ONCOSEC MEDICAL Inc Form 10-K October 10, 2014 <u>Table of Contents</u>

## **UNITED STATES**

## SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM 10-K

(Mark One)

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended July 31, 2014

OR

# o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from

to

Commission file number 000-54318

## **ONCOSEC MEDICAL INCORPORATED**

(Exact name of registrant as specified in its charter)

Nevada (State or other jurisdiction of incorporation or organization) **98-0573252** (I.R.S. Employer Identification Number)

9810 Summers Ridge Road, Suite 110

San Diego, CA 92121

(Address of Principal Executive Offices)(Zip Code)

#### (855) 662-6732

(Registrant s telephone number, including area code)

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

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

Common Stock, par value \$0.0001 per share

(Title of Class)

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject

to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

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

Large accelerated filer o

Non-accelerated filer o (Do not check if a smaller reporting company)

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

The aggregate market value of voting and non-voting common stock held by non-affiliates of the registrant as of January 31, 2014 totaled approximately \$85,000,000 based on the closing price of \$0.48. As of October 1, 2014, there were 244,631,076 shares of the Company s common stock (\$0.0001 par value) outstanding.

Accelerated filer x

Smaller reporting company o

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This Annual Report in Form 10-K contains forward-looking statements that involve risks, uncertainties and assumptions. In some cases, you can identify forward-looking statements by terminology such as may, should, expects, plans, anticipates, believes, estimates, predicts, continue or the negative of these terms or other comparable terminology. All statements made in this Annual Report on Form 10-K other than statements of historical fact could be deemed forward-looking statements.

By their nature, forward-looking statements speak only as of the date they are made, are neither statements of historical fact nor guarantees of future performance and are subject to risks, uncertainties, assumptions and changes in circumstances that are difficult to predict or quantify. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks identified in the section entitled Risk Factors in Part I, Item IA of this Annual Report, and similar discussions in our other filings with the Securities and Exchange Commission (the SEC). If such risks or uncertainties materialize or such assumptions prove incorrect, our results could differ materially from those expressed or implied by such forward-looking statements and assumptions. Risks that could cause actual results to differ from those contained in the forward-looking statements include but are not limited to risks related to: uncertainties inherent in pre-clinical studies and clinical trials; our need to raise additional capital and our ability to obtain financing; general economic and business conditions; our ability to continue as a going concern; our limited operating history; our ability to recruit and retain qualified personnel; our ability to manage future growth; our ability to develop our product candidates and to develop new product candidates; and our ability to protect our intellectual property.

You should not place undue reliance on forward-looking statements. Unless required to do so by law, we do not intend to update or revise any forward-looking statement, because of new information or future developments or otherwise.

As used in this Annual Report on Form 10-K and unless otherwise indicated, the terms the Company, we, us and our refer to OncoSec Medical Incorporated.

OncoSec Medical Incorporated has filed applications to register the following trademarks: ImmunoPulse, and NeoPulse. Other registered trademarks used in this Annual Report are the property of their respective owners.

#### PART I

#### **ITEM 1. BUSINESS**

The following discussion should be read in conjunction with our consolidated financial statements and the related notes and other financial information appearing elsewhere in this Annual Report on Form 10-K.

#### Overview

We are a hybrid device and gene therapy biotechnology company focused on designing, developing and commercializing innovative and proprietary medical approaches for the treatment of cancer where currently approved therapies are inadequate based on their efficacy or side effects. Our Company was incorporated under the laws of Nevada on February 8, 2008 under the name Netventory Solutions Inc. Initially, we provided online inventory services to small and medium sized companies. On March 1, 2011, we changed our name to OncoSec Medical Incorporated. In March 2011, we acquired certain assets related to the use of drug-medical device combination products for the treatment of various cancers from Inovio Pharmaceuticals, Inc. (Inovio). With this acquisition, we have abandoned our efforts in the online inventory services industry and are focusing our efforts in the biotechnology industry. Our goal is to improve the treatment of cancer through the development of our novel therapies.

#### **Our Strategy**

As a biotechnology company focused on discovering and developing novel oncology products, our portfolio includes biologic immunotherapy product candidates intended to treat a wide range of tumor types. Our technology includes intellectual property relating to certain delivery technologies, which we refer to as ImmunoPulse (ImmunoPulse), a therapeutic approach that is based on the use of an electroporation delivery device in combination with DNA-encoded immune targets to treat cancer. This unique therapeutic modality is based on electroporation-mediated delivery of DNA plasmids encoding immunotherapeutic proteins, which are intended to reverse the immunosuppressive microenvironment in the tumor and engender a systemic anti-tumor response. Our electroporation devices consist of an electrical pulse generator and disposable applicators, which can be adapted to treat tumors differing in histologic type, size, and location. Using ImmunoPulse, our DNA-based immunotherapy to treat cancer. Our mission is to enable people with cancer to live longer with a better quality of life than otherwise possible or available with existing therapies.

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Immunotherapy, a process which uses the patient s own immune system to treat cancer, may have advantages over surgery, radiation, and chemotherapy. But many cancers appear to have developed the ability to hide from the immune system. A treatment that can augment the immune response against tumor cells by making the cancer more visible to the immune system would likely represent a significant improvement in cancer therapy. Immune-enhancing proteins such as interleukin-2 (IL-2), interleukin-12 (IL-12), and interferon-alpha (IFN- $\alpha$ ) have shown encouraging results in terms of efficacy but with significant target-mediated toxicity.

Our lead product candidate, an immunotherapy for metastatic melanoma, is being studied in a Phase 2 open label clinical trial. Based on the safety and efficacy of intratumoral electroporation of DNA plasmid IL-12 (pIL-12) in the Phase 1 and ongoing Phase 2 studies, we plan to pursue a Phase 2b study to evaluate the safety and efficacy of intratumoral electroporation of pIL-12 in combination with an anti-PD-1/PDL-1 therapeutic. Based on the literature and OncoSec s internal analysis of the mechanism of action of intratumoral electroporation of pIL-12, we expect that IL-12, a cytokine that has an immunomodulatory effect, may significantly improve the efficacy of anti-PD-1/PDL-1 checkpoint therapies through augmenting the immunogenicity of the tumor, thereby driving an enhanced anti-tumor immune response. In other words, we expect that electroporation of pIL will drive the production of CD8+ tumor-infiltrating lymphocytes (TILs), resulting in enhanced efficacy of anti-PD-1 checkpoint inhibitors, which are tightly correlated to the presence of a significant number of TILs. The initiation of the study is dependent on several factors including accessing a pharmacologically active anti-PD-1/PDL-1 checkpoint inhibitor (e.g. Merck s pembrolizumab, BMS s nivolimumab or Roche MPDL3280A). Availability of these agents may be altered in the near-term based on regulatory approvals and/or partnering opportunities. Enrollment in the current Phase 2 study was recently expanded with a protocol addendum, allowing us to test the safety and efficacy of a modified dose schedule.

The safety and efficacy of intratumoral electroporation with pIL-12 is also being tested in other cancer indications, including Merkel Cell Carcinoma and Cutaneous T-Cell Lymphoma. As of date of this filing, more than 65 cancer patients have received treatment with intratumoral electroporation of pIL-12 as a monotherapy without a single drug-related severe adverse event (SAE), representing an exceptional safety profile for an oncology therapy.

Our ImmunoPulse product candidates are based on our proprietary DNA based immunotherapy technology, which is designed to stimulate the human immune system, resulting in systemic anti-tumor immune responses. Because our candidate therapeutics are plasmid constructs, we expect to benefit from a simpler, more consistent and scalable manufacturing process in comparison to therapies based on patient-derived cells or recombinant proteins.

Given that cancer deploys multiple immunosubversive mechanisms in parallel to suppress anti-tumor immune responses, we believe it is unlikely that a single immunotherapy will suffice to achieve responses in most patients in most tumor types. Therefore, OncoSec is conducting research and development on other DNA-encoded, immunologically-active molecules with an aim to produce additional immunotherapeutic drugs capable of breaking the immune system s tolerance to cancer. At OncoSec, we have the opportunity to leverage the flexibility of a DNA plasmid-based technology to rapidly pursue candidate molecules and combinations of therapeutics. We can introduce, for example, pro-inflammatory cytokines and chemokines, immune stimulatory receptors, co-stimulatory molecules, adhesion molecules, tumor suppressor genes and T-cell engagement molecules. We expect that electroporation-mediated intratumoral expression of immunologically-active molecules such as these can reverse the immunosuppressive microenvironment of the tumor and drive systemic anti-tumor immune responses while limiting systemic exposure and untoward toxicities associated with these potent immunologic effector molecules. We believe that this will become the overriding treatment goal for oncologists across all cancer therapies.

We seek to improve the treatment of cancer through the development of novel intratumoral, electroporation-based therapies. We have several clinical trials for the use of our therapies to treat different tumor types. We also continue to investigate collaboration opportunities that will enable us to identify combinations with current and emerging standard-of-care drugs, including immune-modulating checkpoint inhibitors (i.e. anti-CTLA-4 or anti-PD-1). We may seek regulatory approvals to initiate specific studies in target markets to collect clinical, reimbursement,

and pharmacoeconomic data in order to advance a commercialization strategy. Our clinical development strategy includes completing the necessary additional clinical trials in accordance with United States Food and Drug Administration (the FDA) guidelines for cancers including select, rare cancers (orphan indications) that have limited therapeutic options. Our strategy also includes expanding the applications of our technologies through strategic collaborations or evaluation of other opportunities such as in-licensing and strategic acquisitions. We may collaborate with major pharmaceutical and biotechnology companies and government agencies, providing us access to complementary technologies or greater resources. These business activities are intended to provide us with mutually beneficial opportunities to expand or advance our product pipeline and serve significant unmet medical needs. We may license our intellectual property to other companies to leverage our technologies for applications that may not be appropriate for our independent product development.

In addition, our portfolio includes an asset that utilizes electroporation delivery with a small molecule drug, which we refer to as NeoPulse. Our NeoPulse approach utilizes our electroporation technologies for the local delivery of a small molecule drug (e.g. bleomycin) to treat tumors.

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#### **Asset Acquisition**

We have acquired certain assets pursuant to our Asset Purchase Agreement with Inovio, dated March 14, 2011 (as amended, the Asset Purchase Agreement). The acquired assets include certain non-DNA vaccine technology and intellectual property relating to selective tumor ablation technologies, a therapy which uses an electroporation device to facilitate delivery of chemotherapy agents, or nucleic acids encoding cytokines, into tumors and/or surrounding tissue for the treatment and diagnosis of various cancers.

We did not assume any liabilities of Inovio except liabilities under the assigned contracts and assigned intellectual property arising after the closing date of the Asset Purchase Agreement. We agreed to pay Inovio \$3,000,000 in scheduled payments beginning on the closing date as well as certain royalties in the event we commercialize our technology. We made the final payment to Inovio of \$1 million on December 19, 2013. As a result, we are not subject to further scheduled payment obligations to Inovio pursuant to the Asset Purchase Agreement.

We are also party to a cross-license agreement with Inovio, which we entered into concurrently with the closing of our asset acquisition. This agreement provides for the exclusive license to Inovio of rights related to certain SECTA technology patents in the field of gene or nucleic acids, outside of those encoding cytokines, delivered by electroporation and for the non-exclusive cross-license by Inovio to us of rights related to certain non-SECTA technology patents in the our field, in exchange for specified sublicensing and other licensing fees and royalties.

#### University of South Florida License

On August 24, 2012, we secured an exclusive license for specific patented technology from the University of South Florida Research Foundation relating to the delivery of gene-based therapeutics via intratumoral and intramuscular electroporation. This patent directly supports our clinical development focus in solid tumor applications and specifically metastatic melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma using our ImmunoPulse therapy, and extends patent protection for the ImmunoPulse technology to the year 2024.

#### **Electroporation Delivery**

The effectiveness of many drugs and DNA-based therapeutics is dependent upon their crossing the cell membrane. In the 1970s, it was discovered that the brief application of high-intensity, pulsed electric fields to the cell resulted in a temporary and reversible increase in the permeability of the cell membrane, a mechanism known as electroporation. As a consequence, it was also demonstrated that there was a subsequent increase in the ability of both small and large molecules to move between the cell exterior and interior via the newly formed membrane pores.

The transient, reversible nature of the electrical permeabilization of cell membranes and the resulting increase in intracellular delivery of therapeutic agents is the underlying basis of our ImmunoPulse therapeutic approach. The electroporation delivery consists of an electrical pulse generator and various disposable applicators specific to the individual tumor size, type and location. While the extent of membrane permeabilization depends on various electrical, physical, chemical, and biological parameters, research with electroporation delivery has demonstrated an increase of cellular uptake of chemical molecules from 1,000- to 8,000-fold above baseline. After cessation of the electrical

pulse, the membrane pores close, trapping the molecules within the cell and allowing them to perform their function. The enhanced delivery of these agents may result in the ability to not only improve cytotoxicity and therapeutic value but also to lower the required doses, thereby providing a potentially safer treatment.

DNA Delivery With Electroporation ImmunoPulse

The greatest obstacle to making DNA-based therapeutics a reality has been the safe, efficient, and economical delivery and expression of plasmid-DNA constructs into the target cells. We are leveraging the unique ability of electroporation to enable the efficient and effective delivery of DNA-based therapeutics. The use of DNA delivery with electroporation has been validated from multiple clinical studies assessing DNA-based immunotherapies against cancers. Together with our partners and collaborators, we plan to be the leader in establishing electroporation-delivered DNA immunotherapies. We believe that electroporation should become the method of choice for plasmid-DNA delivery into cells in many clinical applications.

The immunotherapy approach of our therapy uses an electroporation system that is calibrated and designed to create favorable conditions to deliver plasmid DNA encoding immunotherapeutic cytokines into tumor cells that in turn promote anti-cancer responses. The cytokine-encoding plasmid is first injected into the selected tumor. A needle-electrode array then delivers the electrical pulses produced in the pulse generator. When DNA injection is followed by electroporation of the target tissue, transfection is significantly greater with resultant gene expression generally enhanced from 100- to 1000-fold. This electroporation-mediated enhancement of expression makes many DNA-based candidates potentially feasible without unduly compromising safety or cost.

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A Phase I clinical trial in metastatic melanoma has been completed using electroporation to deliver plasmid-DNA encoding for the IL-12 cytokine. Published data have suggested that gene transfer utilizing in vivo DNA electroporation in metastatic melanoma showed that it was safe, effective, reproducible, and titratable. In addition to regression of treated melanoma skin lesions, evidence of regression in distant untreated lesions was also observed, and in some cases a complete regression of all lesions. These findings suggest a systemic immune response to the localized treatment.

A Phase II clinical trial in metastatic melanoma has also been completed and interim data was presented at the 2014 Annual Meeting for the American Society of Clinical Oncology, where it was reported that of the 27 patients who were evaluable, an objective response rate of 33% was observed, with 11% of patients having a complete response. Regression of non-injected lesions was seen in 62% of 21 patients with evaluable lesions. Enrollment for this study is complete and analysis of final data is ongoing.

We consider these results to be significant and thus we are continuing to identify and develop new therapeutic targets that, like IL-12, can (i) be encoded into DNA, (ii) delivered intratumorally using electroporation, and (iii) have an ability to reverse the immunosuppressive mechanisms of the tumor. We plan to expand our ImmunoPulse pipeline beyond the delivery of plasmid-DNA encoding for cytokines with a focus on targeting key pathways of tumor immune subversion.

#### **Clinical Program**

We initiated three Phase 2 clinical trials to assess the safety and efficacy of our ImmunoPulse technology with DNA-encoded IL-12 in patients with melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma during calendar year 2012. Our lead ImmunoPulse candidate for these trials is a DNA plasmid coding for IL-12 that is delivered using our electroporation device. While the pIL-12 immunotherapy is administered locally, results from preclinical and Phase 1 clinical trials indicated that there is no evidence of a dose-related toxicity. Although Phase 1 trials are designed to study only safety and tolerability, our Phase 1 trial suggested that our ImmunoPulse produced both a local and systemic anti-tumor immune responses. All three Phase 2 clinical trials were initially physician-sponsored open label, multi-center trials. As of December 2012, all three physician-sponsored Investigational New Drug (IND) applications were transferred to us.

Phase II Melanoma Trial

Our melanoma trial, entitled Phase II trial of intratumoral pIL-12 electroporation in advanced stage cutaneous and in transit malignant melanoma, is a single dose trial treating approximately 30 patients. We are assessing objective response rate (local and distant) at six months, time to objective response (complete and partial responses), duration of distant response and overall survival. We are building on positive Phase I dose escalation trial results in 24 patients with metastatic melanoma treated with pIL-12 in combination with electroporation. That study further supported safety and tolerability and suggested a systemic objective response in more than half of the subjects; 15% of patients showed 100% clearance of distant, non-treated tumors. Based on historical data, less than 0.25% of patients would have been expected to see regression in their untreated tumors. Recent interim analysis of the Phase 2 study demonstrated an objective response rate of 33%, with 11% of patients having a complete response. Regression of non-injected lesions was seen in 62% (13/21) of patients with evaluable lesions. Enrollment for this study is complete.

Merkel cell carcinoma is a rare but lethal skin cancer affecting about 1,500 people each year with a 33% mortality rate. Current outcomes to chemotherapy treatment have demonstrated short-lived responses with no clear impact on overall survival. Our clinical trial, entitled A Phase II study of intratumoral injection of interleukin-12 plasmid and in vivo electroporation in patients with Merkel cell carcinoma, is a single-dose, open-label trial in 15 patients. The study s endpoints are IL-12 gene expression in tumor tissue at three to four weeks post-treatment and secondary endpoints will evaluate objective response rates (both local and distant) at six months post-treatment, time to relapse or progression, and overall survival. This study will evaluate the safety and tolerability of DNA IL-12 as a treatment for Merkel cell carcinoma and aims to further validate the findings from the Phase 1 dose escalation trial carried out in 24 metastatic melanoma patients. Upon completion of this study, anticipated to be by the end of calendar 2014, management will evaluate the advancement of ImmunoPulse as monotherapy for Merkel cell carcinoma.

#### Phase II Cutaneous T-Cell Lymphoma

Cutaneous T-cell lymphoma, or CTCL, is a rare disease affecting approximately 3,000 people each year with current therapies requiring life-long management and treatment. Today s treatment methods delivered either locally or systemically. Many of these therapies result in systemic toxicities. Cytokine therapies have shown some therapeutic benefit, however the requirement for high dose systemic concentrations results in unwanted toxicities and eventual resistance to the therapy. In contrast, our ImmunoPulse treatment uses locally delivered low-dose pIL-12 to induce a local and systemic anti-tumor immune response.

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The planned clinical trial, entitled Phase II trial of intratumoral IL-12 plasmid electroporation in cutaneous lymphoma, is an open-label, multi-center study and is expected to enroll 34 patients. The trial s primary endpoint is to assess the objective response rate (both local and distant) at six months post-treatment, with safety and progression-free survival as secondary endpoint measures. ImmunoPulse is a potentially new treatment being evaluated for patients suffering from CTCL, who currently have few treatment options that alter the disease course in this chronic life-altering disease.

#### Scientific Advisory Panel

We have consulted with senior and respected oncology researchers to provide counsel as part of our scientific advisory panel for our ImmunoPulse clinical program. We expect to continue to establish relationships with scientific and medical experts in academia, as needed, to support our scientific advisory panel. The scientific advisory panel assists us on issues related to potential product applications, product development, and clinical testing.

#### Commercialization

We plan to continue our clinical development strategy for the ImmunoPulse program with Phase 2 and subsequent pivotal clinical trials focused on various cancers including select rare cancers that have limited, adverse or no therapeutic alternatives. We expect our current studies to validate data from previous Phase 1 and 2 clinical experience, which will be used to further develop our development strategy for this program.

Our business model for the NeoPulse program is based on a partnering and commercialization strategy that leverages previous in-depth clinical experiences, and late-stage clinical studies in the United States (Phase 3) and Europe (Phase 4). Our near-term plan will be to identify and engage potential partner(s) who are established industry leaders in the field of surgical oncology, or who are seeking to expand their portfolio into this space with the purpose of partnering the NeoPulse asset in select geographic regions, such as Europe and Asia. Once a partner is engaged, we may seek regulatory approvals to initiate specific studies in target markets to collect clinical, reimbursement, and pharmacoeconomic data in order to advance a joint commercialization strategy.

#### Competition

We are in a highly competitive industry. We are in competition with traditional and alternative therapies for the indications we are targeting, as well as pharmaceutical and biotechnology companies, hospitals, research organizations, individual scientists and nonprofit organizations engaged in the development of drugs and other therapies for these indications. Our competitors may succeed, and many have already succeeded, in developing competing products, obtaining FDA approval for products, or gaining patient and physician acceptance of products before us for the same markets and indications that we are targeting. Many of these companies, and large pharmaceutical companies in particular, have greater research and development, regulatory, manufacturing, marketing, financial and managerial resources, and experience than we have, and many of these companies may have products and product candidates that are in a more advanced stage of development than our product candidates. If we are not first to market for a particular indication, it may be more difficult for us or our collaborators to effectively enter markets unless we can demonstrate our products are clearly superior to existing therapies (see also Intellectual Property below).

Examples of competitive therapies include the following:

• <u>Immunotherapy</u>. This therapeutic approach stimulates the patient s own immune system to attack malignant tumor cells, which have managed to circumvent the body s natural immune processes that would normally recognize and destroy these cells before they are able to form growing cancerous tumors. Several methods have been employed to evoke this immune response, including monoclonal antibodies and autologous cell-based vaccines, as well as viral and non-viral targeted delivery of immunotherapeutic agents.

Yervoy® (ipilimumab), approved in 2011, is a monoclonal antibody that acts to block the CTLA-4 receptor (an immune checkpoint receptor) on T-cells. In the presence of CTLA-4 receptor it is believed tumors are able to suppress the immune system from recognizing cancerous cells, however blockade of this receptor with Yervoy® (an anti-CTLA-4 antibody) appears to allow the immune system to generate an antitumor T-cell response. Yervoy® was the first approved immunotherapy in melanoma, and current research is evaluating the use of other anti-checkpoint monoclonal antibodies. Although effective at improving overall survival, this benefit is only seen in a small population of patients that respond to the drug (~11%). Moreover, Yervoy® is known to have significant side effects which has resulted in the treatment being intolerable to some patients.

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Another monoclonal antibody approved that acts to block a checkpoint receptor, PD-1, was recently approved by the FDA. Keytruda® (pembrolizumab), was given breakthrough status by the FDA and was given market approval in August 2014 based on the impressive objective response rate data from Phase I and II clinical trials. These studies demonstrated that Keytruda®, when given to patients with unresectable metastatic melanoma, had an objective response rate of ~ 30-40%. What is more, the safety profile for this drug was markedly better than Yervoy®. With the recent approval of Keytruda®, and the pending approval of other anti-PD-1 antibodies, the use of immunotherapy to treat cancers, including melanoma, is expected to increase. However, even with the strong response data from Keytruda®, there are a significant number of patients who do not respond to anti-PD-1 antibodies (~60-70%) in melanoma. Recent research has shown that tumors with little, or no, presence of immune cells (i.e. CD8+ tumor infiltrating lymphocytes) prior to treatment with anti-PD-1 antibodies are less likely to respond, than tumors that have a high number of these cells already present in the tumor prior to treatment. The physical difference between these types of tumors clearly demarcates a population of responders versus non-responders, and it is believed that determining a method to convert the non-responder population to responders represents a significant unmet medical need. A way of addressing this medical need may be through the use of intratumoral therapies that can modify the tumor microenvironment, while combining it with anti-PD-1 antibodies or other checkpoint inhibitors antibodies.

Like Provenge®, a product developed and marketed by Dendreon Corporation, many emerging therapies continue to employ an autologous cell-based mode of delivery, which involves the harvesting of a patients own cells, growing them in a lab, incubating with a vaccine or immune stimulating agent, and re-administering the resulting product to the patient. This autologous cell-based approach has shown safety and efficacy, however the significant cost and time involved in preparing this therapeutic treatment for each individual patient has been unattractive for many patients and clinicians.

Viral vectors, such as adenoviruses and oncolytic viruses, have also been used to deliver immunotherapeutic payloads to fight against cancerous cells, either systemically or through direct injection into the tumor. Clinical trials for this therapeutic delivery method are ongoing with no approved therapies yet to be available in the clinic, however, questions still remain about efficacy of viral vectors as a delivery method, since the patient may mobilize an immune reaction against the virus itself resulting in neutralization of the virus and clearance from the body before an effectual response is elicited. Since viral vectors are occasionally created from pathogenic viruses, involving a deletion of a part of the viral genome critical for viral replication, safety has also been a concern to avoid production of new virions.

Other non-viral vector methods, including liposome-based delivery systems, are also currently being developed and employed in ongoing clinical trials. The impact of all these emerging cancer immunotherapies will ultimately be determined by their ability to improve upon the safety, efficacy, utility and cost of currently available therapies.

• <u>Vaccination</u>. The use of vaccination has long held interest as another potential modality that could prove beneficial in treating and limiting systemic disease. The challenge has been that many tumors do not display antigens unique to the tumor cell that the immune system can use to specifically target for selective destruction of the malignant tissue. Even though tumors over-express normal cellular products that the immune system ignores, due to a process called tolerization, the immune system is educated not to recognize self antigens early in development. As a result of the lack of immune system detection, it has proven difficult to use conventional vaccination strategies to break or overcome tolerance and generate immunity against tumor cells.

• <u>Targeted Small Molecule Therapy</u>. Mutations that drive signaling pathways critical to tumor growth and survival have recently been identified. One such mutation of the mitogen activated protein (MAP) kinase pathway has been shown to be important in the proliferation approximately 50% of all cutaneous melanomas. The introduction of BRAF inhibitors, which block the BRAF V600E mutation, has greatly improved the short-term prospects of some patients with these tumors, but the tumors tend to become resistant to therapy with time by activating alternative signaling pathways. Zelboraf®, approved in 2011, is a BRAF inhibitor that interrupts a key process in melanoma growth in patients with a particular melanoma mutation. Two additional drugs approved in 2013, Tafinlar® and Mekinist , are single-agent oral treatments for the

treatment of unresectable metastatic melanoma and like Zelboraf®, both of these new agents interrupt a key process in melanoma growth by inhibiting the MAP Kinase signaling pathway. Despite these therapies showing benefit to some patients by extending life beyond traditional therapeutic options, safety and tolerance to these drugs, may be a deterrent for some patients. Moreover, there appears to be a high rate of recurrence in patients who respond to these drugs, where the patient becomes refractory to the therapy and the disease often comes back quickly and aggressively.

#### Employees

We have assembled a senior management team with many years of experience and success in biotech/pharma operations, business and commercial development, and capital markets. In addition, we have assembled a clinical and regulatory team is experienced in developing and advancing novel therapeutic approaches through clinical testing and regulatory approvals. As of October 1, 2014, we have a total of 43 employees (of which 42 are full time). We believe that our relations with our employees are good and we have no history of work stoppages.

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We expect to hire additional staff and to engage consultants in regulatory, compliance, investor and public relations, and general administration as necessary. We also expect to engage experts in healthcare and in general business to advise us in various capacities.

#### **Intellectual Property**

Our success and ability to compete depends upon our intellectual property. We have acquired and have been issued 27 U.S. patents and have two U.S. patent applications pending. We expect to file additional patent applications. We have a total of 18 issued patents and patent applications in other jurisdictions. The bulk of our patents, including fundamental patents directed toward our proprietary technology, expire between 2014 and 2027. In addition, we have licensed intellectual property rights to use certain electroporation technology and intellectual property for delivering DNA-based cytokines as an immunotherapy.

#### **Government Regulation**

#### United States

In the United States, our product candidates are subject to extensive regulation by the FDA. Federal and state statutes and regulations, many of which are administered by the FDA, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical products. Failure to comply with applicable FDA or other requirements may subject a company to a variety of administrative or judicial sanctions, such as the FDA s refusal to approve pending applications, a clinical hold, warning letters, recall or seizure of products, partial or total suspension of production, withdrawal of the product from the market, injunctions, fines, civil penalties or criminal prosecution.

FDA approval is required before any new unapproved drug or dosage form, including a new use of a previously approved drug, can be marketed in the United States. The process required by the FDA before a drug may be marketed in the United States generally involves, among other things:

completion of pre-clinical testing and formulation studies in compliance with the FDA s good laboratory practice regulations;

• submission to the FDA of an investigational new drug application, or IND, for human clinical testing, which must become effective before human clinical trials may begin in the United States;

• performance of adequate human clinical trials in accordance with good clinical practices to establish the safety and efficacy of the proposed drug product for each intended use; and

submission to the FDA of a new drug application, or NDA, which the FDA must review and approve.

The pre-clinical and clinical testing and approval process requires substantial time, effort, and financial resources, and the receipt and timing of approval, if any, is highly uncertain. The results of pre-clinical tests, together with certain manufacturing information, analytical data and a proposed clinical trial protocol and other information, are submitted as part of an IND to the FDA. Once an IND is in effect, the protocol for each clinical trial to be conducted under the IND must be submitted to the FDA, which may or may not allow the trial to proceed. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development.

Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with good clinical practice requirements. For purposes of an NDA submission and approval, human clinical trials are typically conducted in the following sequential phases, which may overlap or be combined:

• *Phase 1*: The drug is initially introduced into healthy human subjects or patients and tested for safety, dose tolerance, absorption, metabolism, distribution, and excretion and, if possible, to gain an early indication of its effectiveness.

• *Phase 2*: The drug is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted indications, and to determine dose tolerance and optimal dosage. Multiple Phase II clinical trials may be conducted.

• *Phase 3*: The drug is administered in large patient populations to obtain additional evidence of clinical efficacy and safety in an expanded patient population at multiple, geographically-dispersed clinical trial sites and to establish the overall risk-benefit relationship of the drug.

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• *Phase 4*: In some cases, the FDA may condition approval of an NDA for a product candidate on the sponsor s agreement to conduct additional clinical trials to further assess the drug s safety and effectiveness after NDA approval.

The results of product development, pre-clinical studies and clinical trials are submitted to the FDA as part of an NDA requesting approval to market the product. NDAs must also contain extensive information relating to the product s pharmacology, chemistry, manufacture, controls, and proposed labeling, among other things.

Once the submission has been accepted for filing, the FDA begins an in-depth substantive review. Pursuant to the FDA s performance goals, NDA reviews are to be completed within ten months, subject to extensions by the FDA. Before approving an NDA, the FDA often inspects the facility or facilities where the product is manufactured and will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with good manufacturing practices. Additionally, the FDA will typically inspect one or more clinical sites to assure compliance with good clinical practices before approving an NDA. If the FDA determines that the NDA is not acceptable, then the FDA may outline the deficiencies in the NDA and often will request additional information or additional clinical trials. Notwithstanding the submission of any requested additional testing or information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

Even if regulatory approval of a product candidate is obtained, such approval will usually impose limitations on the indicated uses for which the product may be marketed. Additionally, the FDA may require post-approval testing, such as Phase IV studies, or surveillance programs to monitor the effect of approved products, and the FDA has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs.

After FDA approval, a product will be subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to drug/device listing, recordkeeping, periodic reporting, product sampling and distribution, manufacturing practices, labeling, advertising and promotion, and reporting of adverse experiences with the product. The FDA may withdraw its approval of a product if compliance with regulatory requirements and manufacturing standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things: restrictions on the marketing or manufacturing of the product; complete withdrawal of the product from the market or product recalls; fines, warning letters or holds on post-approval clinical trials; or injunctions or the imposition of civil or criminal penalties.

#### International Regulation

If we pursue research and/or commercialization of our product candidates in countries other than the United States, then we would need to obtain the necessary approvals by the regulatory authorities of such foreign countries comparable to the FDA before we could commence clinical trials or marketing of our product candidates in those countries, and we would be subject to a variety of foreign regulations regarding safety and efficacy and governing, among other things, clinical trials and commercial sales and distribution of our products. The approval processes and requirements vary by country and can involve additional product testing and additional review periods, and the time may be longer or shorter than that required to obtain FDA approval.

#### Other Regulatory Requirements and Environmental Matters

We are or may become subject to various laws and regulations regarding laboratory practices and the experimental use of animals, as well as environmental laws and regulations governing, among other things, any use and disposal by us of hazardous or potentially hazardous substances in connection with our research. In each of these areas, as above, the FDA and other government agencies have broad regulatory and enforcement powers, including, among other things, the ability to levy fines and civil penalties, suspend or delay issuance of approvals, seize or recall products, and withdraw approvals, any one or more of which could have a material adverse effect on us. Additionally, if we are able to successfully obtain approvals for and commercialize our product candidates, then we may become subject to various federal, state, and local laws targeting fraud, abuse, privacy, and security in the healthcare industry.

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#### ITEM 1A. RISK FACTORS

Investment in our common stock involves a high degree of risk. The risk factors described below summarize some of the material risks inherent in and affecting our business. You should consider each of the following factors as well as the other information in this Annual Report in evaluating our business and our prospects. Our business, financial condition, results of operations, and stock price could be materially adversely affected by a wide range of factors. Additional risks not presently known to us or that we currently deem immaterial may also impair our business financial condition, results of operations, and stock price.

## We will likely need to raise additional capital in future periods to continue operating our business, and such additional funds may not be available on acceptable terms or at all.

We do not generate, and may never generate, any cash from operations and will likely need to raise additional funds in future periods in order to continue operating our business. We estimate our cash requirements for the next 12 months to be approximately \$19.5 million. As of July 31, 2014, we had cash and cash equivalents of approximately \$37.9 million.

We have a history of raising funds through offerings of our common stock, and we may in the future raise additional funds through public or private equity offerings, debt financings, or corporate collaborations and licensing arrangements. We expect to continue to fund our operations primarily through equity and debt financings in the future. If additional capital is not available, we may not be able to continue to operate our business pursuant to our business plan or we may have to discontinue our operations entirely. We will require additional financing to fund our planned operations, including developing and commercializing our intellectual property, seeking to license or acquire new assets, researching and developing any potential patents, related compounds and other intellectual property, funding potential acquisitions, and supporting clinical trials and seeking regulatory approval relating to our assets and any assets we may acquire in the future. Additional financing may not be available to us when needed or, if available, may not be available on commercially reasonable terms. If we issue equity or convertible debt securities to raise additional funds, our existing stockholders may experience substantial dilution, and the new equity or debt securities may have rights, preferences and privileges senior to those of our existing stockholders. If we incur additional debt, it may increase our leverage relative to our earnings or to our equity capitalization, requiring us to pay additional interest expenses. Obtaining commercial loans, assuming those loans would be available, would increase our liabilities and future cash commitments.

We may not be able to obtain additional financing if the volatile conditions in the capital and financial markets, and more particularly the market for early development stage biotechnology company stocks, persist. Weak economic and capital markets conditions could result in increased difficulties in raising capital for our operations. We may not be able to raise money through the sale of our equity securities or through borrowing funds on terms we find acceptable. If we cannot raise the funds that we need, we will be unable to continue our operations, and our stockholders could lose their entire investment in our Company.

We have never generated revenue from our operations.

We have not generated any revenue from operations since our inception. During our fiscal year ended July 31, 2014 (Fiscal 2014), we incurred a net loss of approximately \$12.0 million. From inception through July 31, 2014, we have incurred an aggregate net loss of approximately \$25.4 million. We expect that our operating expenses will continue to increase as we expand our current headcount, further our development activities,

and continue to pursue FDA approval for our product candidates.

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#### We are an early-stage company with a limited operating history, which may hinder our ability to successfully meet our objectives.

We are an early-stage company with only a limited operating history upon which to base an evaluation of our current business and future prospects and how we will respond to competitive, financial, or technological challenges. Only recently have we explored opportunities in the biotechnology industry. As a result, the revenue and income potential of our business is unproven. In addition, because of our limited operating history, we have limited insight into trends that may emerge and affect our business. Errors may be made in predicting and reacting to relevant business trends and we will be subject to the risks, uncertainties, and difficulties frequently encountered by early-stage companies in evolving markets. We may not be able to successfully address any or all of these risks and uncertainties. Failure to adequately do so could cause our business, results of operations, and financial condition to suffer or fail.

#### We have not commercialized any of our product candidates and we cannot predict if or when we will become profitable.

We have not commercialized any of our product candidates. Our ability to generate revenues from any of our product candidates will depend on a number of factors, including our ability to successfully complete clinical trials, obtain necessary regulatory approvals, and negotiate arrangements with third parties to help finance the development of, and market and distribute, any product candidate that receives regulatory approval. In addition, even if we achieve regulatory approval for one or more of our product candidates, we will be subject to the risk that the marketplace may not accept our products in sufficient levels for us to achieve profitability, or at all.

Because of the numerous risks and uncertainties associated with our product development and commercialization efforts, we are unable to predict the extent of our future losses or when or if we will become profitable, and it is possible we will never commercialize any of our product candidates or become profitable. Our failure to obtain regulatory approval and successfully commercialize any of our product candidates would have a material adverse effect on our business, results of operations, financial condition, and prospects and could result in our inability to continue operations.

#### If we are unable to successfully recruit and retain qualified personnel, we may not be able to continue our operations.

In order to successfully implement and manage our business plan, we will depend upon, among other things, successfully recruiting and retaining qualified executives, managers and other employees having relevant experience in the biotechnology industry. Competition for qualified individuals is intense, particularly in our geographical location where there are several larger, more established biotechnology companies that compete with us for talent. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are not able to find, attract, and retain qualified personnel on acceptable terms and in a timely manner to coincide with our growth, we may not be able to successful grow or maintain our business and our business operations and prospects could suffer.

Additionally, although we have employment agreements with each of our executive officers, these agreements are terminable by them at will and we may not be able to retain any one or more of our executives. The loss of the services of any one or more members of our senior management team could (i) disrupt or divert our focus from pursuing our business plan while we seek to recruit other executives, (ii) impact the

perceptions of our employees, partners and investors regarding our business and prospects and (iii) delay or prevent the development and commercialization of our product candidates.. These and other potential consequences could cause significant harm to our business to the extent that we are not able to recruit suitable replacements in a timely manner.

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Future growth could strain our resources, and if we are unable to manage our growth, we may not be able to successfully implement our business plan.

Our business plan includes the continued growth of our operations at an accelerated pace, which will place a significant strain on our management, administrative, operational, and financial infrastructure. Our future success will depend in part upon the ability of our executive officers to manage growth effectively. This will require that we hire and train additional personnel to support our expanding operations. In addition, we must continue to improve our operational, financial, and management controls and our reporting systems and procedures. If we fail to successfully manage our growth, we may be unable to execute upon our business plan.

## We may be unable to successfully develop and commercialize the assets we have acquired, or acquire, or develop and commercialize new assets and product candidates.

Our future results of operations will depend to a significant extent upon our ability to successfully develop and commercialize our product candidates, including the assets we acquired from Inovio related to certain non-DNA vaccine technology and intellectual property relating to solid tumor treatments. In addition, we plan to expand our clinical pipeline and to build our product portfolio through the acquisition or licensing of new assets, product candidates or approved products. There are numerous difficulties inherent in acquiring, developing and commercializing new products and product candidates, including difficulties related to:

- successfully identifying potential product candidates;
- developing potential product candidates;
- difficulties in conducting or completing clinical trials, including receiving incomplete, unconvincing, or equivocal clinical trials data;
- obtaining requisite regulatory approvals for such products in a timely manner or at all;
- acquiring, developing, testing, and manufacturing products in compliance with regulatory standards in a timely manner or at all;

• being subject to legal actions brought by our competitors, which may delay or prevent the development and commercialization of new products;

- delays or unanticipated costs; and
- significant and unpredictable changes in the payor landscape, coverage, and reimbursement for any products we develop.

As a result of these and other difficulties, we may be unable to develop potential product candidates using our intellectual property, and our potential products in development may not receive regulatory approvals in a timely manner or at all. If we do not acquire or develop product candidates, if any of our product candidates are not approved in a timely manner or at all, or if any of our product candidates, when acquired or developed and approved, cannot be successfully manufactured and commercialized, our operating results would be adversely affected. In addition, we may not recoup our investment in developing products, even if we are successful in commercializing those products. Our business expenditures may not result in the successful acquisition, development, or commercialization of products that will prove to be commercially

successful or result in the long-term profitability of our business.

#### Certain of our intellectual property is licensed from Inovio pursuant to a non-exclusive license.

As we describe elsewhere in this Annual Report, we have acquired certain technology and related assets from Inovio pursuant to the Asset Purchase Agreement. In connection with the closing of the Asset Purchase Agreement, we entered into a cross-license agreement with Inovio. Under the terms of the cross-license agreement, Inovio granted to us a non-exclusive, worldwide license to certain non-SECTA technology patents held by Inovio, and we granted to Inovio a limited, exclusive license to our acquired SECTA technology. While we do not currently rely on the intellectual property we have licensed from Inovio pursuant to this non-exclusive license, our product candidates may in the future utilize this intellectual property. Because the license is non-exclusive, Inovio may use its technology to compete with us. In addition, there are no restrictions on Inovio s ability to license their technology to others. As a result Inovio could license to others, including our competitors, the intellectual property rights covered by their

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license to us, including any of our improvements to the licensed intellectual property. In addition, either party may terminate the cross-license agreement with 30 days notice if they no longer utilize or sublicense the patent rights they have acquired pursuant to the cross-license. If either party were to terminate the cross-license agreement, they would no longer have the right to use intellectual property that is subject to the cross license.

#### Our failure to successfully acquire, develop and market additional product candidates or approved products would impair our ability to grow.

Our business plan includes the expansion of our clinical pipeline and our product portfolio through the acquisition, in-license, development and/or marketing of additional products and product candidates. The success of our efforts to expand our clinical pipeline and to build our product portfolio will depend in significant part on our ability to successfully identify, select and acquire promising product candidates and products.

The process of proposing, negotiating and implementing a license or acquisition of a product candidate or approved product can be lengthy and complex. Other companies, including many of our competitors with substantially greater financial, marketing and sales resources, may compete with us for the license or acquisition of product candidates and approved products. Our experience in making acquisitions, entering collaborations and in-licensing product candidates is limited, and we have limited resources to identify and execute the acquisition or in-licensing of third-party products, businesses and technologies and integrate them into our current infrastructure. We may incorrectly judge the value or worth of an acquired or in-licensed product candidate, approved product or other asset. Moreover, we may devote resources to potential acquisitions or in-licensing opportunities that are never completed, or we may fail to realize the anticipated benefits of such efforts. We may not be able to acquire the rights to additional product candidates on terms that we find acceptable, or at all.

In addition, future acquisitions may entail numerous operational and financial risks, including:

- exposure to unknown liabilities;
- disruption of our business and diversion of our management s time and attention to develop acquired products or technologies;
- incurrence of substantial debt or dilutive issuances of securities to pay for acquisitions;
- higher than expected acquisition and integration costs;
- increased amortization expenses;
- difficulty and cost in combining the operations and personnel of any acquired business with our operations and personnel;
- impairment of relationships with key suppliers or customers of any acquired business due to changes in management and ownership; and
- inability to retain key employees of any acquired business.

## Any collaboration arrangement that we may enter into in the future may not be successful, which could adversely affect our ability to develop and commercialize our current and potential future product candidates.

We may seek collaboration arrangements with pharmaceutical or biotechnology companies for the development or commercialization of our current and potential future product candidates, including our pursuant of combination trials to develop and commercialize our product candidates as combination products. Drug/device combination products are particularly complex, expensive and time-consuming to develop due to the number of variables involved in the final product design, including ease of patient and doctor use, maintenance of clinical efficacy, reliability and cost of manufacturing, regulatory approval requirements and standards and other important factors. There continues to be substantial and unpredictable risk and uncertainty related to manufacturing and supply until such time as the commercial supply chain is validated and proven.

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We will face, to the extent that we decide to enter into collaboration agreements, significant competition in seeking appropriate collaborators. Moreover, collaboration arrangements are complex and time consuming to negotiate, document and implement. We may not be successful in our efforts to establish and implement collaborations or other alternative arrangements should we choose to enter into such arrangements, and the terms of the arrangements may not be favorable to us. If and when we collaborate with a third party for development and commercialization of a product candidate, we can expect to relinquish some or all of the control over the future success of that product candidate to the third party. The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators.

Collaborators generally have significant discretion in determining the efforts and resources that they will apply to these collaborations. Disagreements between parties to a collaboration arrangement regarding clinical development and commercialization matters can lead to delays in the development process or commercializing the applicable product candidate and, in some cases, termination of the collaboration arrangement. These disagreements can be difficult to resolve if neither of the parties has final decision making authority. Collaborations with pharmaceutical or biotechnology companies and other third parties often are terminated or allowed to expire by the other party. Any such termination or expiration would adversely affect us financially and could harm our business reputation.

## Regulatory authorities may not approve our product candidates or the approvals we secure may be too limited for us to earn sufficient revenues.

The research, testing, manufacturing, labeling, approval, selling, marketing and distribution of our product candidates are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, which regulations differ from country to country. The FDA and other foreign regulatory agencies can delay approval of or refuse to approve our product candidates for a variety of reasons, including failure to meet safety and efficacy endpoints in our clinical trials. Our product candidates may not be approved even if they achieve their endpoints in clinical trials. Regulatory agencies, including the FDA, may disagree with our or our partners trial design and our interpretation of data from preclinical studies and clinical trials. Clinical trials of our product candidates may not demonstrate that they are safe and effective to the extent necessary to obtain regulatory approvals. We have initiated three Phase 2 clinical trials to assess our ImmunoPulse technology in patients with metastatic melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma. We currently plan to initiate a Phase I study for a new solid tumor indication and an additional Phase 2b pivotal trial for metastic melanoma. If we cannot adequately demonstrate through the clinical trial process that a therapeutic product we are developing is safe and effective, regulatory approval of that product would be delayed or prevented, which would impair our reputation, increase our costs and prevent us from earning revenues. Even if a product candidate is approved, it may be approved for fewer or more limited indications than requested or the approval may be subject to the performance of significant post-marketing studies. In addition, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates. Any limitation, condition or denial of approval would have an adverse affect on our business, reputation and results of operations.

Our acquisition of the OMS technology included an extensive clinical database from existing clinical trials utilizing the NeoPulse technology. We must initiate or complete new pivotal clinical studies to support or expand upon our clinical database for our NeoPulse technology, either internally or in collaboration with a strategic partner, in order to commercialize the NeoPulse technology. We or any strategic partner that we engage may not be successful in initiating or completing any such new pivotal clinical studies.

Delays in the commencement or completion of clinical testing for product candidates based on our technology could result in increased costs to us and delay or limit our ability to pursue regulatory approval or generate revenues.

Clinical trials are very expensive, time-consuming, and difficult to design and implement. Even if the results of our proposed clinical trials are favorable, clinical trials for product candidates based on our technology will continue for several years and may take significantly longer than expected to complete.

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Delays in the commencement or completion of clinical testing could significantly affect our product development costs and business plan. We do not know whether our Phase 2 clinical trials will be completed on schedule, if at all. In addition, we do not know whether any other pre-clinical or clinical trials will begin on time or be completed on schedule, if at all. The commencement and completion of clinical trials can be delayed for a number of reasons, including delays related to:

- obtaining clearance from the FDA or respective international regulatory equivalent to commence a clinical trial;
- reaching agreement on acceptable terms with prospective clinical research organizations, or CROs, clinical investigators, and trial sites;
- obtaining institutional review board, or IRB, approval to initiate and conduct a clinical trial at a prospective site;
- identifying, recruiting and training suitable clinical investigators;

• identifying, recruiting and enrolling subjects to participate in clinical trials for a variety of reasons, including competition from other clinical trial programs for similar indications; and

• retaining patients who have initiated a clinical trial but may be prone to withdraw due to side effects from the therapy, lack of efficacy, personal issues, or for any other reason they choose, or who are lost to further follow-up.

We believe that we have planned and designed an adequate development strategy for our electroporation technology. However, the FDA could determine that it is not satisfied with our plan or the details of our pivotal clinical trial protocols and designs.

Additionally, changes in applicable regulatory requirements and guidance may occur and we may need to amend clinical trial protocols to reflect these changes. Amendments may require us to resubmit our clinical trial protocols to IRBs for reexamination, which may impact the costs, timing or successful completion of a clinical trial. If we experience delays in completion of, or if we terminate, any of our clinical trials, the commercial prospects for our product candidates may be harmed, which may have a material adverse effect on our business, results of operations, financial condition and prospects.

We must rely on third parties to conduct our clinical trials. If these third parties do not successfully carry out their duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed.

We expect to enter into agreements with third-party CROs to conduct our planned clinical trials and anticipate that we may enter into other such agreements in the future regarding any future product candidates. We currently rely on these parties for the execution of our clinical and pre-clinical studies, and control only certain aspects of their activities. We, and our CROs, are required to comply with the current FDA Code of Federal Regulations for Conducting Clinical Trials and GCP and ICH guidelines. The FDA enforces these GCP regulations through periodic inspections of trial sponsors, principal investigators, CRO trial sites, laboratories, and any entity having to do with the completion of the study protocol and processing of data. If we, or our CROs, fail to comply with applicable GCP regulations, the data generated in our clinical trials may be deemed unreliable and the FDA may require us to perform additional clinical trials are not compliant with GCP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

If any of our relationships with third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs on commercially reasonable terms, or at all. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully

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commercialize our product candidates. As a result, our results of operations and the commercial prospects for our product candidates could be harmed, our costs could increase and our ability to generate additional revenues could be delayed.

We may participate in clinical trials conducted under an approved investigator-sponsored investigational new drug (IND) application and correspondence and communication with the FDA pertaining to these trials will strictly be between the investigator and the FDA.

We have in the past, and may in the future, participate in clinical trials conducted under an approved investigator-sponsored investigational new drug (IND) application. Regulations and guidelines imposed by the FDA with respect to IND applications include a requirement that the sponsor of a clinical trial provide ongoing communication with the agency as it pertains to safety of the treatment. This communication can be relayed to the agency in the form of safety reports, annual reports, or verbal communication at the request of the FDA. Accordingly, it is the responsibility of each investigator (as the sponsor of the trial) to be the point of contact with the FDA. The communication and information provided by the investigator may not be appropriate and accurate, and the investigator has the ultimate responsibility and final decision-making authority with respect to submissions to the FDA. This may result in reviews, audits, delays, or clinical holds by the FDA ultimately affecting the timelines for these studies and potentially risking the completion of these trials.

## We may incur liability if our promotions of product candidates are determined, or are perceived, to be inconsistent with regulatory guidelines.

The FDA provides guidelines with respect to appropriate product promotion and continuing medical and health education activities. Although we endeavor to follow these guidelines, the FDA or the Office of the Inspector General: U.S. Department of Health and Human Services may disagree, and we may be subject to significant liability, including civil and administrative remedies as well as criminal sanctions. In addition, management s attention could be diverted and our reputation could be damaged.

If we and the contract manufacturers upon whom we rely fail to produce our systems and product candidates in the volumes that we require on a timely basis, or fail to comply with stringent regulations, we may face delays in the development and commercialization of our electroporation equipment and product candidates.

We currently assemble certain components of our electroporation systems and utilize the services of contract manufacturers to manufacture the remaining components of these systems and our product supplies for clinical trials. We expect to increase our reliance on third party manufacturers if and when we commercialize our product candidates and systems. The manufacture of our systems and product supplies requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers often encounter difficulties in production, particularly in scaling up for commercial production. These problems include difficulties with production costs and yields, quality control, including stability of the equipment and product candidates and quality assurance testing, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. If we or our manufacturers were to encounter any of these difficulties or our manufacturers otherwise fail to comply with their obligations to us, our ability to provide our electroporation equipment to our partners and products to patients in our clinical trials or to commercially launch a product would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of our clinical trials, increase the costs associated with maintaining our clinical trial program, and, depending upon the period of delay, require us to commence new trials at significant additional expense or terminate the trials completely.

In addition, all manufacturers of our products must comply with cGMP requirements enforced by the FDA through its facilities inspection program. These requirements include, among other things, quality control, quality assurance, and the generation and maintenance of records and documentation. Manufacturers of our products may be unable to comply with these cGMP requirements and with other FDA, state, and foreign regulatory requirements. We have little control over our manufacturers

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compliance with these regulations and standards. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any product is compromised due to our or our manufacturers failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our products, and we may be held liable for any injuries sustained as a result. Any of these factors could cause a delay of clinical trials, regulatory submissions, approvals, or commercialization of our products, entail higher costs, or result in our being unable to effectively commercialize our products. Furthermore, assuming we are successful in commercializing one or more of our product candidates, if our manufacturers fail to deliver the required commercial quantities on a timely basis, pursuant to provided specifications and at commercially reasonable prices, we may be unable to meet demand for our products and would lose potential revenues.

## If any product candidate for which we receive regulatory approval does not achieve broad market acceptance or coverage by third-party payors, our revenues may be limited.

The commercial success of any potential product candidates for which we obtain marketing approval from the FDA or other regulatory authorities will depend upon the acceptance of these products by physicians, patients, healthcare payors, and the medical community. Coverage and reimbursement of our approved product by third-party payors is also necessary for commercial success. The degree of market acceptance of any potential product candidates for which we may receive regulatory approval will depend on a number of factors, including:

- our ability to provide acceptable evidence of safety and efficacy;
- acceptance by physicians and patients of the product as a safe and effective treatment;
- the prevalence and severity of adverse side effects;
- limitations or warnings contained in a product s FDA-approved labeling;
- the clinical indications for which the product is approved;
- availability and perceived advantages of alternative treatments;
- any negative publicity related to our or our competitors products;
- the effectiveness of our or any current or future collaborators sales, marketing, and distribution strategies;
- pricing and cost effectiveness;
- our ability to obtain sufficient third-party payor coverage or reimbursement; and
- the willingness of patients to pay out of pocket in the absence of third-party payor coverage.

Our efforts to educate the medical community and third-party payors on the benefits of any of our potential product candidates for which we obtain marketing approval from the FDA or other regulatory authorities may require significant resources and may never be successful. If our potential products do not achieve an adequate level of acceptance by physicians, third-party payors, and patients, we may not generate sufficient

revenue from these products to become or remain profitable.

We may not be successful in executing our strategy for the commercialization of our product candidates. If we are unable to successfully execute our commercialization strategy, we may not be able to generate significant revenue.

We intend to advance a commercialization strategy that leverages previous in-depth clinical experiences, previous CE (Conformité Européene) approvals for the electroporation-based devices, and late stage clinical studies in the United States. This strategy includes seeking approval from the FDA to initiate pivotal registration studies in the United States for select rare cancers that have limited, adverse, or no therapeutic alternatives. This strategy also includes expanding the addressable markets for our therapies through the addition of relevant indications. Our commercialization plan also includes partnering and/or co-developing our technology in developing geographic locations, such as Eastern Europe and Asia, where local resources are best leveraged and appropriate collaborators can be secured.

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We may not be able to implement a commercialization strategy as we have planned. Further, we have little experience and have not proven our ability to succeed in the biotechnology industry and are not certain that our implementation strategy, if implemented correctly, would lead to significant revenue. If we are unable to successfully implement our commercialization plans and drive adoption by patients and physicians of our potential future products through our sales, marketing, and commercialization efforts, then we will not be able to generate significant revenue which will have a material adverse effect on our business, results of operations, financial condition, and prospects.

# In order to market our proprietary products, we may choose to establish our own sales, marketing, and distribution capabilities. We have no experience in these areas, and if we have problems establishing these capabilities, the commercialization of our products would be impaired.

We may choose to establish our own sales, marketing, and distribution capabilities to market products to our target markets. We have no experience in these areas, and developing these capabilities will require significant expenditures on personnel and infrastructure. While we intend to market products that are aimed at a small patient population, we may not be able to create an effective sales force around even a niche market. In addition, some of our product candidates may require a large sales force to call on, educate, and support physicians and patients. We may not be able to enter into collaborations with one or more pharmaceutical companies to sell, market, and distribute such products, but we may not be able to enter into any such arrangement on acceptable terms, if at all. Any collaboration we do enter into may not be effective in generating meaningful product royalties or other revenues for us.

# Our success depends in large part on our ability to protect our intellectual property. Because of the difficulties of protecting our proprietary rights and technology, we may not be able to ensure their protection.

Our commercial success will depend in large part on obtaining and maintaining patent, trademark, and trade secret protection of our product candidates and their respective components, formulations, manufacturing methods, and methods of treatment, as well as successfully defending these patents against third-party challenges. Our ability to stop third parties from making, using, selling, offering to sell, or importing our product candidates is dependent upon the extent to which we have rights under valid and enforceable patents or trade secrets that cover these activities.

The coverage claimed in a patent application typically is significantly reduced before a patent is issued, either in the United States or abroad. Consequently, any of our pending or future patent applications may not result in the issuance of patents and any patents issued may be subjected to further proceedings limiting their scope and may in any event not contain claims broad enough to provide meaningful protection. Any patents that are issued to us or our future collaborators may not provide significant proprietary protection or competitive advantage and may be circumvented or invalidated. In addition, unpatented proprietary rights, including trade secrets and know-how, can be difficult to protect and may lose their value if they are independently developed by a third party or if their secrecy is lost. Further, because development and commercialization of our potential product candidates can be subject to substantial delays, our patents may expire and provide only a short period of protection, if any, following any future commercialization of products. Moreover, obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by government patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements. If any of our patents are found to be invalid or unenforceable, or if we are otherwise unable to adequately protect our rights, it could have a material adverse impact on our business and our ability to commercialize or license our technology and products.

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# We may incur substantial costs as a result of litigation or other proceedings relating to protection of our patent and other intellectual property rights, and we may be unable to successfully protect our rights to our potential products and technology.

If we choose to go to court to stop a third party from using the inventions claimed by our patents, that third party may ask the court to rule that the patents are invalid and/or should not be enforced. These lawsuits are expensive and could consume time and other resources even if we were successful in stopping the infringing activity. In addition, the court could decide that our patents are not valid and that we do not have the right to stop others from using the inventions claimed by the patents.

Additionally, even if the validity of these patents is upheld, the court could refuse to stop a third party sinfringing activity on the ground that such activities do not infringe our patents. The U.S. Supreme Court has recently revised certain tests regarding granting patents and assessing the validity of patents to make it more difficult to obtain patents. As a consequence, issued patents may be found to contain invalid claims according to the newly revised standards. Some of our patents may be subject to challenge and subsequent invalidation or significant narrowing of claim scope in a reexamination proceeding, or during litigation, under the revised criteria.

#### Third parties may claim that we infringe their proprietary rights and may prevent us from manufacturing and selling some of our products.

The manufacture, use, and sale of new products that are the subject of conflicting patent rights have been the subject of substantial litigation in the biotechnology industry. These lawsuits relate to the validity and infringement of patents or proprietary rights of third parties. Litigation may be costly and time-consuming and could divert the attention of our management and technical personnel. In addition, if we infringe on the rights of others, we could lose our right to develop, manufacture, or market products or could be required to pay monetary damages or royalties to license proprietary rights from third parties. Although the parties to patent and intellectual property disputes in the biotechnology industry have often settled their disputes through licensing or similar arrangements, the costs associated with these arrangements may be substantial and could include ongoing royalties. Furthermore, we cannot be certain that the necessary licenses would be available to us on commercially reasonable terms or at all. As a result, an adverse determination in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent us from manufacturing and selling our products, and could have a material adverse effect on our business, results of operations, financial condition, and cash flows.

# Extensive industry regulation has had, and will continue to have, a significant impact on our business, especially our product development, manufacturing, and distribution capabilities.

All biotechnology companies are subject to extensive, complex, costly, and evolving government regulation. For the U.S., these regulations are principally administered by the FDA and to a lesser extent by the United States Drug Enforcement Agency (the DEA) and state government agencies, as well as by various regulatory agencies in foreign countries where products or product candidates are being manufactured and/or marketed. The Federal Food, Drug and Cosmetic Act, the Controlled Substances Act, and other federal statutes and regulations, and similar foreign statutes and regulations, govern or influence the testing, manufacturing, packing, labeling, storing, record keeping, safety, approval, advertising, promotion, sale, and distribution of our products. Under these regulations, we may become subject to periodic inspection of our facilities, procedures, and operations and/or the testing of our product candidates and products by the FDA, the DEA, and other authorities, which conduct periodic inspections to confirm that we are in compliance with all applicable regulations. In addition, the FDA and foreign regulatory agencies conduct pre-approval and post-approval reviews and plant inspections to determine whether our systems and processes are in compliance with cGMP and other regulations. Following such inspections, the FDA or other agency may issue observations, notices, citations, and/or warning letters that could cause us to modify certain activities identified during the inspection. To the extent that we successfully commercialize any product, we may also be subject to ongoing FDA obligations and continued regulatory review with respect to manufacturing,

processing, labeling, packaging, distribution, storage, advertising, promotion, and recordkeeping for the product. Additionally, we may be required to conduct potentially

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costly post-approval studies and report adverse events associated with our products to the FDA and other regulatory authorities. Unexpected or serious health or safety concerns would result in labeling changes, recalls, market withdrawals, or other regulatory actions.

The range of possible sanctions includes, among others, FDA issuance of adverse publicity, product recalls or seizures, fines, total or partial suspension of production and/or distribution, suspension of the FDA s review of product applications, enforcement actions, injunctions, and civil or criminal prosecution. Any such sanctions, if imposed, could have a material adverse effect on our business, operating results, financial condition, and cash flows. Under certain circumstances, the FDA also has the authority to revoke previously granted drug approvals. Similar sanctions as detailed above may be available to the FDA under a consent decree, depending upon the actual terms of such decree. If internal compliance programs do not meet regulatory agency standards or if compliance is deemed deficient in any significant way, it could materially harm our business.

Moreover, the regulations, policies, or guidance of the FDA or other regulatory agencies may change and new or additional statutes or government regulations may be enacted that could prevent or delay regulatory approval of our product candidates or further restrict or regulate post-approval activities. If we are not able to achieve and maintain regulatory compliance, we may not be permitted to market our potential product candidates, which would adversely affect our ability to generate revenue and achieve or maintain profitability.

# We are subject to uncertainty relating to reimbursement policies which, if not favorable to our product candidates in combination with third-party products, could hinder or prevent our products commercial success.

Our ability to commercialize our electroporation equipment and ImmunoPulse products successfully will depend in part on the extent to which governmental authorities, private health insurers and other third-party payors establish appropriate coverage and reimbursement levels for our product candidates and related treatments, independently and in combination with third-party products. As a threshold for coverage and reimbursement, third-party payors generally require that drug products have been approved for marketing by the FDA. A primary trend in the U.S. healthcare industry is cost containment. Third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular products and procedures. Increasingly, third-party payors are requiring that companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot assure you that coverage and reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Coverage and reimbursement may impact the demand for, or the price of, any product for which we obtain marketing approval. If coverage and reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any product candidate that we successfully develop.

In addition, the regulations that govern marketing approvals, pricing, coverage and reimbursement for new therapeutic products vary widely from country to country. Some countries require approval of the sale price of a product before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain regulatory approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product and negatively impact the revenue we are able to generate from the sale of the product in that country.

Healthcare reform measures could hinder or prevent our products commercial success.

In both the United States and certain foreign jurisdictions there have been, and we anticipate there will continue to be, a number of legislative and regulatory changes to the healthcare system that could impact our ability to sell any of our products profitably. In the United States, the Federal government recently passed healthcare reform legislation, the Patient Protection and Affordable Care Act, or the ACA.

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The provisions of the ACA are effective on various dates over the next several years. While many of the details regarding the implementation of the ACA are yet to be determined, we believe there will be continuing trends towards expanding coverage to more individuals, containing health care costs and improving quality. At the same time, the rebates, discounts, taxes and other costs associated with the ACA are expected to be a significant cost to the pharmaceutical industry.

The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to make and implement healthcare reforms may adversely affect:

- our ability to set a price we believe if fair for our products;
- our abilitiy to generate revenues and achieve or maintain profitability;
- the availability of capital; and
- our ability to obtain timely approval of our products.

# If we fail to comply with applicable healthcare regulations, we could face substantial penalties and our business, operations and financial condition could be adversely affected.

Certain federal and state healthcare laws and regulations pertaining to fraud and abuse and patients rights may be applicable to our business. We could be subject to healthcare fraud and abuse and patient privacy regulation by both the federal government and the states in which we conduct our business, without limitation. The laws that may affect our ability to operate include:

• the federal healthcare program Anti-Kickback Statute, which prohibits, among other things, people from soliciting, receiving or providing remuneration, directly or indirectly, to induce either the referral of an individual, for an item or service or the purchasing or ordering of a good or service, for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs;

• federal false claims laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent;

• the ACA expands the government s investigative and enforcement authority and increases the penalties for fraud and abuse, including amendments to both the False Claims Act and the Anti-Kickback Statute to make it easier to bring suit under those statutes;

• the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which prohibits executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters and which also imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information;

• the Federal Food, Drug, and Cosmetic Act, which among other things, strictly regulates drug product marketing, prohibits manufacturers from marketing drug products for off-label use and regulates the distribution of drug samples; and

• state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating co

Additionally, the compliance environment is changing, with more states, such as California and Massachusetts, mandating implementation of compliance programs, compliance with industry ethics codes, and spending limits, and other states, such as Vermont, Maine, and Minnesota requiring reporting to state governments of gifts, compensation, and other remuneration to physicians. Under the ACA, starting in 2012, pharmaceutical companies will be required to record any transfers of value made to doctors and teaching hospitals and to disclose such data to HHS, with initial disclosure to HHS due in 2013. These laws all provide for penalties for non-compliance. The shifting regulatory environment, along with the requirement to comply with multiple jurisdictions with different compliance and/or reporting requirements, increases the possibility that a company may run afoul of one or more laws.

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If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations. Any penalties, damages, fines, curtailment or restructuring of our operations could adversely affect our ability to operate our business and our financial results. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management s attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state privacy, security and fraud laws may prove costly.

#### We face potential product liability exposure and if successful claims are brought against us, we may incur substantial liability.

The clinical use of our product candidates exposes us to the risk of product liability claims. Any side effects, manufacturing defects, misuse, or abuse associated with our product candidates could result in injury to a patient or even death. In addition, a liability claim may be brought against us even if our product candidates merely appear to have caused an injury. Product liability claims may be brought against us by consumers, healthcare providers, pharmaceutical companies, or others coming into contact with our product candidates, among others.

Regardless of merit or potential outcome, product liability claims against us may result in, among other effects, the inability to commercialize our product candidates, impairment of our business reputation, withdrawal of clinical trial participants, and distraction of management s attention from our primary business. If we cannot successfully defend ourselves against product liability claims we could incur substantial liabilities.

#### The biotechnology industry is highly competitive.

The biotechnology industry has an intensely competitive environment that will require an ongoing, extensive search for technological innovations and the ability to market products effectively, including the ability to communicate the effectiveness, safety, and value of products to healthcare professionals in private practice, group practices, and payors in managed care organizations, group purchasing organizations, and Medicare & Medicaid services. We face competition from a number of sources, including large pharmaceutical companies, biotechnology companies, academic institutions, government agencies and private and public research institutions. We are smaller than almost all of our competitors. Most of our competitors have been in business for a longer period of time than us, have a greater number of products on the market, and have greater financial and other resources than we do. Furthermore, recent trends in this industry are that large drug companies are consolidating into a smaller number of very large entities, which further concentrates financial, technical, and market strength and increases competitive pressure in the industry. If we directly compete with these very large entities for the same markets and/or products, their financial strength could prevent us from capturing a share of those markets. It is possible that developments by our competitors will make any products or technologies that we develop or acquire noncompetitive or obsolete.

If our competitors market and/or develop competing product candidates that are marketed more effectively, approved more quickly, or demonstrated to be safer or more effective than our product candidates, then our commercial opportunities may be reduced or eliminated.

The biotechnology industry is characterized by rapidly advancing technologies, intense competition, and a strong emphasis on proprietary therapeutics. If we are able to obtain regulatory approval of our product candidates or any assets we may acquire in the future, we will face competition from products currently marketed by companies much larger than us that address our targeted indications.

In addition to already marketed products, we also face competition from product candidates that are or could be under development. We expect our product candidates, if approved and commercialized, to compete on the basis of, among other things, product efficacy and safety, time to market, price, patient reimbursement by third-party payors, extent of adverse side effects, and convenience of treatment

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procedures. We may not be able to effectively compete in one or more of these areas. We also may not be able to differentiate any products that we are able to market from those of our competitors or successfully develop or introduce new products that are less costly or offer better results than those of our competitors.

Additionally, our competitors may obtain regulatory approval of their products more rapidly than we are able to or may obtain patent protection or other intellectual property rights that limit or block us from developing or commercializing our product candidates. Our competitors may also develop products that are more effective, more useful, better tolerated, subject to fewer or less severe side effects, more widely prescribed or accepted, or less costly than ours and may also be more successful than us in manufacturing and marketing their products. If we are unable to compete effectively with the marketed therapeutics of our competitors or if such competitors are successful in developing products that compete with our potential product candidates that are approved, our business, results of operations, financial condition, and prospects may be materially adversely affected.

# If we fail to comply with federal and state healthcare laws, including fraud and abuse and health information privacy and security laws, we could face substantial penalties and our business, results of operations, financial condition, and prospects could be adversely affected.

Even though we do not and will not control referrals of healthcare services or bill directly to third-party payors, certain federal and state healthcare laws and regulations pertaining to fraud and abuse and patients rights may be applicable to our business. We could be subject to healthcare fraud and abuse and patient privacy regulation by both the federal government and the states in which we conduct our business. To the extent that any product we make is sold in a foreign country, we also may be subject to foreign laws and regulations. If we or our operations are found to be in violation of any of these laws or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from participation in U.S. federal or state health care programs, and the curtailment or restructuring of our operations. Any penalties, damages, fines, curtailment or restructuring of our operations could materially adversely affect our ability to operate our business and our financial results. Further, any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management s attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state privacy, security, and fraud laws may prove costly.

# We may engage in strategic transactions that could impact our liquidity, increase our expenses, and present significant distractions to our management.

From time to time we may consider engaging in strategic transactions, such as acquisitions of companies, asset purchases and out-licensing or in-licensing of products, product candidates or technologies. Any such transaction may require us to incur non-recurring or other charges, may increase our near and long-term expenditures, and may pose significant integration challenges or disrupt our management or business, which could adversely affect our operations and financial results. For example, these transactions may entail numerous operational and financial risks, including, among others, exposure to unknown liabilities, disruption of our business and diversion of our management s time and attention in order to develop acquired products, product candidates, or technologies, difficulty and cost in combining the operations and personnel of any acquired businesses with our operations and personnel, and inability to retain key employees of any acquired businesses. Accordingly, although we may not choose to undertake or may not be able to successfully complete any transactions of the nature described above, any transactions that we do complete could have a material adverse effect on our business, results of operations, financial condition, and prospects.

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

Despite the implementation of security measures, our internal computer systems and those of our current and any future partners, contractors, and consultants are vulnerable to damage from cyber-attacks, computer viruses, unauthorized access, natural disasters, terrorism, war, and telecommunication and electrical failures. System failures, accidents, or security breaches could cause interruptions in our

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operations, and could result in a material disruption of our commercialization activities, development programs and our business operations, in addition to possibly requiring substantial expenditures of resources to remedy. The loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the commercialization of any potential product candidate could be delayed.

# If we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results. As a result, current and potential stockholders could lose confidence in our financial reporting, which would harm our business.

Effective internal controls are necessary for us to provide reliable financial reports. If we cannot provide reliable financial reports, our operating results could be misstated, our reputation may be harmed, and the trading price of our stock could be negatively affected. Our controls over financial processes and reporting may not continue to be effective, or we may identify additional material weaknesses or significant deficiencies in our internal controls in the future. Any failure to remediate any future material weaknesses or implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results, cause us to fail to meet our reporting obligations, or result in material misstatements in our financial statements or other public disclosures. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

# Maintaining compliance with our obligations as a public company may strain our resources and distract management, and if we do not remain compliant our stock price may be adversely affected.

We are required to evaluate our internal control systems in order to allow management to report on our internal controls as required by Section 404 of the Sarbanes-Oxley Act of 2002, and our management is required to attest to the adequacy of our internal controls. Recent SEC pronouncements suggest that in the next several years we may be required to report our financial results using new International Financial Reporting Standards, replacing GAAP, which would require us to make significant investments in training, hiring, consulting, and information technology, among other investments. All of these and other reporting requirements and heightened corporate governance obligations that we face, or will face, will further increase the cost to us, perhaps substantially, of remaining compliant with our obligations under the Securities Exchange Act of 1934, as amended (the Exchange Act ) and other applicable laws, including the Sarbanes-Oxley Act and the Dodd-Frank Act of 2010. We are an accelerated filer as of July 31, 2014, which will generally increase our reporting obligations and compliance costs as a public company including, among other requirements, that (i) our compliance date for the filing of this Annual Report on Form 10-K for Fiscal 2014 (our 2014 Annual Report ) is accelerated, (ii) our compliance with Section 404 of the Sarbanes-Oxley Act for our 2014 Annual Report requires that our independent registered public accounting firm issue an attestation report on management s assessment of our internal controls over financial reporting and a report on the effectiveness of our internal controls over financial reporting for Fiscal 2014, and (iii) we will no longer be able to avail ourselves of the scaled disclosure requirements applicable to smaller reporting companies in our filings with the SEC.

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

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

The continued operation and expansion of our business will require substantial funding. Investors seeking cash dividends in the foreseeable future should not purchase our common stock. We have paid no cash dividends on any of our capital stock to date and we currently intend to retain our available cash to fund the development and growth of our business. Any determination to pay dividends in the future will be at the discretion of our Board of Directors and will depend upon results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law, and other factors our Board of Directors

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deems relevant. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock, which may never occur.

#### If we issue additional shares in the future, our existing stockholders will be diluted.

Our articles of incorporation authorize the issuance of up to 3,200,000,000 shares of common stock with a par value of \$0.0001 per share. In addition to capital raising activities, other possible business and financial uses for our authorized common stock include, without limitation, future stock splits, acquiring other companies, businesses, or products in exchange for shares of common stock, issuing shares of our common stock to partners in connection with strategic alliances, attracting and retaining employees by the issuance of additional securities under our various equity compensation plans, or other transactions and corporate purposes that our Board of Directors deems are in the Company s best interest. Additionally, shares of common stock could be used for anti-takeover purposes or to delay or prevent changes in control or management of the Company. We cannot provide assurances that any issuances of common stock will be consummated on favorable terms or at all, that they will enhance stockholder value, or that they will not adversely affect our business or the trading price of our common stock. The issuance of any such shares will reduce the book value per share and may contribute to a reduction in the market price of the outstanding shares of our common stock. If we issue any such additional shares, such issuance will reduce the proportionate ownership and voting power of all current stockholders. Further, such issuance may result in a change of control of our Corporation.

#### Sales of common stock by our stockholders, or the perception that such sales may occur, could depress our stock price.

The market price of our common stock could decline as a result of sales by, or the perceived possibility of sales by, our existing stockholders. Since March 2011, we have completed a number of offerings of our common stock and warrants and as of October 1, 2014, we have issued an aggregate of 244,631,076 shares of our common stock, including common stock underlying warrants. Future sales of common stock by significant stockholders, including by those who acquired their shares in our prior offerings or who are affiliates, or the perception that such sales may occur, could depress the price of our common stock.

# If outstanding options and warrants to purchase shares of our common stock are exercised, the interests of our stockholders could be diluted.

We have issued a total of 55,789,640 shares of our common stock as a result of warrant and option exercises during Fiscal 2014. We have not issued any additional shares of our common stock as a result of warrant and stock option exercises between August 1, 2014 and October 1, 2014 as no such exercises have occurred. In addition, we have as of October 1, 2014, 14,185,900 shares reserved for issuance under our equity compensation plan and pursuant to non-plan awards for vested and unvested stock options. The exercise of options and warrants, and the sale of shares underlying such options or warrants, could have an adverse effect on the market for our common stock, including the price that an investor could obtain for their shares. Investors may experience dilution in the net tangible book value of their investment upon the exercise of outstanding options and warrants granted under our stock option plans, and options and warrants that may be granted or issued in the future. In future periods, we may elect to reduce the exercise price of outstanding warrants as a means of providing additional financing to us.

Trading of our stock is restricted by the SEC s penny stock regulations and certain FINRA rules, which may limit a stockholder s ability to buy and sell our common stock.

Our securities are covered by certain penny stock rules, which impose additional sales practice requirements on broker-dealers who sell low-priced securities to persons other than established customers and accredited investors. For transactions covered by these rules, 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 sale, among other things. In addition, the penny stock rules require a broker-dealer,

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before effecting 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 current bid and offer 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. The bid and offer quotations, and the broker-dealer and salesperson compensation information, must be given to the customer orally or in writing before effecting the transaction, and must be given to the customer in writing before or with the customer s confirmation. These rules may affect the ability of broker-dealers and holders to sell our common stock and may negatively impact the level of trading activity for our common stock. To the extent our common stock remains subject to the penny stock regulations, such regulations may discourage investor interest in and adversely affect the market liquidity of our common stock.

The Financial Industry Regulatory Authority (known as FINRA) has adopted rules that require that in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for that customer. Prior to recommending speculative low-priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer s financial status, tax status, investment objectives, and other information. Under interpretations of these rules, FINRA believes that there is a high probability that speculative low-priced securities will not be suitable for at least some customers. FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our common stock, which may limit stockholder s ability to buy and sell our stock and have an adverse effect on the market for our shares.

# Our common stock is illiquid and the price of our common stock may be negatively impacted by factors which are unrelated to our operations.

Our common stock is quoted on the OTC Markets Group, Inc. s OTCQB tier (OTCQB). Trading of securities quoted on OTCQB is frequently highly volatile, with low trading volume. Since our common stock became available for trading on the OTCQB, we have experienced significant fluctuations in the stock price and trading volume of our common stock. There is no assurance that a sufficient market will develop in our stock, in which case it could be difficult for stockholders to sell their stock. The market price of our common stock could continue to fluctuate substantially.

Factors affecting the trading price of our common stock may include:

- adverse research and development or clinical trial results;
- conducting open-ended clinical trials which could lead to results (success or setbacks) being obtained by the public prior to a formal announcement by us;
- our inability to obtain additional capital;
- announcement that the FDA denied our request to approve our products for commercialization in the United States, or similar denial by other regulatory bodies which make independent decisions outside the United States;
- potential negative market reaction to the terms or volume of any issuance of shares of our stock to new investors or service providers;

- sales of substantial amounts of our common stock, or the perception that substantial amounts of our common stock will be sold, by our stockholders in the public market;
- declining working capital to fund operations, or other signs of apparent financial uncertainty;
- significant advances made by competitors that adversely affect our potential market position; and
- the loss of key personnel and the inability to attract and retain additional highly-skilled personnel.

#### ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

## **ITEM 2. PROPERTIES**

#### **Description of Property**

We do not own any real property. On May 31, 2013, we entered into a thirty-eight month lease agreement for office space to serve as our corporate headquarters in San Diego, California. Our lease commenced on July 1, 2013 and is subject to an initial base monthly rent of approximately \$8,000. The lease calls for annual increases to the base rent of three percent.

Effective April 1, 2014, we entered into a short-term, six-month sublease agreement for temporary office and laboratory space in Seattle, Washington to support our Research and Development (R&D) operations. Effective July 1, we amended the sublease agreement to include additional lab benches and cubicle office space, which increased our rent obligations from \$7,375 to \$9,925 per month.

Effective June 15, 2014 we entered into a 12-month lease agreement for 1,393 square feet of lab space in San Diego, California to further support our R&D operations. The base rent is approximately \$2,300 per month.

Additional space may be required as we expand our activities. We do not currently foresee any significant difficulties in obtaining any required additional facilities.

## **ITEM 3. LEGAL PROCEEDINGS**

In the ordinary course of business, we may become a party to lawsuits involving various matters. The impact and outcome of litigation, if any, is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm our business. We are not currently a party to any proceedings the adverse outcome of which, individually or in the aggregate, would have a material adverse effect on our financial condition or results of operations.

# ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

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## PART II

# ITEM 5. MARKET FOR REGISTRANT S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

#### **Trading Information**

Our common stock has been quoted on OTCQB under the symbol ONCS since March 2011. Prior to March 2011, our common stock traded on the OTCQB and the OTC Bulletin Board under the symbol NTVS. As soon as practicable, and assuming we satisfy all necessary initial listing requirements, we intend to apply to have our common stock listed for trading on a national securities exchange, although we cannot be certain that any application would be approved or that we will ever be able to satisfy the qualitative or quantitative listing requirements for our common stock to be listed on an exchange.

The transfer agent for our common stock is Nevada Agency and Transfer Company at 50 West Liberty Street, Suite 880, Reno, Nevada 89501.

The following table sets forth the range of reported high and low closing bid quotations for our common stock for the fiscal quarters indicated as reported on the OTCQB. The quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not represent actual transactions.

	High	Low
Fiscal 2013		
First Quarter ended October 31, 2012	\$ 0.49	\$ 0.18
Second Quarter ended January 31, 2013	\$ 0.41	\$ 0.20
Third Quarter ended April 30, 2013	\$ 0.29	\$ 0.18
Fourth Quarter ended July 31, 2013	\$ 0.34	\$ 0.23
Fiscal 2014		
First Quarter ended October 31, 2013	\$ 0.36	\$ 0.24
Second Quarter ended January 31, 2014	\$ 0.57	\$ 0.26
Third Quarter ended April 30, 2014	\$ 0.97	\$ 0.43
Fourth Quarter ended July 31, 2014	\$ 0.90	\$ 0.43
Fiscal 2015		
First Quarter ending October 31, 2014 (through October 1, 2014)	\$ 0.65	\$ 0.36

Our common stock is thinly traded and any reported sale prices may not be a true market-based valuation of our common stock.

As of October 1, 2014, there were 38 holders of record of our common stock, not including stockholders whose shares are held in street name.

## Dividends

We have never declared or paid any cash dividends or distributions on our capital stock. We currently intend to retain our future earnings, if any, to support operations and to finance expansion and therefore we do not anticipate paying any cash dividends on our common stock in the foreseeable future.

## **Performance Graph**

The graph below matches OncoSec Medical Inc. s cumulative 4-year total shareholder return on common stock with the cumulative total returns of the NASDAQ Composite index and the NASDAQ Biotechnology index. The graph assumes that the value of the investment in our common stock and in each of the indexes (including reinvestment of dividends) was \$100 on April 8, 2011, the date at which our Company s stock became available for trading on the OTCQB, and tracks it through July 31, 2014.

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## **Comparison of Cumulative Total Return\***

Among OncoSec Medical Inc., the NASDAQ Composite Index and

NASDAQ Biotechnology Index

	4/8/11*	7/31/12	7/31/13	7/31/14
OncoSec Medical Inc.	\$ 100	\$ 14	\$ 20	\$ 29
NASDAQ Composite Index	\$ 100	\$ 106	\$ 130	\$ 157
NASDAQ Biotechnology Index	\$ 100	\$ 131	\$ 194	\$ 247

\* OncoSec stock became available for trading on the OTCQB on April 8, 2011; therefore, a full 5-year graph cannot be provided.

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

Securities Authorized for Issuance under Equity Compensation Plans

In May 2011, our Board of Directors adopted the OncoSec Medical Incorporated 2011 Stock Incentive Plan (the 2011 Plan ). The 2011 Plan was approved by our stockholders in March 2012 and originally authorized the Board of Directors to grant equity awards to employees, directors, and consultants for up to 5,200,000 shares of our common stock. On April 15, 2013, our stockholders approved an amendment to the 2011 Plan to authorize the issuance of an additional 3,800,000 shares of our common stock under the 2011 Plan and on July 18, 2014 our stockholders approved an amendment to the 2011 Plan to authorize the issuance of an additional 16,000,000 shares of our common stock under the 2011 Plan and on July 18, 2014 our stockholders approved an amendment to the 2011 Plan, increasing the total number of shares reserved for issuance under the 2011 Plan to 25,000,000 shares. The 2011 Plan provides for the issuance of a variety of forms of awards, including stock options, stock appreciation rights, restricted stock, and restricted stock units. The following table provides information as of July 31, 2014, with respect to our equity compensation plans:

#### **Equity Compensation Plan Information**

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)			Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	6,060,900	\$	0	).66	16,372,625
Equity compensation plans not approved by	5 700 000		0	).66	
security holders Total	5,700,000 11,760,900	\$		).66 ).66	16,372,625

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### ITEM 6. SELECTED FINANCIAL DATA

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

	Year Ended July 31, 2014	Year Ended July 31, 2013	Year Ended July 31, 2012	Year Ended July 31, 2011	Year Ended July 31, 2010*	April 8, 2011 (inception) to anuary 31, 2014
Operations Data:						
Revenue	\$	\$	\$	\$		\$
Operating expenses	11,950	7,065	5,527	1,695	27	26,305
Loss from operations	(11,950)	(7,065)	(5,527)	(1,695)	(27)	(26,305)
Net loss	\$ (12,012)	\$ (7,150)	\$ (2,365)	\$ (3,759)	(36)	\$ (25,363)
Per common share- basic and						
diluted:	\$ (0.06)	\$ (0.07)	\$ (0.04)	\$ (0.06)	\$ (0.00)	
Balance Sheet Data:						
Cash and cash equivalents	\$ 37,853	\$ 4,970	\$ 5,142	2,458	\$	
Intangible assets	465	1,162	1,859	2,715		
Total assets	39,392	6,510	7,429	5,674		
Current liabilities	1,324	1,771	2,023	6,539	30	
Accumulated deficit	(25,363)	(13,351)	(6,201)	(3,856)	(77)	
Total stockholders equity						
(deficit)	38,068	4,739	4,426	(2,365)	(30)	

\*The data presented is representative of the online inventory services business we engaged in, under the name Netventory Solutions Inc., which we subsequently abandoned in March 2011.

#### ITEM 7. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes and other financial information appearing elsewhere in this Annual Report. Readers are also urged to carefully review and consider the various disclosures made by us which attempt to advise interested parties of the factors which affect our business, including without limitation the disclosures made in Item 1A of Part I of this Annual Report under the caption Risk Factors. The following discussion and other sections of this report contain forward looking statements. We make forward-looking statements, as defined by the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, and in some cases, you can identify these statements by shall, will likely result, should, forward-looking words such as if, may, might, expect, plan, anticipate, believe. goal, predict, potential or continue, or the negative of these terms and other estimate, project, intend, objective, comparable terminology. These forward-looking statements, which are based on various underlying assumptions and expectations and are subject to risks, uncertainties and other unknown factors, may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events that we believe to be reasonable. There are important factors that could cause our actual results, level of activity, performance or

achievements to differ materially from the historical or future results, level of activity, performance or achievements expressed or implied by such forward-looking statements. These factors include, but are not limited to, those discussed under the caption Risk Factors in this report. We undertake no duty to update any of these forward-looking statements after the date of filing of this report to conform such forward-looking statements to actual results or revised expectations, except as otherwise required by law.

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#### **Company Overview**

We were incorporated under the laws of the State of Nevada on February 8, 2008 under the name Netventory Solutions Inc. to pursue the business of inventory management solutions. Effective March 1, 2011, we effected a 32-for-one forward stock split of our common stock and completed a merger with our subsidiary, OncoSec Medical Incorporated, a Nevada corporation which was incorporated solely to effect the change of our name to OncoSec Medical Incorporated .

Asset Purchase Agreement

We have acquired certain assets pursuant to our Asset Purchase Agreement with Inovio Pharmaceuticals, Inc. (Inovio), dated March 14, 2011 (as amended, the Asset Purchase Agreement). The acquired assets relate to certain non-DNA vaccine technology and intellectual property relating to selective tumor ablation technologies (SECTA).

We did not assume any of the liabilities of Inovio except liabilities under the assigned contracts and assigned intellectual property arising after the closing date of the Asset Purchase Agreement. We agreed to pay Inovio \$3,000,000 in scheduled payments beginning on the closing date as well as certain royalties in the event we commercialize our OMS technology. We have entered into amendments to the Asset Purchase Agreement with Inovio in September 2011 (the First Amendment ) and in March 2012 (the Second Amendment ) to modify the terms of our payment obligations (among other modifications). We made a payment of \$1,000,000 to Inovio in May 2013 and we made the final payment to Inovio of \$1,000,000 by December 2013. In consideration for the First Amendment we issued to Inovio a warrant to purchase 1,000,000 shares of common stock with an exercise price of \$1.20 per share. In consideration for the Second Amendment, we issued to Inovio a warrant to purchase 3,000,000 shares of our common stock with an exercise price of \$1.00 per share. Each of the warrants is subject to a five year term. Each of the warrants also contains a mandatory exercise provision allowing us to request the exercise of the warrant in whole provided that our daily market price (as defined in the warrant) is equal to or greater than \$2.40 for twenty consecutive trading days. We completed an evaluation of the warrants issued to Inovio and determined the warrants should be classified as equity within our consolidated balance sheet.

We are also party to a cross-license agreement with Inovio, which we entered into concurrently with the closing of our asset acquisition. This agreement provides for the exclusive license to Inovio of rights related to certain SECTA patents in the field of gene or nucleic acids, outside of those encoding cytokines, delivered by electroporation and for the non-exclusive cross-license by Inovio to us of rights related to certain non-SECTA patents in our field in exchange for specified sublicensing and other licensing fees and royalties.

We are a hybrid device and gene-therapy biotechnology company focused on the discovery, the design, the development and the commercialization of innovative and proprietary medical approaches (principally immunotherapy) for the treatment of solid tumors where currently approved therapies are inadequate based on their efficacy or side-effects. Our technology includes intellectual property relating to certain delivery technologies, which we refer to as ImmunoPulse (ImmunoPulse), a therapeutic approach that is based on the use of an electroporation delivery device in combination with a DNA-based cytokine to treat cancer, or NeoPulse (NeoPulse), a therapeutic approach that is based on the use of an electroporation delivery device in combination with an approved small molecule drug (e.g., bleomycin, a chemotherapeutic agent). Our goal is to improve the lives of people suffering from the life-altering effects of cancer through the development of our novel intratumoral, electroporation-based therapies. We have initiated three Phase 2 clinical trials for the use of our therapies to treat metastatic melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma. We also intend to conduct research and development on other DNA-encoded, immunologically-active molecules with an aim to produce additional immunotherapeutic drugs capable of breaking the immune system s tolerance to cancer.

## **Recent Equity Financings**

June 2014 Public Offering

On June 6, 2014, we closed a registered public offering of an aggregate of 22,535,212 shares of our common stock and warrants to purchase an aggregate of 7,887,325 shares of common stock for gross proceeds to us of approximately \$16.0 million (the June 2014 Public Offering The warrants have an exercise price of \$0.90 per share, are exercisable immediately upon issuance, and have a term of exercise equal to five years from the date of issuance of the warrants. After deducting for fees and expenses, the aggregate net proceeds from the sale of the common stock and the warrants in the June 2014 Public Offering were approximately \$14.9 million. In connection with the June 2014 Public Offering, we paid placement agent fees consisting of (i) a cash fee equal to 6% of the gross proceeds of the offering, as well as a non-accountable expense allowance equal to 1% of the gross proceeds and (ii) warrants to purchase up to an aggregate of 6% of the aggregate number of shares of common stock sold in the offering, or 1,352,113 shares of our common stock (the June 2014 Placement Agent Warrants ). The June 2014 Placement Agent Warrants have substantially the same terms as the warrants issued to the purchasers in the June 2014 Public Offering, except that such warrants expire on May 12, 2019.

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#### September 2013 Public Offering

On September 18, 2013, we closed a registered public offering and issued an aggregate of 47,792,000 shares of our common stock and warrants to purchase an aggregate of 23,896,000 shares of common stock for gross proceeds of approximately \$11.95 million (the September 2013 Public Offering ). The warrants have an exercise price of \$0.35 per share, are exercisable immediately upon issuance and have a term of exercise equal to four years from the date of issuance of the warrants. After deducting for fees and expenses, the aggregate net proceeds to us from the sale of the common stock and the warrants in the September 2013 Public Offering were approximately \$11.1 million. In connection with the offering, we paid placement agent fees consisting of (i) a cash fee equal to 6% of the gross proceeds of the offering, as well as a non-accountable expense allowance equal to 1% of the gross proceeds and (ii) warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or 2,389,600 shares of our common stock (the September 2013 Placement Agent Warrants ). The September 2013 Placement Agent Warrants have substantially the same terms as the warrants issued to the purchasers in the offering, except that such warrants have an exercise price of \$0.3125 and expire on September 13, 2018.

#### **Critical Accounting Policies**

#### Accounting for Long-Lived Assets / Intangible Assets

We assess the impairment of long-lived assets, consisting of property and equipment, and finite-lived intangible assets, whenever events or circumstances indicate that the carry value may not be recoverable. Examples of such circumstances include: (1) loss of legal ownership or title to an asset; (2) significant changes in our strategic business objectives and utilization of the assets; and (3) the impact of significant negative industry or economic trends.

Recoverability of assets to be held and used in operations is measured by a comparison of the carrying amount of an asset to the future net cash flows expected to be generated by the assets. The factors used to evaluate the future net cash flows, while reasonable, require a high degree of judgment and the results could vary if the actual results are materially different than the forecasts. In addition, we base useful lives and amortization or depreciation expense on our subjective estimate of the period that the assets will generate revenue or otherwise be used by us. If such assets are considered impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less selling costs.

We also periodically review the lives assigned to our intangible assets to ensure that our initial estimates do not exceed any revised estimated periods from which we expect to realize cash flows from the technologies. If a change were to occur in any of the above-mentioned factors or estimates, the likelihood of a material change in our reported results would increase.

#### **Derivative Liabilities**

In conjunction with the June 2011 Private Placement, we issued warrants to purchase our common stock that are accounted for as derivative liabilities. These derivative liabilities were determined to be ineligible for equity classification due to certain price protection and anti-dilution

#### provisions.

These derivative liabilities were initially recorded at their estimated fair value on the date of issuance of the common stock and warrants, and are subsequently adjusted to reflect the estimated fair value at each period end, with any decrease or increase in the estimated fair value being recorded as other income or expense. The fair value of these liabilities is estimated using option pricing models that are based on the individual characteristics of the common stock, the derivative liabilities on the valuation date, probabilities related to future financings, as well as assumptions for volatility, remaining expected life, and risk-free interest rate. The option pricing models of our derivative liabilities are estimates and are sensitive to changes to inputs and assumptions used in the option pricing models.

## Share-Based Compensation

We grant equity-based awards under our share-based compensation plan. We estimate the fair value of share-based payment awards using the Black-Scholes option valuation model. This fair value is then amortized over the requisite service periods of the awards. The Black-Scholes option valuation model requires the input of subjective assumptions, including price volatility of the underlying stock, risk-free interest rate, dividend yield, and expected life of the option. Share-based compensation expense is based on awards ultimately expected to vest, and therefore is reduced by expected forfeitures. Changes in assumptions used under the Black-Scholes option valuation model could materially affect our net loss and net loss per share.

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#### **Recent Accounting Pronouncements**

Information regarding recent accounting pronouncements is contained in Note 2 to the Consolidated Financial Statements, included elsewhere in this report.

### **Results of Operations**

### Comparison of Fiscal Years Ended July 31, 2014 and 2013

The audited consolidated financial data for the fiscal years ended July 31, 2014 and July 31, 2013 are presented in the following table and the results of these two periods are used in the discussion thereafter.

	July 31, 2014 (\$)	July 31, 2013 (\$)	Increase/ (Decrease) (\$)	Increase/ (Decrease) %
Revenue				
Operating expenses				
Research and development	5,796,347	3,159,209	2,637,138	83
General and administrative	6,153,313	3,905,763	2,247,550	58
Loss from operations	(11,949,660)	(7,064,972)	4,884,688	69
Other income (expense)				
Interest expense non-cash	(20,684)	(83,215)	(62,531)	(75)
Net loss before income taxes	(11,970,344)	(7,148,187)	4,822,157	67
Income tax provision	41,773	2,000	39,773	**
Net loss	(12,012,117)	(7,150,187)	4,861,930	68

\*\* Percentage increase/(decrease) is greater than 100%.

#### Research and Development Expenses

The \$2,637,000 increase in research and development expenses for the fiscal year ended July 31, 2014 (Fiscal 2014) as compared to the fiscal year ended July 31, 2013 (Fiscal 2013) was primarily the result of (i) increased salary related expenses (inclusive of stock-based compensation) of \$1,500,000 due to increased headcount, inclusive of hiring a Chief Medical Officer and additional research personnel, (ii) increased outside services expenses related to sponsored research and clinical development consulting of \$600,000, (iii) increased expenses of \$200,000 for acquisition of lab supplies to support our expansion of our R&D operations, and (iv) increased clinical trial expenses of \$200,000 due to the progression of our clinical trials. We expect research and development to continue to account for a significant portion of our total expenses in the future as we continue to expand our operations and focus on designing and developing our therapies.

We expect to use our current funds following our June 2014 Public Offering for the advancement of our operational milestones. Our significant operational milestones currently include the expansion of our research and development efforts in furtherance of our ImmunoPulse clinical pipeline (our Clinical Pipeline ) and electroporation devices ( Device R&D ). Specifically, we intend to pursue the following key activities: (i) ongoing product development and execution of clinical trials supporting our Clinical Pipeline; (ii) research related to new product candidates entering into our Clinical Pipeline; and (iii) new Device R&D and support for clinical trials including improvements to existing devices.

During Fiscal 2014, we incurred approximately \$4,000,000 in costs associated with our Clinical Pipeline and approximately \$900,000 in costs associated with our Device R&D milestones.

### General and Administrative

The \$2,248,000 increase in general and administrative expenses for Fiscal 2014, as compared to Fiscal 2013, was primarily the result of increased (i) salary related expenses (inclusive of stock-based compensation) of \$1,100,000 due to increased headcount and Board-approved management bonuses and (ii) outside services costs of \$1,000,000 consisting primarily of corporate development and corporate communications consulting. The increases in these costs are attributable to the expansion of our corporate infrastructure as we continue to progress toward achieving our operational milestones.

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### Other Income (Expense)

The \$63,000 decrease in other expense for Fiscal 2014 as compared to Fiscal 2013 was due to the decrease in non-cash interest expense related to our payment obligations to Inovio pursuant to the Asset Purchase Agreement which was fully paid in December 2013.

## Comparison of Fiscal Years Ended July 31, 2013 and 2012

The audited consolidated financial data for Fiscal 2013 and Fiscal 2012 are presented in the following table and the results of these two periods are used in the discussion thereafter.

	July 31, 2013 (\$)	July 31, 2012 (\$)	Increase/ (Decrease) (\$)	Increase/ (Decrease) %
Revenue				
Operating expenses				
Research and development	3,159,209	2,368,481	790,728	33
General and administrative	3,905,763	3,158,693	747,070	24
Loss from operations	(7,064,972)	(5,527,174)	1,537,798	28
Other income (expense)				
Interest expense non-cash	(83,215)	(266,567)	(183,352)	(69)
Loss on extinguishment of debt		(761,492)	(761,492)	(100)
Adjustments to fair value of derivative liabilities		4,192,781	4,192,781	100
Net loss before income taxes	(7,148,187)	(2,362,452)	4,785,735	**
Income tax provision	2,000	2,400	(400)	(17)
Net loss	(7,150,187)	(2,364,852)	4,785,335	**

\*\* Percentage increase/(decrease) is greater than 100%.

#### Research and Development Expenses

The \$791,000 increase in research and development expenses for Fiscal 2013 as compared to Fiscal 2012 was mainly the result of increased clinical trial expenses of \$723,000. We expect research and development to account for a significant portion of our total expenses in the future as we continue to focus on designing and developing our therapies.

## General and Administrative

The \$747,000 increase in general and administrative expenses for Fiscal 2013 as compared to Fiscal 2012 was primarily the result of increased corporate communications costs of \$160,000 consisting primarily of investor relations services, contract labor costs of \$40,000, rental expense of \$72,000, salaries and wage expense of \$67,000, information technology costs of \$53,000, conference registration fees of \$58,000, share-based compensation expense of \$168,000, as well as other general corporate matters and increased travel and associated costs of \$29,000.

Other Income (Expense)

The \$3,082,000 decrease in other income for Fiscal 2013 as compared to Fiscal 2012 was primarily due to the recording of other income of \$4,193,000 as a result of the adjustment to fair value of the derivative liabilities as of April 30, 2012. In connection with the June 2011 Private Placement, we issued warrants to purchase 240,000 shares of our common stock to the co-placement agents and warrants to purchase 12,000,000 shares of our common stock to the investors in the private placement. As more fully described in Note 7 to our consolidated financial statements, certain warrants issued in connection with the June 2011 Private Placement were determined to be derivative liabilities as a result of the anti-dilution provisions contained in the warrant agreements. All of these warrants ceased to be classified as derivative liabilities as of March 28, 2012.

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## Liquidity and Capital Resources

Working Capital

Our working capital as of July 31, 2014 and 2013 is summarized as follows:

	At	At
	July 31, 2014	July 31, 2013
	(\$)	(\$)
Current assets	38,319,177	5,169,687
Current liabilities	1,323,551	1,770,604
Working capital	36,995,626	3,399,083

#### Current Assets

Current assets as of July 31, 2014 increased to \$38,319,000 from \$5,170,000 as of July 31, 2013. This increase was primarily due to an increase in cash from \$4,970,000 as of July 31, 2013, to \$37,853,000 as of July 31, 2014, as a result of cash received from the exercise of warrants and options to buy common stock and the September 2013 and June 2014 financings, partially offset by cash used in operations during Fiscal 2014.

### Current Liabilities

Current liabilities as of July 31, 2014 decreased to \$1,324,000 from \$1,771,000 as of July 31, 2013. This decrease was primarily due to the \$1,000,000 payment made in December 2013, in accordance with the Asset Purchase Agreement as more fully discussed in Note 6 to our consolidated financial statements, partially offset by an increase in accounts payable and accrued expenses.

Cash Flow

Cash Flow Used in Operating Activities

Cash used in operating activities for Fiscal 2014 was \$8,980,000, as compared to \$5,533,000 for Fiscal 2013. This increase was related to increased costs of operations, due primarily to salary expense and associated costs, clinical trial costs, legal fees, and professional fees for investor relations, sponsored research, and clinical development consulting.

## Cash Flow Used in Investing Activities

Cash used in investing activities for Fiscal 2014 was \$513,000, as compared to \$115,000 for Fiscal 2013, and was due to the acquisition of property and equipment for our new office and our two new R&D lab facilities.

## Cash Flow Provided by Financing Activities

Cash provided by financing activities was \$42,375,000 for the year ended July 31, 2014, as compared to \$5,476,000 for the year ended July 31, 2013. The increase in cash primarily related to aggregated net proceeds of \$26,000,000 received from the September 2013 Public Offering and June 2014 Public Offering, as well as aggregate cash proceeds of approximately \$17,400,000 received as a result of warrant and stock option exercises during Fiscal 2014, offset by the final payment of \$1,000,000 to Inovio in December 2013 in connection with the Asset Purchase Agreement.

Equity Financings Since March 2011

In March 2011 we closed a private placement of 1,456,000 units at a purchase price of \$0.75 per unit for gross proceeds of \$1,092,000 (the March 2011 Private Placement ). Each unit consisted of one share of our common stock and one share purchase warrant entitling the holder to acquire one share of our common stock at a price of \$1.00 per share for a period of five years from the closing of the March 2011 Private Placement. The warrants were exercisable as of March 18, 2011 and any unexercised warrants will expire on March 18, 2016. We are not obligated to register any of the shares issued or issuable upon exercise of the warrants issued in the March 2011 Private Placement.

On June 24, 2011, we sold in a private placement an aggregate of 4,000,000 shares of our common stock and three series of warrants to purchase an aggregate of 12,000,000 shares of our common stock at a per unit purchase price of \$0.75 per unit, for gross proceeds of \$3.0 million (the June 2011 Private Placement ). We also issued warrants to purchase 240,000 shares of our common stock to the co-placement agents in the offering. After deducting for fees and expenses, the aggregate net cash proceeds from the June 2011 Private Placement were approximately \$2.79 million.

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In the June 2011 Private Placement, each purchaser was issued a Series A Warrant, a Series B Warrant, and a Series C Warrant, each to purchase up to a number of shares of our common stock equal to 100% of the shares issued to such purchaser in the June 2011 Private Placement. The Series A Warrants had an initial exercise price of \$1.20 per share, are exercisable immediately upon issuance and have a term of five years. On February 21, 2012, the Series B and Series C Warrants expired unexercised. On March 28, 2012, the exercise price of the Series A Warrants reset to \$0.50 upon the closing of the March 2012 Public Offering.

On March 28, 2012, in the March 2012 Public Offering, we sold an aggregate of 31,000,000 units, each consisting of one share of common stock and a warrant to purchase one share of common stock, at a purchase price of \$0.25 per unit. The warrants have an exercise price of \$0.35 per share, are exercisable immediately upon issuance and have a term of exercise equal to five years from the date of issuance. We paid fees and expenses of \$542,500 and issued warrants to purchase 1,550,000 shares of our common stock on terms substantially similar to the purchaser warrants to the placement agent and a financial advisor in the March 2012 Public Offering. After deducting for fees and expenses, our aggregate net proceeds from the offering were approximately \$7.2 million.

On December 17, 2012, in the December 2012 Public Offering, we sold an aggregate of 28,800,000 shares of our common stock and warrants to purchase an aggregate of 14,400,000 shares of common stock for an aggregate purchase price of \$7.2 million. The warrants have an exercise price of \$0.26 per share, are exercisable immediately upon issuance and have a term of exercise equal to four years from the date of issuance. We paid fees and expenses of \$504,000 and issued warrants to purchase 1,440,000 shares of our common stock on terms substantially similar to the purchaser warrants to the placement agent and our financial advisors in the December 2012 Public Offering. After deducting for fees and expenses, the aggregate net proceeds from the offering were approximately \$6.7 million.

On September 18, 2013, we closed the September 2013 Public Offering, in which we sold an aggregate of 47,792,000 shares of our common stock plus warrants to purchase an aggregate of 23,896,000 shares of common stock for a purchase price of \$0.25 per share, for gross proceeds of approximately \$11.95 million. The warrants have an exercise price of \$0.35 per share, are exercisable immediately upon issuance and have a term of exercise equal to four years from the date of issuance. We paid placement agent fees consisting of (i) \$836,000 in cash fees and expenses and (ii) issued warrants to purchase 2,390,000 shares of our common stock on terms substantially similar to the purchaser warrants in the September 2013 Public Offering. After deducting for fees and expenses, the aggregate net proceeds from the September 2013 Public Offering were approximately \$11.1 million.

On June 6, 2014, we closed the June 2014 Public Offering in which we sold an aggregate of 22,535,212 shares of our common stock and warrants to purchase an aggregate of 7,887,325 shares of our common stock for gross proceeds of approximately \$16.0 million. The warrants have an exercise price of \$0.90 per share, are exercisable immediately upon issuance, and have a term of exercise equal to five years from the date of issuance of the warrants. We paid placement agent fees consisting of (i) \$1,145,000 in cash fees and expenses and (ii) warrants to purchase 1,352,113 shares of our common stock on terms substantially similar to the purchaser warrants in the June 2014 Public Offering. After deducting for fees and expenses, the aggregate net proceeds from the sale of the common stock and the warrants in the June 2014 Public Offering were approximately \$14.9 million.

#### Cash Requirements

Our primary objectives for the next twelve-month period are to continue to pursue our current operational milestones regarding our Clinical Pipeline and new Device R&D. More specifically, we intend to continue to (i) pursue and support our ongoing product development efforts and our current and anticipated clinical trials supporting our Clinical Pipeline; and (ii) our research and development activities, including new Device

R&D, to improve upon existing product candidates and to introduce new product candidates into our Clinical Pipeline. While we believe that our management team has been strengthened through are recent additions to our team, we may add additional industry experts to further expand our management team and better position our company. In addition, we expect we may need to raise additional capital in future periods to fund our operations and we may acquire additional assets and technologies consistent with our business objectives.

We currently estimate our operating expenses and working capital requirements for fiscal year ending July 31, 2015 (Fiscal 2015) to be approximately \$19.5 million, although we may modify or deviate from our estimates and it is likely that our actual results for certain categories of operating expenses and working capital requirements will vary from the estimates as set forth in the table below.

Cash Requirements for Fiscal 2015	Amount
Product development	\$ 10,800,000
Employee compensation	6,000,000
General and administration	2,200,000
Professional services fees	500,000
Total	\$ 19,500,000
	\$ · · · · · ·

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As of July 31, 2014, we had cash and cash equivalents of approximately \$37,900,000. We expect these funds to be sufficient to allow us to continue to operate our business for at least the next 12 months.

During Fiscal 2014, we received approximately \$17,000,000 in cash proceeds from the exercise of warrants previously issued to investors of our equity securities. If the investors in the June 2011 Private Placement, the March 2012 Public Offering, the December 2012 Public Offering, the September 2013 Public Offering, and the June 2014 Public Offering choose to exercise their remaining outstanding warrants in full on a cash basis, we would receive an aggregate of approximately \$15.2 million. However, the warrant holders may choose not to exercise any of the warrants they hold, may choose to net exercise their warrants as provided in such warrants under certain limited circumstances, or may choose to exercise only a portion of the warrants issued. As a result, we may never receive proceeds from the exercise of such warrants.

Since the inception of our current business in March 2011, we have funded our operations primarily through equity financings and we expect to continue to pursue capital-raising transactions in future periods. If we obtain additional financing by issuing equity securities, our existing stockholders ownership will be diluted. Obtaining commercial loans, assuming those loans would be available, will increase our liabilities and future cash commitments and may subject us to financial covenants and other restrictions applicable to our business. We may be unable to maintain operations at a level sufficient for investors to obtain a return on their investments in our common stock. Further, we may continue to be unprofitable.

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

We have no significant off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources that is material to stockholders.

# ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Not applicable.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this Item 8 is incorporated by reference to our Consolidated Financial Statements and the Report of Independent Registered Public Accounting Firm beginning at page F-1 of this report.

# 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**

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized, and reported within the time periods specified in the SEC s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

As required by Rule 13a-15(b) under the Exchange Act, our management conducted an evaluation, with the participation of our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of our disclosure controls and procedures as of July 31, 2014. Based on the foregoing evaluation, our principal executive officer and principal financial officer concluded that, as of July 31, 2014, our disclosure controls and procedures were effective.

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

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) under the Exchange Act, for our company. With the participation of our Chief Executive Officer and Chief Financial Officer, our management conducted an evaluation of the effectiveness of our internal control over financial reporting as of July 31, 2014. Management used the criteria set forth in the report entitled *Internal Control Integrated Framework* published by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) to evaluate the effectiveness of our internal control over financial reporting. Management has concluded that our internal control over financial reporting was effective as of July 31, 2014, based on those criteria.

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

None

#### Attestation Report of Independent Registered Public Accounting Firm

The independent registered public accounting firm that audited the consolidated financial statements that are included in this Annual Report on Form 10-K has issued an audit report on the effectiveness of our internal control over financial reporting as of July 31, 2014. The report appears below.

### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders

OncoSec Medical Incorporated and Subsidiary

We have audited OncoSec Medical Incorporated and Subsidiary s internal control over financial reporting as of July 31, 2014, based on criteria established in *Internal Control Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). OncoSec Medical Incorporated and Subsidiary s management is responsible for maintaining effective internal control over financial reporting and for their assessment of the effectiveness of internal control over financial reporting included in the accompanying Management s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

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

In our opinion, OncoSec Medical Incorporated and Subsidiary maintained, in all material respects, effective internal control over financial reporting as of July 31, 2014, based on criteria established in *Internal Control Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets as of July 31, 2014 and 2013, and the related consolidated statements of operations, stockholders equity (deficit), and cash flows of OncoSec Medical Incorporated and Subsidiary for the years ended July 31, 2014, 2013 and 2012 and for the period from inception (February 8, 2008) to July 31, 2014, and our report dated October 10, 2014, expressed an unqualified opinion thereon.

/s/ Mayer Hoffman McCann P.C.

San Diego, California

October 10, 2014

# ITEM 9B. OTHER INFORMATION

None

# PART III

## ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Set forth below is certain information regarding our directors and executive officers:

Name	Position	Age	<b>Director / Officer Since</b>
Avtar Dhillon, M.D. (1)(2)(3)(4)(5)	Chairman and Director	53	March 10, 2011
James DeMesa, M.D. (1)(2)(3)	Director	56	February 3, 2011
Anthony Maida, III, Ph.D (1)(3)(4)	Director	62	June 21, 2011
Punit Dhillon	President, Chief Executive Officer, and Director	34	March 10, 2011
Veronica Vallejo	Chief Financial Officer	41	March 10, 2011
Mai Hope Le, M.D.	Chief Medical Officer	38	September 16, 2014
Robert Pierce, M.D.	Chief Scientific Officer	51	December 11, 2013

(1) Member of Audit Committee

- (2) Member of Compensation Committee
- (3) Member of Nomination and Corporate Governance Committee
- (4) Member of Clinical and Regulatory Affairs Committee

(5) Member of Financing Committee

### **Business Experience**

The following is a brief account of the education and business experience of our directors and executive officers during at least the past five years, indicating their principal occupation during the period, and the name and principal business of the organization by which they were employed.

#### Avtar Dhillon, M.D., Chairman and Director

Dr. Dhillon has served as the Chairman of our Board of Directors since March 2011. Previously, Dr. Dhillon was the President and Chief Executive Officer of Inovio Pharmaceuticals, Inc. (formerly Inovio Biomedical Corporation) (NYSE MKT: INO) from October 2001 to June 2009, as President and Chairman of Inovio from June 2009 until October 2009, as Executive Chairman until August 2011, and as Chairman from September 2011. During his tenure at Inovio, Dr. Dhillon led the successful turnaround of the company through a restructuring, acquisition of technology from several European and North American companies, and a merger with VGX Pharmaceuticals to develop a vertically integrated DNA vaccine development company with one of the strongest development pipelines in the industry. Dr. Dhillon led multiple successful financings for Inovio and concluded several licensing deals that included global giants, Merck and Wyeth (now Pfizer). Prior to joining Inovio, Dr. Dhillon was vice president of MDS Capital Corp. (now Lumira Capital Corp.), one of North America s leading healthcare venture capital organizations. In July 1989, Dr. Dhillon started a medical clinic and subsequently practiced family medicine for over 12 years. Dr. Dhillon has been instrumental in successfully turning around struggling companies and is influential as an active member in the biotech community. From March 1997 to July 1998, Dr. Dhillon was a consultant to Cardiome Pharma Corp. (NASDAQ: CRME), a biotechnology company, where he led a turnaround based on three pivotal financings, establishing a clinical development strategy, and procuring a new management team. In his role as a founder and board member of companies, Dr. Dhillon has been involved in several early stage healthcare focused companies listed on the USA or Canadian stock exchanges, which have successfully matured through advances in their development pipeline and subsequent M&A transactions. Most recently, he was a founding board member (May 2003) of Protox Therapeutics, Inc. (TSX-V: SHS) (now Sophiris Bio Inc.), a publicly traded specialty pharmaceutical company. Dr. Dhillon maintained his board position until the execution of a financing of up to \$35 million with Warburg Pincus in November 2010. Dr. Dhillon currently sits on the Board of Directors of BC Advantage Funds, a Venture Capital Corporation in British Columbia, and since March 2012 has been the Chairman of Stevia First Corp. (OTCOB: STVF), an agricultural biotechnology company engaged in the cultivation and harvest of stevia leaf and the development of stevia products. Since May 2011, Dr. Dhillon has also served as a Director and was appointed Chairman in April 2013 of Arch Therapeutics, Inc. (OTCBB: ARTH), a medical device company offering an innovative therapeutic approach to stasis and barrier applications. Dr. Dhillon plays a key role on our Board of Directors because of his extensive experience with pharmaceutical and biotech companies, including based on his tenure as President and CEO of Inovio where he was responsible for developing and executing on the clinical programs that provide the extensive clinical database supporting our current clinical development plan and partnering efforts for treating solid tumors.

#### James M. DeMesa, M.D., MBA, Director

Dr. DeMesa has served on our Board of Directors since February 3, 2011. Dr. DeMesa has been a practicing physician and has served as a senior executive with several international pharmaceutical and biotech companies, both public and private, in the areas of corporate management, regulatory affairs, and pre-clinical and clinical pharmaceutical and medical device product development. In addition to OncoSec, Dr. DeMesa is currently on the Board of Directors of Induce Biologics, a regenerative medicine company. In August 2008, Dr. DeMesa retired from his role as President, Chief Executive Officer and a director of Migenix Inc., a public biotechnology company focused on infectious and neurodegenerative diseases. From 1997 to 2001, he was President, Chief Executive Officer and a director of GenSci Regeneration Sciences Inc., a public biotech company involved in regenerative medicine (now part of Integra LifeSciences, NASD: IART). During his tenure at these two companies, Dr. DeMesa led the acquisition of several technologies and companies and completed multiple strategic partnership transactions with companies such as J&J, Astellas Pharmaceuticals, and Cadence Pharmaceuticals. He also led multiple successful financings totaling over \$150 million. From 1992 to 1997, he was Vice President, Medical and Regulatory Affairs at Biodynamics International, Inc. (now part of RTI Surgical, NASD: RTIX), and from 1989 to 1992 was Vice President, Medical and Regulatory Affairs of Bentley Pharmaceuticals (now part of Teva Pharmaceuticals). Dr. DeMesa is a co-founder of CommGeniX, a medical communications company, and MedXcel, a medical education company. Dr. DeMesa attended the University of South Florida where he received his B.A. (Chemistry), M.D., and M.B.A. degrees and did his medical residency at the University of North Carolina. He is the author of two books and speaks regularly to companies and organizations throughout North America. Dr. DeMesa provides the Board with extensive experience leading and operating pharmaceutical and biotechnology companies as well as relevant expertise based on his professional training and extensive experience as a medical doctor and as an executive in the pharmaceutical and biotechnology industries.

#### Anthony Maida, III, Ph.D, MA, MBA, Director

On June 21, 2011, Dr. Maida joined our Board of Directors. Dr. Maida has served as a director on the Board of Directors of Spectrum Pharmaceuticals, Inc. since December 2003 and currently serves as the chairman of its Audit Committee and a member of its Compensation Committee, Placement Committee, Nomination and Corporate Governance Committee and Product Acquisition Committee. He is currently Senior Vice President Clinical Research at Northwest Biotherapeutics, Inc., a company focused on the development of therapeutic DC cell-based vaccines to treat patients with cancer. Currently Dr. Maida serves as the Chair of the Audit Committee of Stevia First Corp. Dr. Maida has been the acting Chairman of Dendri Therapeutics, Inc., a startup company focused on the clinical development of therapeutic vaccines for patients with cancer, since 2003 and as Principal of Anthony Maida Consulting International since 1999, providing consulting services to large and small biopharmaceutical firms in the clinical development of oncology products and product acquisitions and to venture capital firms evaluating life science investment opportunities. Recently Dr. Maida was Vice President of Clinical Research and General Manager, Oncology, world-wide for PharmaNet, Inc. He served as the President and Chief Executive Officer of Replicon NeuroTherapeutics, Inc., a biopharmaceutical company focused on the therapy of patients with tumors (both primary and metastatic) of the central nervous system, where he successfully raised financing from both venture capital and strategic investors and was responsible for all financial and operational aspects of the company, from June 2001 to July 2003. From 1999 to 2001, he held positions as Interim Chief Executive Officer for Trellis Bioscience, Inc., a privately held biotechnology company that addresses high clinical stage failure rates in pharmaceutical development, and President of CancerVax Corporation, a biotechnology company dedicated to the treatment of cancer. From 1992 until 1999, Dr. Maida served as President and CEO of Jenner Biotherapies, Inc., a biopharmaceutical company. From 1980 to 1992, he held senior management positions with various companies including Vice President Finance and Chief Financial Officer of Data Plan, Inc., a wholly owned subsidiary of Lockheed Corporation. Dr. Maida serves or has served as a consultant and technical analyst for several investment firms, including CMX Capital, LLC, Sagamore Bioventures, Roaring Fork Capital, North Sound Capital, The Bonnie J. Addario Lung Cancer Foundation and Pediatric BioScience, Inc. Additionally, he has been retained by Abraxis BioScience, Inc., Northwest Biotherapeutics, Inc., Takeda Chemical Industries, Ltd. (Osaka, Japan), and Toucan Capital to conduct corporate and technical due diligence on investment opportunities. Dr. Maida formerly served as a member of the board of directors of Sirion Therapeutics, Inc., a privately held ophthalmic- focused company, and GlycoMetrix, Inc., a startup company focused on the development of assays to identify carbohydrates that can indicate cancer. He is a speaker at industry conferences and is a member of the American Society of Clinical Oncology, the American Association for Cancer Research, the Society of Neuro-Oncology and the International Society for Biological Therapy of Cancer. Dr. Maida received a B.A. in History from Santa Clara University in 1975, a B.A. in Biology from San Jose State University in 1977, an M.B.A. from Santa Clara University in 1978, an M.A. in Toxicology from San Jose State University in 1986 and a Ph.D. in Immunology from the University of California in 2010. Dr. Maida brings to the Board extensive experience in our industry and significant

expertise in clinical development and clinical trials. We believe that his financial and operational experience in our industry provide important resources to our Board.

#### Punit Dhillon, President, Chief Executive Officer and Director

On March 10, 2011, Mr. Punit Dhillon was appointed Chief Executive Officer. Mr. Dhillon was formerly Vice President of Finance and Operations at Inovio from September 2003 until March 2011. In his corporate finance role, Mr. Dhillon was pivotal to the company raising over \$125 million through multiple financings and several licensing deals including early stage deals with Merck and Wyeth. Mr. Dhillon was responsible for implementation of Inovio s corporate strategy, including achievement of annual budgets and milestones. He was also instrumental to the successful in-licensing of key intellectual property and a number of corporate transactions, including the acquisition and consolidation of Inovio AS, a Norwegian DNA delivery company, and the merger with VGX Pharmaceuticals (VGX), which solidified Inovio s position in the DNA vaccine industry. Mr. Dhillon played an effective role as head of operations for Inovio. He completed the integration of the VGX with Inovio, including achieving cost-cutting of over 30% through the synergy assessment of both companies, consolidating four operating locations into two bi-coastal offices, and managing the existing stockholders from both companies. Mr. Dhillon was a director of Auricle Biomedical, a capital pool company, from July 2007 to April 2010. Mr. Dhillon has also previously been a consultant and board member for several TSX Venture Exchange listed early stage life science companies, which matured through advances in their development pipelines and subsequent M&A transactions. Most recently, Mr. Dhillon was involved as a board member in the completion of a trilateral merger between three Capital Pool Companies listed on the TSX Venture Exchange, which completed a qualifying transaction in April 2010 with a company specializing in conservation and demand management accessories for the utilities industry. Prior to joining Inovio, Mr. Dhillon worked for a corporate finance law firm as a law clerk. From September 1999 to July 2002, he worked with MDS Capital Corp. (now Lumira Capital Corp.) as an intern analyst. Mr. Dhillon is an active member in his community and co-founder of Inbalance Network Inc., an organization focused on promoting an active lifestyle and grassroots community involvement, including scholarships to support students pursuing post-secondary education. Mr. Dhillon has a Bachelor of Arts with honors in Political Science and a minor in Business Administration from Simon Fraser University. Mr. Dhillon s in-depth knowledge of our business and operations as our Chief Executive Officer, his experience in the biotechnology and pharmaceutical industry, and his experience with publicly traded companies position him well to serve as a member of our Board of Directors.

Veronica Vallejo, Chief Financial Officer

Ms. Vallejo serves as our Chief Financial Officer. Ms. Vallejo has been a corporate officer of OncoSec since February 2011, having previously served as our Controller, Secretary and Treasurer prior to being appointed as our Chief Financial Officer in February 2013. Prior to working for us, Ms. Vallejo worked in public accounting since 1997, most recently working as a Senior Manager with Mayer Hoffman McCann P.C., from January 2001 to December 2010. Ms. Vallejo holds a B.S. in Business Administration with an emphasis in accounting from San Diego State University. She is a certified public accountant and a member of the American Institute of Certified Public Accountants.

#### Robert Pierce, Chief Scientific Officer

Dr. Pierce has served as our Chief Scientific Officer since September 16, 2014. Previously, Dr. Pierce served as our Chief Medical Officer since December 2013. Prior to OncoSec, Dr. Pierce was Executive Director, Department of Pathology for Merck Research Labs where he led the Global Anti-PD-1 development team, and contributed to seven successful IND applications in Oncology, Autoimmune Disease and Diabetes and participated in drug discovery research in immunopathology from March 2007 until October 2013. Prior to joining Merck Research Labs, from 2003 to 2007, Dr. Pierce worked as a Principal Investigator of a K-08 and RO1-funded research lab, Course Director for graduate/medical student education, Staff Pathologist and Director of Autopsy Pathology at the University of Rochester School of Medicine/Strong Memorial Hospital. He is also the co-author of over fifty peer-reviewed journal articles and book chapters. From 1999 to 2001, Dr. Pierce was Medical Director at United States Air Force Medical Corps (Major), Wright-Patterson, Air Force Base. Dr. Pierce received his post-doctoral training at the University of Washington, Seattle, WA, his graduate education and training at Brown University School of Medicine in Providence, RI, and received his undergraduate education at Yale University in New Haven, CT. As a Fulbright Award recipient, Dr. Pierce studied Philosophy at the Albert-Ludwigs University in Freiburg, Germany. Dr. Pierce is American Board certified in Pathology and holds an active California State

medical license.

# Appointment of Chief Medical Officer

On September 16, 2014, we appointed Dr. Mai Hope Le as our Chief Medical Officer. Dr. Le has replaced Dr. Pierce in that position.

Prior to joining the Company, Dr. Le, 38, was Medical Director at Calithera Biosciences, Inc. from July 2013 to September 2014, where she formulated and launched the early clinical development plans for a novel small molecule inhibitor of glutaminase for a variety of solid and hematological tumor indications. From June 2008 to April 2013, she was medical director or associate medical director at Plexxikon Inc., Onyx Pharmaceuticals, Inc., and Proteolix, Inc. At Proteolix and, later, Onyx Pharmaceuticals, her work contributed to the accelerated approval of carfilzomib (Kyprolis), a second generation proteosome inhibitor, for the treatment of relapsed/refractory multiple myeloma. Prior to entering medical school, Dr. Le managed clinical trials for PAREXEL Inc. in Waltham, Massachusetts. Dr. Le received her medical degree at the University of Rochester School of Medicine and Dentistry and completed her residency in Clinical Pathology/Laboratory Medicine at the University of California at San Francisco. She received her Bachelor of Arts in Biology from Cornell University. Dr. Le is licensed to practice in California.

#### **Term of Office**

Our directors are elected at each annual meeting of stockholders and serve until the next annual meeting of stockholders or until their successor has been duly elected and qualified, or until their earlier death, resignation or removal.

#### **Committees of the Board of Directors**

On June 30, 2011, our Board of Directors established an Audit Committee, a Compensation Committee, a Nomination and Corporate Governance Committee, a Clinical and Regulatory Affairs Committee, and a Financing Committee, each of which has the composition and responsibilities described below.

#### Audit Committee

The Audit Committee of our Board of Directors consists of Dr. Anthony Maida, Dr. James DeMesa, and Dr. Avtar Dhillon, with Dr. Maida serving as Chairman. Our Board of Directors has determined that each of the members of our Audit Committee is independent within the meaning of applicable Securities and Exchange Commission rules and Rule 803B of the NYSE MKT LLC Company Guide, and has determined that Dr. Maida is an audit committee financial expert, as such term is defined in the rules and regulations of the Securities and Exchange Commission and is financially sophisticated within the meaning of Rule 803B of the NYSE MKT LLC Company Guide. The Audit Committee has oversight responsibilities regarding, among other things: the preparation of our financial statements and our financial reporting and disclosure processes; the administration, maintenance and review of our system of internal controls regarding accounting compliance; our practices and processes relating to internal audits of our financial statements; the appointment of our independent registered public accounting firm and the review of its qualifications and independence; the review of reports, written statements and letters from our independent registered public accounting firm; and our compliance with legal and regulatory requirements in connection with the foregoing. Our Board of Directors has adopted a written charter for our Audit Committee, which is available on our website, www.oncosec.com, under the Investors tab.

#### **Compensation Committee**

The Compensation Committee of our Board of Directors consists of Dr. Avtar Dhillon and Dr. James DeMesa, with Dr. Dhillon serving as Chairman. Our Board of Directors has determined that each of the members of our Compensation Committee is independent within the meaning of applicable Securities and Exchange Commission rules and Rule 803A of the NYSE MKT LLC Company Guide. The duties of our Compensation Committee include, without limitation: reviewing, approving and administering compensation programs and arrangements to ensure that they are effective in attracting and retaining key employees and reinforcing business strategies and objectives; determining the objectives of our executive officer compensation programs and the specific objectives relating to CEO compensation, including evaluating the performance of the CEO in light of those objectives; approving the compensation of our other executive officer compensation for inclusion in our proxy statement, when required and in accordance with applicable rules and regulations. Our Board of Directors has adopted a written charter for our Compensation Committee, which is available on our website, www.oncosec.com, under the Investors tab.

#### Nomination and Corporate Governance Committee

The Nomination and Corporate Governance Committee of our Board of Directors consists of Dr. James DeMesa, Dr. Avtar Dhillon, and Dr. Anthony Maida, with Dr. DeMesa serving as Chairman. Our Board of Directors has determined that each of the members of our Nomination and Corporate Governance Committee is independent within the meaning of applicable Securities and Exchange Commission rules and Rule 803A of the NYSE MKT LLC Company Guide. The responsibilities of the Nomination and Corporate Governance Committee include, without limitation: assisting in the identification of nominees for election to our Board of Directors, consistent with approved qualifications and criteria; determining the composition of the Board of Directors and its committees; recommending to the Board of Directors the director nominees for the annual meeting of stockholders; establishing and monitoring a process of assessing the effectiveness of the Board of Directors; developing and overseeing a set of corporate governance guidelines and procedures; and overseeing the evaluation of our directors and executive officers. Our Board of Directors has adopted a written charter for our Nomination and Corporate Governance Committee, which is available on our website, www.oncosec.com, under the Investors tab.

#### Clinical and Regulatory Affairs Committee

The Clinical and Regulatory Affairs Committee of our Board of Directors consists of Dr. Anthony Maida and Dr. Avtar Dhillon, with Dr. Maida serving as Chairman. The Clinical and Regulatory Affairs Committee does not currently have a charter. The Clinical and Regulatory Affairs Committee has responsibilities relating to reviewing and providing comments on the clinical development plan for our ImmunoPulse programs, including introducing the clinical team to established opinion leaders, potential doctors and investigators, regulatory contacts and other professionals in the clinical oncology field that could benefit us in executing our development plan.

#### **Financing Committee**

Dr. Avtar Dhillon is the Chairman and sole member of our Financing Committee. The Financing Committee does not currently have a charter. The Financing Committee has responsibilities relating to our efforts to obtain adequate funding to finance our development programs and operations.

#### **Family Relationships**

Mr. Punit Dhillon, Director, President and Chief Executive Officer, is the nephew of Dr. Avtar Dhillon, a Director and our Chairman of the Board. Dr. Robert Pierce, Chief Scientific Officer, and Dr. Mai Hope Le, Chief Medical Officer, are married to each other and they will both report to our Chief Executive Officer. There have been no related transactions, and none are contemplated, between our executive officers or any of their immediate family members and us that would require disclosure pursuant to Item 404(a) of Regulation S-K promulgated by the Securities and Exchange Commission.

#### Section 16 Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires our executive officers, directors and persons who beneficially own more than 10% of our common stock to file initial reports of ownership and reports of changes in ownership with the SEC. Such persons are required by SEC regulations to furnish us with copies of all Section 16(a) forms filed by such person.

Based solely on our review of such forms furnished to us from such reporting persons, we believe that all such filing requirements applicable to our executive officers, directors, and more than 10% stockholders were met in a timely manner.

**Code of Business Conduct and Ethics** 

Our Board of Directors has adopted a Code of Business Conduct and Ethics that applies to all of our directors, officers, and employees, including our principal executive officer, principal financial officer, and principal accounting officer and controller. The Code of Business Conduct and Ethics is available for review on our website at www.oncosec.com, under the Investors tab, and is also available in print, without charge, to any stockholder who requests a copy by writing to us at OncoSec Medical Incorporated, 9810 Summers Ridge Road, Suite 110, San Diego, CA 92121, Attention: Investor Relations. Each of our directors, employees, and officers, including our Chief Executive Officer and Chief Financial Officer, and all of our other executive officers, are required to comply with the Code of Business Conduct and Ethics. There have not been any amendments or waivers from the Code of Business Conduct and Ethics relating to any of our executive officers or directors in the past year.

#### **Corporate Governance Documents**

Our corporate governance documents, including the charters of each of the Audit Committee, Compensation Committee, and Nomination and Corporate Governance Committee are available, free of charge, on our website at www.oncosec.com, under the Investors tab. Please note, however, that the information contained on the website is not incorporated by reference in, or considered part of, this Annual Report on Form 10-K. We will also provide copies of these documents, free of charge, to any stockholder upon written request to OncoSec Medical Incorporated, 9810 Summers Ridge Road, Suite 110, San Diego, CA 92121, Attention: Investor Relations.

## ITEM 11. EXECUTIVE COMPENSATION

The following table summarizes all compensation recorded by us in each of Fiscal 2014 and Fiscal 2013 for our named executive officers, consisting of (i) our principal executive officer, (ii) our principal financial officer, and (iii) our next most highly compensated executive officer whose total compensation exceeded \$100,000 in Fiscal 2014.

#### **Summary Compensation Table**

Name	Fiscal Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$) (6)	Non-Equity Incentive Plan Compensation (\$)	Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation (\$) (4)(5)	Total (\$)
Punit Dhillon, President & CEO									
(1)	2014	\$ 342,500	125,000		435,892				\$ 903,392
	2013	\$ 293,958	96,000		30,128			20,250	\$ 440,336
Veronica Vallejo, CFO (2)	2014	\$ 235,000	75,000		212,309				\$ 522,309
-	2013	\$ 199,167	48,000		10,813			3,894	\$ 261,874
Robert Pierce, CSO (3)	2014	\$ 172,821			213,110			3,750	\$ 389,681

(1) Mr. Dhillon was appointed our President and Chief Executive Officer on March 10, 2011.

(2) Ms. Vallejo was appointed our Secretary and Treasurer on March 10, 2011 and our Chief Financial Officer on February 8, 2013. Ms. Vallejo is also our Principal Financial and Accounting Officer.

(3) Dr. Pierce was appointed our Chief Medical Officer on December 11, 2013. Dr. Pierce was appointed as our Chief Scientific Officer on September 16, 2014.

(4) 2013 amounts under the All Other Compensation column consist of the payment of accrued vacation benefits. In 2014, the Company changed to a flexible leave policy and no longer accrues vacation benefits.

(5) The 2014 amount under the All Other Compensation column relates to relocation benefits paid to Dr. Pierce.

(6) The values listed in the above table represent the fair value of the option grants that was recognized during Fiscal 2014 and Fiscal 2013, as applicable, under Accounting Standards Codification Topic 718 and is calculated as of the grant date using a Black-Scholes option-pricing model. For information on the valuation assumptions with respect to the grants made during Fiscal 2014 and Fiscal 2013, refer to Note 9 Stock-Based Compensation in our consolidated financial statements for Fiscal 2014, included in this filing.

#### **Outstanding Equity Awards At Fiscal Year-End**

The following table summarizes the aggregate number of option awards held by our named executive officers at July 31, 2014.

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Ех	Option cercise Price (\$)	Option Expiration Date
Punit Dhillon (1)	500,000	132,604		\$	0.21 0.23	4/25/22 2/8/23
	117,396 666,667	1,333,333			0.23	3/7/24
Veronica Vallejo (2)	150,000			\$	0.21	4/25/22
	46,958	53,042			0.23	2/8/23
	333,333	666,667			0.805	3/7/24
Robert Pierce (3)	578,000	1,122,000		\$	0.31	12/11/23

(1) Mr. Dhillon was issued an option to purchase 500,000 shares of our common stock on April 25, 2012. The option is fully vested as of April 25, 2014.

Mr. Dhillon was issued an option to purchase 250,000 shares of our common stock on February 8, 2013. The option vests pursuant to the following schedule: 33% one year anniversary of grant date, with the remaining option shares vesting monthly thereafter in equal increments.

Mr. Dhillon was issued an option to purchase 2,000,000 shares of our common stock on March 7, 2014. The option was granted outside the terms of our 2011 Plan and vests pursuant to the following schedule: 25% of the shares subject to the option vested on the grant date, with the remaining shares subject to the option vesting monthly thereafter in equal increments.

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(2) Ms. Vallejo was issued an option to purchase 150,000 shares of our common stock on April 25, 2012. The option is fully vested as of April 25, 2014.

Ms. Vallejo was also issued an option to purchase 100,000 shares of our common stock on February 8, 2013. The option vests pursuant to the following schedule: 33% one year anniversary of grant date, with the remaining option shares vesting monthly thereafter in equal increments.

Ms. Vallejo was issued an option to purchase 1,000,000 shares of our common stock on March 7, 2014. The option was granted outside of the terms of the 2011 Plan and vests pursuant to the following schedule: 25% of the shares subject to option vested on the grant date, with the remaining shares subject to the option vesting monthly thereafter in equal increments.

(3) Dr. Pierce was issued an option to purchase 1,700,000 shares of our common stock on December 11, 2013. The option vests pursuant to the following schedule: 34% of the shares subject to the option vested on the grant date and 33% of the shares subject to the option vest on each of the one year anniversary and the two year anniversary of the grant.

#### **Employment Agreements**

#### Punit Dhillon

On May 18, 2011, we entered into an Employment Agreement with our current President and Chief Executive Officer, Mr. Punit Dhillon. The Employment Agreement provides for the following, among other things: (a) an initial annual base salary of \$240,000; (b) eligibility to receive an annual bonus at the discretion of the Board of Directors; (c) eligibility to participate in the Company s stock incentive program at the discretion of the Board of Directors; (d) acceleration of vesting of any unvested stock options outstanding upon a change of control of the Company; (e) if Mr. Dhillon is terminated other than for cause, death or disability, or if he terminates his employment with the Company for good reason, Mr. Dhillon is entitled to receive (i) severance payments equal to 24 months of his then current annual base salary, (ii) a pro rata percentage of the annual bonus he had received the prior fiscal year and (iii) payment of health benefits for 24 months, conditioned on his execution of a release; and (f) if Mr. Dhillon s employment is terminated for death or disability, he or his estate is entitled to receive a pro rata percentage of the annual bonus he had received for the prior fiscal year. Mr. Dhillon s Employment Agreement has an initial term of five years.

The term good reason is defined to mean termination by Mr. Dhillon following the occurrence of any of the following events without Mr. Dhillon s consent: (a) Mr. Dhillon ceases to report to the Board of Directors, provided that such change in reporting relationship results in a material reduction in his authority, duties or responsibilities; or (b) any other material reduction in his duties, authority or responsibilities relative to those in effect immediately prior to the reduction.

On April 25, 2012, our Board of Directors approved an increase in Mr. Dhillon s annual base salary to \$270,000. On February 8, 2013, our Board of Directors approved an increase in Mr. Dhillon s annual base salary to \$320,000, and on March 7, 2014, our Board of Directors approved an increase in Mr. Dhillon s annual base salary to \$380,000.

## Veronica Vallejo

On May 18, 2011, we entered into an Employment Agreement with Ms. Veronica Vallejo, who was then Vice President, Finance and Controller and who is currently our Chief Financial Officer. The Employment Agreement provides for the following, among other things: (a) an initial annual base salary of \$140,000; (b) eligibility to receive an annual bonus at the discretion of the Board of Directors; (c) eligibility to participate in the Company s stock incentive program at the discretion of the Board of Directors; (d) acceleration of vesting of any unvested stock options outstanding upon a change of control of the Company; (e) if Ms. Vallejo is terminated other than for cause, death or disability, or if she terminates her employment with the Company for good reason, she is entitled to receive (i) severance payments equal to six months of her then current annual base salary, (ii) a pro rata percentage of the annual bonus she had received the prior fiscal year and (iii) payment of health benefits for six months, conditioned on her execution of a release; and (f) if Ms. Vallejo s employment is terminated for death or disability, she or her estate is entitled to receive a pro rata percentage of the annual bonus she had received for the prior fiscal year. Ms. Vallejo s Employment Agreement has an initial term of five years.

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The term good reason is defined to mean termination by Ms. Vallejo following the occurrence of any of the following events without Ms. Vallejo s consent: (a) Ms. Vallejo ceases to report directly to the President and Chief Executive Officer or the Board of Directors, provided that such change in reporting relationship results in a material reduction in her authority, duties or responsibilities; or (b) any other material reduction in her duties, authority or responsibilities relative to those in effect immediately prior to the reduction.

On June 30, 2011, Ms. Vallejo was promoted to Vice President, Finance, and a commensurate increase in her base annual salary to \$160,000. On April 25, 2012, our Board of Directors approved an increase in Ms. Vallejo s annual base salary to \$180,000. On February 8, 2013, our Board of Directors appointed Ms. Vallejo as our Chief Financial Officer and increased in her annual base salary to \$220,000 and on March 7, 2014, our Board of Directors approved an increase in Ms. Vallejo s annual base salary to \$260,000.

On August 2, 2013, the Compensation Committee of our Board of Directors approved an amendment to Ms. Vallejo s Employment Agreement, pursuant to which (i) the severance payment payable to Ms. Vallejo in the event of her termination has been amended to equal 12 months instead of six months of her annual base salary at the time of termination, and (ii) the period for which we will pay for applicable premium costs for continued group health plan coverage has been increased from six months to 12 months following the date of her termination, subject in each case to the terms of the Employment Agreement.

#### Robert Pierce

On December 11, 2013, we entered into an Employment Agreement with Dr. Robert Pierce. Dr. Pierce was originally appointed our Chief Medical Officer and, on September 16, 2014, Dr. Pierce was appointed as our Chief Scientific Officer concurrently with the appoint of Dr. Le as our Chief Medical Officer. The Employment Agreement provides for the following, among other things: (a) an initial annual base salary of \$260,000; (b) eligibility to receive an annual bonus at the discretion of the Board of Directors; (c) eligibility to participate in the Company s stock incentive plans at the discretion of the Board of Directors or a committee thereof; (d) acceleration of vesting of any unvested options outstanding upon a change of control of the Company; (e) if Dr. Pierce is terminated other than for cause, by death or by disability, or if Dr. Pierce terminates his employment with the Company for good cause, then Dr. Pierce shall be entitled to receive (i) severance payments equal to nine months of his then current annual base salary plus any accrued bonus, if such termination were to occur at any time before such time as Dr. Pierce has provided services for the Company for 12 months, or (ii) severance payments equal to 12 months of his then current annual base salary plus any accrued bonus, if such termination were to occur at any time as Dr. Pierce has provided services for the Company for 12 months. In all cases, Dr. Pierce s receipt of any such severance payments would be conditioned on his execution of a release. Dr. Pierce s Employment Agreement has no stated term and will continue until terminated by the Company or Dr. Pierce.

The term for cause is defined to mean (a) commission of a crime involving dishonesty, breach of trust, or physical harm to any person, (b) willful engagement in conduct that is in bad faith and materially injurious to the Company, including but not limited to, misappropriation of trade secrets, fraud or embezzlement, (c) commission of a material breach of the Employment Agreement, which breach is not cured within 30 days after written notice to Dr. Pierce from the Company, (d) willful refusal to implement or follow a reasonable and lawful policy or directive of the Company, which is not cured within 30 days after written notice to Dr. Pierce from the Company, or (e) engagement in misfeasance or malfeasance demonstrated by a pattern of failure to perform job duties diligently and professionally, which misfeasance or malfeasance is not cured within 30 days after written notice to Dr. Pierce from the Company; and the term good cause is defined to mean any one or more of the following events without Dr. Pierce s consent: (a) a reduction in the amount of Dr. Pierce s base compensation or other Company action which materially and adversely affects Dr. Pierce s working conditions, in either case in a manner that disproportionately adversely affects Dr. Pierce as compared to other senior management of the Company, (b) Dr. Pierce ceases to report directly to the Chief Executive Officer of the Company, provided that such change in reporting relationship results in a material reduction in Dr. Pierce s authority, duties, or responsibilities, (c) any other material change in Dr. Pierce s duties, authority or responsibilities with the Company relative to the duties, authority or responsibilities in effect immediately prior to such reduction, or (d) the Company s relocation of Dr. Pierce s work location

more than 30 miles from Dr. Pierce s then current work location; provided in each case that the Company shall have 15 business days following its receipt of written notice from Dr. Pierce to cure any such event before it is deemed an event constituting good cause.

On July 18, 2014, our Board of Directors approved an increase in Dr. Pierce s annual base salary to \$300,000, which was effective August 1, 2014.

#### **Compensation of Directors**

All directors received reimbursement for reasonable out-of-pocket expenses in attending Board of Directors meetings and for promoting our business.

On June 30, 2011, the Board of Directors adopted a director compensation policy for non-employee directors, retroactive to the date of each non-employee director s appointment, which was modified effective as of May 1, 2014 as summarized in the paragraph below. According to our former policy, the Chairman of our Board of Directors received an annual fee of \$30,000 and all other independent directors received an annual fee of \$15,000 for service on our Board of Directors. In addition, non-employee directors received the following compensation for serving on the following committees of the Board of Directors:

• The Chairman of the Audit Committee received \$12,000 per year and each member of the Audit Committee receives \$6,000 per year;

• The Chairman of the Compensation Committee received \$8,000 per year and each member of our Compensation Committee received \$4,000 per year;

• The Chairman of our Nomination and Corporate Governance Committee received \$6,000 per year and each member of the committee received \$3,000 per year; and

• In recognition of the significant contributions expected of the members of our Clinical and Regulatory Affairs Committee and our Financing Committee, each member of the Clinical and Regulatory Affairs Committee received \$20,000 per year and each member of our Financing Committee received \$40,000 per year.

Additionally, members of all of our committees received a fee of \$1,500 for each committee meeting attended in person and \$750 for each committee meeting attended telephonically.

On March 7, 2014, the Board of Directors adopted a new compensation plan for non-employee directors, effective May 1, 2014 (the fourth quarter of Fiscal 2014), wherein the Chairman of our Board of Directors receives an annual fee of \$120,000 and all other independent directors receive an annual fee of \$50,000. Additionally, each member of the financing committee receives \$50,000 and the chairman of the clinical and regulatory affairs committee receives \$25,000. With this new compensation plan, our non-employee directors no longer receive additional fees for service on our committees except as described above.

The following table summarizes all compensation paid to our non-employee directors during Fiscal 2014:

#### **Director Compensation Table**

N	Fees Earned or Paid In Cash	Stock Awards	Option Awards	Non- Equity Incentive Plan Compensation	Nonqualified Deferred Compensation Earnings	All other Compensation	Total
Name	(\$)	(\$)	(\$)(4)	(\$)	(\$)	(\$)	(\$)
Dr. Avtar Dhillon (1)	\$ 125,000		101,663				\$ 226,663
Dr. Anthony Maida (2)	\$ 63,750		101,663				\$ 165,413
Dr. James DeMesa (3)	\$ 42,500		101,663				\$ 144,163

(1) On March 7, 2014, Dr. Dhillon was granted an option to purchase 250,000 shares of common stock with an exercise price of \$0.805 and a ten-year term. The option vests over a one-year period, as follows: 25% on the date of grant, and 25% quarterly thereafter. As of July 31, 2014, Dr. Dhillon held (i) outstanding option awards to purchase up to an aggregate of 450,000 shares of common stock, and (ii) no outstanding stock awards.

(2) On March 7, 2014, Dr. Maida was granted an option to purchase 250,000 shares of common stock with an exercise price of \$0.805 and a ten-year term. The option vests over a one-year period, as follows: 25% on the date of grant, and 25% quarterly thereafter. As of July 31, 2014, Dr. Maida held (i) outstanding option awards to purchase up to an aggregate of 550,000 shares of common stock, and (ii) no outstanding stock awards.

(3) On March 7, 2014, Dr. DeMesa was granted an option to purchase 250,000 shares of common stock with an exercise price of \$0.805 and a ten-year term. The option vests over a one-year period, as follows: 25% on the date of grant, and 25% quarterly thereafter As of July 31, 2014, Dr. DeMesa held (i) outstanding option awards to purchase up to an aggregate of 450,000 shares of common stock, and (ii) no outstanding stock awards.

(4) The values listed in the above table represent the fair value of the option grants that was recognized during Fiscal 2014, as applicable, under Accounting Standards Codification Topic 718 and is calculated as of the grant date using a Black-Scholes Option Pricing Model. For information on the valuation assumptions with respect to such awards, refer to Note 9 Stock-Based Compensation in our audited consolidated financial statements for Fiscal 2014, included in this filing.

# ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information regarding the beneficial ownership of our common stock by (i) each person who, to our knowledge, owns more than 5% of our common stock as of October 1, 2014, (ii) each of our directors and executive officers, and (iii) all of our executive officers and directors as a group. Unless otherwise indicated in the footnotes to the following table, the address of each person named in the table is: c/o OncoSec Medical Incorporated, 9810 Summers Ridge Road, Suite 110, San Diego, CA 92121. Shares of our common stock subject to options, warrants, or other rights currently exercisable or exercisable within 60 days of October 1, 2014, are deemed to be beneficially owned and outstanding for computing the share and percentage ownership of the person holding such options, warrants or other rights, but are not deemed outstanding for computing the percentage ownership of any other person.

	Number of Shares	Percentage
	Beneficially	Beneficially
Name of Beneficial Owner	Owned	Owned (1)
Directors and Named Executive Officers:		
Avtar Dhillon (2)	10,297,996	4.2%
Punit Dhillon (3) (4)	5,922,662	2.4%
Anthony Maida (2) (5)	510,300	*
James DeMesa (2)	637,516	*
Veronica Vallejo (6)	824,793	*
Robert Pierce (2)	578,000	*
Mai Le (7)	495,833	*
Current Directors and Executive Officers as a Group (7 persons)	19,267,100	7.7%

\*Less than 1%

(1) Based on 244,631,076 shares of our common stock issued and outstanding as of October 1, 2014. Except as otherwise indicated, we believe that the beneficial owners of the common stock listed above, based on information furnished by such owners, have sole investment and voting power with respect to such shares, subject to community property laws where applicable. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities.

(2) Includes no shares of common stock issuable upon exercise of options exercisable within 60 days of October 1, 2014.

(3) Includes 120,000 shares held by Inbalance Network Inc., and 25,000 shares held by Four Front Investments. Mr. Dhillon is a stockholder and managing partner of Inbalance Network, Inc. and Four Front Investments. Also includes 607,000 shares held by Mr. Dhillon s spouse.

(4) Includes 97,292 shares of common stock issuable upon exercise of options exercisable within 60 days of October 1, 2014.

<sup>(5)</sup> Includes 20,000 shares and 2,800 shares held by Dr. Maida s spouse and daughter, respectively.

<sup>(6)</sup> Includes 47,251 shares of common stock issuable upon exercise of options exercisable within 60 days of October 1, 2014.

<sup>(7)</sup> Includes 70,833 shares of common stock issuable upon exercise of options exercisable within 60 days of October 1, 2014.

# ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

#### **Transactions with Related Persons**

Since August 1, 2011, there have been no transactions, or currently proposed transactions, in which we were or are to be a participant and the amount involved exceeds the lesser of \$120,000 or one percent of the average of our total assets at year-end for the last two completed fiscal years and in which any related person had or will have a direct or indirect material interest.

#### **Director Independence**

Our common stock is not currently listed on any national securities exchange that has a requirement that the majority of our Board of Directors be independent. However, our Board of Directors has determined that all of the current members of our Board of Directors would be considered independent under Rule 803A of the NYSE MKT LLC Company Guide as applied to directors and to members of audit, nominating and corporate governance and compensation committees of the Board of Directors, except that Punit Dhillon would not be considered independent because he is our President and Chief Executive Officer.

1	o
4	o

#### ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The following table presents the aggregate fees billed to the Company in Fiscal 2014 and Fiscal 2013 for the indicated services during those periods:

	ŀ	iscal 2014	Fiscal 2013
Audit Fees Mayer Hoffman McCann P.C.	\$	177,022	\$ 133,928
Tax Fees		4,625	10,750
All Other Fees			3,750
Total	\$	181,647	148,248

*Audit Fees.* The fees identified under this caption were for professional services rendered by Mayer Hoffman McCann P.C. (MHM) for the audits of our annual financial statements. The fees identified under this caption also include fees for professional services rendered by MHM for the review of the financial statements included in our quarterly reports on Forms 10-Q. In addition, the amounts include fees for services that are normally provided by the auditor in connection with statutory and regulatory filings and engagements for the years identified. Audit fees in 2014 and 2013 include an aggregate of \$27,000 and \$32,000, respectively, in fees paid to MHM in connection with consents related to our filings of Forms S-1, S-3 and S-8 during Fiscal 2014 and Form S-1 during Fiscal 2013.

*Tax Fees.* Tax fees consist principally of assistance related to tax compliance and reporting provided by a professional service firm other than MHM.

*All Other Fees.* These fees consist primarily of consultation fees for the calculation, documentation and disclosure requirements under Financial Accounting Standards Board ASC 740 provided by a professional service firm other than MHM.

#### **Pre-approval Policy**

Our Audit Committee s charter requires our Audit Committee to pre-approve all audit and permissible non-audit services to be performed for the Company by our independent registered public accounting firm, giving effect to the de minimus exception for ratification of certain non-audit services allowed by the applicable rules of the SEC, in order to assure that the provision of such services does not impair the auditor s independence. Subsequent to the establishment of our Audit Committee on June 30, 2011, the Audit Committee approved in advance all services provided by our independent registered public accounting firms.

MHM has advised the Company that MHM leases substantially all of its personnel, who work under the control of MHM s shareholders, from wholly-owned subsidiaries of CBIZ, Inc., in an alternative practice structure. Accordingly, substantially all of the hours expended on MHM s engagement to audit the Company s financial statements for Fiscal 2014 and Fiscal 2013, were attributed to work performed by persons other than MHM s full-time, permanent employees.

## PART IV

# ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this report.

1. The following consolidated financial statements of OncoSec Medical Incorporated and Subsidiary are filed as part of this report under Item 8 Financial Statements and Supplementary Data:

Report of Independent Registered Public Accounting Firm	52
Consolidated Balance Sheets at July 31, 2014 and 2013	53
Consolidated Statements of Operations for Each of the Years in the Three Year Period Ended July 31, 2014 and for the Period From Inception (February 8, 2008) to July 31, 2014	54
Consolidated Statements of Stockholders Equity (Deficit) for the Period From Inception (February 8, 2008) to July 31, 2014	55
Consolidated Statements of Cash Flows for Each of the Years in the Three Year Period Ended July 31, 2014 and for the Period From Inception (February 8, 2008) to July 31, 2014	56
Notes to Consolidated Financial Statements	57

2. Financial Statement Schedules

These schedules are omitted because they are not required, or are not applicable, or the required information is shown in the consolidated financial statements or notes thereto.

3. Exhibits

The exhibit index included at the end of this report is incorporated by reference herein.

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# SIGNATURES

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

# ONCOSEC MEDICAL INCORPORATED

Date: October 10, 2014

By: /s/ Punit Dhillon Punit Dhillon President and Chief Executive Officer

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

SIGNATURE	TITLE	DATE
/s/ Punit Dhillon Punit Dhillon	President, Chief Executive Officer and Director (Principal Executive Officer)	October 10, 2014
/s/ Veronica Vallejo Veronica Vallejo	Chief Financial Officer (Principal Financial and Accounting Officer)	October 10, 2014
/s/ James DeMesa Dr. James DeMesa	Director	October 10, 2014
/s/ Avtar Dhillon Dr. Avtar Dhillon	Director	October 10, 2014
/s/ Anthony Maida Dr. Anthony Maida, III	Director	October 10, 2014

# REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders

OncoSec Medical Incorporated and Subsidiary

We have audited the accompanying consolidated balance sheets of OncoSec Medical Incorporated and Subsidiary (a development stage company) as of July 31, 2014 and 2013, and the related consolidated statements of operations, stockholders equity (deficit), and cash flows for the years ended July 31, 2014, 2013 and 2012 and for the period from inception (February 8, 2008) to July 31, 2014. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated 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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of OncoSec Medical Incorporated and Subsidiary as of July 31, 2014 and 2013, and the results of their operations and their cash flows for the years ended July 31, 2014, 2013 and 2012 and for the period from inception (February 8, 2008) to July 31, 2014, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), OncoSec Medical Incorporated and Subsidiary s internal control over financial reporting as of July 31, 2014, based on criteria established in *Internal Control Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated October 10, 2014 expressed an unqualified opinion thereon.

/s/ Mayer Hoffman McCann P.C.

San Diego, California

October 10, 2014

# **OncoSec Medical Incorporated**

# (A Development Stage Company)

**Consolidated Balance Sheets** 

#### As of July 31, 2014 and July 31, 2013

	July 31, 2014	July 31, 2013
Assets		2010
Current assets		
Cash and cash equivalents	\$ 37,852,694	\$ 4,970,175
Prepaid expenses	442,888	186,984
Other current assets	23,595	12,528
Total Current Assets	38,319,177	5,169,687
Property and equipment, net	581,054	151,625
Intangible assets, net	464,693	1,161,731
Other long-term assets	26,685	26,685
Total Assets	\$ 39,391,609	\$ 6,509,728
Liabilities and Stockholders Equity		
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	\$ 1,236,352	\$ 729,085
Accrued compensation related	42,654	
Accrued income taxes	800	1,600
Acquisition obligation, current		979,316
Accrued other	43,745	60,603
Total Current Liabilities	1,323,551	1,770,604
Acquisition obligation, net of current portion		
Total Liabilities	1,323,551	1,770,604
Staakholdong Fanity		
StockholdersEquityCommon stock authorized - 3,200,000,000 common shares with a par value of \$0.0001,common stock issued and outstanding244,631,076 and 118,014,224 common shares as		
of July 31, 2014 and July 31, 2013, respectively	24,463	11,802
Additional paid-in capital	56,081,475	11,467,139
Warrants issued and outstanding 37,647,790 and 57,644,276 warrants as of July 31, 2014		
and July 31, 2013, respectively	7,325,152	6,611,098
Deficit accumulated during the development stage	(25,363,032)	(13,350,915)
Total Stockholders Equity	38,068,058	4,739,124
Total Liabilities and Stockholders Equity	\$ 39,391,609	\$ 6,509,728

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

# **OncoSec Medical Incorporated**

# (A Development Stage Company)

# **Consolidated Statements of Operations**

		Year Ended July 31, 2014		Year Ended July 31, 2013		Year Ended July 31, 2012	(	Period from Inception February 8, 2008) to July 31, 2014
Revenue	\$		\$	July 51, 2015	\$		\$	July 51, 2014
Expenses:	Ŧ		Ŧ		+		Ŧ	
Research and development		5,796,347		3,159,209		2,368,481		11,909,395
General and administrative		6,153,313		3,905,763		3,158,693		14,395,945
Loss from operations		(11,949,660)		(7,064,972)		(5,527,174)		(26,305,340)
Other income (expense):								
Fair value of derivative liabilities in excess of								
proceeds								(808,590)
Adjustments to fair value of derivative								
liabilities						4,192,781		3,150,986
Loss on extinguishment of debt						(761,492)		(761,492)
Financing transaction costs								(210,000)
Non-cash interest expense		(20,684)		(83,215)		(266,567)		(370,466)
Interest expense								(1,357)
Impairment charges								(9,000)
Net loss before income taxes		(11,970,344)		(7,148,187)		(2,362,452)		(25,315,259)
Provision for income taxes		41,773		2,000		2,400		47,773
Net loss, net of tax	\$	(12,012,117)	\$	(7,150,187)	\$	(2,364,852)	\$	(25,363,032)
Basic and diluted net loss per common share	\$	(0.06)	\$	(0.07)	\$	(0.04)		
Weighted average shares used in computing								
basic and diluted net loss per common share		190,543,627		106,558,325		67,443,432		

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

# **OncoSec Medical Incorporated**

# (A Development Stage Company)

# Consolidated Statements of Stockholders Equity (Deficit)

# For the period from Inception (February 8, 2008) to July 31, 2014

	Common Shares	Stock (1) Amount	Additional Paid-In Capital (1)	W: Shares	arrants Amount	Deficit Accumulated during the Development Stage	Total Stockholders Equity (Deficit)
Balance, February 8, 2008		\$\$	6		\$	\$	\$
Shares issued to founder on Feb 8, 2008	48,000,000	4,800	10,200				15,000
Private placement on June 30, 2008	20,480,000	2,048	29,952				32,000
Net loss						(7,187)	(7,187)
Balance, July 31, 2008	68,480,000	6,848	40,152			(7,187)	39,813
Net loss						(33,714)	(33,714)
Balance, July 31, 2009	68,480,000	6,848	40,152			(40,901)	6,099
Net loss	(2) 100 000	6.0.10	10.150			(36,158)	(36,158)
Balance, July 31, 2010	68,480,000	6,848	40,152			(77,059)	(30,059)
Common stock cancelled	(17,280,000)	(1,728)	1,728				
Private placement on	1 456 000	146	(50.072	1 456 000	421.001		1 002 000
March 18, 2011	1,456,000	146	659,873	1,456,000	431,981		1,092,000
Common stock issued for services	200,000	20	221.090				222.000
Private placement on	200,000	20	331,980				332,000
June 24, 2011	4,000,000	400	(400)	4,000,000			
Net loss	4,000,000	400	(400)	4,000,000		(3,758,817)	(3,758,817)
Balance, July 31, 2011	56.856.000	5.686	1,033,333	5,456,000	431,981	(3,835,876)	(2,364,876)
Issuance of warrants Inovio	50,050,000	5,000	1,055,555	4,000,000	958,111	(5,655,670)	958,111
Expiration of Series B Warrants				(4,000,000)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Re-classification of				(4,000,000)			
Series A Warrants				4,240,000	657,604		657,604
Public offering on March 28, 2012, net of issuance costs of							
\$542,500	31,000,000	3,100	4,227,456	32,550,000	2,976,944		7,207,500
Share-based compensation							
expense			332,778				332,778
Net loss						(2,364,852)	(2,364,852)
Balance, July 31, 2012	87,856,000	8,786	5,593,567	42,246,000	5,024,640	(6,200,728)	4,426,265
Exercise of stock options	766,500	76	138,224				138,300
Exercise of common stock			101.05		(20.070)		
warrants	441,724	45	181,931	(441,724)	(39,858)		142,118
Common stock issued in connection with license							
agreement	150,000	15	34,485				34,500
Public offering on December 17, 2012, net	28,800,000	2,880	5,066,804	15,840,000	1,626,316		6,696,000

of issuance costs of \$504,000

Share-based compensation								
expense				452,128				452,128
Net loss							(7,150,187)	(7,150,187)
Balance, July 31, 2013	118,014,224	11,80	2	11,467,139	57,644,276	6,611,098	(13,350,915)	4,739,124
Exercise of common stock								
warrants	54,014,232	5,40	2	22,585,088	(55,521,524)	(5,546,175)		17,044,315
Exercise of common stock								
options	1,775,408	1'	6	364,360				364,536
Common stock issued for								
services	500,000		0	149,950				150,000
Public offering on								
September 17, 2013, net								
of issuance costs of \$836,360	47,792,000	4,7	9	8,235,318	26,285,600	2,871,543		11,111,640
Public offering on June 6,								
2014, net of issuance costs of								
\$1,145,000	22,535,212	2,25	4	11,464,061	9,239,438	3,388,686		14,855,001
Share-based compensation								
expense				1,815,559				1,815,559
Net loss							(12,012,117)	(12,012,117)
Balance, July 31, 2014	244,631,076	\$ 24,40	3 \$	56,081,475	37,647,790	\$ 7,325,152	\$ (25,363,032) \$	38,068,058

(1) Adjusted to reflect the forward stock split of 32-for-1 effective March 1, 2011.

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

# **OncoSec Medical Incorporated**

# (A Development Stage Company)

# **Consolidated Statements of Cash Flows**

	Year Ended July 31, 2014	Year Ended July 31, 2013	Year Ended July 31, 2012	Period from Inception (February 8, 2008) to July 31, 2014
Operating activities				
Net loss	\$ (12,012,117) \$	(7,150,187)	\$ (2,364,852)	6 (25,363,032)
Adjustments to reconcile net loss to net cash used				
in operating activities:				
Depreciation and amortization	780,110	736,875	717,450	2,485,256
Write-down of supplies inventory				38,000
Write-down of web development costs				9,000
Fair value of derivative liabilities in excess of				
proceeds			- (1.100	808,590
Loss on extinguishment of debt			761,492	761,492
Gain on adjustment to fair value of derivative liabilities			(4,192,781)	(3,150,986)
Non-cash interest expense	20.684	83,215	266,567	370,466
Share-based compensation	1,815,559	452,128	332,778	2,600,460
Common stock paid for services	150,000	34,500	249,000	399,833
Changes in operating assets and liabilities:	150,000	54,500	249,000	577,055
(Increase) decrease in prepaid expenses	(405,904)	156,194	(164,220)	(476,222)
(Increase) decrease in other current and long-term	(+05,70+)	150,174	(104,220)	(470,222)
assets	(11,067)	(30,845)	7,572	(50,280)
(Decrease) increase in accounts payable and	(11,007)	(50,045)	1,512	(50,200)
accrued liabilities	657,266	344,764	15,146	1,386,351
(Decrease) increase in accrued compensation	42,654	(218,849)	151,075	42,654
(Decrease) increase in accrued other	(16,858)	60.603	101,075	43,745
(Decrease) Increase in accrued income taxes	(10,000)	(1,600)	1,600	800
Net cash used in operating activities	(8,980,473)	(5,533,202)	(4,219,173)	(20,093,873)
Investing activities	(0,900,179)	(3,333,202)	(1,21),113)	(20,000,010)
Purchases of property and equipment	(512,500)	(114,550)	(54,511)	(751,847)
Investment in intangible assets	(512,500)	(111,550)	(51,511)	(250,000)
Net cash used in investing activities	(512,500)	(114,550)	(54,511)	(1,001,847)
Financing activities	(012,000)	(11,000)	(01,011)	(1,001,017)
Proceeds from issuance of common stock and				
warrants	27,948,001	7,200,000	7,750,000	47,037,000
Payment of financing and offering costs	(1,981,360)	(504,000)	(542,500)	(3,027,860)
Payment of amounts due under acquisition	(1,,,01,000)	(001,000)	(0.12,000)	(0,027,000)
obligation	(1,000,000)	(1,500,000)	(250,000)	(2,750,000)
Proceeds from exercise of warrants and stock	( ,,)	( )= = = ; = = = = ;	( = =,===)	(=,::::,:::)
options	17,408,851	280,418		17,689,274
Proceeds from amounts due to stockholder	.,,	,10		153,867
Repayment of amounts due to stockholder				(153,867)
Net cash provided by financing activities	42,375,492	5,476,418	6,957,500	58,948,414
Net increase (decrease) in cash	32,882,519	(171,334)	2,683,816	37,852,694
Cash and cash equivalents, at beginning of period	4,970,175	5,141,509	2,457,693	

Cash and cash equivalents, at end of period	\$ 37,852,694	\$ 4,970,175	\$ 5,141,509	\$ 37,852,694
Supplemental disclosure for cash flow				
information:				
Cash paid during the period for:				
Interest	\$	\$	\$	\$ 1,357
Income taxes	\$ 1,600	\$ 2,800	\$ 800	\$ 5,200
Noncash investing and financing transaction:				
Fair value of placement agent warrants issued in				
the public offerings	\$ 1,042,242	\$ 228,240	\$ 276,980	\$ 1,547,462
Acquisition obligation of asset purchase				
agreement	\$	\$	\$	\$ 2,750,000
Acquisition obligation discounts - imputed				
interest and fair value of warrants	\$	\$	\$ 402,355	\$ 402,355

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

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### Note 1 Nature of Operations and Basis of Presentation

OncoSec Medical Incorporated (the Company ) was incorporated under the name of Netventory Solutions Inc., in the state of Nevada on February 8, 2008 to pursue the business of inventory management solutions. On March 1, 2011, Netventory Solutions Inc. completed a merger with its subsidiary OncoSec Medical Incorporated and changed its name to OncoSec Medical Incorporated. On March 24, 2011, the Company completed the acquisition of certain technology and related assets from Inovio Pharmaceuticals, Inc. (Inovio) pursuant to an Asset Purchase Agreement (the Asset Purchase Agreement) dated March 14, 2011. The acquired technology and related assets relate to the use of drug-medical device combination products for the treatment of various cancers. Since this acquisition, the Company has focused its efforts in the biotechnology industry and abandoned its efforts in the online inventory services industry. Prior to the acquisition of the assets from Inovio, the Company had been inactive since March 2010 and had no continuing operations other than those of a company seeking a business opportunity. The Company has not produced any revenues from its newly acquired assets and is considered a development stage company.

The accompanying consolidated financial statements include the accounts of OncoSec Medical Incorporated and its wholly-owned inactive subsidiary, OncoSec Medical Therapeutics Incorporated (OncoSec Medical Therapeutics), which was acquired on June 3, 2011 for a total purchase price of \$1,000. OncoSec Medical Therapeutics was incorporated in Delaware on July 2, 2010. There have been no significant transactions related to this subsidiary since its inception. All significant intercompany transactions and balances have been eliminated at consolidation.

#### Note 2 Significant Accounting Policies

Segment Reporting

The Company operates in a single industry segment the discovery and development of novel immunotherapeutic product to improve treatment options for patients and physicians, intended to treat a wide range of oncology indications.

Concentrations and Credit Risk

The Company maintains cash balances at a single financial institution and such balance commonly exceeds the \$250,000 amount insured by the Federal Deposit Insurance Corporation. The Company has not experienced any losses in such accounts and management believes that the Company does not have significant credit risk with respect to such cash and cash equivalents.

Financial Instruments

The carrying amounts for cash and cash equivalents, prepaid expenses, accounts payable and accrued expenses approximate fair value due to their short-term nature, generally less than three months. The carrying amount of the Company s short-term acquisition obligation outstanding as of July 31, 2013 approximates fair value based upon current rates and terms available to us for similar activity. It is management s opinion that the Company is not exposed to significant interest, currency, or credit risks arising from its other financial instruments and that their fair values approximate their carrying values except where separately disclosed.

#### Derivative Liabilities

The Company accounts for its warrants and other derivative financial instruments as either equity or liabilities based upon the characteristics and provisions of each instrument. Warrants classified as equity are recorded at fair value as of the date of issuance on the Company s consolidated balance sheets and no further adjustments to their valuation are made. Warrants classified as derivative liabilities and other derivative financial instruments that require separate accounting as liabilities are recorded on the Company s consolidated balance sheets at their fair value on the date of issuance and will be revalued on each subsequent balance sheet date until such instruments are exercised or expire, with any changes in the fair value between reporting periods recorded as other income or expense. Management estimates the fair value of these liabilities using option pricing models and assumptions that are based on the individual characteristics of the warrants or instruments on the valuation date, as well as assumptions for future financings, expected volatility, expected life, yield, and risk-free interest rate.

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### Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts in the consolidated financial statements and disclosures made in the accompanying notes to the consolidated financial statements. Actual results could differ materially from the estimates.

#### Property and Equipment

The cost of property and equipment is depreciated on a straight-line basis over the estimated useful lives of the related assets. The useful lives of property and equipment for the purpose of computing depreciation are:

Computers and Equipment	3 to 10 years
Computer Software	1 to 3 years
Leasehold Improvements	3 years

Property and equipment, net, is comprised of the following:

	July 31, 2014	July 31, 2013
Computers and Equipment	465,964	136,116
Computer Software	18,701	18,701
Leasehold Improvements	100,196	70,530
Construction In Progress	138,506	
Property and Equipment, gross	723,367	225,347
Accumulated Depreciation	(142,313)	(73,722)
Property and Equipment, net	581,054	151,625

Depreciation expense recorded for the years ended July 31, 2014, 2013 and 2012 was approximately \$83,000, \$40,000 and \$35,000, respectively.

#### Net Loss Per Share

The Company computes basic net loss per common share by dividing the applicable net loss by the weighted average number of common shares outstanding during the respective period. Diluted earnings per share is computed using the weighted average number of common shares outstanding during the period, plus the dilutive effect of potential future issuances of common stock relating to stock options and other potentially dilutive securities using the treasury stock method. In calculating diluted earnings per share, the dilutive effect of stock options is computed using the average market price for the respective period. In addition, the assumed proceeds under the treasury stock method include

the average unrecognized compensation expense of stock options that are in-the-money. This results in the assumed buyback of additional shares, thereby reducing the dilutive impact of stock options. The Company did not include shares underlying stock options and warrants issued and outstanding during any of the periods presented in the computation of net loss per share, as the effect would have been anti-dilutive.

Stock Options

We grant equity-based awards under our share-based compensation plan. We estimate the fair value of share-based payment awards using the Black-Scholes option valuation model. This fair value is then amortized over the requisite service periods of the awards. The Black-Scholes option valuation model requires the input of subjective assumptions, including price volatility of the underlying stock, risk-free interest rate, dividend yield, and expected life of the option. Share-based compensation expense is based on awards ultimately expected to vest, and therefore is reduced by expected forfeitures. Changes in assumptions used under the Black-Scholes option valuation model could materially affect our net loss and net loss per share. Stock options granted to non-employees are revalued monthly until fully vested, with any change in fair value expensed.

Comprehensive Income (Loss)

Comprehensive income or loss includes all changes in equity except those resulting from investments by owners and distributions to owners. The Company did not have any items of comprehensive income or loss other than net loss from operations for the years ended July 31, 2014, 2013 and 2012, or for the period from inception (February 8, 2008) through July 31, 2014.

#### Recent Accounting Pronouncements

Recent pronouncements that are not anticipated to have an impact on or are unrelated to the Company s financial condition, results of operations, or related disclosures are not discussed.

In June 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2014-10, *Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation.* The amendments in the ASU remove all incremental financial reporting requirements from U.S. GAAP for development stage entities. In addition, the ASU: (*a*) adds an example disclosure in Topic 275, *Risks and Uncertainties*, to illustrate one way that an entity that has not begun planned principal operations could provide information about the risks and uncertainties related to the company s current activities; and (*b*) removes an exception provided to development stage entities in Topic 810, *Consolidation,* for determining whether an entity is a variable interest entity. The Company plans to early adopt this standard in the first quarter of fiscal year 2015. The adoption of this standard will not have an impact on the financial condition of the Company.

In August 2014, the FASB issued 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*, which is intended to define management s responsibility to evaluate whether there is substantial doubt about an organization s ability to continue as a going concern and to provide related footnote disclosures. This ASU provides guidance to an organization s management, with principles and definitions that are intended to reduce diversity in the timing and content of disclosures that are commonly provided by organizations today in the financial statement footnotes. The amendments are effective for annual periods ending after December 15, 2016, and interim periods within annual periods beginning after December 15, 2016. Early application is permitted for annual or interim reporting periods for which the financial statements have not previously been issued. The Company does not intend to early adopt this standard. The adoption of this standard will not have an impact on the financial condition of the Company.

#### Note 3 Cash and Cash Equivalents and Liquidity

The Company considers all liquid investments with maturities of ninety days or less when purchased to be cash equivalents. As of July 31, 2014 and July 31, 2013, cash and cash equivalents were comprised of cash in checking accounts.

The Company s activities to date have been supported by equity and debt financing. It has sustained losses in previous reporting periods with an inception to date loss of \$25,363,032 as of July 31, 2014.

As of July 31, 2014, the Company had cash and cash equivalents of approximately \$37.9 million. The Company believes its cash resources are sufficient to meet its anticipated needs during the next twelve months. The Company will require additional financing to fund its future planned operations, including research and development and clinical trials and commercialization of the intellectual property acquired from Inovio pursuant to the Asset Purchase Agreement (see Note 5). In addition, the Company will require additional financing in order to seek to license or acquire new assets, research and develop any potential patents and the related compounds, and obtain any further intellectual property that the Company may seek to acquire. Additional financing may not be available to the Company when needed or, if available, it may not be obtained on commercially reasonable terms. If the Company is not able to obtain the necessary additional financing on a timely basis, the Company will be forced to delay or scale down some or all of its development activities or perhaps even cease the operation of its business. Historically, the

Company has funded its operations primarily through equity financings and it expects that it will continue to fund its operations through equity and debt financing. If the Company raises additional financing by issuing equity securities, its existing stockholders ownership will be diluted. Obtaining commercial loans, assuming those loans would be available, will increase the Company s liabilities and future cash commitments. The Company also expects to pursue non-dilutive financing sources. However, obtaining such financing would require significant efforts by the Company s management team, and such financing may not be available, and if available, could take a long period of time to obtain.

#### Note 4 Fair Value of Financial Instruments

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Financial assets and liabilities are measured at fair value, which is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The following is a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value:

Level 1 Quoted prices in active markets for identical assets or liabilities.

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• Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

• Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

In conjunction with the June 2011 Private Placement, the Company issued warrants with derivative features. These instruments, the Series A and Series C Warrants, were accounted for as derivative liabilities (see Note 7).

The Company used Level 3 inputs for its valuation methodology for the warrant derivative liabilities. The estimated fair values were determined using a Monte Carlo option pricing model based on various assumptions. The Company s derivative liabilities are adjusted to reflect estimated fair value at each period end, with any decrease or increase in the estimated fair value being recorded in other income or expense accordingly, as adjustments to fair value of derivative liabilities.

On February 21, 2012, Series C Warrants to purchase an aggregate of 4,000,000 shares of the Company s stock expired unexercised. On March 28, 2012, the Series A Warrants were reclassified to equity, following the reset of the exercise price to the base floor price of \$0.50 per warrant share and an evaluation of the instrument s settlement provisions which were determined to be fixed-for-fixed (see Note 7).

During the year ended July 31, 2012, the estimated fair value of derivative liabilities decreased by \$4,192,781. This amount was recorded as other income during the year ended July 31, 2012.

#### Note 5 Intangible Asset Acquisition and Cross License Agreement

On March 14, 2011, the Company entered into the Asset Purchase Agreement with Inovio, whereby the Company agreed to purchase certain assets of Inovio related to certain non-DNA vaccine and selective electrochemical tumor ablation (SECTA) technology, including, among other things: (a) certain patents, including patent applications, and trademarks related to the SECTA technology; (b) certain equipment, machinery, inventory and other tangible assets related to the technology; (c) certain engineering and quality documentation related to the technology; and (d) the assignment of certain contracts related to the technology. In return, the Company agreed to pay Inovio \$3,000,000 in scheduled payments and a royalty on commercial product sales related to the SECTA technology. The transaction closed on March 24, 2011. The Asset Purchase Agreement has been amended by the parties to modify the schedule of payments to Inovio (see Note 6).

In connection with the closing of the Asset Purchase Agreement, the Company entered into a cross-license agreement with Inovio. Under the terms of the agreement, the Company granted Inovio a fully paid-up, exclusive, worldwide license to certain of the acquired SECTA technology patents in the field of use of electroporation. No consideration was received by the Company, nor will Inovio be liable for future royalty fees related to this arrangement. Inovio also granted the Company a non-exclusive, worldwide license to certain non-SECTA technology patents

held by it in consideration for the following: (a) a fee for any sublicense of the Inovio technology, not to exceed 10%; (b) a royalty on net sales of any business the Company develops with the Inovio technology, not to exceed 10%; and (c) payment to Inovio of any amount Inovio pays to one licensor of the Inovio technology that is a direct result of the license. In addition, the Company agreed not to transfer this non-exclusive license apart from the assigned intellectual property.

ASC 805, *Business Combinations*, provides guidance on determining whether an acquired set of assets meets the definition of a business for accounting purposes. Under the framework, the acquired set of activities and assets have to be capable of being operated as a business, from the viewpoint of a market participant as defined in ASC 820, *Fair Value Measurements*. Two essential elements required for an integrated set of activities are inputs and outputs. The Company evaluated the Asset Purchase Agreement and in accordance with the guidance, determined it did not meet the definition of a business acquisition as the acquisition consisted solely of the SECTA technology and certain other tangible assets. The Company did not acquire the right to any employees previously involved with the technology, or research processes previously in place at Inovio. The Company has therefore accounted for the transaction as an asset acquisition.

The purchase price was allocated to the identified tangible and intangible assets acquired based on their relative fair values, which were derived from their individual estimated fair values of \$38,000 and \$3,000,000, respectively. Included in the estimated fair value of the intangible assets is the value associated with the engineering and quality documentation acquired, which was determined to have no stand-alone value apart from the patents. The relative fair value of the intangible assets of \$2,962,000 was reduced by a discount of approximately \$174,000 recorded for the acquisition obligation (see Note 6). The relative fair value of the tangible assets of \$38,000 was expensed to research and development as of the acquisition date.

The following table summarizes the purchase price allocation for the assets acquired:

Intangible assets - patents	\$ 2,788,154
Tangible assets - machinery, property and inventory	\$ 38,000

Patents are stated net of accumulated amortization of approximately \$2,323,000 and \$1,626,000 as of July 31, 2014 and July 31, 2013, respectively. The patents are amortized on a straight-line basis over the estimated remaining useful lives of the assets, determined as four years from the date of acquisition. Amortization expense for the years ended July 31, 2014, 2013 and 2012 was approximately \$697,000, \$697,000 and \$682,000, respectively. At July 31, 2014, the weighted average remaining amortization period for all patents was approximately .17 years. Estimated amortization expense over the annual period ended July 31, 2015 is approximately \$465,000.

In accordance with the provisions of the applicable authoritative guidance, the Company s long-lived assets and amortizable intangible assets are tested for impairment whenever events or changes in circumstances indicate that their carrying value may not be recoverable. The Company assesses the recoverability of such assets by determining whether their carrying value can be recovered through undiscounted future operating cash flows, including its estimates of revenue driven by assumed market segment share and estimated costs. If impairment is indicated, the Company measures the amount of such impairment by comparing the fair value to the carrying value. During the years ended July 31, 2014 and 2013, no impairment was recorded.

#### Note 6 Acquisition Obligation

On March 24, 2011, the Company recorded an acquisition obligation for amounts due to Inovio in accordance with the Asset Purchase Agreement (see Note 5). On September 28, 2011, the Company entered into a First Amendment to Asset Purchase Agreement (the First Amendment ). The First Amendment modified the payment of \$750,000 due to Inovio by September 24, 2011, requiring the Company to make a payment of \$100,000 to Inovio on September 30, 2011, with the remaining \$650,000 to be paid to Inovio at the earlier of: (a) 30 days following the receipt by the Company of aggregate net proceeds of more than \$5,000,000 from one or more financings occurring on or after September 30, 2011, or (b) March 31, 2012. On March 24, 2012, the Company entered into a Second Amendment to Asset Purchase Agreement (the Second Amendment ). The Second Amendment further modified the payment of \$150,000 on March 31, 2012, with the remaining \$1,000,000 to be paid to Inovio in March 2012 by requiring the Company to make a payment of \$150,000 on March 31, 2012, with the remaining \$1,000,000 to be paid to Inovio in on December 31, 2013. In consideration for the First Amendment, the Company issued to Inovio a warrant to purchase 1,000,000 shares of common stock (see Note 8). In consideration for the Second Amendment, the Company issued to Inovio a warrant to purchase 3,000,000 shares of common stock (see Note 8).

In accordance with ASC 835-30 Interest on Receivables and Payables , the future payments under the acquisition obligation were discounted using the incremental borrowing rate of 5.00%, to arrive at an initial imputed interest discount on the obligation as of the acquisition date of approximately \$174,000. The imputed interest discount was recorded as a reduction to the relative fair value of the intangible assets acquired (see Note 5). The discount was revised as of the date of the First and Second Amendments to arrive at a revised imputed interest discount on the obligation of approximately \$132,000 as of September 28, 2011 and \$145,000 as of March 24, 2012. The increase in imputed interest as of the date of the Second Amendment was primarily due to the extended payment terms. Non-cash interest expense recognized during the years ended July 31, 2014, 2013 and 2012 was approximately \$21,000, \$83,000 and \$152,000, respectively. As of July 31, 2013, the outstanding acquisition obligation was reduced by a short-term imputed interest discount of approximately \$21,000. As of July 31, 2014, the acquisition obligation no longer exists.

The Company evaluated both amendments in accordance with ASC 470-50. The Company determined the modification of the terms upon entry into the First Amendment to the Asset Purchase Agreement on September 28, 2011, was not considered substantial as of that date. In accordance with the guidance, the fair value of the warrants issued to Inovio as consideration for the First Amendment were recorded as a discount to the acquisition obligation to be amortized to interest expense over the remaining term of the modified obligation payable, starting September 28, 2011. On March 24, 2012, the Company entered into the Second Amendment. In accordance with the guidance, the Company evaluated the cumulative impact of both amendments and determined the modification of the terms of the Asset Purchase Agreement as a result of the Second Amendment was considered substantial. The Company recorded the difference between the re-acquisition price and carrying value of the debt as of the modification date of March 24, 2012 as a loss on debt extinguishment of \$761,492. The loss on debt extinguishment recorded resulted in the write-off of the unamortized portion of the discount to the debt obligation initially recorded upon entry into the First Amendment in the amount of approximately \$113,000 as of March 24, 2012. As of March 24, 2012, the acquisition obligation s fair value was \$2,504,178. During the year ended July 31, 2012, approximately \$115,000 was recognized as non-cash interest expense for amortization of the discount to the acquisition obligation.

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The scheduled payments for the \$3,000,000 obligation under this arrangement, as amended, are as follows:

- \$ 250,000 Upon the closing of the Asset Purchase Agreement
- \$ 100,000 September 30, 2011
- \$ 150,000 March 31, 2012
- \$ 500,000 September 24, 2012
- \$ 1,000,000 March 31, 2013
- \$ 1,000,000 December 31, 2013

As of July 31, 2014, we completed all scheduled payments under the Asset Purchase Agreement and have no further payment obligations related to the Asset Purchase Agreement.

#### Note 7 Private Placements and Public Offerings

### **March 2011 Private Placement**

On March 18, 2011, the Company closed a private placement whereby it issued 1,456,000 units at a purchase price of \$0.75 per unit for gross proceeds of \$1,092,000. Each unit consists of one share of common stock and one share purchase warrant entitling the holder to acquire one share of common stock at a price of \$1.00 per share for a period of five years from the closing of the private placement. The fair value of the warrants, based on their fair value relative to the common stock issued, was \$431,981 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 89.68%, and a risk-free interest rate of 2.11%). The warrants were exercisable as of March 18, 2011 and any unexercised warrants will expire on March 18, 2016. The Company completed an evaluation of the warrants issued in connection with this private placement and determined the warrants should be classified as equity within the consolidated balance sheets as the instrument s settlement provisions were fixed-for-fixed.

### June 2011 Private Placement

On June 24, 2011, the Company closed a private placement whereby it issued an aggregate of 4,000,000 shares of the Company s common stock at a purchase price of \$0.75 per share, and three series of warrants, the Series A Warrants, the Series B Warrants and the Series C Warrants, to purchase an aggregate of 12,000,000 shares of the Company s common stock, for proceeds to the Company of \$3.0 million (the June 2011 Private Placement ). After deducting for fees and expenses, the aggregate net proceeds from the sale of the common stock and the warrants in the June Private Placement were approximately \$2.79 million.

Pursuant to the terms of the Securities Purchase Agreement, each investor was issued a Series A Warrant, a Series B Warrant and a Series C Warrant, each to purchase up to a number of shares of the Company s common stock equal to 100% of the shares issued to such investor. The Series A Warrants have an exercise price of \$1.20 per share, are exercisable immediately upon issuance and have a term of exercise equal to five years. The Series B Warrants have an exercise price of \$0.75 per share, are exercisable immediately upon issuance and expire on February 21, 2012. The Series C Warrants have an exercise price of \$1.20 per share, vest and are exercisable ratably commencing on the exercise of the Series B Warrants held by each investor and have a term of exercise equal to five years. The Series C Warrants also expire if the Series B Warrants expire unexercised. On February 21, 2012, the Series B and Series C Warrants expired unexercised.

On June 24, 2011, in connection with the closing of the June 2011 Private Placement, the Company and the Purchasers entered into a registration rights agreement pursuant to which the Company is required to file a registration statement within 30 days following such closing to register the resale of the common stock and the common stock underlying the warrants issued in the June 2011 Private Placement. The failure on the part of the Company to meet the filing deadlines and other requirements set forth in the registration rights agreement may subject the Company to payment of certain monetary penalties, up to a maximum of 9% of the aggregate proceeds of the June 2011 Private Placement. As of July 31, 2014 the Company was in compliance with the requirements set forth in the registration rights agreement.

In addition, pursuant to the terms of a placement agent agreement entered into with the lead placement agent on June 1, 2011 and amended on June 21, 2011, the Company agreed to pay the lead placement agent and the co-placement agent fees equal to 6% of the aggregate gross proceeds raised in the private placement of \$180,000 and reimbursement to the lead placement agent for certain expenses in the amount of \$30,000. The total cash fees of \$210,000 paid to the placement agents were recorded as a period expense as of the closing date. In connection with the agreement, the Company also issued to the placement agents Series A Warrants to purchase 6% of the aggregate common stock issued in the June 2011 Private Placement, or 240,000 shares of common stock.

#### **Allocation of Proceeds**

At the closing date of the June 2011 Private Placement, the estimated fair value of the Series A and Series C Warrants exceeded the proceeds from the June 2011 Private Placement of \$3,000,000 (see the valuations of these derivative liabilities under the heading, Derivative Liabilities below). As a result, all of the proceeds were allocated to these derivative liabilities and no proceeds remained for allocation to the common stock and Series B Warrants issued in the financing.

#### **Common Stock**

At the closing date of the June 2011 Private Placement, the Company issued 4,000,000 shares of unregistered common stock and recorded the par value of the shares issued of \$400 (at par value of \$0.0001 per share) with a corresponding reduction to paid-in capital, given that there was no allocated value from the proceeds to the common stock.

### **Derivative Liabilities**

The Company accounted for the Series A and C Warrants in accordance with accounting guidance for derivatives. The accounting guidance provides a two-step model to be applied in determining whether a financial instrument is indexed to an entity s own stock that would qualify such financial instruments for a scope exception. This scope exception specifies that a contract that would otherwise meet the definition of a derivative financial instrument would not be considered as such if the contract is both (i) indexed to the entity s own stock and (ii) classified in the stockholders equity section of the balance sheet. The Company determined that its Series A and Series C Warrants were ineligible for equity classification as a result of the anti-dilution provisions in the Series A and Series C Warrants that may result in an adjustment to the warrant exercise price.

On the closing date of the June 2011 Private Placement, the derivative liabilities were recorded at an estimated fair value of \$3,808,590. Given that the fair value of the derivative liabilities exceeded the total proceeds of the private placement of \$3,000,000, no net amounts were allocated to the common stock. The \$808,590 amount by which the recorded liabilities exceeded the proceeds was charged to other expense at the closing date. The Company revalued the derivative liability as of each subsequent balance sheet date, with any changes in the fair value between reporting periods recorded as other income or expense.

On March 28, 2012, the anti-dilution provisions of the Series A Warrants were triggered upon the closing of the Company s March 2012 registered public offering, which resulted in the reset of the exercise price of the Series A Warrants to the base floor price of \$0.50. The fair value of the derivative liabilities as of March 28, 2012 was \$657,604. The reset of the exercise price to the base floor price caused the anti-dilution provisions to become void as of March 28, 2012 and for future periods. As a result, on March 28, 2012, the Series A Warrants were reclassified as equity within the Company s consolidated financial statements, at a fair value of \$657,604.

The change in the estimated fair value of the Series A and C Warrants during the year ended July 31, 2012, resulted in other income of \$4,192,781. Such change in the estimated fair value was primarily due to the fluctuation in the Company s common stock price and updates to

the assumptions used in the option pricing models.

The derivative liabilities were valued as of March 28, 2012, using a Monte Carlo valuation model with the following assumptions:

	March 28, 2012
Closing price per share of common stock	0.22
Exercise price per share	0.50
Expected volatility	125.0%
Risk-free interest rate	1.05%
Dividend yield	
Floor price	0.50
Remaining expected term of underlying securities (years)	4.24

In addition, as of the valuation date, management assessed the probability of future financings assumptions in the Monte Carlo valuation model.

#### March 2012 Public Offering

On March 28, 2012, the Company closed a registered public offering of an aggregate of 31,000,000 shares of the Company s common stock and warrants to purchase an aggregate of 31,000,000 shares of common stock for gross proceeds to the Company of \$7.75 million (the March 2012 Public Offering ). On March 23, 2012, the Company entered into a Securities Purchase Agreement (the Securities Purchase Agreement ) for the issuance and sale by the Company of the common stock and warrants in the March 2012 Public Offering. After deducting for fees and expenses, the aggregate net proceeds from the March 2012 Public Offering were approximately \$7.2 million.

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Pursuant to the terms of the Securities Purchase Agreement, at the closing each purchaser was issued a warrant to purchase up to a number of shares of the Company s common stock equal to 100% of the shares issued to such purchaser in the offering. The warrants have an exercise price of \$0.35 per share, are exercisable immediately upon issuance and have a term of exercise equal to five years from the date of issuance of the warrants, or March 28, 2017.

Pursuant to a Placement Agent Agreement dated January 23, 2012 by and between the Company and Rodman & Renshaw, LLC ( Rodman ), as subsequently amended on March 12, 2012 (as amended, the Placement Agent Agreement ), Rodman agreed to act as the Company s placement agent in connection with the offering. Under the Placement Agent Agreement, the Company agreed to pay Rodman a cash fee equal to 6% of the gross proceeds of the offering, as well as a non-accountable expense allowance equal to 1% of the gross proceeds of the offering. In addition, the Company agreed to issue to the placement agent warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or warrants to purchase 1,550,000 shares of the Company s common stock (the Placement Agent Warrants directly to Roth Capital Partners, LLC ( Roth ), who acted as financial advisors in the offering, and as a result issued to Rodman a Placement Agent Warrant to purchase 1,085,000 shares of common stock and issued to Roth a Placement Agent Warrant to purchase 465,000 shares of common stock. The Placement Agent Warrants have substantially the same terms as the warrants issued to the purchasers in the offering, except that such warrants have an exercise price of \$0.3125 and shall expire on March 23, 2017. The fair value of the Placement Agent Warrants was \$276,980 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 125.0%, and a risk-free interest rate of 1.05%), and was recorded as an offering cost. The Placement Agent Warrants and the shares of the Company s common stock underlying the Placement Agent Warrants have not been registered under the Securities Act of 1933, as amended (the Securities Act ).

The fair value of the warrants issued in connection with the March 2012 Public Offering to the purchasers, based on their fair value relative to the common stock issued, was \$3,206,486 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 125.0%, and a risk-free interest rate of 1.05%). The Company completed an evaluation of all of the warrants issued in connection with this offering and determined the warrants should be classified as equity within the consolidated balance sheet.

#### **December 2012 Public Offering**

On December 17, 2012, the Company closed a registered public offering of an aggregate of 28,800,000 shares of the Company s common stock and warrants to purchase an aggregate of 14,400,000 shares of common stock for gross proceeds to the Company of \$7.2 million (the

December 2012 Public Offering ). On December 12, 2012, the Company entered into a Securities Purchase Agreement (the Securities Purchase Agreement ) for the issuance and sale by the Company of the common stock and warrants in the December 2012 Public Offering. After deducting for fees and expenses, the aggregate net proceeds from the sale of the common stock and the warrants in the December 2012 Public Offering were approximately \$6.7 million.

Pursuant to the terms of the Securities Purchase Agreement, at the closing each purchaser was issued a warrant to purchase up to a number of shares of the Company s common stock equal to 50% of the shares issued to such purchaser in the offering. The warrants have an exercise price of \$0.26 per share, are exercisable immediately upon issuance and have a term of exercise equal to four years from the date of issuance of the warrants, or December 17, 2016.

Pursuant to a Placement Agent Agreement dated November 16, 2012 by and between the Company and Dawson James Securities, Inc. (Dawson), Dawson agreed to act as the Company s placement agent in connection with the offering. Under the Placement Agent Agreement, the

Company agreed to pay Dawson a cash fee equal to 6% of the gross proceeds of the offering, as well as a non-accountable expense allowance equal to 1% of the gross proceeds of the offering. In addition, the Company agreed to issue to the placement agent warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or warrants to purchase 1,440,000 shares of the Company s common stock (the Placement Agent Warrants ). As permitted under the Placement Agent Agreement, the Company elected to pay 50% of the 5% Placement Agent Warrants directly to Noble International Investments, Inc. and Burrill LLC (Noble and Burrill, respectively), who acted as financial advisors in the offering, and as a result issued to Dawson a Placement Agent Warrant to purchase 720,000 shares of common stock, and issued to Noble and Burrill Placement Agent Warrants to purchase 360,000 shares of common stock each. The Placement Agent Warrants have substantially the same terms as the warrants issued to the purchasers in the offering, except that such warrants have an exercise price of \$0.3125 and shall expire on December 11, 2017. The fair value of the Placement Agent Warrants was \$228,240 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 98.09%, and a risk-free interest rate of 0.74%), and was recorded as an offering cost. The Placement Agent Warrants and the shares of the Company s common stock underlying the Placement Agent Warrants have not been registered under the Securities Act.

The fair value of the warrants issued in connection with the December 2012 Public Offering to the purchasers, based on their fair value relative to the common stock issued, was \$2,151,360 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 96.66%, and a risk-free interest rate of 0.56%). The Company completed an evaluation of all of the warrants issued in connection with this offering and determined the warrants should be classified as equity within the consolidated balance sheets.

### September 2013 Public Offering

On September 18, 2013, the Company closed a registered public offering of an aggregate of 47,792,000 shares of the Company s common stock and warrants to purchase an aggregate of 23,896,000 shares of common stock for gross proceeds to the Company of approximately \$11.95 million (the September 2013 Public Offering ). On September 16, 2013, the Company entered into a Securities Purchase Agreement for the issuance and sale by the Company of the common stock and warrants in the September 2013 Public Offering. After deducting for fees and expenses, the aggregate net proceeds from the sale of the common stock and the warrants in the September 2013 Public Offering were approximately \$11.1 million.

Pursuant to the terms of the Securities Purchase Agreement, at the closing each purchaser was issued a warrant to purchase up to a number of shares of the Company s common stock equal to 50% of the shares issued to such purchaser in the offering. The warrants have an exercise price of \$0.35 per share, are exercisable immediately upon issuance and have a term of exercise equal to four years from the date of issuance of the warrants, or September 18, 2017.

Pursuant to a Placement Agent Agreement, dated August 16, 2013, by and between the Company and H.C. Wainwright & Co., LLC (H.C. Wainwright agreed to act as the Company's placement agent in connection with the offering. Pursuant to the Placement Agent Agreement, the Company agreed to pay an aggregate cash fee for placement agent and financial advisory services equal to 6% of the gross proceeds of the offering (the Placement Agent Fee), as well as a non-accountable expense allowance equal to 1% of the gross proceeds of the offering. In addition, the Company agreed to issue warrants to purchase an aggregate of up to 5% of the aggregate number of shares of Common Stock sold in the offering, or 2,389,600, to the placement agent or its designees (the Placement Agent Warrants). As permitted under the Placement Agreement, the Company elected to pay 20% of each of the Placement Agent Fee and the 5% Placement Agent Warrants directly to Maxim Group LLC (Maxim), who acted as financial advisor in the offering. As a result, the Company issued Placement Agent Warrants to purchase 1,911,680 shares and 477,920 shares to Wainwright and Maxim, respectively, or their designees. The Placement Agent Warrants have substantially the same terms as the warrants issued to the purchasers in the offering, except that such warrants have an exercise price of \$0.3125 and shall expire on September 18, 2018. The fair value of the Placement Agent Warrants was \$410,535 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 94.57%, and a risk-free interest rate of 1.43%), and was recorded as an offering cost. The Placement Agent Warrants have not been registered under the Securities Act.

The fair value of the warrants issued in connection with the September 2013 Public Offering to the purchasers, based on their fair value relative to the common stock issued, was \$2,461,008 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 83.62%, and a risk-free interest rate of 1.43%). The Company completed an evaluation of all of the warrants issued in connection with this offering and determined the warrants should be classified as equity within the consolidated balance sheet.

#### June 2014 Public Offering

On June 6, 2014, the Company closed a registered public offering of an aggregate of 22,535,212 shares of the Company s common stock and warrants to purchase an aggregate of 7,887,325 shares of common stock for gross proceeds to the Company of approximately \$16.0 million (the June 2014 Public Offering). On June 3, 2014 the Company entered into a Securities Purchase Agreement for the issuance and sale by the Company of the common stock and warrants in the June 2014 Public Offering. After deducting for fees and expenses, the aggregate net proceeds from the sale of the common stock and the warrants in the June 2014 Public Offering were approximately \$14.9 million.

Pursuant to a Placement Agent Agreement (the June Placement Agent Agreement ), dated June 3, 2014, by and between the Company and Wainwright agreed to act as the Company s placement agent in connection with the Offering. Pursuant to the June Placement Agent Agreement, the Company agreed to pay an aggregate cash fee for placement agent and financial advisory services equal to 6% of the gross proceeds of the Offering (the June Placement Agent Fee ), as well as a non-accountable expense allowance equal to 1% of the gross proceeds of the Offering and an accountable legal expense reimbursement of \$25,000. In addition, the Company agreed to issue warrants to purchase an aggregate of up to 6% of the aggregate number of shares of Common Stock sold in the Offering to the placement agent or its designees (the June Placement Agent Fee and issue up to 45% of the June Placement Agent Warrants directly to other broker-dealers acting as placement agents or financial advisors in the Offering. The Company has engaged Maxim Group LLC (Maxim ) and Noble Financial Capital Markets (Noble ) as financial advisors with respect to the Offering, and has agreed to pay each such advisor 22.5% of the June Placement Agent Fee and issue 22.5% of the June Placement Agent Warrants in consideration for such

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advisor s financial advisory services. The June Placement Agent Warrants shall have substantially the same terms as the Warrants to be issued to the Purchasers in the Offering, except that such warrants shall expire on May 12, 2019. The fair value of the June Placement Agent Warrants was \$631,707 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 90.30%, and a risk-free interest rate of 1.53%), and was recorded as an offering cost. The June Placement Agent Warrants and the shares of the Company s common stock underlying the June Placement Agent Warrants have not been registered under the Securities Act.

The fair value of the warrants issued in connection with the June 2014 Public Offering to the purchasers, based on their fair value relative to the common stock issued, was \$2,756,979 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 90.30%, and a risk-free interest rate of 1.53%). The Company completed an evaluation of all of the warrants issued in connection with this offering and determined the warrants should be classified as equity within the consolidated balance sheet.

#### Note 8 Other Equity and Common Stock Transactions

On March 1, 2011, the Company effected a 32 for one forward stock split of its authorized, issued and outstanding common stock. As a result, its authorized capital increased from 100,000,000 shares of common stock at \$0.001 par value to 3,200,000,000 shares of common stock at \$0.0001 par value, and its outstanding common stock has increased from 2,140,000 shares of common stock to 68,480,000 shares of common stock as of that date. The accompanying consolidated financial statements for the annual prior periods presented have been retroactively adjusted to reflect the effects of the forward stock split.

On March 22, 2011, 17,280,000 shares of common stock held by previous majority stockholders were returned to the Company for no consideration. The shares were not retired and are available for future issuance.

On May 9, 2011, the Board of Directors authorized the issuance of 200,000 fully vested shares of the Company s common stock to a consultant in exchange for advisory services. The shares were valued at \$332,000, based on the closing price of the Company s common stock on the date of issuance, and are amortized over the service period of twelve months.

On September 28, 2011, in consideration for the First Amendment entered into with Inovio, the Company issued to Inovio a warrant to purchase 1,000,000 shares of the Company s common stock (see Note 6). The warrant has an exercise price of \$1.20 per share, is exercisable immediately upon issuance and has an exercise term of five years. The warrant also contains a mandatory exercise provision allowing the Company to request the exercise of the warrant in whole provided that the Company s Daily Market Price (as defined in the warrant) is equal to or greater than \$2.40 for twenty consecutive trading days. The Company completed an evaluation of the warrant issued in connection with this private placement and determined the warrants should be classified as equity within the consolidated balance sheet. The fair value of the warrant was \$228,509 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 87.62%, and a risk-free interest rate of 0.96%). In accordance with the guidance, the fair value of the warrant was recorded as a discount to the acquisition obligation and amortized to interest expense over the remaining term of the modified obligation payable (see Note 6).

On March 24, 2012, in consideration for the Second Amendment entered into with Inovio, the Company issued to Inovio a warrant to purchase 3,000,000 shares of the Company s common stock (see Note 6). The warrant has an exercise price of \$1.00 per share, is exercisable immediately upon issuance and has an exercise term of five years. The warrant also contains a mandatory exercise provision allowing the Company to

request the exercise of the warrant in whole provided that the Company s Daily Market Price (as defined in the warrant) is equal to or greater than \$2.40 for twenty consecutive trading days. The Company completed an evaluation of the warrant issued in connection with this private placement and determined the warrants should be classified as equity within the consolidated balance sheet. The fair value of the warrant was \$729,602 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 125.0%, and a risk-free interest rate of 1.04%). In accordance with the applicable guidance, the fair value of the warrant was recorded as part of the loss on debt extinguishment as of the issuance date (see Note 6).

On December 18, 2012, the Board of Directors authorized the issuance of 150,000 fully vested shares of the Company s common stock to the University of South Florida Research Foundation in connection with an agreement to license certain intellectual property to the Company entered into on August 24, 2012. The shares were valued at \$34,500, based on the closing price of the Company s common stock on the date of issuance. The shares have not been registered under the Securities Act and were issued in reliance on an exemption from the registration requirements of the Securities Act afforded by Section 4(2) thereof. The Company is responsible for payments upon the achievement of specified milestones and royalty payments at specified percentages of net sales of licensed products and processes, as defined, upon commercialization of stipulated licensed products or processes. The first payment will be for \$50,000 upon the start of a future Phase II clinical trial for specific indications, \$100,000 upon the start of a specified future Phase III clinical trial and \$250,000 upon FDA approval under certain conditions. The Company also agreed to pay for certain patent prosecution and filing fees.

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At July 31, 2014, the Company had outstanding warrants to purchase 37,647,790 shares of common stock, with exercise prices ranging from \$0.26 to \$1.20, all of which were classified as equity instruments. These warrants expire at various times between March 2016 and June 2019.

The Company has not adopted any policy regarding payment of dividends. No dividends have been paid during the periods presented.

### Note 9 Stock-Based Compensation

In May 2011, the Company's Board of Directors adopted the OncoSec Medical Incorporated 2011 Stock Incentive Plan (the 2011 Plan). The 2011 Plan was approved by the Company's stockholders in March 2012 and originally authorized the Board of Directors to grant equity awards to employees, directors, and consultants for up to 5,200,000 shares of common stock. On April 15, 2013, the Company's stockholders approved an amendment to the 2011 Plan to authorize the issuance of an additional 3,800,000 shares of common stock under the 2011 Plan, increasing the total number of shares reserved for issuance under the 2011 Plan to 9,000,000 shares. On July 18, 2014, the Company's stockholders approved an amendment to the 2011 Plan to authorize the issuance of an additional 16,000,000 shares of common stock under the 2011 Plan, increasing the total number of shares reserved for issuance under the 2011 Plan to 25,000,000 shares. Incentive stock options are to be granted at a price that is no less than 100% of the fair value of the stock at the date of grant. Options vest over a period specified in individual option agreements entered into with grantees, and are exercisable for a maximum period of ten years after the date of grant. Options granted to stockholders who own more than 10% of the outstanding stock of the Company at the time of grant must be issued at an exercise price no less than 110% of the fair value of the stock on the date of grant.

During the year ended July 31, 2014, the Company granted options to purchase 1,810,000, 750,000 and 760,000 shares of the Company s common stock to employees, directors and consultants, respectively, under the 2011 Plan. During the year ended July 31, 2014, the Company granted options to purchase 5,200,000 and 500,000 shares of the Company s common stock to employees and consultants, respectively, outside of the terms of the 2011 Plan. The options issued to employees both within the 2011 Plan and outside of the terms of the 2011 Plan have a ten-year term, vest over a range of two to three years, and have exercise prices ranging from \$0.31 to \$0.805. The options issued to directors have a ten-year term, vest quarterly in equal increments over one year, and have an exercise price of \$0.805. The options issued to consultants both within the 2011 Plan and outside of the terms of the 2011 Plan have one- to ten-year terms, vest in accordance with the terms of the applicable consulting agreement, and have exercise prices ranging from \$0.26 to \$0.805.

During the year ended July 31, 2013, the Company granted options to purchase 685,000 and 300,000 shares of the Company s common stock to employees and directors, respectively, under the 2011 Plan. The options issued to employees have a ten-year term, vest over a range of two to three years, and have exercise prices ranging from \$0.20 to \$0.42. The options issued to directors have a ten-year term, vest quarterly in equal increments over one year and have an exercise price of \$0.25. During the year ended July 31, 2013, the Company also granted options to purchase 2,030,000 shares of the Company s common stock to consultants under the 2011 Plan. The options issued to consultants have three to ten year terms, vest in accordance with the terms of the applicable consulting agreement, and have exercise prices ranging from \$0.18 to \$0.35.

During the year ended July 31, 2012, the Company granted options to purchase 1,300,000 and 400,000 shares of the Company s common stock to employees and directors, respectively, under the 2011 Plan. The options issued to employees have a ten-year term, vest over two years, and have exercise prices ranging from \$0.21 to \$0.40. The options issued to directors have a ten-year term, vest quarterly in equal increments over one year, and have exercise prices ranging from \$0.21 to \$0.40. During the year ended July 31, 2012, the Company also granted options to purchase 1,560,000 shares of the Company s common stock to consultants under the 2011 Plan. The options issued to consultants have three- to ten-year terms, vest in accordance with the terms of the applicable consulting agreement, and have exercise prices ranging from \$0.18 to \$0.39.

The Company recognizes compensation expense for stock option awards on a straight-line basis over the applicable service period of the award. The service period is generally the vesting period, with the exception of options granted subject to a consulting agreement, whereby the option vesting period and the service period are defined pursuant to the terms of the consulting agreement. Share-based compensation expense for awards granted during the years ended July 31, 2014, 2013 and 2012, were based on the grant date fair value estimated using the Black-Scholes Option Pricing Model.

The following assumptions were used to calculate the fair value of share-based compensation during the years ended:

	July 31, 2014	July 31, 2013	July 31, 2012
Expected volatility	83.62% - 93.27%	80.32 - 97.85%	85.96% - 125.00%
Risk-free interest rate	0.100% - 2.78%	0.31% - 1.97%	0.35% - 2.08%
Expected forfeiture rate	0.00%	0.00%	0.00%
Expected dividend yield			
Expected term	1 - 10 years	3 - 10 years	3 - 10 years

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Expected price volatility is the measure by which the Company s stock price is expected to fluctuate during the expected term of an option. The Company exited shell status on March 24, 2011. In situations where a newly public entity has limited historical data on the price of its publicly traded shares and no other traded financial instruments, authoritative guidance is provided on estimating this assumption by basing its expected volatility on the historical, expected, or implied volatility of similar entities whose share option prices are publicly available. In making the determination as to similarity, the guidance recommends the consideration of industry, stage of life cycle, size and financial leverage of such other entities. The Company s expected volatility is derived from the historical daily change in the market price of its common stock since it exited shell status, as well as the historical daily changes in the market price for the peer group as determined by the Company.

The expected term of the options represents the period that stock-based awards are expected to be outstanding based on the simplified method provided in ASC Topic 718, which averages an award s weighted-average vesting period and contractual term for share options and warrants. The Company will continue to use the simplified method until it has the historical data necessary to provide a reasonable estimate of expected life in accordance with ASC Topic 718, as amended by SAB 110. For the expected term of options issued to employees and directors, the Company used the simplified method. The Company expects to continually evaluate its historical data as a basis for determining the expected terms of options granted under the 2011 Plan. The Company s estimation of the expected term for stock options granted to parties other than employees or directors is the contractual term of the option award.

For the purposes of estimating the fair value of stock option awards, the risk-free interest rate used in the Black-Scholes calculation is based on the prevailing U.S. Treasury yield. The Company has never paid any dividends on its common stock and does not anticipate paying dividends on its common stock in the foreseeable future.

Stock-based compensation expense recognized in the Company s consolidated statements of operations is based on awards ultimately expected to vest, reduced for estimated forfeitures. Authoritative guidance requires forfeitures to be estimated at the time of grant, and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Due to the Company s minimal stock-based compensation activity, the Company has not had significant forfeitures of stock options granted to employees and directors. Therefore, the Company has estimated the forfeiture rate of its outstanding stock options as zero, but will continually evaluate its historical data as a basis for determining expected forfeitures.

Share-based compensation expense recorded in the Company s consolidated statements of operations for the years ended July 31, 2014, 2013 and 2012 resulting from share-based compensation awarded to the Company s employees, directors and consultants was approximately \$1,816,000, \$452,000 and \$333,000, respectively. Of these balances during the years ended July 31, 2014, 2013 and 2012, \$666,000, \$41,000 and \$89,000, respectively, was recorded to research and development, and \$1,150,000, \$411,000 and \$244,000, respectively, was recorded in general and administrative in the Company s consolidated statements of operationsDuring the years ended July 31, 2014, 2013 and 2012, the Company recorded \$118,000, \$11,000 and \$25,000 respectively, in research and development expense and \$119,000, \$289,000 and \$133,000, respectively, in general and administrative expense for stock options granted to non-employees.

A summary of the Company s stock option activity for the years ended July 31, 2014, 2013 and 2012 is as follows:

	Option Shares Outstanding	Weighted-Average Exercise Price		Aggregate Intrinsic Value (\$000 s)
Balance at July 31, 2011	\$		\$	
Granted	3,260,000		0.24	

Exercised			
Forfeited / Cancelled	(85,000)	0.40	
Balance at July 31, 2012	3,175,000	0.24	24
Granted	3,015,000	0.22	232
Exercised	(766,500)	0.18	52
Forfeited / Cancelled	(273,500)	0.33	9
Balance at July 31, 2013	5,150,000	0.23	372
Granted	9,020,000	0.66	1
Exercised	(1,799,975)	0.21	846
Forfeited / Cancelled	(609,125)	0.26	65
Balance at July 31, 2014	11,760,900	0.56	844
Exercisable at July 31, 2014	6,022,353 \$	0.47 \$	647

		Number of Shares	Weighted Average Contractual Life	Number Of Shares	Weighted Average Remaining Contractual
Range of Exercise Prices		Outstanding	(in years)	Exercisable	Life (in years)
\$	0.18 - 0.805	11,760,900	8.51	\$ 6,022,353	7.61

The weighted-average grant date fair value of stock options granted during the years ended July 31, 2014, 2013 and 2012 were \$0.47, \$0.14 and \$0.18, respectively. As of July 31, 2014, there was approximately \$2.5 million of unrecognized non-cash compensation cost related to unvested options, which will be recognized over a weighted average period of 2.36 years.

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Common Stock Reserved for Future Issuance

The following table summarizes common stock reserved for future issuance at July 31, 2014:

Common Stock options outstanding (within the 2011 Plan and outside of the terms of the 2011 Plan)	11,760,900
Common Stock warrants	37,647,790
Common Stock options authorized for future grant under the 2011 Plan	16,372,625
	65,781,315

### Note 10 Income Taxes

The FASB Topic on Income Taxes prescribes a recognition threshold and measurement attribute criteria for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not to be sustained upon examination by taxing authorities. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. The Company has had no unrecognized tax benefits.

The Company s practice is to recognize interest and/or penalties related to income tax matters in income tax expense. The Company had an accrual of \$0 and \$0 for interest or penalties on the Company s consolidated balance sheets at July 31, 2014 and July 31, 2013 respectively, and has recognized \$41,000, \$0 and \$0 of interest and/or penalties in the consolidated statements of operations for the years ended July 31, 2014, 2013 and 2012, respectively.

The Company is subject to taxation in the United States and California. The Company s tax years for 2008 and forward are subject to examination by the United States and California tax authorities due to the carry forward of unutilized net operating losses and research and development credits.

At July 31, 2014, the Company had federal and California income tax net operating loss carryforwards of approximately \$12,056,000 and \$11,905,000, respectively. In addition, the Company has federal and California research and development tax credit carryforwards of approximately \$128,000 and \$268,000, respectively. The Company also has California Hiring Credits of approximately \$9,300. The federal net operating loss, research tax credit carryforwards and California net operating loss carryforwards will begin to expire in 2030 unless previously utilized. The California research and development credit carryforwards will carry forward indefinitely until utilized. The Company has not completed a study to assess whether an ownership change has occurred, as defined by IRC Section 382/383 or whether there have been multiple ownership changes since the Company s formation due to the complexity and cost associated with such a study, and the fact that there may be additional such ownership changes in the future. Based on a preliminary assessment, the Company believes that an ownership change occurred in 2011. The Company estimates that if such a change did occur, the federal and state net operating loss carryforwards and research and development credits that can be utilized in the future will be significantly limited. There can be no assurance that the Company will ever be able to realize the benefit of some or all of the federal and state loss carryforwards or the credit carryforwards, either due to ongoing operating losses or due to ownership changes, which limit the usefulness of the loss carryforwards.

Significant components of the Company s deferred tax assets as of July 31, 2014 and 2013 are listed below (in thousands):

	2014	L .	2013
Net operating loss carryforwards	8	,211,000	4,444,000
Credits		397,000	190,000
Start-up costs		61,000	67,000
Accumulated Depreciation		663,000	450,000
Other		877,000	253,000
Net deferred tax assets	10	,209,000	5,404,000
Valuation allowance for deferred tax assets	(10	,209,000)	(5,404,000)
Net deferred taxes	\$	\$	

A valuation allowance of \$10,209,000 and \$5,404,000 at July 31, 2014 and 2013, respectively, has been recognized to offset the net deferred tax assets as realization of such assets is uncertain.

A reconciliation of incomes taxes using the statutory income tax rate, compared to the effective rate, is as follows:

	2014	2013	2012
Federal tax benefit at the expected statutory			
rate	34.00%	34.00%	34.00%
State income tax, net of federal tax benefit	(0.01)%	(0.01)%	(0.07)%
Loss on extinguishment of debt			(11.48)%
Adjustment of fair value of derivative			
liabilities			63.20%
Non-deductible expenses	(0.45)%	(0.08)%	(6.63)%
Change in valuation allowance	(33.90)%	(33.93)%	(81.58)%
Other			2.45%
Income tax benefit - effective rate	(0.36)%	(0.02)%	(0.11)%

### Note 11 Commitments and Contingencies

In the ordinary course of business, the Company may become a party to lawsuits involving various matters. The Company is unaware of any such lawsuits presently pending against it which individually or in the aggregate, are deemed to be material to the Company s financial condition or results of operations.

On May 12, 2011, the Company entered into a one-year lease agreement for office space, with a base annual rent of \$42,000. On June 1, 2012, the Company entered into an amendment to its lease agreement. The lease amendment extended the lease term for a period of seven months commencing on June 1, 2012, through December 31, 2012. The amendment also increased the base monthly rent to approximately \$10,000. On December 18, 2012, the Company entered into a second amendment to its lease agreement. The second amendment extended the lease term for a period of six months commencing on January 1, 2013 through June 30, 2013, with no changes to remaining terms of the lease.

On May 31, 2013, the Company entered into a thirty-eight month lease agreement for new office space to serve as our corporate headquarters in San Diego, California, commencing on July 1, 2013. The initial base monthly rent is approximately \$8,000, with scheduled annual increases of 3%. Under the terms of the lease agreement, the Company received a tenant improvement allowance of approximately \$60,000, which was classified as deferred rent and is being amortized on a straight-line basis over the term of the lease as a reduction to rent expense. Tenant improvements associated with the lease agreement are recorded as an addition to leasehold improvements and are being amortized over the shorter of the estimated useful life of the improvement or the remaining life of the lease.

Effective April 1, 2014, the Company entered into a short-term, six-month sublease agreement for temporary office and laboratory space in Seattle, Washington to support our R&D operations. Effective July 1, we amended the sublease agreement to include additional lab benches and cubicle office space, which increased our rent obligations from \$7,375 to \$9,925 per month.

Effective June 15, 2014 we entered into a 12-month lease agreement for 1,393 square feet of lab space in San Diego, California to further support our R&D operations. The base rent is approximately \$2,300 per month

Total rent expense for the years ended July 31, 2014, 2013 and 2012 was approximately \$141,000, \$128,000 and \$57,000, respectively.

At July 31, 2014, future minimum lease payments under the non-cancelable operating leases are as follows:

Year Ending July 31,	Ope	Operating Lease	
2015	\$	165,800	
2016		108,400	
2017		13,400	
Total minimum payments	\$	287,600	

On May 18, 2011, the Company entered into Employment Agreements with a term of five years with each of its President and Chief Executive Officer, its Chief Business Officer, and its Chief Financial Officer, who was then our VP Finance and Controller, (the Officers Under the terms of the agreements, if any of the Officers are terminated other than for cause, death or disability, or if

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the case of termination of employment with the Company is for good reason, the Officers are entitled to receive (i) severance payments equal to between six and twenty four months of the then-current annual base salary, (ii) a pro rata percentage of the annual bonus received the prior fiscal year and (iii) payment of health benefits for a period between six and twenty four months, conditioned on the execution of a release. In addition, in the event of a change in control of the Company, the agreements provide for the acceleration of vesting of any unvested stock options outstanding. Effective April 26, 2012, as a result of the termination of employment of the Company s Chief Business Officer and his execution of a release, the Company recorded a severance liability of \$220,000 in accordance with the terms of the Employment Agreement and the separation release. On August 2, 2013, the Employment Agreement with the Company s Chief Financial Officer was amended to increase (i) the severance payment in the event of termination to equal 12 months instead of six months of the Chief Financial Officer s annual base salary at the time of the termination, and (ii) the period for which the Company will pay for applicable premium costs for continued group health plan coverage to 12 months instead of six months following the date of the termination, subject in each case to the terms of the Employment Agreement.

On December 11, 2013, the Company entered into an Employment Agreement with Dr. Robert Pierce, our Chief Medical Officer. Under the terms of the agreement, if he is terminated other than for cause, death or disability, or if the case of termination of employment with the Company is for good cause, Dr. Pierce shall be entitled to receive (i) severance payments equal to nine months of his then current annual base salary plus any accrued bonus, if such termination were to occur at any time before such time as Dr. Pierce has provided services for the Company 12 months, or (ii) severance payments equal to 12 months of his then current annual base salary plus any accrued bonus, if such termination were to occur after such time as Dr. Pierce has provided services for Company for 12 months.

Effective May 15, 2012, the Company adopted a defined contribution savings plan pursuant to Section 401(k) of the Internal Revenue Code. The plan is for the benefit of all qualifying employees and permits voluntary contributions by employees up to 100% of eligible compensation, subject to the Internal Revenue Service imposed maximum limits. The terms of the plan allows for discretionary employer matching contributions. No employer matching contributions were made during the years ended July 31, 2014 and 2013.

### Note 12 Related Party Transactions

The Company s Chairman of the Board of Directors is also a Director and the Chairman (formerly Executive Chairman) of Inovio. The Company s Chairman abstained from all discussions and voting related to negotiations of the Asset Purchase Agreement disclosed in Note 5 and the amendments (and related warrants) disclosed in Notes 6 and 8, while performing his duties as Executive Chairman of Inovio. (See Footnote 14, Subsequent Events, below for additional related party disclosure.)

#### Note 13 Quarterly Financial Data (Unaudited)

The following financial information reflects all normal recurring adjustments, which are, in the opinion of management, necessary for a fair statement of the results of the interim periods. Summarized quarterly data for fiscal 2014 and 2013 are as follows:

Year ended July 31 2014					
1st	2nd	3rd	4th		
Quarter	Quarter	Quarter	Quarter		

Selected quarterly financial data:				
Revenue	\$	\$	\$	\$
Total operating exenses	(1,988,493)	(2,601,780)	(3,816,030)	(3,543,357)
Loss from operations	(1,988,493)	(2,601,780)	(3,816,030)	(3,543,357)
Net loss	\$ (2,051,486)	\$ (2,600,429)	\$ (3,816,844)	\$ (3,543,357)
Net loss applicable to common stockholders	\$ (2,051,486)	\$ (2,600,429)	\$ (3,816,844)	\$ (3,543,357)
Basic and diulted net loss per share (1)	\$ 0.01	\$ 0.01	\$ 0.02	\$ 0.02

(1) Loss per share is computed independently for each of the quarters presented.

Therefore, the sum of the quarterly net loss per share will not necessarily equal the total for the year.

	Year ended July 31 2013						
		1st		2nd		3rd	4th
		Quarter		Quarter		Quarter	Quarter
Selected quarterly financial data:							
Revenue	\$		\$		\$		\$
Total operating exenses		(1,997,476)		(1,597,843)		(1,709,178)	(1,760,475)
Loss from operations		(1,997,476)		(1,597,843)		(1,709,178)	(1,760,475)
Net loss	\$	(2,026,925)	\$	(1,621,988)	\$	(1,728,659)	\$ (1,772,615)
Net loss applicable to common stockholders	\$	(2,026,925)	\$	(1,621,988)	\$	(1,728,659)	\$ (1,772,615)
Basic and diulted net loss per share (1)	\$	0.02	\$	0.02	\$	0.01	\$ 0.02

(1) Loss per share is computed independently for each of the quarters presented.

Therefore, the sum of the quarterly net loss per share will not necessarily equal the total for the year.

#### Note 14 Subsequent Events

Appointment of Chief Scientific Officer

On September 16, 2014, OncoSec Medical Incorporated (the Company ) appointed Dr. Robert Pierce as the Company s Chief Scientific Officer. Dr. Pierce previously served as the Company s Chief Medical Officer but will no longer hold that position effective as of his appointment as Chief Scientific Officer. The terms of Dr. Pierce s executive employment agreement with the Company remain unchanged, except for modifications to reflect Dr. Pierce s new title as of September 16, 2014, and an increase to his base salary as approved by the Company s Board of Directors and in accordance with the terms of his employment agreement on July 18, 2014.

Appointment of Chief Medical Officer

On September 16, 2014, the Company appointed Dr. Mai Hope Le as Chief Medical Officer of the Company. Dr. Le has replaced Dr. Pierce in such position. The terms of Dr. Le s executive employment agreement with the Company are comparable to the terms of the Company s employment agreements with other members of its executive management team.

Dr. Robert Pierce, our Chief Scientific Officer, and Dr. Mai Hope Le, our Chief Medical Officer, are married to each other and they will both report to the Company s Chief Executive Officer. There have been no related transactions, and none are contemplated, between Dr. Le or any of her immediate family members and the Company that would require disclosure pursuant to Item 404(a) of Regulation S-K promulgated by the Securities and Exchange Commission.

### EXHIBIT INDEX

The following exhibits are being filed with this Annual Report on Form 10-K.

#### Exhibit Number

#### **Description of Exhibit**

- 3.1 Certificate of Incorporation of Netventory Solutions, Inc. (incorporated by reference to our Registration Statement on Form S-1, filed on September 3, 2008)
- 3.2 Amended and Restated Bylaws (incorporated by reference to our Current Report on Form 8-K, filed on March 6, 2012)
- 3.3 Articles of Merger dated February 9, 2011 (incorporated by reference to our Current Report on Form 8-K, filed on March 3, 2011)
- 3.4 Certificate of Change dated February 9, 2011 (incorporated by reference to our Current Report on Form 8-K, filed on March 3, 2011)
- 3.5 Certificate of Correction dated March 9, 2011 (incorporated by reference to our Current Report on Form 8-K, filed on March 14, 2011)
- 10.1\* Asset Purchase Agreement, dated March 14, 2011, by and between OncoSec Medical Incorporated and Inovio Pharmaceuticals, Inc. (incorporated by reference to our Quarterly Report on Form 10-Q, filed on June 14, 2011)
- 10.2\* Cross-License Agreement, dated March 24, 2011 by and between OncoSec Medical Incorporated and Inovio Pharmaceuticals, Inc. (incorporated by reference to our Quarterly Report on Form 10-Q, filed on June 14, 2011)
- 10.3# Employment Agreement with Punit Dhillon dated May 18, 2011 (incorporated by reference to our Quarterly Report on Form 10-Q, filed on June 14, 2011)
- 10.4# Employment Agreement with Veronica Vallejo dated May 18, 2011 (incorporated by reference to our Quarterly Report on Form 10-Q, filed on June 14, 2011)
- 10.5# Amendment No. 1 to Employment Agreement, dated August 2, 2013, by and between OncoSec Medical Incorporated and Veronica Vallejo (incorporated by reference to our Current Report on Form 8-K, filed on August 8, 2013)
- 10.6# 2014 Stock Option Award Agreement, dated March 7, 2014, by and between the Company and Punit Dhillon (incorporated by reference to our Current Report on From 8-K, filed on March 13, 2014)
- 10.7# 2014 Stock Option Award Agreement, dated March 7, 2014, by and between the Company and Veronica Vallejo (incorporated by reference to our Current Report on From 8-K, filed on March 13, 2014)
- 10.8# Executive Employment Agreement, dated December 11, 2013, by and between the Company and Robert Pierce (incorporated by reference to our Current Report on From 8-K, filed on December 17, 2013)
- 10.9# Inducement Stock Option Award Agreement, dated December 11, 2013, by and between the Company and Robert Pierce (incorporated by reference to Exhibit A to the Executive Employment Agreement filed as Exhibit 10.8 hereto)
- 10.10# Executive Employment Agreement, dated September 16, 2014, by and between the Company and Mai Hope Le (incorporated by reference to our Current Report on From 8-K, filed on September 19, 2014)
- 10.11 Form of Share Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on March 24, 2011)

- 10.12 Sponsored Research Agreement, dated as of June 4, 2013 by and among OncoSec Medical Incorporated, Old Dominion University and The Frank Reidy Research Center for Bioelectrics (incorporated by reference to our Quarterly Report on Form 10-Q, filed December 16, 2013)
- 10.13 Form of Registration Rights Agreement, dated June 24, 2011, by and among OncoSec Medical Incorporated and the purchasers identified therein (incorporated by reference to our Current Report on Form 8-K, filed June 27, 2011)

Exhibit Number	Description of Exhibit
10.14	Form of Common Stock Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on June 5, 2014)
10.1	Form of Securities Purchase Agreement, dated as of June 3, 2014, by and among the Company and the purchaser identified on the signature pages thereto (incorporated by reference to our Current Report on Form 8-K, filed on June 4, 2014)
10.10	Placment Agency Agreement, dated as of June 3, 2014, by and between the Company and H. C. Wainright & Co., LLC (incorporated by reference to our Current Report on Form 8-K, filed on June 5, 2014)
10.1	Amendment to Asset Purchase Agreement, dated September 28, 2011 by and between OncoSec Medical Incorporated and Inovio Pharmaceuticals, Inc. (incorporated by reference to our Current Report on Form 8-K, filed on October 3, 2011)
10.1	Form of Series A (incorporated by reference to our Current Report on Form 8-K, filed on June 27, 2011)
10.1	Share Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on October 3, 2011)
10.20	Form of Common Stock Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on March 29, 2012)
10.2	Second Amendment to Asset Purchase Agreement, dated March 24, 2012, by and between OncoSec Medical Incorporated and Inovio Pharmaceuticals, Inc. (incorporated by reference to our Current Report on Form 8-K, filed on March 29, 2012)
10.22	2 Common Stock Purchase Warrant (issued to Inovio Pharmaceuticals on March 24, 2012) (incorporated by reference to our Current Report on Form 8-K, filed on March 29, 2012)
10.2	Form of Common Stock Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on December 19, 2012)
10.24	Standard Industrial Lease, dated May 31, 2013, by and between OncoSec Medical Incorporated and H.G. Fenton Property Company (incorporated by reference to our Current Report on Form 8-K, filed on June 6, 2013)
10.25	OncoSec Medical Incorporated 2011 Stock Incentive Plan, as amended and restated (incorporated by reference to our Registration Statement on Form S-8, filed on July 28, 2014, File No. 333-197678)
10.20	5 Securities Purchase Agreement, dated September 16, 2013, by and among Oncosec Medical Incorporated and the purchasers party thereto (incorporated by reference to our Current Report on Form 8-K, filed on September 19, 2013)
10.2	Form of Common Stock Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on September 19, 2013)
10.23	<sup>3</sup> Placement Agent Agreement, dated August 16, 2013, by and between OncoSec Medical Incorporated and H.C. Wainwright & Co., LLC (incorporated by reference to our Registration Statement on Form S-1/A, filed on August 16, 2013, File No. 333-189516)
10.25	Amendment to Placement Agent Agreement, dated September 11, 2013, by and between OncoSec Medical Incorporated and H.C. Wainwright & Co., LLC (incorporated by reference to our Annual Report on Form 10-K, filed on September 27, 2013)
21.	Subsidiaries of the registrant (incorporated by reference to our Registration Statement on Form S-1, filed on July 25, 2011, File No. 333-175779)
23.	Consent of Independent Registered Public Accounting Firm, Mayer Hoffman McCann P.C.

Exhibit Number	Description of Exhibit
31.1	Certification of Chief Executive Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities Exchange Act of 1934
31.2	Certification of Chief Financial Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities Exchange Act of 1934
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS++	XBRL Instant Document
101.SCH++	XBRL Taxonomy Extension Schema Document
101.CAL++	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF++	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB++	XBRL Taxonomy Extension Label Linkbase Document
101.PRE++	XBRL Taxonomy Extension Presentation Linkbase Document

<sup>#</sup> Management contract or compensatory plan or arrangement.

++ Furnished herewith. In accordance with Regulation S-T, the XBRL-related information in Exhibit 101 to this Annual Report on Form 10-K shall be deemed to be furnished and not filed.

<sup>\*</sup> Confidential treatment has been granted or requested with respect to portions of this exhibit pursuant to Rule 24b-2 of the Securities Exchange Act of 1934 and these confidential portions have been redacted from the filing that is incorporated by reference. A complete copy of this exhibit, including the redacted terms, has been separately filed with the Securities and Exchange Commission.