ONCOSEC MEDICAL Inc
Form 424B3
November 26, 2014
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Filed Pursuant to Rule 424(b)(3)

Registration No. 333-175779

PROSPECTUS

ONCOSEC MEDICAL INCORPORATED

Up to 8,440,000 Shares of Common Stock

This prospectus relates to the offering by the selling stockholders of OncoSec Medical Incorporated of up to 8,440,000 shares of common stock, par value $0.0001 per share. These shares include 4,000,000 issued and outstanding shares of common stock and 4,000,000 shares of common stock underlying Series A Warrants, all issued to certain of the selling stockholders in connection with a private placement offering completed in June 2011 (the June 2011 Private Placement). In addition, we are registering 240,000 shares of common stock underlying warrants issued to the co-placement agents in the June 2011 Private Placement, and 200,000 shares of common stock issued to a consulting firm in connection with its performance of consulting services unrelated to the June 2011 Private Placement. The common stock sold in the June 2011 Private Placement was sold at a purchase price of $0.75 per share and the related Series A Warrants authorize the holders thereof to purchase shares of common stock at an exercise price of $1.20 per share, all as further described in this prospectus.

The selling stockholders have advised us that they will sell the shares of common stock from time to time in the open market, on the OTCQB Marketplace, in privately negotiated transactions or using a combination of these methods, at market prices prevailing at the time of sale, at prices related to the prevailing market prices or at negotiated prices.

We will not receive any proceeds from the sale of common stock by the selling stockholders.

Our common stock is quoted for trading on the OTC Markets Group Inc. s OTCQB tier under the symbol ONCS . On November 24, 2014, the closing price of our common stock was $0.52 per share. We have not applied and do not intend to apply to list the warrants issued in the June 2011 Private Placement on any securities exchange or quotation system, and we do not expect that such warrants will be quoted on the

OTCQB Marketplace.

Investing in our common stock involves a high degree of risk. Before making any investment in our common stock, you should read and carefully consider the risks described in this prospectus under Risk Factors beginning on page 6 of this prospectus.

You should rely only on the information contained in this prospectus or any prospectus supplement or amendment thereto. We have not authorized anyone to provide you with different information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus is dated November 25, 2014

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ABOUT THIS PROSPECTUS

You should rely only on the information provided in this prospectus and in any prospectus supplement, including the information incorporated by reference. We have not authorized anyone to provide you with different information. You should not assume that the information in this prospectus or any supplement to this prospectus is accurate at any date other than the date indicated on the cover page of these documents or the date of the statement contained in any incorporated documents, respectively. This prospectus is not an offer to sell or a solicitation of an offer to buy any securities other than the securities referred to in the prospectus or any prospectus supplement. This prospectus is not an offer to sell or a solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should not interpret the delivery of this prospectus, any prospectus supplement or amendment, or any sale of securities pursuant hereto or thereto as an indication that there has been no change in our affairs since the date of this prospectus or the applicable prospectus supplement or amendment. You should be aware that information in this prospectus or any prospectus supplement or any documents incorporated herein by reference may change after their respective dates. The information contained in this prospectus or a prospectus supplement or amendment, or incorporated herein or therein by reference, is accurate only as of the date of this prospectus or prospectus supplement or amendment, as applicable, regardless of the time of delivery of this prospectus or prospectus supplement or amendment, as applicable, or of any sale of the securities hereunder or thereunder.

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

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PROSPECTUS SUMMARY

This summary does not contain all of the information that should be considered before investing in our common stock. Investors should carefully read the entire registration statement and the information incorporated herein by reference, including the more detailed information regarding our business and the risks of purchasing our common stock discussed in this prospectus under Risk Factors .

As used in this prospectus, unless the context requires otherwise, the Company , we , us , and our refer to OncoSec Medical Incorporated, a Nevada corporation.

Our Company

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.

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 also 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.

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- a) 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 our 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 s 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 prosectus, 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.

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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, we are 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. We believe 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 are pursuing 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 (e.g. anti-CTLA-4 or anti-PD-1). 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. 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. 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 (NeoPulse). Our NeoPulse approach utilizes our electroporation technologies for the local delivery of a small molecule drug (e.g. bleomycin) to treat tumors.

The June 2011 Private Placement

On June 24, 2011, we completed the June 2011 Private Placement pursuant to the terms of a Securities Purchase Agreement dated June 21, 2011 (the Securities Purchase Agreement) entered into with certain institutional investors and providing for our issuance and sale of an aggregate of 4,000,000 shares of our common stock, Series A Warrants to purchase an aggregate of 4,000,000 shares of our common stock, Series B Warrants to purchase an aggregate of 4,000,000 shares of our common stock and Series C Warrants to purchase an aggregate of 4,000,000 shares of our common stock, for aggregate gross proceeds to us of $3.0 million.

Pursuant to the terms of the Securities Purchase Agreement, 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 pursuant to the Securities Purchase Agreement. The Series A Warrants have an exercise price of $1.20 per share, are exercisable immediately upon issuance and have a term of exercise of five years. On March 28, 2012, the exercise price of the Series A Warrants was reset to $0.50 per share upon our issuance of common stock at a lower effective price than the warrants then exercise price, pursuant to certain price-based anti-dilution provisions in the Series A Warrants. The Series B Warrants had an exercise price of $0.75 per share, were exercisable immediately upon issuance and had a term of exercise equal to the earlier of (a) the later of (i) eight months following the closing of the June 2011 Private Placement and (ii) four months following the earliest date that the shares underlying such warrants had been sold or could be freely sold, whether pursuant to a

registration statement, Rule 144 or an exemption from registration under Section 4(a)(1) of the Securities Act of 1933, as amended (the Securities Act), and (b) sixteen months following the closing of the June 2011 Private Placement (unless extended three additional months upon the occurrence of a single issuance by us of our common stock or warrants to purchase our common stock that met certain criteria specified in the warrants). The Series C Warrants had an exercise price of $1.20 per share, vested and were exercisable ratably in proportion to each holder s exercise of its Series B Warrants and had a term of exercise equal to five years. On February 21, 2012, all of the Series B and Series C Warrants expired unexercised. On the date of our entry into the Securities Purchase Agreement, the exercise price of the Series B Warrants was lower than the market value of our common stock, which closed at $1.12 on the OTC Bulletin Board on that date, for an aggregate discount to the market price of our common stock of $1,480,000 as of June 21, 2011. The total value of the common stock underlying the Series B Warrants as of June 21, 2011 was $4,480,000.

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On June 24, 2011, we entered into a Registration Rights Agreement (the Registration Rights Agreement) with the purchasers in the June 2011 Private Placement. Under the Registration Rights Agreement, we were required to file a registration statement within 30 days following the closing of the June 2011 Private Placement to register the resale of the shares of common stock issued in the June 2011 Private Placement and the shares of common stock underlying the Series A, Series B and Series C Warrants. The shares of common stock to be registered by the registration statement of which this prospectus forms a part include all of the shares issued and underlying the warrants issued in the June 2011 Private Placement (except solely for the shares underlying the expired Series B and Series C Warrants). Our failure to meet the filing deadlines and other requirements set forth in the Registration Rights Agreement, including certain maintenance requirements relating to this registration statement, may subject us to the payment of substantial financial penalties. As of the date of this prospectus, we are in compliance with our obligations under the Registration Rights Agreement.

Rodman & Renshaw, LLC (Rodman) acted as the lead placement agent for the June 2011 Private Placement. Pursuant to the terms of a Placement Agent Agreement entered into with Rodman on June 1, 2011 and amended on June 21, 2011 (the Placement Agent Agreement), we agreed to pay to Rodman and a co-placement agent fees equal to 6% of the aggregate gross proceeds raised in the June 2011 Private Placement, to issue to Rodman and the co-placement agent warrants to purchase an aggregate of 240,000 shares of our common stock, and to reimburse Rodman for certain expenses. The shares of common stock underlying the warrants originally issued to Rodman and the co-placement agent are included in the registration statement of which this prospectus forms a part.

After deducting for fees and expenses, the aggregate cash net proceeds to us from the June 2011 Private Placement were approximately $2.79 million. The table below describes in more detail the costs to us associated with the June 2011 Private Placement:

Gross proceeds received by us in the June 2011 Private Placement:	$	3,000,000(1)
Total cash payments to the placement agents in connection with the June 2011 Private Placement:	$	210,000(2)
Total non-cash payments to the placement agents in connection with the June 2011 Private Placement:	$	130,708(3)
Resulting net cash proceeds received by us in the June 2011 Private Placement:	$	2,790,000(4)
Resulting net proceeds received by us in the June 2011 Private Placement, including cash and non-cash payments:	$	2,659,292(5)
Total possible profit to be realized by the Series B warrant holders as of the date of their issuance, as a result of any exercise discounts underlying the Series B Warrants:	$	1,480,000(6)

(1) Does not include the potential gross proceeds payable to us upon exercise of all of the warrants issued in connection with the June 2011 Private Placement that remain outstanding as of the date of this prospectus, which would equal $2,120,000.

(2) This amount does not include additional payments that we may be required to make under certain circumstances but that are currently indeterminable, including (a) potential liquidated damages for failure to maintain the registration of the shares issued or issuable upon exercise of warrants issued to the investors in the June 2011 Private Placement (such liquidated damages not to exceed 9% of the aggregate subscription amount paid by each investor in the June 2011 Private Placement), (b) amounts payable if we fail to timely deliver certificates representing the required number of shares upon exercise of the warrants issued to investors in the June 2011 Private Placement, and (c) amounts payable if we or our transfer agent fail to timely remove certain restrictive legends from certificates representing the shares issued or issuable in the June 2011 Private Placement.

(3) Includes the value of the warrants issued to the placement agents.

(4) Resulting cash net proceeds is calculated by subtracting the total currently determinable cash payments from gross proceeds.

(5) Resulting cash and non-cash net proceeds is calculated by subtracting the total currently determinable cash and non-cash payments from gross proceeds.

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(6) On the date of our entry into the Securities Purchase Agreement, the Series B Warrants had an exercise price lower than the market value of our common stock, which closed at $1.12 on the OTC Bulletin Board on that date, for an aggregate discount to our market price of $1,480,000 on that date. The total value of the common stock underlying the Series B Warrants as of June 21, 2011 was $4,480,000. The table below indicates the total possible discount to the market price as of June 21, 2011, for the securities underlying the Series B Warrants.

Market price per share of our common stock on the date of the sale of the Series B Warrants:	$	1.12
Exercise price per share of the Series B Warrants:	$	0.75
Total possible shares of common stock underlying the Series B Warrants:		4,000,000 shares
Combined market price of total number of shares of common stock underlying the Series B Warrants on June 21, 2011:	$	4,480,000
Combined exercise price of the total number of shares of common stock underlying the Series B Warrants:	$	3,000,000
Total possible discount to the market price as of June 21, 2011:	$	1,480,000

The last trading price of our common stock on the OTC Bulletin Board on June 24, 2011, the date of the closing of the June 2011 Private Placement, was $0.77. Calculated as of June 24, 2011, the total possible discount to the market price of our common stock for the Series B Warrants would have been $80,000.

The total value of payments made to the placement agents (including the value of the warrants issued to the placement agents) and the total possible discount to the market price of the shares underlying the Series B Warrants as of the date of the Securities Purchase Agreement, divided by the proceeds to us from the exercise of the Series B Warrants of $3,000,000, is 60.7%. However, we do not expect to make any additional payments to the selling stockholders, the placement agents or any of their affiliates in connection with the Series B Warrants, all of which expired unexercised on February 21, 2012. Excluding such payments made by us in connection with the June 2011 Private Placement, the applicable percentage is 49.3%.

The securities in the June 2011 Private Placement were issued under an exemption from the registration requirements of the Securities Act, pursuant to Section 4(a)(2) thereof and Rule 506 of Regulation D promulgated thereunder.

The shares of common stock to be registered by the registration statement of which this prospectus forms a part also include 200,000 shares of common stock that were issued to a consulting firm in connection with its performance of consulting services for us that are unrelated to the June 2011 Private Placement. Our agreement with the consulting firm entitled it to certain piggyback registration rights with respect to such shares in the event that we determined to file any registration statement that would permit the inclusion of such shares. Such shares were issued under an exemption from the registration requirements of the Securities Act, pursuant to Section 4(a)(2) thereof.

Corporate Information

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 completed a merger with our subsidiary, OncoSec Medical Incorporated, a Nevada corporation which was incorporated solely to effect a change in our name to OncoSec Medical Incorporated . Our principal executive offices are located at 9810 Summers Ridge Road, Suite 110, San Diego, CA 92121. The telephone number at our principal executive office is (855) 662-6732. Our website address is www.oncosec.com. Information contained on our website is not deemed part of this prospectus.

The Offering

This prospectus relates to the resale from time to time by the selling stockholders identified in this prospectus of up to 8,440,000 shares of our common stock. The majority of the common stock, together with related warrants to purchase our common stock, was purchased by certain of the selling stockholders in the June 2011 Private Placement. No shares are being offered for sale by us.

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Common stock outstanding prior to offering	244,631,076 (1)
Common stock offered by the selling stockholders	8,440,000 (2)
Common stock to be outstanding after the offering	248,057,192 (2)(3)
Use of Proceeds	We will not receive any proceeds from the sale of common stock offered by the selling stockholders under this prospectus.
OTCQB Marketplace Symbol	ONCS

(1) As of November 3, 2014. Includes 4,000,000 shares of our common stock issued to certain selling stockholders in connection with the June 2011 Private Placement and 200,000 shares of our common stock issued to Vista Partners LLC (Vista) in connection with its performance of consulting services unrelated to the June 2011 Private Placement. Includes 14,827,328 outstanding shares of common stock beneficially owned by our affiliates as of November 3, 2014 (but excludes 5,295,959 shares of common stock beneficially owned by our affiliates that are not outstanding as of November 3, 2014 and that such affiliates have the right to acquire within 60 days after November 3, 2014). Other than Vista, none of the selling stockholders held shares of our common stock immediately prior to the closing of the June 2011 Private Placement. The total shares of common stock held by persons other than the selling stockholders, affiliates of the Company and affiliates of the selling stockholders as of immediately prior to the closing of the June 2011 Private Placement on June 23, 2011 was 69,204,520, and the total shares of common stock held by persons other than the selling stockholders, affiliates of the Company and affiliates of the selling stockholders as of November 3, 2014 is 229,603,748.

(2) Includes (a) 4,000,000 shares of our common stock issued to certain selling stockholders in connection with the June 2011 Private Placement (all of which have been resold by such selling stockholders as of November 3, 2014), (b) 200,000 shares of our common stock issued to and offered by Vista, (c) 4,000,000 shares of our common stock offered by the selling stockholders issuable upon exercise of each of the Series A Warrants (of which 750,000 shares have been issued upon exercise of such warrants as of November 3, 2014), and (d) 240,000 shares of common stock issuable to the placement agents for the June 2011 Private Placement upon exercise of their warrants (of which 63,884 shares have been issued upon exercise of such warrants as of November 3, 2014).

(3) As of November 3, 2014. Assumes the full exercise of the outstanding warrants issued to the selling stockholders in the June 2011 Private Placement to acquire 3,426,116 shares of common stock. Excludes (a) 25,000,000 shares of common stock reserved for future issuance under our 2011 Stock Incentive Plan (the 2011 Plan), of which 8,682,418 shares are reserved for issuance pursuant to outstanding stock options granted under the 2011 Plan with a weighted average exercise price of $0.48 (b) 5,700,000 shares of common stock reserved for issuance pursuant to outstanding stock options granted outside of the 2011 Plan with a weighted average exercise price of $0.66, and (c) 34,221,674 shares of common stock issuable upon the exercise of outstanding warrants that are not being registered pursuant to the registration statement of which this prospectus forms a part.

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RISK FACTORS

Investment in our common stock and warrants involves a high degree of risk. The following risk factors summarize some of the material risks inherent in and affecting this offering and our business, and you should carefully consider them, in addition to the other information contained and incorporated by reference in this prospectus. This prospectus contains forward-looking statements. Our business, financial condition, results of operations and stock price could be materially adversely affected by any of these risks. 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.

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.

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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.

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.

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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 in licensed from Inovio pursuant to a non-exclusive license.

In March 2011, we acquired certain technology and related assets selective tumor ablation technologies (SECTA) pursuant to our asset purchase agreement with Inovio, (as amended, 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 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.

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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.

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 any 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 1 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 effect on our business, reputation and results of operations.

Our acquisition of assets and technology from Inovio 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 (CROs), clinical investigators, and trial sites;
- obtaining institutional review board (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 good clinical practice (GCP) and International Conference on Harmonization (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 before approving our marketing applications. Upon inspection, the FDA and similar foreign regulators may determine that our 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 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 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.

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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 (HHS) 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 current good manufacturing practice (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 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;

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- 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 Conformité Européene (CE) 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.

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 desire in the future 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

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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.

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 s infringing 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 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

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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 (the ACA).

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 ability to generate revenues and achieve or maintain profitability;
- the availability of capital; and
- our ability to obtain timely approval of our products.

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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 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 (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 compliance efforts.

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.

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

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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 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

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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 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 pronouncements of the Securities and Exchange Commission (the SEC) suggest that in the next several years we may be required to report our financial results using new International Financial Reporting Standards, replacing U.S generally accepted accounting principles (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 our Annual Report on Form 10-K for Fiscal 2014 and all of our subsequent periodic reports to be filed under the Exchange Act is accelerated, (ii) our compliance with Section 404 of the Sarbanes-Oxley Act for our Annual Report on Form 10-K for Fiscal 2014 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 available to smaller reporting companies in our filings with the SEC.

Risks Related to This Offering and our Common Stock

We will have immediate and broad discretion over the use of any proceeds we receive from this offering, and we may use these proceeds in ways with which you may not agree.

We will not receive proceeds from the sale of common stock under this prospectus. We will, however, receive approximately $1.6 million from the selling stockholders if they exercise their warrants in full on a cash basis, which we expect we would use primarily for working capital purposes. We have considerable discretion in the application of any proceeds we may receive in connection with this offering. You must rely on our judgment regarding the application of any net proceeds we may receive in connection with this offering. Our judgment may not result in positive returns on your investment and you will not have an opportunity to evaluate the economic, financial, or other information upon which we base our decisions.

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There is no public market for the Series A Warrants.

There is no established public trading market for the Series A Warrants, and we do not expect a market to develop. In addition, we have not applied and do not intend to apply to list the Series A Warrants on any securities exchange or quotation system or expect the Series A Warrants to trade on the OTCQB. Without an active market, the liquidity of the Series A Warrants is limited.

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 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 November 3, 2014, we have issued an aggregate of 244,631,076 shares of our common stock in such offerings, 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.

As of November 3, 2014, 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. In addition, as of November 3, 2014, we have 37,647,790 shares reserved for issuance upon exercise of outstanding warrants and 30,700,000 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, before

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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.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains and incorporates by reference forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. We intend these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. Words such as anticipate, estimate, expect, project, intend, n plan, predict, believe, should and similar words or expressions are intended to identify forward-looking statements. Investors should not place undue reliance on forward-looking statements. All forward-looking statements reflect our management s present expectations and assumptions regarding future events and are subject to known and unknown risks and uncertainties, including, but not limited to, the risks identified in the Risk Factors contained in or incorporated by reference in this prospectus, that could cause actual results to differ materially from those described in any forward-looking statements. Given these risks, uncertainties and other important factors, you should not place undue reliance on any forward-looking statements we make. You should carefully read this prospectus, the applicable prospectus supplement and the information incorporated herein by reference as described under the heading Where You Can Find Additional Information completely and with the understanding that our actual future results may be materially different from what we expect. Except as required by law, we undertake no obligation to update forward-looking statements, which reflect management s opinions only as of their respective dates.

These forward-looking statements represent our estimates and assumptions only as of the date made. We undertake no duty to update these forward-looking statements after the date of this prospectus, except as required by law, even though our situation may change in the future. We qualify all of our forward-looking statements by these cautionary statements.

SELLING STOCKHOLDERS

This prospectus covers the resale from time to time by the selling stockholders identified in the table below of:

- Up to 4,000,000 issued and outstanding shares of our common stock sold to investors in the June 2011 Private Placement (all of which have been resold by the selling stockholders as of November 3, 2014);

- Up to 4,000,000 shares of our common stock issuable upon exercise of the Series A Warrants sold to investors in the June 2011 Private Placement of which 750,000 shares have been issued upon exercise of such warrants as of November 3, 2014;

- Up to 240,000 shares of our common stock issuable upon exercise of warrants issued to the placement agents or their respective designees for services rendered in connection with the June 2011 Private Placement of which warrants to acquire 63,884 shares of our common stock have been issued upon exercise of such warrants as of November 3, 2014; and

- Up to 200,000 issued and outstanding shares of our common stock issued to a consulting firm in connection with its performance of consulting services.

Pursuant to the Registration Rights Agreement executed in connection with the June 2011 Private Placement, we have filed with the SEC a registration statement (and post-effective amendments thereto pursuant to applicable SEC rules and regulations), of which this prospectus forms a part, under the Securities Act to register these resales. We have also agreed to cause such registration statement to become effective, and to keep such registration statement effective as set forth in the Registration Rights Agreement. Our failure to satisfy the deadlines or registration maintenance requirements set forth in the Registration Rights Agreement may subject us to payment of certain monetary penalties pursuant to the terms of the Registration Rights Agreement.

The selling stockholders identified in the table below may from time to time offer and sell under this prospectus any or all of the shares of common stock described under the column Shares of Common Stock Being Offered in this Offering in the table below. The table below has been prepared based upon the limited information furnished to us by the selling stockholders as of November 3, 2014. The selling stockholders identified below may have sold, transferred or otherwise disposed of some or all of their shares since the date on which the information in the table below is presented in transactions exempt from or not subject to the registration requirements of the Securities Act. Information concerning the selling stockholders may change from time to time and, if necessary, we will amend or supplement this prospectus accordingly. We cannot provide an estimate of the number of shares of common stock that will be held by the selling stockholders upon termination of the offering covered by this prospectus because the selling stockholders may offer and sell some, all or none of their shares of common stock under this prospectus.

We have been advised, as noted in the footnotes in the table below, that two of the selling stockholders are broker-dealers and/or underwriters and that certain of the selling stockholders are affiliates of a broker-dealer and/or underwriter. We have been advised that each of these selling stockholders acquired our securities in the ordinary course of business, not for resale, and that none of these selling stockholders had, at the time of purchase, any agreements or understandings, directly or indirectly, with any person to distribute the related common stock.

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The following table and disclosure following the table set forth the name of each selling stockholder, the nature of any position, office or other material relationship, if any, that the selling stockholder has had, within the past three years, with us or with any of our predecessors or affiliates, and the number of shares of our common stock beneficially owned by the selling stockholder before this offering. The number of shares owned are those beneficially owned, as determined under the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under these SEC rules, beneficial ownership includes any shares of common stock as to which a person has sole or shared voting power or investment power and any shares of common stock which the person has the right to acquire within 60 days of November 3, 2014 through the exercise of any option, warrant or right, through conversion of any security or pursuant to the automatic termination of a power of attorney or revocation of a trust, discretionary account or similar arrangement. Unless otherwise indicated in the footnotes to the table below and subject to community property laws where applicable, we have been advised that each of the selling stockholders named in the table has sole voting and investment power with respect to the shares indicated as beneficially owned.

Selling Stockholder	Outstanding Shares of Common Stock Owned Before this Offering §	Shares of Common Stock Underlying Warrants Owned Before this Offering §	Shares of Common Stock Being Offered in this Offering	Shares of Common Stock Owned Upon Completion of this Offering (a) §	Percentage of Common Stock Outstanding Upon Completion of this Offering (b) §
Capital Ventures International (1)	0	10,464,789	2,000,000	8,464,789	3.3%
Hudson Bay Master Fund Ltd. (2)	0	1,450,000	1,250,000	200	*
OTA LLC (3)(4)	0	44,116	44,116		
Noam Rubinstein (3)(5)	0	762,685	14,400	748,285	*
Kira Sheinerman (3)(5)	5,127	57,600	21,600	41,127	*
Roth Capital Partners, LLC (3)(6)	0	96,000	96,000		
Vista Partners LLC (7)	200,000	0	200,000		

* Less than 1%.

The selling stockholder is a broker-dealer.

The selling stockholder is an affiliate of a broker-dealer.

§ Based upon limited information provided to us by the selling stockholders as of November 3, 2014. As of the date of effectiveness of the Initial Registration Statement on October 24, 2011, the selling stockholders that participated in the June 2011 Private Placement owned no securities of the Company other than those acquired in connection with the June 2011 Private Placement, and Vista Partners LLC owned no securities of the Company other than those issued by us pursuant to the terms of its consulting agreement with us. Certain of the selling stockholders have elected to participate in certain of our subsequent public offerings, with Capital Ventures International purchasing an aggregate of 20,642,254 shares of our common stock and warrants to purchase up to an aggregate of 9,264,789 shares of our common stock and Hudson Bay Master Fund Ltd. purchasing an aggregate of 1,600,000 shares of our common stock and warrants to purchase up to an aggregate of 1,000,000 shares of our common stock in such subsequent offerings. Such selling stockholders may have resold some or all of such shares prior to this offering; however, such selling stockholder provided only limited information regarding their resales prior to the date of this prospectus of our securities that they have acquired in our subsequent public offerings that are unrelated to the June 2011 Private Placement. As a result, to the extent updated information was not provided by a selling stockholder, this table assumes that all such securities acquired by a selling stockholder in our subsequent public offerings have not been resold. The shares of common stock issued and sold and the shares underlying the warrants issued and sold to such selling stockholders in our subsequent public offerings are not being registered by the registration statement of which this prospectus forms a part, and have been registered under the Securities Act under one or more registration statements unrelated hereto. The information in this table does not reflect any of our securities that the selling stockholders may acquire after the date of this prospectus (other than any shares of our common stock that may be issued as a result of the conversion or exercise of previously acquired securities reflected herein).

(a) Assumes that (i) all of the shares of common stock to be registered by the registration statement of which this prospectus forms a part, including all shares of common stock underlying warrants held by the selling stockholders and offered hereby, are sold in the offering, and (ii) the selling stockholders do not acquire additional shares of our common stock after the date of this prospectus and prior to

completion of the offering.

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(b) Applicable percentage ownership is based on the sum of (i) 244,631,076 shares of common stock outstanding as of November 3, 2014, and (ii) the number of shares of common stock issuable upon exercise of the warrants or conversion of the convertible securities held by the applicable selling stockholder. The warrants held by the selling stockholders, including those registered by the registration statement of which this prospectus forms a part, include certain exercise limitations, such that the holders thereof may not exercise any such warrants if the conversion or exercise results in the holder becoming the beneficial owner of more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to such conversion or exercise, provided that upon at least 61 days prior notice to us, the holder may increase or decrease such limitation up to a maximum of 9.99% of the number of shares of common stock outstanding.

(1) Includes (a) 2,000,000 shares of common stock issuable upon exercise of the Series A Warrants issued in connection with the June 2011 Private Placement, as no shares of common stock have been issued to and resold by Capital Ventures International as of the date of this prospectus upon exercise of the Series A Warrants issued to it in the June 2011 Private Placement, and (b) outstanding warrants to purchase up to an aggregate of 8,464,789 shares of our common stock issued to Capital Ventures International in connection with subsequent public offerings of our securities. Limited information was provided by Capital Ventures International regarding any sales by it prior to the date of this prospectus of our securities that it has acquired in our subsequent public offerings that are unrelated to the June 2011 Private Placement, and this table assumes that all such securities have not been resold. Heights Capital Management, Inc., the authorized agent of Capital Ventures International, has discretionary authority to vote and dispose of the shares held by Capital Ventures International and may be deemed to be the beneficial owner of these shares. Martin Kobinger, in his capacity as Investment Manager of Heights Capital Management, Inc., may also be deemed to have investment discretion and voting power over the shares held by Capital Ventures International. Mr. Kobinger disclaims any such beneficial ownership of the shares.

(2) Includes (a) 1,250,000 shares of common stock issuable upon exercise of the Series A Warrants issued in connection with the June 2011 Private Placement, as 750,000 shares of common stock have been issued to and resold by Hudson Bay Master Fund Ltd. as of the date of this prospectus upon exercise of some of the Series A Warrants issued to it in the June 2011 Private Placement, and (b) outstanding warrants to purchase up to an aggregate of 200 shares of our common stock issued to Hudson Bay Master Fund Ltd. in connection with subsequent public offerings of our securities. Limited information was provided by Hudson Bay Master Fund Ltd. regarding any sales by it prior to the date of this prospectus of our securities that it has acquired in our subsequent public offerings that are unrelated to the June 2011 Private Placement, and this table assumes that all such securities have not been resold. Hudson Bay Capital Management LP, the investment manager of Hudson Bay Master Fund Ltd., has voting and investment power over the securities help by Hudson Bay Master Fund Ltd. Sander Gerber is the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management LP. Sander Gerber disclaims beneficial ownership over these securities.

(3) Pursuant to the terms of the Placement Agent Agreement, Rodman, a former registered broker dealer, received warrants to purchase 144,000 shares of common stock and a co-placement agent, Roth Capital Partners, LLC (Roth), received warrants to purchase 96,000 shares of common stock for financial advisory services provided in connection with the June 2011 Private Placement. Rodman designated warrants to purchase up to an aggregate of 14,400 shares of common stock to Noam Rubinstein and up to an aggregate of 21,600 shares of common stock to Kira Sheinerman. We issued the remaining warrants to purchase 108,000 shares of our common stock to Rodman pursuant to the Placement Agent Agreement, and such warrants were subsequently assigned to OTA, LLC. Each of the warrants had an original exercise price of $1.20 per share, which was subsequently reset on March 28, 2012 to $0.50 per share. We also paid placement agent fees to Rodman and Roth pursuant to the Placement Agent Agreement. Rodman received $108,000 in fees and $30,000 in expense reimbursements. Roth received $72,000 in fees.

(4) As of the date of this prospectus, 63,884 of the shares of common stock underlying the warrants issued in connection with the June 2011 Private Placement and assigned to OTA LLC have been issued upon exercise of such warrants, and all such issued shares have been resold by OTA LLC. Ira Leventhal is the Senior Managing Director of OTA LLC and has voting and dispositive control over the securities originally issued to Rodman and subsequently transferred to and held by OTA LLC.

(5) As of the date of this prospectus, Mr. Rubenstein and Ms. Sheinerman hold outstanding warrants to purchase up to an aggregate of 748,285 and 36,000 shares of our common stock, respectively, and Ms. Sheinerman holds 5,127 outstanding shares of common stock that have been issued upon exercise of certain warrants, in each case that have been issued to such individuals as designees of the placement agent in our subsequent public offerings that are not registered under the registration statement of which this prospectus forms a part. No information was provided by Mr. Rubenstein regarding any sales by him prior to the date of this prospectus of our securities that have been acquired by him in our subsequent public offerings that are unrelated to the June 2011 Private Placement and are not registered by the registration statement of which the prospectus forms a part, and this

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table assumes that all such securities have not been resold. Limited information was provided by Ms. Sheinerman regarding any sales by her prior to the date of this prospectus of our securities that have been acquired by her in connection with our subsequent public offerings that are unrelated to the June 2011 Private Placement and are not registered by the registration statement of which the prospectus forms a part, and this table assumes that such securities for which no updated information was provided have not been resold.

(6) Each of Bryon Roth and Gordon Roth has voting and investment control over the securities held by Roth.

(7) Includes 200,000 shares of our common stock issued to Vista Partners LLC pursuant to our consulting agreement with Vista Partners LLC. Vista Partner LLC did not participate in the June 2011 Private Placement. Vista Partners LLC has discretionary authority to vote and dispose of the shares held by Vista Partners LLC and may be deemed to be the beneficial owner of these shares. Ross Silver, in his capacity as managing director of Vista Partners LLC, has sole voting and dispositive powers over the shares held by Vista Partners LLC. Mr. Silver disclaims beneficial ownership of these securities. We made one payment of $12,500 to Vista for reimbursement of expenses under the consulting agreement. We are not obligated to make any further payments to Vista for its services under the consulting agreement other than the reimbursement of reasonable expenses.

Other than as described in the above table and accompanying footnotes or as further described below, (a) we have not made, and are not required to make, any potential payments to any selling stockholder, any affiliate of a selling stockholder, or any person with whom any selling stockholder has a contractual relationship regarding the June 2011 Private Placement, and (b) other than in connection with the June 2011 Private Placement or our subsequent public offerings, or in the case of Vista, entry into the consulting agreement with us, the selling stockholders have not had, and do not have, any material relationship with us except for their ownership of our common stock.

The holders of the warrants issued in the June 2011 Private Placement have ongoing rights to exercise the warrants during their term of exercise. We have disclosed the material terms of the warrants issued in the June 2011 Private Placement elsewhere in this prospectus. In addition, the participants in the June 2011 Private Placement have ongoing registration rights related to the securities issued in the June 2011 Private Placement pursuant to the terms of the Registration Rights Agreement, and Vista has certain registration rights pursuant to the terms of the consulting agreement.

We may be required to make certain payments to the investors in the June 2011 Private Placement under certain circumstances pursuant to the terms of the Securities Purchase Agreement and the Registration Rights Agreement. These potential payments include: (a) potential liquidated damages for failure to failure to maintain the registration of the common stock issued or issuable upon exercise of warrants to the investors in the June 2011 Private Placement (such liquidated damages not to exceed 9% of the aggregate subscription amount paid by each investor in the June 2011 Private Placement); (b) amounts payable if we fail to timely deliver certificates representing the required number of shares upon exercise of the Series A Warrants; and (c) amounts payable if we or our transfer agent fail to timely remove certain restrictive legends from certificates representing shares issued or issuable in the June 2011 Private Placement. We intend to comply with the requirements of the Registration Rights Agreement and do not currently expect to make any such payments; however, it is possible that such payments may be required.

DETERMINATION OF OFFERING PRICE

The selling stockholders will determine at what price they may sell the shares of common stock offered by this prospectus, and such sales may be made at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices.

PLAN OF DISTRIBUTION

Each selling stockholder of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the OTCQB Marketplace or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker dealer solicits purchasers;

- block trades in which the broker dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;

- purchases by a broker dealer as principal and resale by the broker dealer for its account;

- an exchange distribution in accordance with the rules of the applicable exchange;

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- privately negotiated transactions;

- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;

- in transactions through broker dealers that agree with the selling stockholders to sell a specified number of such securities at a stipulated price per security;

- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;

- a combination of any such methods of sale; or

- any other method permitted pursuant to applicable law.

The selling stockholders may also sell securities under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker dealers engaged by the selling stockholders may arrange for other broker dealers to participate in sales. Broker dealers may receive commissions or discounts from the selling stockholders (or, if any broker dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction, not in excess of a customary brokerage commission in compliance with applicable FINRA rules; and in the case of a principal transaction, a markup or markdown in compliance with applicable FINRA rules.

In connection with the sale of the securities or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The selling stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be underwriters within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would

exceed eight percent (8%).

We are required to pay certain fees and expenses incurred by us incident to the registration of the securities registered hereby. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because selling stockholders may be deemed to be underwriters within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. The selling stockholders have advised us that there is no underwriter or coordinating broker acting in connection with the proposed resale by the selling stockholders of the securities registered hereby.

We have agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the selling stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144 and without the requirement that we are in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect, or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The securities will be resold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the securities registered for resale hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

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Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to our common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of securities of the common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

USE OF PROCEEDS

We will not receive proceeds from the sale of common stock under this prospectus. We will, however, receive approximately $1.6 million from the selling stockholders if they exercise their warrants in full on a cash basis, which we expect we would use primarily for working capital purposes. The warrant holders may exercise their warrants at any time in accordance with the terms thereof until their expiration, as further described under Description of Securities. If there is no effective registration statement registering the resale of the common stock underlying the warrants as of certain time periods (as provided in the warrants), the warrant holders may choose to exercise their warrants on a cashless exercise or net exercise basis. If they do so, we will not receive any proceeds from the exercise of the warrants. Because the warrant holders may exercise the warrants largely at their own discretion, if at all, we cannot plan on specific uses of proceeds beyond application of any proceeds to the purposes herein described. We have agreed to bear the expenses (other than any underwriting discounts or commissions or agent s commissions) in connection with the registration of the common stock being offered hereby by the selling stockholders.

DESCRIPTION OF SECURITIES

General

The following summary of the material features of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, the provisions of our articles of incorporation, as amended, our amended and restated bylaws, the Nevada Revised Statutes and other applicable law. For information on how to obtain copies of our articles of incorporation and bylaws, which are exhibits to the registration statement of which this prospectus is a part, see Where You Can Find More Information.

Capital Stock Issued and Outstanding and Reserved for Issuance

As of November 3, 2014, there were issued and outstanding:

- 244,631,076 shares of common stock, including 4,000,000 shares issued to investors in the June 2011 Private Placement; 1,456,000 shares issued as part of units issued in an offshore transaction pursuant to Regulation S promulgated under the Securities Act completed in March 2011; 31,000,000 shares issued to investors in our public offering completed in March 2012; 28,800,000 shares issued to investors in our public offering completed in December 2012; 47,792,000 shares issued to investors in our public offering completed in September 2013; and

22,535,212 shares issued to investors in our public offering completed in June 2014;

- Options to purchase 14,382,418 shares of common stock at exercise prices ranging from $0.18 to $0.805 per share, issued to employees, directors, and consultants both within the 2011 Plan and outside of the terms of the 2011 Plan;

- Series A Warrants to purchase 3,426,116 shares at an exercise price of $0.50 per share held by two investors, two placement agents (or their assignees) and two designees of a placement agent in connection with the June 2011 Private Placement;

- Warrants to purchase 1,456,000 shares of common stock at a price of $1.00 per share, issued as part of units issued in an offshore transaction pursuant to Regulation S promulgated under the Securities Act completed in March 2011;

- Warrants to purchase 6,315,100 shares of common stock at an exercise price of $0.35 per share issued to investors, and warrants to purchase 465,000 shares of common stock at an exercise price of $0.3125 per share issued to the placement agent designees and the financial advisor, in each case in connection with our public offering completed in March 2012;

- Warrants to purchase 833,949 shares of common stock at an exercise price of $0.26 and per share issued to the investors, and warrants to purchase and 612,000 shares of common stock at an exercise price of $0.3125 issued to the placement agent designees and the financial advisor, in each case in connection with our public offering completed in December 2012;

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- Warrants to purchase 10,717,125 shares of common stock at an exercise price of $0.35 and per share issued to investors, and warrants to purchase and 583,062 shares of common stock at an exercise price of $0.3125 per share issued to the placement agent designees and the financial advisor, in each case in connection with our public offering completed in September 2013;

- Warrants to purchase 7,887,325 shares of common stock at an exercise price of $0.90 per share issued to investors, and warrants to purchase and 1,352,113 shares of common stock at an exercise price of $0.90 per share issued to the placement agent designees and financial advisor, in each case in connection with our public offering completed in June 2014; and

- Warrants to purchase 1,000,000 and 3,000,000 shares of common stock with an exercise price of $1.20 and $1.00 per share issued to Inovio on September 28, 2011 and March 24, 2012, respectively.

Description of Common Stock

Authorized Shares

Pursuant to our articles of incorporation, we are currently authorized to issue 3,200,000,000 shares of common stock, par value $0.0001 per share. As of November 3, 2014, there were 244,631,076 shares of our common stock outstanding.

Voting Rights

The outstanding shares of our common stock are fully paid and non-assessable. Holders of our common stock are entitled to one vote, in person or by proxy, for each share held of record on all matters submitted to a vote of the stockholders. Except as otherwise provided by applicable law, holders of our common stock are not entitled to cumulative voting of their shares in elections of directors.

Dividends

Subject to the provisions of applicable law, including the Nevada Revised Statutes, the holders of shares of our common stock are entitled to receive, when and as declared by the board of directors, dividends or other distributions (whether payable in cash, property, or securities) out of our assets legally available for such dividends or other distributions.

Other Rights

None of our stockholders has any preemptive right under our articles of incorporation to subscribe for, purchase, or otherwise acquire shares of any class or series of our capital stock. The shares of our common stock are not subject to redemption by operation of a sinking fund or otherwise. In the event of any liquidation, dissolution, or winding up of the Company, subject to the rights, if any, of the holders of other classes of our capital stock, the holders of shares of our common stock are entitled to receive any of our assets available for distribution to our stockholders ratably in proportion to the number of shares held by them.

Trading Market and Symbol

Our common stock is quoted for trading on the OTCQB under the symbol ONCS .

Description of Warrants

Warrants Issued in the June 2011 Private Placement and Registered by this Registration Statement

On June 24, 2011, the investors in the June 2011 Private Placement were each issued a Series A Warrant, a Series B Warrant and a Series C Warrant, with each such warrant exercisable for up to 2,000,000 shares of our common stock. The Series A Warrants have an exercise price of $1.20 per share and expire on June 24, 2016. The Series B Warrants and the Series C Warrants expired unexercised in February 2012 and are no longer outstanding. In addition, we issued warrants to purchase 144,000 shares of our common stock to Rodman or its designees and 96,000 shares of our common stock to Roth, in each case pursuant to the terms of a placement agent agreement entered into in connection with the June 2011 Private Placement. The placement agent warrants are exercisable for $1.20 per share for five years following their issuance and their terms are otherwise similar to those of the Series A Warrants.

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The exercise of the Series A Warrants is subject to certain exercise limitations, such that a holder thereof may not exercise the Series A Warrants if such exercise results in the holder becoming the beneficial owner of more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to such exercise, provided that upon at least 61 days prior notice to us, the holder may increase or decrease such limitation up to a maximum of 9.99% of the number of shares of common stock outstanding.

The Series A Warrants provide for the adjustment of the exercise price and number of shares issuable upon exercise of the warrants under the following circumstances, as more fully set forth in the Series A Warrants:

Stock dividend or distribution; forward or reverse stock split of our common stock:	Number of shares issuable upon exercise of the Series A Warrant is adjusted in proportion to the change in the number of outstanding shares of common stock as a result of the event.
Subdivision or combination of outstanding shares of common stock:	Exercise price is adjusted to the lower of (a) the exercise price as adjusted and (b) the average of the volume weighted average price (VWAP) of the common stock for the five trading days immediately following the date on which the applicable subdivision or combination becomes effective.
Distribution of dividends, rights, warrants or other assets to all holders of common stock and excluding the holders of the Series A Warrants:	The exercise price is adjusted by multiplying the then-effective exercise price by a fraction, of which the denominator would be the VWAP of the common stock as of such distribution and the numerator would be such VWAP less the then per share fair market value of the portion of the dividends or other assets so distributed applicable to one outstanding share of our common stock.

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In addition, upon the reclassification, reorganization or recapitalization of our common stock, our merger or consolidation with or into another entity, the consummation of a stock purchase agreement whereby more than 50% of the outstanding shares of the common stock are acquired by another person or entity, or a sale or other disposition of substantially all of our assets, the holder of each of the Series A Warrants is entitled to receive the number of shares of our common stock or the common stock of our successor or acquirer that such holder would have been entitled to receive immediately prior to such transaction, and the exercise price for such shares shall be adjusted based on the amount of any alternate consideration receivable as a result of such transaction by a holder of the number of shares of common stock for which the Series A Warrant is exercisable immediately prior to such transaction. Each holder of the Series A Warrants may also require us or any successor entity to purchase the warrant from the holder by paying to the holder an amount of cash equal to the Black-Scholes value of the remaining unexercised portion of the warrant on the date of the consummation of the transaction.

The Series A Warrants also provide for adjustment based on price-based anti-dilution provisions, which are generally triggered upon our issuance of common stock at a lower effective price per share than the applicable Series A Warrants exercise price (subject to a floor price of $0.50 per share). On March 28, 2012, the exercise price of the Series A Warrants was reset to $0.50 upon the completion of our March 2012 public offering.

Warrants Issued in Other Offerings

March 2011 Offshore Transaction

In March 2011, we sold 1,456,000 units to three investors pursuant to an exemption from registration under Regulation S under the Securities Act. Each unit consisted of one share of our common stock and one warrant entitling the holder to acquire one share of our common stock at an exercise price of $1.00 per share. Such warrants have a term of five years. We are not obligated to register any of the shares issued in the transaction or issuable upon exercise of the warrants issued in the transaction.

The warrants provide for the adjustment of the exercise price and number of shares issuable upon exercise of the warrant in connection with a stock split or reverse stock split of the shares of our common stock, such that the number of shares issuable upon exercise of the warrant is adjusted in proportion to the change in the number of outstanding shares of common stock as a result of the event. Upon a capital reorganization or reclassification or merger of the Company with or into any other company, each warrant will confer the right to purchase the number of shares or other securities of the Company (or of the company resulting from such transaction) which the holder would have been entitled to if the warrant holder had been a stockholder at the time of such transaction.

Public Offerings

On March 28, 2012, we issued a warrant to purchase one share of common stock for each share of common stock purchased by the investors in our public offering completed in March 2012, totaling warrants to purchase 31,000,000 shares. Each investor warrant has an exercise price of $0.35 per share and has a term of five years. In addition, pursuant to our placement agent agreement for the offering, we issued warrants to purchase 1,085,000 shares of our common stock to Rodman or its designees and 465,000 shares of our common stock to Roth. The placement agent warrants have an exercise price of $0.3125 per share, a term of five years and other terms similar to the investor warrants issued in the offering.

On December 17, 2012, we issued a warrant to purchase up to one half of a share of common stock for each share of common stock purchased by the investors in our public offering completed in December 2012, totaling warrants to purchase 14,400,000 shares. The investor warrants are exercisable for $0.26 per share and have a term of four years. In addition, pursuant to our placement agent agreement for the offering, we issued warrants to purchase (i) 720,000 shares of our common stock to our lead placement agent, Dawson James Securities, Inc., or its designees and (ii) 360,000 shares of our common stock to each of our financial advisors for the offering, Noble International Investments, Inc. and Burrill, LLC. The placement agent and financial advisor warrants have an exercise price of $0.3125 per share, a term of five years and other terms similar to the investor warrants issued in the offering.

On September 18, 2013, we issued a warrant to purchase up to one half of a share of common stock for each share of common stock purchased by the investors in our public offering completed in September 2013, totaling warrants to purchase 23,896,000 shares. The investor warrants are exercisable for $0.35 per share and have a term of four years. In addition, pursuant to our placement agent agreement for the offering, we issued warrants to purchase (i) 1,911,680 shares of our common stock to our lead placement agent, H.C. Wainwright & Co., LLC or its designees, and (ii) 477,920 shares of our common stock to our financial advisor for the offering, Maxim Group LLC. The placement agent and financial advisor warrants are exercisable for $0.3125 per share, have a term of five years and other terms similar to the investor warrants issued in the offering.

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On June 6, 2014, we issued a warrant to purchase up to 0.35 of a share of common stock for each share of common stock purchased by the investors in our public offering completed in June 2014, totaling warrants to purchase 7,887,325 shares. The investor warrants are exercisable for $0.90 per share and have a term of five years. In addition, pursuant to our placement agent agreement for the offering, we issued warrants to purchase (i) 743,662 shares of our common stock to our lead placement agent, H.C. Wainwright & Co., LLC, or its designees, and (ii) 304,225 shares of our common stock to each of our financial advisors for the offering, Maxim Group LLC and Noble Financial Capital Markets. The placement agent and financial advisor warrants have an exercise price of $0.90 per share, an expiration date of May 12, 2019 and other terms similar to the investor warrants issued in the offering.

The exercise of each of the warrants issued in connection with our public offerings is subject to certain exercise limitations, such that the holder may not exercise the warrants if such exercise results in the holder becoming the beneficial owner of more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to such exercise, provided that upon at least 61 days prior notice to us, the holder may increase or decrease such limitation up to a maximum of 9.99% of the number of shares of common stock outstanding.

Each of the warrants issued in connection with our public offerings provide for the adjustment of the exercise price and number of shares issuable upon exercise of the warrants in connection with stock dividends and splits, such that the number of shares issuable upon exercise of the warrant is adjusted in proportion to the change in the number of shares outstanding and the aggregate exercise price of the warrant remains unchanged. In addition, if we grant, issue or sell any common stock equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of common stock (and not the holder of the warrant), then the warrant holder will be entitled to acquire, upon the terms applicable to such purchase rights, the aggregate purchase rights which the holder could have acquired if the holder had held the number of shares of common stock acquirable upon complete exercise of the warrant. If we declare or make any dividend or other distribution of our assets to holders of our common stock, the warrant holder shall be entitled to participate in the distribution to the same extent that the holder would have participated therein if the holder had held the number of shares of common stock acquirable upon complete exercise of the warrant. Other than as described above, the warrants do not contain anti-dilution provisions.

Upon the reclassification, reorganization or recapitalization of our common stock, our merger or consolidation with or into another entity, the consummation of a stock purchase agreement whereby more than 50% of the outstanding shares of the common stock are acquired by another person or entity, or a sale or other disposition of substantially all of our assets, the holder of each of the warrants issued in connection with our public offerings is entitled to receive the number of shares of our common stock or the common stock of our successor or acquirer that such holder would have been entitled to receive immediately prior to such transaction, and the exercise price for such shares shall be adjusted based on the amount of any alternate consideration receivable as a result of such transaction by a holder of the number of shares of common stock for which the warrant is exercisable immediately prior to such transaction. The holder of the warrant may also require us or any successor entity to purchase the warrant from the holder by paying to the holder an amount of cash equal to the Black Scholes value of the remaining unexercised portion of the warrant on the date of the consummation of the transaction.

Inovio Warrants

In September 2011, in consideration for an amendment to the Asset Purchase Agreement with Inovio, we issued to Inovio a warrant to purchase 1,000,000 shares of our common stock. The warrant is exercisable for $1.20 per share and has a term of five years. The warrant also contains a mandatory exercise provision allowing us to request the exercise of the warrant in whole provided that our daily market price (as that term is defined in the warrant) is equal to or greater than $2.40 for 20 consecutive trading days.

In March 2012, in consideration for a second amendment to the Asset Purchase Agreement, we issued to Inovio a warrant to purchase 3,000,000 shares of our common stock at an exercise price of $1.00 per share. The warrant contains the same terms as the warrant issued to Inovio in September 2011.

The warrants issued to Inovio provide for the adjustment of the exercise price and number of shares issuable upon exercise of the warrants in connection with the payment of a dividend or distribution on common stock in shares of common stock or a stock split or reverse stock split of the shares of our common stock, such that the number of shares issuable upon exercise of the warrant is adjusted in proportion to the change in the number of outstanding shares of common stock as a result of the event. In addition, the exercise price and number of shares issuable upon exercise of the warrants is subject to adjustment upon the distribution or dividend to our common stockholders of cash, property, or warrants to purchase common stock.

Upon the acquisition by an individual or legal entity or group of more than one-half of the voting rights or equity interests in the Company; or the sale, conveyance, or other disposition of all or substantially all of the assets, property or business of the Company; or the merger into or consolidation with any other corporation (other than a wholly owned subsidiary corporation) or effectuation of any transaction or series of related transactions where holders of the Company s voting securities prior to such transaction or series of transactions fail to continue to hold at least 50% of the voting power of the Company, the holder of the warrant

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has the right to receive, for each share of stock that would have been issuable upon exercise of the warrant immediately prior to the occurrence of such change of control, the number of shares of common stock of the successor or acquiring corporation that the holder would have received if the holder had exercised immediately prior to the change of control, and any additional consideration receivable as a result of such change of control by a holder of the number of shares of common stock for which the warrant is exercisable immediately prior to such change of control.

Registration Rights

On June 24, 2011, we entered into the Registration Rights Agreement with the purchasers in the June 2011 Private Placement. Under the Registration Rights Agreement, we were required to file a registration statement within 30 days following the closing of the June 2011 Private Placement to register the resale of the shares of common stock issued in the June 2011 Private Placement and the shares of common stock underlying the Series A, Series B and Series C Warrants. The shares of common stock to be registered by the registration statement of which this prospectus forms a part include all of the shares issued and underlying the warrants issued in the June 2011 Private Placement (except solely for the shares underlying the expired Series B and Series C Warrants). Our failure to meet the filing deadlines and other requirements set forth in the Registration Rights Agreement, including certain maintenance requirements relating to this registration statement, may subject us to the payment of substantial financial penalties. As of the date of this prospectus, we are in compliance with our obligations under the Registration Rights Agreement.

In April 2011 we granted certain piggyback registration rights to a consulting firm relating to 200,000 shares of common stock that we issued to such consulting firm in connection with its performance of services for us that are unrelated to the June 2011 Private Placement, which obligated us under certain circumstances to include such shares in any registration statement that we determined to file that would permit the inclusion of such shares. All 200,000 shares issued to the consulting firm are included in the shares of common stock to be registered by the registration statement of which this prospectus forms a part, and as of the date of this prospectus, we are in compliance with our obligations in connection with such registration rights.

Liability and Indemnification of Directors and Officers

The Nevada Revised Statutes provide us with the power to indemnify any of our directors and officers. The director or officer must have conducted himself/herself in good faith and reasonably believe that his/her conduct was in, or not opposed to, our best interests. In a criminal action, the director or officer must not have had reasonable cause to believe his/her conduct was unlawful. Under applicable sections of the Nevada Revised Statutes, advances for expenses may be made by agreement if the director or officer affirms in writing that he/she believes he/she has met certain standards and will personally repay the expenses if it is determined the officer or director did not meet the standards. If Section 2115 of the California Corporations Code is applicable to us, certain laws of California relating to the indemnification of directors, officer and others also will govern.

Our amended and restated bylaws include an indemnification provision under which we must indemnify any of our directors or officers, or any of our former directors or officers, to the full extent permitted by law. We also maintain insurance policies that indemnify our directors and officers against various liabilities, including liabilities arising under the Securities Act, which may be incurred by any director or officer in his or her capacity as such. We have not entered into separate indemnification agreements with any of our directors or officers in their capacities as such.

At present, there is no pending litigation or proceeding involving any of our directors or officers for which indemnification is sought, nor are we aware of any threatened litigation that is likely to result in claims for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or controlling persons pursuant to the foregoing provisions, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable. In the event a claim for indemnification against such liabilities (other than payment by us for expenses incurred or paid by a director, officer or controlling person of ours in successful defense of any action, suit, or proceeding) is asserted by a director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction, the question of whether such indemnification by it is against public policy in the Securities Act and will be governed by the final adjudication of such issue.

Anti-Takeover Provisions

Nevada Revised Statutes

Some features of the Nevada Revised Statutes, which are further described below, may have the effect of deterring third parties from making takeover bids for control of us or may be used to hinder or delay a takeover bid. This would decrease the chance that our stockholders would realize a premium over market price for their shares of common stock as a result of a takeover bid.

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Acquisition of Controlling Interest

The Nevada Revised Statutes contain provisions governing acquisition of a controlling interest of a Nevada corporation. These provisions provide generally that any person or entity that acquires a certain percentage of the outstanding voting shares of a Nevada corporation may be denied voting rights with respect to the acquired shares, unless certain criteria are satisfied. Our amended and restated bylaws provide that these provisions do not apply to us or to any existing or future stockholder or stockholders.

Combination with Interested Stockholder

The Nevada Revised Statutes contain provisions governing the combination of a Nevada corporation that has 200 or more stockholders of record with an interested stockholder. These provisions may have the effect of delaying or making it more difficult to affect a change in control of our company.

A corporation affected by these provisions may not engage in a combination within two years after the interested stockholder acquires his, her or its shares unless the combination or purchase is approved by the board of directors before the interested stockholder acquired such shares. Generally, if approval is not obtained, then after the expiration of the two-year period, the business combination may be consummated with the approval of the board of directors before the person became an interested stockholder or a majority of the voting power held by disinterested stockholders, or if the consideration to be received per share by disinterested stockholders is at least equal to the highest of:

- the highest price per share paid by the interested stockholder within the three years immediately preceding the date of the announcement of the combination or within three years immediately before, or in, the transaction in which he, she or it became an interested stockholder, whichever is higher;

- the market value per share on the date of announcement of the combination or the date the person became an interested stockholder, whichever is higher; or

- if higher for the holders of preferred stock, the highest liquidation value of the preferred stock, if any.

Generally, these provisions define an interested stockholder as a person who is the beneficial owner, directly or indirectly of 10% or more of the voting power of the outstanding voting shares of a corporation, and define combination to include any merger or consolidation with an interested stockholder, or any sale, lease, exchange, mortgage, pledge, transfer or other disposition, in one transaction or a series of transactions with an interested stockholder of assets of the corporation having:

- an aggregate market value equal to 5% or more of the aggregate market value of the assets of the corporation;

- an aggregate market value equal to 5% or more of the aggregate market value of all outstanding shares of the corporation; or

- representing 10% or more of the earning power or net income of the corporation.

Articles of Incorporation and Amended and Restated Bylaws

There are no provisions in our articles of incorporation or our amended and restated bylaws that would delay, defer or prevent a change in control of our company and that would operate only with respect to an extraordinary corporate transaction involving our company or any of our subsidiaries, such as merger, reorganization, tender offer, sale or transfer of substantially all of its assets, or liquidation.

Transfer Agent

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

LEGAL MATTERS

The validity of the common stock being offered hereby has been passed upon by McDonald Carano Wilson LLP, Reno, Nevada.

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EXPERTS

The consolidated financial statements of OncoSec Medical Incorporated appearing in the Company s Annual Report on Form 10-K for the fiscal year ended July 31, 2014, filed with the SEC on October 10, 2014, and its operating effectiveness of internal controls over financial reporting, have been audited by Mayer Hoffman McCann P.C., an independent registered public accounting firm, as stated in its reports therein, and are incorporated by reference. Such audited consolidated financial statements are incorporated hereby by reference in reliance upon such report of such firm given upon its authority as experts in accounting and auditing.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it. This means that we can disclose important information to you in this prospectus by referring you to those documents. These incorporated documents contain important business and financial information about us that is not included in or delivered with this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information filed with the SEC will update and supersede this information.

We incorporate by reference the documents listed below as well as any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act from the date of the initial registration statement and prior to the effectiveness of this registration statement, and any filings made after the date of this prospectus until all of the securities are sold under this prospectus, except that we do not incorporate any document or portion of a document that is furnished to the SEC, but not deemed filed. The following documents filed with the SEC are incorporated by reference in this prospectus:

- our Annual Report on Form 10-K for the fiscal year ended July 31, 2014 filed on October 10, 2014;
- our Current Report on Form 8-K filed on September 19, 2014; and
- the description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on March 31, 2011, including any amendments or reports filed for the purpose of updating such description.

We will provide without charge to each person, including any beneficial owner, to whom a prospectus is delivered, upon written or oral request of that person, a copy of any or all of the documents we are incorporating by reference into this prospectus, other than exhibits to those documents unless such exhibits are specifically incorporated by reference into those documents. Such written requests should be addressed to:

OncoSec Medical Incorporated

9810 Summer Ridge Road, Suite 110

San Diego, California 92121

Attention: Investor Relations

You may also make such requests by contacting us at (855) 662-6732.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports and proxy statements and other information with the SEC. You may read and copy any document that we file at the SEC s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available on the SEC s web site at http://www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at http://www.oncosec.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this document.