ONCOSEC MEDICAL Inc Form S-1/A October 11, 2011 <u>Table of Contents</u>

As filed with the Securities and Exchange Commission on October 11, 2011

No. 333-175779

## **UNITED STATES**

## SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

**AMENDMENT NO. 2** 

ТО

## FORM S-1/A

## **REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

## **ONCOSEC MEDICAL INCORPORATED**

(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction of incorporation or organization)

(Primary Standard Industrial Classification Code Number)

(I.R.S. Employer Identification Number)

## 4690 Executive Drive, Suite 250

San Diego, CA 92121

(855) 662-6732

(Address, including zip code, and telephone number, including

area code, of registrant s principal executive offices)

**Punit Dhillon** 

President and Chief Executive Officer

4690 Executive Drive, Suite 250

San Diego, CA 92121

(855) 662-6732

(Name, address, including zip code, and telephone number, including

area code, of agent for service)

With Copies to:

Steven G. Rowles, Esq.

Jeannette V. Filippone, Esq.

Morrison & Foerster LLP

12531 High Bluff Drive, Suite 100

San Diego, California 92130

(858) 720-5100

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

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

Large accelerated filer o

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

Accelerated filer o

Smaller reporting company x

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

#### SUBJECT TO COMPLETION, DATED OCTOBER 11, 2011

#### ONCOSEC MEDICAL INCORPORATED

#### PROSPECTUS

#### Up to 16,440,000 Shares of Common Stock

This prospectus relates to the offering by the selling stockholders of OncoSec Medical Incorporated of up to 16,440,000 shares of common stock, par value \$0.0001 per share. These shares include 4,000,000 issued and outstanding shares of common stock, 4,000,000 shares of common stock underlying Series A warrants, 4,000,000 shares of common stock underlying Series C warrants, all issued to certain of the selling stockholders in connection with a private placement offering completed in June 2011 (the June Private Placement . In addition, we are registering 240,000 shares of common stock underlying warrants issued to the co-placement agents in the June 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 Private Placement. The common stock sold in the June Private Placement was sold at a purchase price of \$0.75 per share and the related warrants authorize the holders thereof to purchase shares of common stock at an exercise price of \$1.20 per share for the Series A and C Warrants and \$0.75 per share for the Series B Warrants, 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 OTC Bulletin Board, in privately negotiated transactions or 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 traded on the OTC Bulletin Board under the symbol ONCS.OB . On October 5, 2011, the closing price of our common stock was \$0.40 per share.

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 4 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 , 2011

## TABLE OF CONTENTS

|   | Page |
|---|------|
| <u>SUMMARY</u>  | 1    |
| <u>RISK FACTORS</u>   | 4    |
| SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS   | 15   |
| SELLING STOCKHOLDERS  | 16   |
| DETERMINATION OF OFFERING PRICE   | 18   |
| PLAN OF DISTRIBUTION  | 19   |
| <u>USE OF PROCEEDS</u>  | 20   |
| DESCRIPTION OF SECURITIES   | 20   |
| MARKET PRICE OF AND DIVIDENDS ON COMMON STOCK AND RELATED MATTERS                                 | 25   |
| MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS             | 27   |
| BUSINESS  | 33   |
| DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE  | 41   |
| EXECUTIVE COMPENSATION  | 45   |
| CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS  | 48   |
| SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER<br>MATTERS | 49   |
| LEGAL MATTERS   | 50   |
| EXPERTS   | 50   |
| WHERE YOU CAN FIND MORE INFORMATION   | 50   |
| FINANCIAL STATEMENTS  | F-1  |
|   |      |

#### SUMMARY

This summary does not contain all of the information that should be considered before investing in our common stock. Investors should read the entire prospectus carefully, including the more detailed information regarding our business, the risks of purchasing our common stock discussed in this prospectus under Risk Factors beginning on page 4 of this prospectus and our financial statements and the accompanying notes beginning on page F-1 of this prospectus.

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

### **Our Company**

We are an emerging drug-medical device company focused on designing, developing and commercializing innovative and proprietary medical approaches for the treatment of solid cancers that have unmet medical needs or where currently approved therapies are inadequate based on their efficacy or side-effects. We were incorporated under the laws of Nevada on February 8, 2008 as Netventory Solutions Inc. Initially, we provided online inventory services to small and medium sized companies. In March 2011, we acquired from Inovio Pharmaceuticals, Inc. (Inovio) certain assets related to the use of drug-medical device combination products for the treatment of different cancers. With this acquisition, we have abandoned our efforts in the online inventory services industry and are focusing our efforts in the biomedical industry.

The assets we acquired from Inovio include intellectual property relating to selective tumor ablation technologies, which we now refer to as the OncoSec Medical System (OMS), a therapeutic approach which is based on the use of an electroporation delivery device in combination with an approved chemotherapeutic drug or a DNA-based cytokine for immunotherapy to treat solid tumors. OMS consists of an electrical pulse generator console and various disposable applicators specific to the individual tumor size, type and location and is designed to increase the permeability of cancer cell membranes and, as a result, increases the intracellular delivery of selected therapeutic agents. Our electroporation platform for the delivery of therapeutic agents specifically and effectively targets the killing of cancerous cells and not healthy normal tissues. Our mission is to enable people with cancer to live longer with a better quality of life than otherwise possible or available with existing therapeis.

Our OMS business is composed of two different therapeutic modalities: OMS ElectroImmunotherapy and OMS ElectroChemotherapy. Our OMS ElectroImmunotherapy approach is based on the use of electroporation to enhance the local delivery of DNA-based cytokines as immunotherapy agents that produce both a local and systemic immune response for the treatment of various cancers. A Phase I clinical trial using our OMS ElectroImmunotherapy approach has been completed and a Phase II clinical trial is expected to begin before the end of 2011. OMS ElectroChemotherapy utilizes our electroporation technologies for the local delivery of the chemotherapeutic drug bleomycin to treat solid tumors. The OMS ElectroChemotherapy approach has been developed up to Phase III clinical trials in the United States for the treatment of recurrent head and neck cancer and Phase I/II for the treatment of recurrent breast cancer and has suggested safety and efficacy in a wide range of solid tumors including basal cell, squamous carcinomas, melanoma, breast, prostate, and pancreatic. In addition, Phase IV pre-marketing studies to support the commercialization of the OMS ElectroChemotherapy in Europe were also performed for the treatment of primary and recurrent head and neck cancers and cutaneous skin cancers.

The primary front line treatment of solid tumors involves surgical resection and/or radiation to eliminate or debulk tumor growth prior to initiating systemic therapy with chemotherapeutic agents. Because of the difficulty of determining the border, or margins, between healthy and diseased tissue, surgeons will often remove or resect an area outside of the obvious tumor mass to ensure that they have excised all of the cancerous tissue. This treatment can result in the loss of function and appearance of the surrounding tissues, significantly reducing the patient s quality of life. Although there have been recent advances in non-surgical forms of tumor ablation, such as cryoablation, microwave and high frequency radio ablation therapy, we believe they fail to fully satisfy the clinical need to preserve normal healthy tissue. Given the desire for improved outcomes in the surgical resection of solid tumors, we believe that there will be significant demand for our OMS technology from patients, dermatologists and surgical oncologists.

Our business model is based on a commercialization strategy that leverages previous in-depth clinical experiences (primarily at Inovio), previous approvals for the electroporation-based devices and late stage clinical studies in the United States (Phase III) and Europe (Phase IV). We plan to seek regulatory approvals to initiate specific studies in target markets to collect clinical, reimbursement, and pharmacoeconomic data in order to advance our commercialization strategy. Our 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. Our strategy also includes expanding the addressable markets for the OMS therapies through the addition of relevant indications and partnering and/or co-developing OMS ElectroOncology in developing geographic locations, such as Eastern Europe and Asia, where local resources are best leveraged and appropriate collaborators can be secured.

For more information regarding our business, see Management s Discussion and Analysis of Financial Condition and Results of Operations and Business, included elsewhere in this prospectus.

<sup>1</sup> 

#### **The June Private Placement**

On June 21, 2011, we entered into a Securities Purchase Agreement (the Securities Purchase Agreement ), with certain institutional investors providing for the 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 C Warrants to purchase an aggregate of 4,000,000 shares of our common stock, for proceeds to us of \$3.0 million (the June Private Placement ). The June Private Placement closed on June 24, 2011.

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 equal to the earlier of (a) the later of (i) eight months following the closing of the June Private Placement and (ii) four months following the earliest date that the shares underlying such warrants have been sold or may be freely sold, whether pursuant to a registration statement, Rule 144 or an exemption from registration under Section 4(1) of the Securities Act, and (b) sixteen months from the closing of the June 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 meets certain criteria specified in the warrants). The Series C Warrants have an exercise price of \$1.20 per share, vest and are exercisable ratably in proportion to each holder s exercise of the Series B Warrants held by such holder and have a term of exercise equal to five years. 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 OTCBB on that date, for an aggregate discount to our market price 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.

On June 24, 2011, we entered into a Registration Rights Agreement (the Registration Rights Agreement ), with the purchasers in the June Private Placement. Under the Registration Rights Agreement, we are required to file a registration statement within 30 days following the closing of the June Private Placement to register the resale of the shares of common stock issued in the June Private Placement and the shares of common stock underlying the Series A, Series B and Series C Warrants. Our failure to meet the filing deadlines and other requirements set forth in the Registration Rights Agreement may subject us to the payment of substantial financial penalties. The shares of common stock to be registered on the registration statement of which this prospectus forms a part include all of the shares issued in the private placement and the shares underlying the issued warrants.

Rodman & Renshaw, LLC (Rodman) acted as the lead placement agent for the June Private Placement. Pursuant to the terms of a Placement Agent Agreement entered into on June 1, 2011 and amended on June 21, 2011, we agreed to pay to Rodman and the co-placement agent fees equal to 6% of the aggregate gross proceeds raised in the 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 issued to the placement agents 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 Private Placement were approximately \$2.79 million. The table below describes in more detail the costs to us associated with the June Private Placement:

| Total cash payments to the placement agents in connection with the June Private Placement:   | \$<br>210,000(2)   |
|--|--------------------|
| Total non-cash payments to the placement agents in connection with the June Private Placement  | \$<br>130,708(3)   |
| Resulting net cash proceeds to the Company in connection with the June Private Placement:  | \$<br>2,790,000(4) |
| Resulting net proceeds to the Company in connection with the June Private Placement, including cash and non-cash payments:                   | \$<br>2,659,292(5) |
| Total possible profit to be realized by the Series B warrant holders as a result of any exercise discounts underlying the Series B Warrants: | \$<br>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 Private Placement, which equal \$12,600,000.
- (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 payments to the co-placement agents in connection with a future financing, (b) potential liquidated damages for failure to register the shares issued or issuable upon exercise of warrants to the investors in the June Private Placement (such liquidated damages not to exceed 9% of the aggregate subscription amount paid by each investor in the June Private Placement), (c) amounts payable if we fail to timely deliver certificates representing the required number of shares upon exercise of the Warrants, and (d) amounts payable if we or our transfer agent fail to timely remove certain restrictive legends from certificates representing shares.
- (3) Includes the value of the warrants issued to the co-placement agents.
- (4) Resulting cash net proceeds is calculated by subtracting the total possible and currently determinable cash payments from gross proceeds.
- (5) Resulting cash and non-cash net proceeds is calculated by subtracting the total possible and currently determinable cash and non-cash payments from gross proceeds.
- (6) Calculated as of June 21, 2011, the date of entry into the Securities Purchase Agreement. 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 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 \$60,000.

The shares of common stock to be registered on 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 Private Placement.

The issuances of securities in the June Private Placement described above were issued under an exemption from the registration requirements of the Securities Act of 1933, as amended (the Securities Act ), pursuant to Section 4(2) thereof and Rule 506 of Regulation D promulgated thereunder.

#### **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. As a result, we have changed our name from Netventory Solutions Inc. to OncoSec Medical Incorporated . Our principal executive offices are located at 4690 Executive Drive, Suite #250,

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 16,440,000 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 Private Placement. No shares are being offered for sale by us.

| Common stock outstanding prior to offering        | 56,856,000(1)   |
|---|---|
| Common stock offered by the selling stockholders  | 16,440,000(2)   |
| Common stock to be outstanding after the offering | 69,096,000(3)   |
| Use of Proceeds                                   | We will not receive any proceeds from the sale of common stock offered by the selling stockholders under this prospectus. |
| OTC Bulletin Board Symbol                         | ONCS.OB   |

(1) As of October 5, 2011. Includes 4,000,000 shares of our common stock issued to certain selling stockholders in connection with the June 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 Private Placement. Includes 15,968,480 shares of common stock held by our affiliates and 200,000 shares of common stock held by Vista. Other than Vista, none of the selling stockholders held shares of our common stock immediately prior to the closing of the June 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 June 23, 2011, was 36,687,520.

(2) Includes 4,000,000 shares of common stock offered by the selling stockholders issuable upon exercise of each of the Series A, Series B and Series C Warrants and 240,0000 shares of common stock issuable to the co-placement agents upon exercise of their warrants (collectively, the Warrants ).

(3) Assumes the full exercise of the warrants held by the selling stockholders to acquire 12,240,000 shares of common stock.

#### **RISK FACTORS**

The following risk factors should be considered carefully in addition to the other information contained in this prospectus. This prospectus contains forward-looking statements. Our business, financial condition, results of operations and stock price could be materially adversely effected 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 must raise additional capital in order to continue operating our business, and such additional funds may not be available on acceptable terms or at all.

We do not generate any cash from operations and must raise additional funds in order to continue operating our business. Since inception we have funded our operations primarily through equity and debt financings and we expect to continue to do so in the future. As further described elsewhere in this prospectus, on June 24, 2011, we issued 4 million shares of common stock and three series of warrants to purchase an aggregate of 12 million shares of our common stock to two institutional investors for proceeds of \$3.0 million (the June Private Placement ). However, we will require additional financing to fund our planned operations, including developing and commercializing the assets obtained under the Asset Purchase Agreement dated March 14, 2011, that we entered into with Inovio (the Asset Purchase Agreement ), 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 on a timely basis, we may be forced to delay or scale down some or all of our development activities or perhaps even cease the operation of our business. If we issue 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 biomedical 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 and our independent auditors have expressed substantial doubt about our ability to continue as a going concern.

We have not generated any revenue from operations since our incorporation. During the fiscal year ended July 31, 2010, we incurred a net loss of \$36,158 and during the nine month period ended April 30, 2011, we incurred a net loss of \$506,205. From inception through April 30, 2011, we incurred an aggregate loss of \$583,264. We expect that our operating expenses will increase substantially over the next 12 months as we ramp-up our business. We estimate our average monthly expenses over the next 12 months to be approximately \$458,000, including general and administrative expenses but excluding future acquisition costs and the cost of any future development activities. As of April 30, 2011, we had cash and cash equivalents of \$542,896.

Although we have obtained some of the funds we expect to require in the June Private Placement, after deducting for fees and expenses, our aggregate net proceeds from the June Private Placement was approximately \$2.79 million. We will not receive proceeds for any of the sales of common stock made pursuant to this prospectus. In order to fund our anticipated budget for the next 12 months, including acquisition costs, we believe that we will need to raise approximately \$2.9 million in additional funds. This amount could increase if we encounter unanticipated difficulties. In addition, our estimates of the amount of cash necessary to fund our business and development and commercialization activities may prove to be wrong, and we could spend our available financial resources much faster than we currently expect. If we cannot raise the money that we need in order to continue to develop our business, we will be forced to delay, scale back or eliminate some or all of our proposed operations. If any of these were to occur, there is a substantial risk that our business would fail.

### Table of Contents

These circumstances raise substantial doubt about our ability to continue as a going concern, as described in the explanatory paragraph to our independent auditors report on our financial statements for the year ended July 31, 2010, which are included in our annual report on Form 10-K for the fiscal year ended July 31, 2010, filed with the Securities and Exchange Commission (the SEC) on November 15, 2010. Although our financial statements raise substantial doubt about our ability to continue as a going concern, they do not reflect any adjustments that might result if we are unable to continue our business. Our financial statements contain additional note disclosure describing the circumstances that lead to this disclosure by our independent auditors.

#### 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 biomedical 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 yet commercialized any of our potential product candidates and we cannot predict if or when we will become profitable.

We have not yet commercialized any product candidate relating to our current assets in the biomedical industry. 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, we will be subject to the risk that the marketplace will not accept our products.

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 personnel having experience in the biomedical industry. Competition for qualified individuals is intense. If we are not able to find, attract and retain qualified personnel on acceptable terms, our business operations 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 their services. The loss of the services of any members of our senior management team could delay or prevent the development and commercialization of any other product candidates and our business could be harmed to the extent that we are not able to find suitable replacements.

# 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.

We hope to experience rapid growth in our operations, 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 manage 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.

### Table of Contents

We may be unable to successfully develop and commercialize the assets we recently 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 in a timely manner the assets we recently acquired from Inovio related to certain non-DNA vaccine technology and intellectual property relating to selective electrochemical tumor ablation, which we now refer to as the OncoSec Medical System (OMS). In addition, we may acquire new assets or product candidates in the future. 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 payer landscape, coverage and reimbursement for any products we develop.

As a result of these and other difficulties, we may be unable to develop potential product candidates using our intellectual property, and potential products in development by us may not receive timely regulatory approvals, or approvals at all, necessary for marketing by us or our third-party partners. If we do not acquire or develop product candidates, any of our product candidates are not approved in a timely fashion or at all or, 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.

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

The United States Food and Drug Administration (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 trial design and our interpretations 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 recently announced the planned initiation of three Phase II clinical trials to assess our ElectroImmunotherapy technology in patients with metastatic melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma. 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 candidate is approved, it may be approved for fewer or more limited indications than requested or the approval may be subject to the performance of significant post-marketing studies. In addition, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates. Any limitation, condition or denial of approval would have an adverse affect on our business, reputation and results of operations.

We acquired our OMS technology from Inovio in March 2011. In 2007, Inovio had been enrolling patients in two Phase III clinical studies designed to evaluate the use of the OMS technology as a treatment for resectable recurrent and second primary squamous cell carcinomas of the head and neck. The studies were accruing North American and European patients with tumors in the anterior and posterior areas of the oral cavity. The primary endpoint of these two Phase III trials was preservation of function status at four and eight months as measured by the Performance Status Scale (which assesses the ability of a patient to eat normal foods, speak understandably and eat in public). On June 5, 2007, Inovio announced that it had stopped enrollment of these studies based on a recommendation from the trial s independent data safety monitoring board (DSMB). The DSMB expressed concern about the efficacy and serious adverse events, including higher mortality rates on the OMS technology arm of the study than on the surgery arm. In the DSMB s opinion, although no single parameter was sufficient to warrant recommending a review of the trial, the totality of data

### Table of Contents

for this recurrent head and neck cancer study suggested an unfavorable benefit-to-risk profile for the OMS arm relative to the surgery arm. The DSMB also noted that slow enrollment presented a possible challenge in meeting the patient enrollment goals of each of these two trials, but that, if timely enrollment could allow reaching the target of 400 patients in the combined trials, this would provide enhanced insights regarding the benefit-to-risk profile of the OMS treatment. Without conducting further analysis, Inovio stopped enrollment and conducted its own interim analysis of the unaudited and unblended data on the 212 patients enrolled to date. These clinical trials were never reinitiated. If we are unable to initiate or complete new Phase III or pivotal clinical studies, we will be unable to commercialize the OMS technology.

Delays in the commencement or completion of clinical testing for product candidates based on the OMS 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 the OMS technology will continue for several years and may take significantly longer than expected to complete. 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 planned Phase II clinical trials will be initiated or 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 regulatory authorization to commence a clinical trial;
- reaching agreement on acceptable terms with prospective clinical research organizations, or CROs, clinical investigators and trial sites;
- obtaining institutional review board, or IRB, approval to initiate and conduct a clinical trial at a prospective site;
- identifying, recruiting and training suitable clinical investigators;

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

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

We believe that we have planned and designed an adequate clinical trial program for our product candidates based on our OMS 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 expect to 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 rely heavily 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 current good clinical practices, or GCPs. The FDA enforces these GCP regulations through periodic inspections of trial sponsors, principal investigators and trial sites. 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 incur liability if our promotions of product candidates are determined, or are perceived, to be inconsistent with regulatory guidelines.

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

We have limited experience in manufacturing our product candidates in quantities required to conduct our clinical trials, and if our products are eventually approved for sale by the FDA, for commercial quantities. We may not be able to comply with applicable manufacturing regulations or produce sufficient product for contract, clinical trial or commercial purposes.

The commercial manufacturing of DNA based cytokines and other biological products is a time-consuming and complex process, which must be performed in compliance with the FDA s current Good Manufacturing Practices, or cGMP, regulations. We may not be able to comply with the cGMP regulations, and our manufacturing process may be subject to delays, disruptions or quality control problems. In addition, we may need to complete the installation and validation of additional large-scale fermentation and related purification equipment to produce the quantities of product expected to be required for clinical trials, and if our products are eventually approved for sale by the FDA, for commercial purposes. We have limited experience in manufacturing at this scale. Noncompliance with the cGMP regulations, the inability to complete the installation or validation of additional large-scale equipment, or other problems with our manufacturing process may limit or delay the development or commercialization of our product candidates, and cause us to breach our contract manufacturing service arrangements.

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

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

- our ability to provide acceptable evidence of safety and efficacy;
- acceptance by physicians and patients of the product as a safe and effective treatment;
  - the prevalence and severity of adverse side effects;

- limitations or warnings contained in a product s FDA-approved labeling;
- the clinical indications for which the product is approved;
- availability and perceived advantages of alternative treatments;
- any negative publicity related to our or our competitors products;
- the effectiveness of our or any current or future collaborators sales, marketing and distribution strategies;
- pricing and cost effectiveness;
- our ability to obtain sufficient third-party payor coverage or reimbursement; and
- the willingness of patients to pay out of pocket in the absence of third-party payor coverage.

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

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

We intend to advance a commercialization strategy that leverages previous in-depth clinical experiences, previous CE (Conformité Européene) approvals for the electroporation-based devices and late stage clinical studies in the United States (Phase III) and Europe (Phase IV). 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 the OMS therapies through the addition of relevant indications. Our commercialization plan also includes partnering and/or co-developing OMS in developing geographic locations, such as Eastern Europe and Asia, where local resources are best leveraged and appropriate collaborators can be secured.

### Table of Contents

We may not be able to implement our commercialization strategy as we have planned. Further, we have little experience and have not proven our ability to succeed in the biomedical 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 part on our ability to protect our intellectual property. Because of the difficulties of protecting our proprietary rights and technology, we may not be able to ensure their protection.

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

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

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 biomedical 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 biomedical 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 biomedical 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 Stated 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 FDA and other regulatory authorities. Unexpected or serious health or safety concerns would result in labeling changes, recalls, market withdrawals or other regulatory actions.

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

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

product candidates, which would adversely affect our ability to generate revenue and achieve or maintain profitability.

#### We 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 biomedical industry is highly competitive.

The biomedical 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 payers in managed care organizations, group purchasing organizations and Medicare & Medicaid services. We face competition from a number of sources, including large pharmaceutical companies, biotechnology companies, academic institutions, government agencies and private and public research institutions. We are smaller than almost all of our competitors. Most of our competitors have been in business for a longer period of time than us, have a greater number of products on the market and have greater financial and other resources than we do. Furthermore, recent trends in this industry are that large drug companies are consolidating into a smaller number of very large entities, which further concentrates financial, technical and market strength and increases competitive pressure in the industry. If we directly compete with these very large entities for the same markets and/or products, their financial strength could prevent us from capturing a share of those markets. It is possible that developments by our competitors will make any products or technologies that we 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 pharmaceutical 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 related to our OMS technology 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 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.

#### We may invest or spend our cash in ways with which you may not agree or in ways which may not yield a significant return.

Our management has considerable discretion in the use of our cash. Our cash may be used for purposes that do not increase our operating results or market value. Until the cash is used, it may be placed in investments that do not produce significant income or that may lose value. The failure of our management to invest or spend our cash effectively could result in unfavorable returns and uncertainty about our prospects, each of which could cause the price of our common stock to decline.

#### 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 shareholders 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. Our Board of Directors may choose to issue some or all of such shares to acquire one or more companies or products and to fund our overhead and general operating requirements. 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 shareholders. Further, such issuance may result in a change of control of our corporation.

#### Sales of substantial amounts of our shares could adversely affect the market price of our common stock.

Sales of substantial amounts of our common stock in the public market, or the perception that these sales could occur, could cause the market price of our common stock to decline. These sales could also make it more difficult for us to raise additional capital through the sale of equity securities on commercially reasonable terms.

As of October 5, 2011, we have 56,856,000 outstanding shares of common stock, of which 4,200,000 are included in the registration statement of which this prospectus forms a part, all of which will be freely transferable without restriction under the Securities Act after the effective date of the registration statement. If the warrants issued in the June Private Placement are exercised, based on the number of shares outstanding on October 5, 2011, we would have 69,096,000 outstanding shares of common stock, all of which would be freely transferable without restriction under the Securities Act. These warrant holders may exercise their warrants at their own discretion and at any time in accordance with the terms of such warrants until their expiration. The holders of shares of our common stock that are freely transferable, including the selling stockholders identified in this prospectus after the effective date of this registration statement, have the right to sell their shares at their own discretion and at any time and such sales are outside of our control. If such stockholders choose to sell substantial amounts of our common stock within a short period of time, the market price of our common stock could be adversely affected.

# We have identified material weaknesses in our internal control over financial reporting. If we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results or prevent fraud.

As described in our periodic reports filed with the SEC, including Item 4 of Part I of the Quarterly Report on Form 10-Q for the quarter ended April 30, 2011 and our Annual Report on Form 10-K for the fiscal year ended July 31, 2010, we have identified material weaknesses in our internal controls and procedures. As a result, we have concluded that our disclosure controls and procedures were not effective as of the end of the period covered by those reports. We have implemented, and continue to implement, actions to address these weaknesses and to enhance the reliability and effectiveness of our internal controls and operations; however, the measures we have taken to date and any future measures may not remediate the material weaknesses discussed in our periodic reports.

In addition, we may not be able to maintain adequate controls over our financial processes and reporting in the future. We may discover additional material weaknesses, which we may not successfully remediate on a timely basis or at all. Any failure to remediate any material weaknesses identified by us or to implement required new or improved controls, or difficulties encountered in their implementation, could cause us to fail to meet our reporting obligations or result in material misstatements in our financial statements. Inadequate internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative impact on the trading price of our stock. Moreover, we will be required to expend significant resources to design, implement and maintain a system of internal controls that is adequate to satisfy our reporting obligations as a public company. The costs associated with external consultants, as well as internal resources are significant and difficult to predict. As a result of these matters, our business, results of operations, financial condition and cash flows could be adversely affected.

# 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. 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 your 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 only recently began trading on the OTC Bulletin Board (OTCBB), and has a limited trading history on that market. Trading on the OTCBB is frequently highly volatile, with low trading volume. Since our common stock began trading on the OTCBB in March 2011, 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;

## Table of Contents

• 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.

Additionally, our clinical trials will be open-ended and, therefore, there is the possibility that information regarding the success (or setbacks) of our clinical trials may be obtained by the public prior to a formal announcement by us.

#### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Information contained in this prospectus may contain forward-looking statements. Except for the historical information contained in this discussion of the business and the discussion and analysis of financial condition and results of operations, the matters discussed herein are forward looking statements. This information may involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from future results, performance or achievements expressed or implied by any forward-looking statements. Forward-looking statements, which involve assumptions and describe our future plans, strategies and expectations, are generally identifiable by use of the words may, will, should, expect, anticipate, estimate, believe, intend or proje negative of these words or other variations on these words or comparable terminology. In addition to the risks and uncertainties described in Risk Factors above and elsewhere in this prospectus, these risks and uncertainties may include consumer trends, business cycles, scientific

developments, changes in governmental policy and regulation, and general economic developments. Forward-looking statements are based on assumptions that may be incorrect, and there can be no assurance that any projections or other expectations included in any forward-looking statements will come to pass. Our actual results could differ materially from those expressed or implied by the forward-looking statements as a result of various factors. Except as required by applicable laws, we undertake no obligation to update publicly any forward-looking statements for any reason, even if new information becomes available or other events occur in the future.

### Table of Contents

#### 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 Private Placement;

• Up to 4,000,000 shares of our common stock issuable upon exercise of Series A warrants sold to investors in the June Private Placement;

• Up to 4,000,000 shares of our common stock issuable upon exercise of Series B warrants sold to investors in the June Private Placement;

• Up to 4,000,000 shares of common stock issuable upon exercise of Series C warrants sold to investors in the June Private Placement;

• Up to 240,000 shares of our common stock issuable upon exercise of warrants issued to the co-placement agents or their respective designees for services rendered in connection with the June Private Placement; 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 Private Placement, we have filed with the Securities and Exchange Commission a registration statement on Form S-1, 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. Our failure to satisfy the deadlines 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 information furnished to us by the selling stockholders. 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 following table 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. As of October 5, 2011, to our knowledge and based upon information obtained from the selling stockholders other than Hudson Bay Master Fund Ltd., none of such selling

stockholders have a short position in our common stock. We are not aware of any existing short position in our common stock held by Hudson Bay Master Fund Ltd.

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 warrants 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.

The following table and disclosure following the table sets forth the name of each selling stockholder, the nature of any position, office or other material relationship, if any, which 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 stockholder before this offering. The number of shares owned are those beneficially owned, as determined under the rules of the Securities and Exchange Commission, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under these 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 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 this table and subject to community property laws where applicable, we believe that each of the selling stockholders named in this table has sole voting and investment power with respect to the shares indicated as beneficially owned.

We have assumed all shares of common stock reflected on the table will be sold from time to time in the offering covered by this prospectus. We cannot provide an estimate as to 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 some or all of their shares of common stock under this prospectus.

## Table of Contents

|                                    |   |  |   |   | Percentage of   |
|------------------------------------|---|--|---|---|---|
|                                    | Shares of<br>Common<br>Stock Owned<br>Before this | Shares of<br>Common Stock<br>Underlying<br>Warrants Owned<br>Before this | Shares of<br>Common<br>Stock Being<br>Offered in this | Shares of<br>Common Stock<br>Owned Upon<br>Completion of<br>this Offering | Common Stock<br>Outstanding<br>Upon<br>Completion of<br>this Offering |
| Selling Stockholder                | Offering §  | Offering   | Offering  | (a) §   | (b) §   |
| Capital Ventures International (1) | 2,000,000   | 6,000,000  | 8,000,000   |   |   |
| Hudson Bay Master Fund Ltd. (2)    | 2,000,000   | 6,000,000  | 8,000,000   |   |   |
| Rodman & Renshaw, LLC (3)(6)       | 0   | 108,000  | 108,000   |   |   |
| Noam Rubinstein (3)                | 0   | 14,400   | 14,400  |   |   |
| Kira Sheinerman (3)                | 0   | 21,600   | 21,600  |   |   |
| Roth Capital Partners, LLC (3)(5)  | 0   | 96,000   | 96,000  |   |   |
| Vista Partners LLC (4)             | 200,000   | 0  | 200,000   |   |   |

The selling stockholder is a broker-dealer.

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

- § Based upon information provided to us by the selling stockholders, the selling stockholders that participated in the June Private Placement own no securities of the Company other than those acquired in connection with such private placement and Vista Partners LLC owns no securities of the Company other than those issued by us pursuant to the terms of the consulting agreement.
- (a) Assumes all of the shares of common stock to be registered on the registration statement of which this prospectus is a part, including all shares of common stock underlying warrants held by the selling stockholders, are sold in the offering, and that 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.
- (b) Applicable percentage ownership is based on the sum of (i) 56,856,000 shares of common stock outstanding as of October 5, 2011, and (ii) 12,240,000 shares of common stock issuable upon exercise of all of the outstanding warrants to purchase common stock issued in connection with the June Private Placement.
- (1) Includes 2,000,000 shares of common stock issuable upon exercise of each of the Series A, B and C warrants, all of which were issued in connection with the June Private Placement. 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 2,000,000 shares of common stock issuable upon exercise of each of the Series A, B and C warrants, all of which were issued in connection with the June Private Placement. 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 (the Placement Agent Agreement ) entered into with Rodman & Renshaw, LLC (Rodman), Rodman received warrants to purchase 144,000 shares of common stock and 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 Private Placement. Rodman designated warrants to purchase 14,400 shares of common stock to Noam Rubinstein and 21,600 shares of common

stock to Kira Sheinerman, such that Rodman now holds warrants to purchase 108,000 shares of our common stock. Each of the warrants has an exercise price of \$1.20 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) 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 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.
- (5) Each of Bryon Roth and Gordon Roth has voting and investment control over the securities beneficially owned by Roth.
- (6) John J. Borer is the Senior Managing Director of Rodman and has voting and dispositive control over the shares beneficially owned by Rodman.

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 transactions and (b) other than in connection with the June Private Placement, 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.

### Table of Contents

Under the Placement Agent Agreement, Rodman is entitled to a cash placement agent fee and warrants with respect to any public or private offering or other financing or capital-raising transaction of any kind that occurs within nine months following the closing of the June Private Placement, to the extent that such financing or capital is provided to us by certain investors introduced to us by Rodman. Under those circumstances, we would be required to make the following cash and warrant payments:

• A cash placement fee payable as follows: (a) 3.6% of the aggregate purchase price paid by each purchaser of securities that are placed in the offering up to \$10 million; and (b) 6% of the aggregate purchase price paid by each purchaser of securities that are placed in the offering that is in excess of \$10 million.

• Warrants to purchase our common stock upon completion of such an offering, issuable to Rodman or its designees, as follows: (a) warrants equal to 3.6% of the aggregate number of shares placed in the offering (but excluding any warrants issued to purchasers in the offering) for the aggregate number of shares that equal up to \$10 million in aggregate purchase price and (b) warrants equal to 6% of the aggregate number of shares placed in the offering (but excluding any warrants issued to purchasers in the offering) for the aggregate number of shares that equal up to \$10 million in aggregate to purchasers in the offering) for the aggregate number of shares that equal in excess of \$10 million in the aggregate.

The holders of the warrants issued in the June Private Placement have ongoing rights to exercise the warrants, including the Series B Warrants. We have disclosed the material terms of the warrants, including the Series B Warrants, elsewhere in this prospectus. In addition, the participants in the June Private Placement have ongoing registration rights related to the securities issued in the June 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 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 register the common stock issued or issuable upon exercise of warrants to the investors in the June Private Placement (such liquidated damages not to exceed 9% of the aggregate subscription amount paid by each investor in the June Private Placement); (b) amounts payable if we fail to timely deliver certificates representing the required number of shares upon exercise of the Warrants; and (c) amounts payable if we and our transfer agent fail to timely remove certain restrictive legends from certificates representing shares of common stock. 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.

The Securities Purchase Agreement grants to the investors, until the eighteen month anniversary of the date of the agreement, the right to participate in any financing by us through an issuance of our common stock for cash or indebtedness up to an amount equal to 50% of such financing and on the same pricing and other terms and conditions as such financing. The terms and conditions of such financing shall not include any provision that requires a participating investor to agree to any restrictions on its trading of any of the shares acquired in connection with the June Private Placement without such investor s consent.

## 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.

### Table of Contents

### 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 OTC Bulletin Board 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;
- 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 FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

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 the Company 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%).

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has 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 sale of the resale securities by the selling stockholders.

### Table of Contents

We 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, without the requirement for the Company to be 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 resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered 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.

Under applicable rules and regulations under the Securities Exchange Act of 1934, as amended (the Exchange Act ), any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the 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 \$12.9 million from the selling stockholders if they exercise their warrants in full on a cash basis, which we will use primarily for working capital purposes. We also expect to use a portion of any proceeds we may receive to satisfy our indebtedness to Inovio incurred in connection with the Asset Purchase Agreement. Pursuant to the Asset Purchase Agreement, we must pay to Inovio \$750,000 on the earlier of our obtaining cumulative financing of over \$5,000,000 or six months from the closing date of the acquisition, or September 24, 2011, as well as additional amounts at later dates. 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 in their own discretion, if at all, we cannot plan on specific uses of proceeds beyond application of 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**

#### **Authorized Capital Stock**

On March 1, 2011 we effected a 32 for one forward stock split of our authorized and issued and outstanding common stock. As a result, our authorized capital has increased from 100,000,000 shares of common stock at \$0.001 par value to 3,200,000,000 shares of common stock at \$0.0001 par value. Following the effectiveness of the forward split, our outstanding capital stock increased from 2,140,000 shares of common stock to 68,480,000 shares of common stock. On February 28, 2011, the Company s former majority shareholders and directors, Ronald Dela Cruz and David Marby, entered into an agreement to sell certain of the shares held by them to Mr. Punit Dhillon, Dr. Avtar Dhillon and certain other purchasers in a private transaction. The Company was not a party to this agreement. As a condition of their acquisition of such shares from Mr. Dela Cruz and Mr. Marby, the purchasers of such shares required Mr. Dela Cruz and Mr. Marby to cancel and return to the Company

the remaining shares of the Company s common stock held by them, for no consideration. On March 22, 2011, 17,280,000 shares of common stock held by Mr. Dela Cruz and Mr. Marby were returned to the Company for no consideration. The shares were not retired and are available for future issuance.

### **Capital Stock Issued and Outstanding**

As of October 5, 2011, there were issued and outstanding:

• 56,856,000 shares of common stock, including 4,000,000 shares issued to investors in the June Private Placement and 1,456,000 shares issued as part of units issued to three subscribers in an offshore transaction pursuant to Regulation S of the Securities Act;

• No shares of preferred stock;

• Warrants to purchase 1,456,000 shares of common stock at a price of \$1.00 per share, issued as part of units issued to three subscribers in an offshore transaction pursuant to Regulation S of the Securities Act; and

### Table of Contents

• Warrants to purchase 12,240,000 shares of common stock with a weighted average exercise price of \$1.03 per share, including (i) Series A warrants to purchase 4,240,000 shares at an exercise price of \$1.20 per share issued to two investors, two placement agents and two designees of a placement agent in connection with the June Private Placement, (ii) Series B Warrants to purchase 4,000,000 shares at an exercise price of \$0.75 per share issued to two investors in the June Private Placement, and (iii) Series C warrants to purchase 4,000,000 shares at an exercise price of \$1.20 per share issued to two investors in the June Private Placement.

#### **Description of Common Stock**

We are authorized to issue 3,200,000,000 shares of common stock. The holders of our common stock are entitled to one vote per share on all matters submitted to a vote of the stockholders, including the election of directors. Generally, all matters to be voted on by stockholders must be approved by a majority of the votes entitled to be cast by all shares of common stock that are present in person or represented by proxy, subject to any voting rights granted to holders of any preferred stock that we may issue. Except as otherwise provided by law, and subject to any voting rights granted to holders of any preferred stock that we may issue. Except as otherwise provided by law, and subject to any voting rights granted to holders of any preferred stock that we may issue, amendments to our articles of incorporation generally must be approved by a majority of the votes entitled to be cast by all outstanding shares of common stock. Our articles of incorporation do not provide for cumulative voting in the election of directors. Subject to any preferential rights of any outstanding series of preferred stock created by our Board of Directors from time to time, the holders of our common stock will be entitled to cash dividends as may be declared, if any, by our Board of Directors from funds available. Subject to any preferential rights of any outstanding series of preferred stock that we may issue, upon liquidation, dissolution or winding up of our company, the holders of our common stock will be entitled to receive pro rata all assets available for distribution to the holders.

### **Description of Warrants**

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 share purchase warrant entitling the holder to acquire one share of our common stock at an exercise price of \$1.00 per share. We are not obligated to register any of the shares issued or issuable upon exercise of the warrants issued in such private placement and no such shares are included in the shares to be registered on the registration statement of which this prospectus forms a part.

On September 28, 2011, we issued a warrant to purchase 1,000,000 shares of our common stock to Inovio in consideration for entry into an Amendment to the Asset Purchase Agreement The warrant has an exercise price of \$1.20 per share, is exercisable immediately upon issuance and has an exercise term of five years. The warrant also contains a mandatory exercise provision allowing us to request the exercise of the warrant in whole provided that our Daily Market Price (as defined in the warrant) is equal to or greater than \$2.40 per share for twenty consecutive trading days. The warrant was issued pursuant to an exemption from registration under Section 4(2) of the Securities Act.

Each of the two investors participating in the June Private Placement were issued a Series A Warrant, a Series B Warrant and a Series C Warrant, each to purchase up to 2,000,000 shares of our common stock. The Series A Warrants have an exercise price of \$1.20 per share, are exercisable immediately upon issuance and have a term of exercise equal to five years. The Series B Warrants have an exercise price of \$0.75 per share, are exercisable immediately upon issuance and have a term of exercise equal to the earlier of (a) the later of (i) eight months following the closing of the June Private Placement and (ii) four months following the earliest date that the shares underlying such warrants have been sold or may be freely sold, whether pursuant to a registration statement, Rule 144 or an exemption from registration under Section 4(1) of the Securities Act, and (b) sixteen months from the closing of the June 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 meets certain criteria specified in the

warrants). The Series C Warrants have an exercise price of \$1.20 per share, vest and are exercisable ratably in proportion to each holder s exercise of the Series B Warrants held by such holder and have a term of exercise equal to five years.

In addition, we issued warrants to purchase 144,000 shares of our common stock to Rodman & Renshaw, LLC or its designees and 96,000 shares of our common stock to Roth Capital Partners, LLC pursuant to the terms of a Placement Agent Agreement entered into in connection with the June Private Placement. The warrants have an exercise price of \$1.20 per share and have a term of exercise equal to five years. These warrants have terms similar to those of the Series A Warrants.

Each of the Series A, Series B and Series C Warrants provides for the adjustment of the exercise price and number of shares issuable upon exercise of the Warrants under the following circumstances:

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:

Subdivision of outstanding shares of common stock into a larger number of shares or combination (including by way of reverse stock split) outstanding shares of common stock into a smaller number of shares:

Distribution of, among other things, dividends, rights, warrants or other assets to all holders of common stock other than holder of the Warrant:

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.

Exercise price is further 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.

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.

### Table of Contents

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 a each of the 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 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.

The Series A and Series C Warrants are also subject to adjustment of the per share exercise price upon the disposition of shares of our common stock at a lower effective price than the applicable warrant s exercise price. If we sell or grant any option to purchase, or otherwise dispose of or issue any common stock or common stock equivalents, at an effective price per share lower than the exercise price of the Series A and Series C Warrants then in effect, then the exercise price of the Series A and C Warrants will be reduced to equal the lower effective price per share, provided that the exercise price will not be reduced to less than \$0.50 per share.

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 OTCBB 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 the Common Stock on the date of the sale of the Series B Warrants:      | \$1.12 (1)       |
|---|------------------|
| 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: | \$4,480,000 (2)  |
| Combined exercise price of total number of shares of Common Stock underlying the Warrants:        | \$3,000,000      |
| Total Possible Discount to the Market Price as of June 21, 2011                                   | \$1,480,000 (3)  |

<sup>(1)</sup> The market price per share is based on the closing price of our common stock on the OTCBB on June 21, 2011, the date of the Securities Purchase Agreement.

<sup>(2)</sup> The combined market price is calculated by multiplying the total possible shares of common stock underlying the Series B Warrants by the market price per share of \$1.12 as of June 21, 2011.

<sup>(3)</sup> Calculated as of the date of entry into the Stock Purchase Agreement. The last trading price of the Company s common stock on the OTCBB on June 24, 2011, the date of the closing of the June Private Placement, was \$0.77. Calculated as of June 24, 2011, the total possible discount to the market price of our common stock would have been \$60,000.

The total value of payments made to the co-placement agents (including the value of the warrants issued to the co-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 net proceeds to us from the sale exercise of the Series B Warrants of \$3,000,000, is 56.3%. However, we do not expect to make any additional payments to the selling stockholders, the co-placement agents or any of their affiliates in connection with the exercise of the Series B Warrants. Excluding such payments made by us in connection with the June Private Placement, the applicable percentage is 49.3%.

#### Liability and Indemnification of Directors and Officers

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 the standards and will personally repay the expenses if it is determined the officer or director did not meet the standards.

### Table of Contents

Our 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. 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.

At present, there is no pending litigation or proceeding involving any of our directors or officers regarding which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification. We also maintain insurance policies that indemnify our directors and officers against various liabilities, including liabilities arising under the Securities Act, that might be incurred by any director or officer in his or her capacity as such.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been informed that in the opinion of the Securities and Exchange Commission 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 of Nevada State Law

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.

#### 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 the holders of a majority of the voting power of the corporation, excluding shares as to which any of such acquiring person or entity, an officer or a director of the corporation, and an employee of the corporation exercises voting rights, elect to restore such voting rights in whole or in part. These provisions apply whenever a person or entity acquires shares that, but for the operation of these provisions, would bring voting power of such person or entity in the election of directors within any of the following three ranges:

- 20% or more but less than 33 1/3%;
- 33 1/3% or more but less than or equal to 50%; or
- more than 50%.

The stockholders or board of directors of a corporation may elect to exempt the stock of the corporation from these provisions through adoption of a provision to that effect in the articles of incorporation or bylaws of the corporation. Our articles of incorporation and bylaws do not exempt our common stock from these provisions.

These provisions are applicable only to a Nevada corporation that:

• has 200 or more stockholders of record, at least 100 of whom have addresses in Nevada appearing on the stock ledger of the corporation; and

• does business in Nevada directly or through an affiliated corporation.

At this time, we do not have 100 stockholders of record who have addresses in Nevada appearing on the stock ledger of our company. Therefore, we believe that these provisions do not apply to acquisitions of our shares and will not until such time as these requirements have been met. At such time as they may apply to us, these provisions may discourage companies or persons interested in acquiring a significant interest in or control of our company, regardless of whether such acquisition may be in the interest of our stockholders.

## Combination with Interested Stockholder

The Nevada Revised Statutes contain provisions governing combination of a Nevada corporation that has 200 or more stockholders of record with an interested stockholder. As of October 5, 2011, we had 75 holders of record of our common stock. Therefore, we believe that these provisions do not apply to us and will not until such time as these requirements have been met. At such time as they may apply to us, these provisions may also have effect of delaying or making it more difficult to effect a change in control of our company.

### Table of Contents

A corporation affected by these provisions may not engage in a combination within three 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 three-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. Generally, these provisions 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 Bylaws

There are no provisions in our articles of incorporation or our 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 address is 50 West Liberty Street, Suite 880, Reno, Nevada 89501.

## Table of Contents

### MARKET PRICE OF AND DIVIDENDS ON COMMON STOCK AND RELATED MATTERS

#### **Trading Information**

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

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

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

|  | High  |      | Low    |
|--|-------|------|--------|
| Fiscal 2009  |       |      |        |
| First Quarter ended October 31, 2008*                            |       |      |        |
| Second Quarter ended January 31, 2009*                           |       |      |        |
| Third Quarter ended April 30, 2009*                              |       |      |        |
| Fourth Quarter ended July 31, 2009*                              |       |      |        |
| Fiscal 2010  |       |      |        |
| First Quarter ended October 31, 2009*                            |       |      |        |
| Second Quarter ended January 31, 2010*                           |       |      |        |
| Third Quarter ended April 30, 2010 \$                            | 0.002 | 2 \$ | 0.0022 |
| Fourth Quarter ended July 31, 2010*                              | 0.002 | - φ  | 0.0022 |
|  |       |      |        |
| Fiscal 2011  |       |      |        |
| First Quarter ended October 31, 2010*                            |       |      |        |
| Second Quarter ended January 31, 2011*                           |       |      |        |
| Third Quarter ended April 30, 2011#                              |       |      |        |
| Fourth Quarter ended July 31, 2011 \$                            | 1.9   | 9 \$ | 0.65   |
| Fiscal 2012  |       |      |        |
| First Quarter ended October 31, 2010 (through October 5, 2011)\$ | 1.0   | 0 \$ | 0.33   |

<sup>\*</sup> There was no market for our common stock during this period.

<sup>#</sup> There was no market for our common stock during portions of this period

Our common stock is thinly traded and any reported sale prices may not be a true market-based valuation of our common stock. On October 5, 2011, the closing bid price of our common stock, as reported on the OTCBB, was \$0.40.

As of October 5, 2011, there were 75 holders of record of our common stock.

Trades in our common stock may be subject to Rule 15g-9 under the Exchange Act, which imposes requirements on broker-dealers who sell securities subject to the rule to persons other than established customers and accredited investors. For transactions covered by the rule, broker-dealers must make a special suitability determination for purchasers of the securities and receive the purchaser s written agreement to the transaction before the sale.

The Securities and Exchange Commission also has rules that regulate broker-dealer practices in connection with transactions in penny stocks. Penny stocks generally are equity securities with a price of less than \$5.00 (other than securities listed on some national exchanges, provided that the current price and volume information with respect to transactions in that security is provided by the applicable exchange or system). The penny stock rules require a broker-dealer, before effecting a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document prepared by the Securities and Exchange Commission 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

### Table of Contents

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 disclosure requirements may have the effect of reducing the level of trading activity in the secondary market for shares of common stock.

#### Dividends

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

### Securities Authorized for Issuance under Equity Compensation Plans

In May 2011, OncoSec's Board of Directors adopted the 2011 Stock Incentive Plan ("the 2011 Plan"), subject to stockholder approval. The 2011 Plan authorized the Board of Directors to grant incentive stock options and non-statutory stock options to employees, directors, and consultants for up to 5,200,000 shares of common stock. Under the 2011 Plan, incentive stock options and nonqualified stock options can be granted. Incentive stock options are to be granted at a price that is no less than 100% of the fair value of the stock at the date of grant. Options vest over a period according to the Option Agreement, and are exercisable for a maximum period of ten years after the date of grant. Options granted to stockholders who own more than 10% of the outstanding stock of OncoScc at the time of grant must be issued at an exercise price no less than 110% of the fair value of the stock on the date of grant. No options were issued under the 2011 Plan during the fiscal year ended July 31, 2011. We expect to submit the 2011 Plan to a vote of our stockholders at our next annual meeting.

### Table of Contents

#### MANAGEMENT S DISCUSSION AND ANALYSIS OF

## FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the financial statements and the related notes contained elsewhere in this prospectus. In addition to historical information, the following discussion contains forward looking statements based upon current expectations that are subject to risks and uncertainties. Actual results may differ substantially from those referred to herein due to a number of factors, including but not limited to risks described in the section entitled Risk Factors and elsewhere in this prospectus.

#### **Company Overview**

We were incorporated under the laws of the State of Nevada on February 8, 2008 under the name Netventory Solutions Inc. to pursue the business of inventory management solutions. Effective March 1, 2011, we completed a merger with our subsidiary, OncoSec Medical Incorporated, a Nevada corporation which was incorporated solely to effect a change in our name. As a result, we have changed our name from Netventory Solutions Inc. to OncoSec Medical Incorporated .

On March 24, 2011, we completed the acquisition of certain assets of Inovio Pharmaceuticals, Inc. (Inovio) pursuant to an Asset Purchase Agreement dated March 14, 2011 by and between the Company and Inovio (the Asset Purchase Agreement). The acquired assets relate to certain non-DNA vaccine technology and intellectual property relating to selective tumor ablation technologies, which we now refer to as the OncoSec Medical System (OMS), a therapy which uses an electroporation device to facilitate delivery of chemotherapy agents, or nucleic acids encoding cytokines, into tumors and/or surrounding tissue for the treatment and diagnosis of tumors. The acquired assets included, among other things: certain equipment, machinery, inventory and other tangible assets of Inovio related to the OMS technology; certain engineering and quality documentation related to the OMS technology; the assignment of certain contracts; and certain of Inovio s patents, including patent applications, and trademarks, and all goodwill associated therewith related to the OMS technology.

We did not assume any of the liabilities of Inovio except liabilities under the assigned contracts and assigned intellectual property arising after the closing date of the Asset Purchase Agreement. On September 28, 2011, we entered into a First Amendment to Asset Purchase Agreement (the Amendment ). The Amendment amended and modified certain payment terms of the Asset Purchase Agreement. We are required to pay Inovio \$3,000,000 in scheduled payments over a period of two years from the closing date and a royalty on any commercial product sales related to the OMS technology.

In connection with the Asset Purchase Agreement, on March 24, 2011 we entered into a cross-license agreement with Inovio pursuant to which we granted Inovio a fully paid-up, exclusive, worldwide license to certain of the OMS technology patents in the field of gene or nucleic acids, outside of those encoding cytokines, delivered by electroporation. Inovio also granted us a non-exclusive, worldwide license to certain non-OMS technology patents in the OMS field in exchange for: a fee for any sublicense of the Inovio technology, not to exceed 10%; a royalty on net sales of any business we develop with the Inovio technology, not to exceed 10%; and payment to Inovio of any amount Inovio pays to the licensor of the Inovio technology that is a direct result of the license.

Following the acquisition of the OMS technology assets from Inovio, we relocated our principal office to San Diego, California. Our business is now focused on designing, developing and commercializing innovative and proprietary medical approaches for the treatment of solid tumors that have unmet medical needs or where currently approved therapies are inadequate based on their therapeutic benefit or side-effect profile. Our therapies are based on the use of electroporation to deliver either an approved chemotherapeutic agent (OMS ElectroChemotherapy), or a DNA plasmid construct that encodes for a cytokine (OMS ElectroImmunotherapy) to treat solid tumors. OMS ElectroChemotherapy and OMS ElectroImmunotherapy specifically target destruction of cancerous cells and not healthy normal tissues. Our goal is to improve the lives of people suffering from the life-altering effects of cancer through the development of our novel treatment approaches. In May 2011, we announced the planned initiation of three Phase II clinical trials for the use of our therapies to treat metastatic melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma.

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

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

### Table of Contents

On June 24, 2011, we sold in a private placement an aggregate of 4,000,000 shares of our common stock and three series of warrants to purchase an aggregate of 12,000,000 shares of our common stock, for proceeds to us of \$3.0 million (the June Private Placement ). After deducting for fees and expenses, the aggregate net proceeds from the June Private Placement were approximately \$2.79 million.

Pursuant to the terms of the Securities Purchase Agreement that we entered into with the purchasers in the June Private Placement, each purchaser has been issued a Series A Warrant, a Series B Warrant and a Series C Warrant, each to purchase up to a number of shares of the 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 five years. The Series B Warrants have an exercise price of \$0.75 per share, are exercisable immediately upon issuance and have a term of exercise equal to the earlier of (a) the later of (i) eight months following the closing of the June Private Placement and (ii) four months following the earliest date that the shares underlying such warrants have been sold or may be freely sold, whether pursuant to a registration statement, Rule 144 or an exemption from registration under Section 4(1) of the Securities Act, and (b) sixteen months from the closing of the June 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 meets certain criteria specified in the warrants). The Series C Warrants have an exercise price of \$1.20 per share, vest and are exercisable ratably in proportion to each holder s exercise of the Series B Warrants held by such holder and have a term of five years.

On June 24, 2011, in connection with the closing of the private placement, we entered into a Registration Rights Agreement with the purchasers in the June Private Placement. The Registration Rights Agreement requires that we file a registration statement within thirty days following such closing to register the resale of the shares of common stock and the shares underlying the warrants issued in the June Private Placement. Our failure to meet the filing deadlines and other requirements set forth in the Registration Rights Agreement may subject us to payment of substantial penalties.

As further discussed in Liquidity and Capital Resources below, we will need to raise additional funds in order to continue operating our business.

#### **Critical Accounting Policies**

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

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

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

exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less selling costs.

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

Table of Contents

### **Results of Operations**

### Three and Nine Months Ended April 30, 2011 Compared to the Three and Nine Months Ended April 30, 2010

The following discussion of our financial condition and results of operations should be read together with the unaudited interim consolidated financial statements and the notes to the unaudited interim consolidated financial statements included in this quarterly report.

Our operating results for the three and nine month periods ended April 30, 2011 and April 30, 2010 are summarized as follows:

|          | Three Month<br>Period Ended<br>April 30, 2011<br>(\$) | Three Month<br>Period Ended<br>April 30, 2010<br>(\$) | Nine Month<br>Period<br>Ended<br>April 30, 2011<br>(\$) | Nine Month<br>Period<br>Ended<br>April 30, 2010<br>(\$) |
|----------|---|---|---|---|
| Revenue  |   |   |   |   |
| Expenses | 499,409   | 3,100   | 506,205   | 15,379  |
| Net Loss | (499,409)   | (3,100)   | (506,205)   | (15,379)  |

#### Revenue

We had no revenues in the three and nine month periods ended April 30, 2011 and April 30, 2010.

## Expenses

Operating expenses for the three and nine month periods ended April 30, 2011 and April 30, 2010 are summarized as follows:

|                            | Three Month<br>Period Ended<br>April 30, 2011<br>(\$) | Three Month<br>Period Ended<br>April 30, 2010<br>(\$) | Nine Month<br>Period Ended<br>April 30, 2011<br>(\$) | Nine Month<br>Period Ended<br>April 30, 2010<br>(\$) |
|----------------------------|---|---|--|--|
| Research and development   | 216,658   |   | 216,658  |  |
| General and administrative | 279,751   | 3,100   | 286,547  | 15,379   |
| Total Operating Expenses   | 496,409   | 3,100   | 503,205  | 15,379   |

Our operating expenses for the three month period ended April 30, 2011 increased \$493,000, or 15,913%, when compared to the three month period ended April 30, 2010.

During the three month period ended April 30, 2011, general and administrative expense increased by \$277,000 as a result of increased salary and related costs of \$91,000, travel and related costs of \$10,000, and legal costs of \$105,000 related to the acquisition of assets from Inovio, the March 2011 private placement and various other corporate matters. Research and development expense increased to \$217,000 mainly as a result of increased salary and associated costs of \$79,000, patent amortization of \$62,000, write-down of acquisition supplies inventory of \$38,000, travel and related costs of \$13,000, and costs related to our preliminary advisory panel meeting of \$15,000. We expect our research and development expense to grow in future periods as we develop our clinical trials plan and initiate trials.

Our operating expenses in the nine month period ended April 30, 2011 increased \$488,000, or 3,172%, when compared to the nine month period ended April 30, 2010. The factors leading to the increase in operating expenses for the nine month period ended April 30, 2011 are the same as those discussed in the above comparison of the change for the three month periods ended April 30, 2011 and 2010.

### Fiscal year ended July 31, 2010 and July 31, 2009

|          | July 31, 2010<br>(\$) | July 31, 2009<br>(\$) |
|----------|-----------------------|-----------------------|
| Revenue  |                       |                       |
| Expenses | 36,158                | 33,714                |
| Net Loss | (36,158)              | (33,714)              |

Revenue

We had no revenues during the fiscal years ended July 31, 2010 and July 31, 2009.

## Table of Contents

### **Expenses**

Operating expenses for the fiscal years ended July 31, 2010 and July 31, 2009 are summarized as follows:

|                            | July 31, 2010<br>(\$) | July 31, 2009<br>(\$) |
|----------------------------|-----------------------|-----------------------|
| Research and development   |                       |                       |
| General and administrative | 27,158                | 33,714                |
| Total Operating Expenses   | 27,158                | 33,714                |

Our operating expenses for the fiscal year ended July 31, 2010 decreased \$6,600, or 19%, when compared to the fiscal year ended July 31, 2010. The decrease was as a result of decreased professional costs of \$5,000 and filing fees of \$3,500, offset by increased consulting costs of \$2,000.

### Other Expenses

Other expenses increased \$9,000 due to impairment charges for website development costs recorded during the fiscal year ended July 31, 2010, which were previously capitalized during the fiscal year ended July 31, 2009.

## Liquidity and Capital Resources

Working Capital

Our working capital as of April 30, 2011 and July 31, 2010 is summarized as follows:

|                            | At<br>April 30, 2011<br>(\$) | At<br>July 31, 2010<br>(\$) |
|----------------------------|------------------------------|-----------------------------|
| Current assets             | 636,156                      | 237                         |
| Current liabilities        | 1,497,514                    | 30,296                      |
| Working capital deficiency | (861,358)                    | (30,059)                    |

#### Current Assets

The increase in our current assets was primarily due to an increase in cash from \$237 as of July 31, 2010 to \$543,000 as of April 30, 2011 as a result of our March 2011 financing, which is described in more detail below.

Current Liabilities

Current liabilities at April 30, 2011 increased to \$1,498,000 from \$30,000 as of July 31, 2010. This increase was primarily due to the addition of the current portion of the acquisition obligation payable to Inovio of \$1,250,000 related to the Asset Purchase Agreement.

Cash Flow

Cash Flow Used in Operating Activities

Cash used in operating activities for the nine months ended April 30, 2011 was \$267,000, as compared to \$7,000 used in operating activities for the nine months ended April 30, 2010. This increase was related to costs of operations such as salary expense and associated costs, as well as legal fees related to our acquisition of assets from Inovio, our March 2011 financing and other expenses related to our transition to a biomedical company.

Cash Flow Used in Investing Activities

Cash used in investing activities was \$268,000 for the nine month period ended April 30, 2011, and was primarily related to the initial \$250,000 payment on the Asset Purchase Agreement entered into with Inovio. There was no investing activity during the nine month period ended April 30, 2010.

## Table of Contents

### Cash Flow Provided by Financing Activities

Cash provided by financing activities for the nine months ended April 30, 2011 was primarily related to the private placement of common stock in March 2011, which resulted in proceeds of \$1,092,000. There was no financing activity during the nine month period ended April 30, 2010.

#### **Recent Financings**

As described above, on March 18, 2011, in the March Private Placement, we issued 1,456,000 units at a price of \$0.75 per unit for gross proceeds of \$1,092,000. Each unit consisted of one share of our common stock and one share purchase warrant entitling the warrant holder to purchase an additional share of our common stock at a price of \$1.00 per share for a period of five years from closing. We issued the units to three subscribers, each of whom represented that it was not a U.S. person (as that term is defined in Regulation S of the Securities Act of 1933, as amended (the Securities Act )), in an offshore transaction pursuant to Regulation S under the Securities Act. We used \$250,000 of the proceeds as the first payment to Inovio pursuant to the Asset Purchase Agreement. We have used and will continue to use the remaining funds for general working capital purposes.

As described above, on June 24, 2011, in the June Private Placement we sold an aggregate of 4,000,000 shares of the our common stock and three series of warrants, the Series A Warrants, the Series B Warrants and the Series C Warrants to purchase an aggregate of 12,000,000 shares of the our common stock, for proceeds to us of \$3.0 million. After deducting for fees and expenses, the aggregate net proceeds from the June Private Placement were approximately \$2.79 million.

Pursuant to the terms of the Securities Purchase Agreement that we entered into with the purchasers in the June Private Placement, each purchaser has been issued a Series A Warrant, a Series B Warrant and a Series C Warrant, each to purchase up to a number of shares of the 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 equal to five years. The Series B Warrants have an exercise price of \$0.75 per share, are exercisable immediately upon issuance and have a term of exercise equal to the earlier of (a) the later of (i) eight months following the closing of the June Private Placement and (ii) four months following the earliest date that the shares underlying such warrants have been sold or may be freely sold, whether pursuant to a registration statement, Rule 144 or an exemption from registration under Section 4(1) of the Securities Act, and (b) sixteen months from the closing of the June 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 meets certain criteria specified in the warrants). The Series C Warrants have an exercise price of \$1.20 per share, vest and are exercisable ratably in proportion to each holder s exercise of the Series B Warrants held by such holder and have a term of exercise equal to five years.

On June 24, 2011, in connection with the closing of the private placement, we entered into a Registration Rights Agreement with the purchasers in the June Private Placement. The Registration Rights Agreement requires that we file a registration statement within thirty days following such closing to register the resale of the shares of common stock and the shares underlying the warrants issued in the June Private Placement. Our failure to meet the filing deadlines and other requirements set forth in the Registration Rights Agreement may subject us to payment of certain monetary penalties.

### Cash Requirements

Our primary objectives for the next twelve-month period are to develop and pursue the commercialization of our planned products and to identify additional products for acquisition and development. We have begun a search for industry experts to expand our management team and better position our company. In addition, we expect to pursue raising sufficient capital to fund our operations and to acquire and develop additional assets and technology consistent with our business objectives.

We estimate our operating expenses and working capital requirements for the next 12 months to be as follows:

| Amount          |
|-----------------|
| \$<br>2,500,000 |
| 1,400,000       |
| 900,000         |
| 700,000         |
| \$<br>5,500,000 |
| \$              |

### Table of Contents

In addition to the funds raised in the March Private Placement and the June Private Placement, we will require additional financing to fund our planned operations, including commercializing any assets obtained under the Asset Purchase Agreement, seeking to license or acquire new assets, and researching and developing any potential patents, the related compounds and any further intellectual property that we may acquire.

If the purchasers and placement agents in the June Private Placement choose to exercise their warrants in full on a cash basis, we would receive approximately \$12.9 million. However, the warrant holders may choose not to exercise any of the warrants they hold, may choose to net exercise their warrants as provided in such warrants under certain circumstances, or may choose to exercise only a portion of the warrants issued in the June Private Placement. As a result, we may never receive proceeds from the exercise of such warrants.

We currently do not have committed sources of additional financing and may not be able to obtain additional financing, particularly if the volatile conditions in the capital and financial markets, and more particularly the market for early development stage biomedical company stocks, persist. Additional financing may not be available to us when needed or, if available, may not be obtained on commercially reasonable terms. If we are not able to obtain the additional financing on a timely basis, we may be forced to delay or scale down some or all of our development activities or perhaps even cease the operation of our business.

Since inception we have funded our operations primarily through equity and debt financings and we expect to continue to do so in the future. If we obtain additional financing by issuing equity securities, our existing stockholders ownership will be diluted. Obtaining commercial loans, assuming those loans would be available, will increase our liabilities and future cash commitments. We may be unable to maintain operations at a level sufficient for investors to obtain a return on their investments in our common stock. Further, we may continue to be unprofitable.

#### Going Concern

As of April 30, 2011, we had incurred a net loss of \$583,264 since our inception. In their report on the annual consolidated financial statements for the fiscal year ended July 31, 2010, our independent auditors included an explanatory paragraph regarding concerns about our ability to continue as a going concern. As further discussed in Note 8 to the financial statements for the fiscal year ended July 31, 2010, during that fiscal year we incurred losses from operations, had negative working capital, and were in need of additional capital to grow our operations to become profitable. Management s plans as of the date of the Annual Report on Form 10-K for the fiscal year ended July 31, 2010 were to continue to seek funding from our stockholders and other qualified investors in order to pursue our business plan.

As further described elsewhere in this prospectus, during the quarter ended April 30, 2011 we completed the acquisition of certain technology and related assets from Inovio. With this acquisition, we are now focusing our efforts in the biomedical industry and abandoning our efforts in the online inventory services industry. As of the date of this prospectus, management s plan continues to be to seek funding from qualified investors to pursue our current business plan in the biomedical industry.

We expect our cash requirements over the next 12 month period to be approximately \$5,500,000. Our cash outflows from May, June, and July, 2011, are expected to be approximately \$152,000, \$299,000, and \$498,000, respectively, mainly as a result of increased payroll and related expenses, as well as administrative expenditures related to our increase in personnel, new and facilities, and ramp up in operations. Cash outflows from the remaining 12 month period (other than September 2011 and March 2012), are expected to range approximately between \$300,000 and \$400,000. September 2011 and March 2012 outflows are expected to be approximately \$450,000 and \$1,500,000, respectively, as

a result of our scheduled payment to Inovio of \$100,000 and \$1,150,000, respectively, which is included in our \$5.5 million cash requirement projection. We will owe Inovio additional payments during subsequent periods, as further described in Note 5 of our financial statements for the quarter ended April 30, 2011.

There is substantial doubt about our ability to continue as a going concern as the continuation of our business is dependent upon the continued support of our stockholders to aid in financing our operations. The issuance of additional equity securities by us could result in a significant dilution in the equity interests of our current stockholders. Obtaining commercial loans, assuming those loans would be available, will increase our liabilities and future cash commitments.

## **Off-Balance Sheet Arrangements**

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

## Table of Contents

#### **DESCRIPTION OF THE BUSINESS**

#### Overview

We are an emerging drug-medical device company focused on designing, developing and commercializing innovative and proprietary medical approaches for the treatment of solid cancers that have unmet medical needs or 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 as Netventory Solutions Inc. Initially, we provided online inventory services to small and medium sized companies. On March 1, 2011, we changed our name from Netventory Solutions, Inc. to OncoSec Medical Incorporated . In March 2011, we acquired from Inovio Pharmaceuticals, Inc. (Inovio) certain assets related to the use of drug-medical device combination products for the treatment of different cancers. With this acquisition, we have abandoned our efforts in the online inventory services industry and are focusing our efforts in the biomedical industry.

#### **Our Strategy**

The assets we acquired from Inovio include intellectual property relating to selective tumor ablation technologies, which we now refer to as the OncoSec Medical System (OMS), a therapeutic approach which is based on the use of an electroporation delivery device in combination with an approved chemotherapeutic drug or a DNA-based cytokine for immunotherapy to treat solid tumors. OMS consists of an electrical pulse generator console and various disposable applicators specific to the individual tumor size, type and location and is designed to increase the permeability of cancer cell membranes and, as a result, increases the intracellular delivery of selected therapeutic agents. Our electroporation platform for the delivery of therapeutic agents specifically and effectively targets the killing of cancerous cells and not healthy normal tissues. Our mission is to enable people with cancer to live longer with a better quality of life than otherwise possible or available with existing therapeis.

Our OMS business is composed of two different therapeutic modalities: OMS ElectroImmunotherapy and OMS ElectroChemotherapy. Our OMS ElectroImmunotherapy approach is based on the use of electroporation to enhance the local delivery of DNA-based cytokines as immunotherapy agents that produce both a local and systemic immune response for the treatment of various cancers. A Phase I clinical trial using our OMS ElectroImmunotherapy approach has been completed and a Phase II clinical trial is expected to begin before the end of 2011. OMS ElectroChemotherapy utilizes our electroporation technologies for the local delivery of the chemotherapeutic drug bleomycin to treat solid tumors. The OMS ElectroChemotherapy approach has been developed up to Phase III clinical trials in the United States for the treatment of recurrent head and neck cancer and Phase I/II for the treatment of recurrent breast cancer and has suggested safety and efficacy in a wide range of solid tumors including basal cell, squamous carcinomas, melanoma, breast, prostate, and pancreatic. In addition, Phase IV pre-marketing studies to support the commercialization of the OMS ElectroChemotheraphy in Europe were also performed for the treatment of primary and recurrent head and neck cancers and cutaneous skin cancers.

The primary front line treatment of solid tumors involves surgical resection and/or radiation to eliminate or debulk tumor growth prior to initiating systemic therapy with chemotherapeutic agents. Because of the difficulty of determining the border, or margins, between healthy and diseased tissue, surgeons will often remove or resect an area outside of the obvious tumor mass to ensure that they have excised all of the cancerous tissue. This treatment can result in the loss of function and appearance of the surrounding tissues and organs, significantly reducing the patient s quality of life. Although there have been recent advances in non-surgical forms of tumor ablation, such as cryoablation, microwave and high frequency radio ablation therapy, we believe they fail to fully satisfy the clinical need to preserve normal healthy tissue. Given the desire for improved outcomes in the surgical resection of solid tumors, we believe that there will be significant demand for our OMS technology from patients, dermatologists and surgical oncologists.

### **Asset Acquisition**

As described above, on March 14, 2011, we entered into an Asset Purchase Agreement with Inovio to acquire certain assets from Inovio related to certain non-DNA vaccine technology and intellectual property relating to selective electrochemical tumor ablation (formerly referred to as SECTA, and which we now refer to as the OncoSec Medical System, or OMS). The asset purchase was completed on March 24, 2011. On

SectrA, and which we now refer to as the Oncosec Medical System, of OMS ). The asset purchase was completed on March 24, 2011. On September 28, 2011, we entered into an Amendment to the Asset Purchase Agreement to amend certain of the payment terms. We acquired the following assets from Inovio in connection with this transaction: certain equipment, machinery, inventory and other tangible assets of Inovio related to the OMS technology; certain engineering and quality documentation related to the OMS technology; the assignment of certain contracts; and certain of Inovio s patents, including patent applications, and trademarks, and all goodwill associated therewith related to the OMS technology. We did not assume any of the liabilities of Inovio except with respect to all liabilities under the assigned contracts and assigned or acquired intellectual property arising after the closing of the acquisition.

### Table of Contents

Pursuant to a cross-license agreement with Inovio entered into in connection with the closing of the asset acquisition, we granted to Inovio a fully paid-up, exclusive, worldwide license to certain of the OMS technology patents in the field of gene or nucleic acids, outside of those encoding cytokines, delivered by electroporation. Inovio also granted us a non-exclusive, worldwide license to certain non-OMS technology patents in the OMS field for the following consideration: a fee for any sublicense of the Inovio technology; a royalty on net sales of any business we develop with the Inovio technology; and repayment of Inovio for any amount Inovio pays to the licensor of the Inovio technology that is a direct result of the license.

We are required to pay Inovio \$3,000,000 in scheduled payments over a period of two years from the closing date and a royalty on commercial product sales related to the OMS technology. As we describe elsewhere in this prospectus, on March 18, 2011, we closed a private placement of 1,456,000 units at a purchase price of \$0.75 per unit for gross proceeds of \$1,092,000. Each unit consists of one share of our common stock and one share purchase warrant entitling the holder to acquire one share of common stock at a price of \$1.00 per share for a period of five years from the closing of such private placement. We used \$250,000 of the proceeds as the first payment to Inovio pursuant to the Asset Purchase Agreement. We also made a payment of \$100,000 to Inovio on September 30, 2011. A cash payment of \$650,000 is due to Inovio on the earlier of thirty days following the receipt by us of aggregate net proceeds of more than \$5,000,000 from one or more financings occurring on or after September 30, 2011, or March 31, 2012. Payment of the remaining amounts owed to Inovio are due on the following schedule: \$500,000 on the first anniversary of the closing date; \$500,000 eighteen months from the closing date; and \$1,000,000 on the second anniversary of the closing date.

#### June Private Placement

On June 21, 2011, we entered into a Securities Purchase Agreement with certain institutional investors providing for the 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 proceeds to us of \$3,000,000, which we refer to in this prospectus as the June Private Placement. The June Private Placement closed on June 24, 2011. After deducting for fees and expenses, the aggregate net proceeds to us from the June Private Placement were approximately \$2,790,000. We expect to use a portion of the proceeds from the June Private Placement to pay part of our obligation to Inovio and the remainder for working capital purposes.

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. The Series B Warrants have an exercise price of \$0.75 per share, are exercisable immediately upon issuance and have a term of exercise equal to the earlier of (a) the later of (i) eight months following the closing of the June Private Placement (ii) four months following the earliest date that the shares underlying such warrants have been sold or may be freely sold, whether pursuant to a registration statement, Rule 144 or an exemption from registration under Section 4(1) of the Securities Act, and (b) sixteen months from the closing of the June 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 meets certain criteria specified in the warrants). The Series C Warrants have an exercise price of \$1.20 per share, vest and are exercisable ratably in proportion to each holder s exercise of the Series B Warrants held by such holder and have a term of exercise equal to five years.

On June 24, 2011, we entered into a Registration Rights Agreement with the purchasers in the June Private Placement. Under the Registration Rights Agreement, we are required to file a registration statement within 30 days following the closing of the June Private Placement to register the resale of the shares of common stock issued in the June Private Placement and the shares of common stock underlying the Series A, Series B and Series C Warrants. Our failure to meet the filing deadlines and other requirements set forth in the Registration Rights Agreement may

subject us to the payment of substantial financial penalties.

#### The OncoSec Medical System

Most drugs and DNA-based therapeutics must enter the target cell through its membrane in order to perform their intended function. However, the effectiveness of these medicines is limited as gaining entry into target cells through the outer membrane can be a significant challenge. In the 1970s, it was discovered that the brief application of high-intensity, pulsed electric fields to the cell resulted in a temporary and reversible increase in the permeability of the cell membrane. As a consequence, it was also demonstrated that there was a subsequent increase in the ability of both small and large molecules to move between the cell exterior and interior via the newly formed membrane pores.

The transient, reversible nature of the electrical permeabilization of cell membranes and the resulting increase in intracellular delivery of therapeutic agents is the underlying basis of our therapeutic approach, which we refer to as the OncoSec Medical System. OMS consists of an electrical pulse generator console and various disposable applicators specific to the individual tumor size, type and location. While the extent of membrane permeabilization depends on various electrical, physical, chemical, and biological

### Table of Contents

parameters, research with OMS has demonstrated an increase of cellular uptake of chemical molecules from 6,000-8,000 fold above baseline. Once inside of the cell, the membrane permeability decreased thereby trapping the molecules within the cell and allowing them to perform their function. The enhanced delivery of these agents results in the ability to not only improve cytotoxicity and therapeutic value but also to lower the required doses and thereby providing a potentially safer treatment.

Our OMS business is composed of two different therapeutic approaches: OMS ElectroImmunotherapy and OMS ElectroChemotherapy. Our OMS ElectroImmunotherapy products are based on the use of electroporation to enhance the local delivery of DNA-based cytokines as immunotherapy agents that produce both a local and systemic immune response for the treatment of various cancers. Our approach of OMS ElectroChemotherapy utilizes our electroporation technologies for the local delivery of the chemotherapeutic drug bleomycin to treat solid tumors. Our OMS platform for the delivery of therapeutic agents specifically and effectively targets the killing of cancerous cells and not healthy normal tissues. Our mission is to enable people with life-altering cancers to lead better lives through the development of our treatment approaches.

DNA Delivery With Electroporation OMS ElectroImmunotherapy

The greatest obstacles to making DNA-based immunotherapies a reality has been the lack of safe, efficient, and economical delivery and expression of plasmid-DNA constructs into the target cells. We have significant history and experience in developing the methods and devices that optimize the use of electroporation for the efficient and effective delivery of DNA-based therapeutics. The use of OMS in this approach has been validated with multiple sets of interim data from multiple clinical studies assessing DNA-based immunotherapies against cancers. Together with our partners and collaborators, we plan to be the leader in establishing proof-of-principle of electroporation-delivered DNA immunotherapies. We believe that electroporation should become the method of choice for plasmid-DNA delivery into cells in many clinical applications.

The immunotherapy approach of our OMS therapy uses an electroporation system that is calibrated and designed to create optimal conditions to deliver plasmid DNA encoding immunotherapeutic cytokines into tumor cells that in turn promote anti-cancer responses. The cytokine-encoding plasmid is first injected with a syringe/needle into the selected tumor. Using a remote control, the pulse generator is switched on and electrical pulses are generated and delivered through an attached electrical cord into the injected tissue through an electrode-needle array on the applicator. When DNA injection is followed by electroporation of the target tissue, transfection is significantly greater with resultant gene expression generally enhanced from 100 to 1000-fold. This increase makes many DNA-based candidates potentially feasible without unduly compromising safety or cost.

A Phase I clinical trial in metastatic melanoma has been completed using OMS ElectroImmunotherapy to deliver plasmid-DNA encoding for the IL-12 cytokine. The study was designed to assess both the adaptive and innate immunity responses from the targeted delivery of the IL-12 into melanoma tumor cells. Published data have demonstrated that gene transfer utilizing in vivo DNA electroporation in metastatic melanoma showed that it was safe, effective, reproducible, and titratable. The findings also demonstrated not only regression of treated melanoma skin lesions, but also regression of distant untreated lesions, suggesting a systemic immune response to the localized treatment. These results are of great significance and thus the Company is now planning the further development of OMS for the delivery of plasmid-DNA encoding for the IL-12 cytokine in a Phase II clinical trial that is expected to begin before the end of calendar year 2011.

Drug Delivery With Electroporation OMS ElectroChemotherapy

The chemotherapeutic approach of our OMS ElectroOncology platform was formerly described as Selective Electrochemical Tumor Ablation (SECTA). OMS utilizes electroporation technologies for the local delivery of the chemotherapeutic drug bleomycin to treat solid tumors. The approach has demonstrated safety and efficacy in a wide range of solid tumors including, basal cell, squamous carcinomas, melanoma, breast, prostate, and pancreatic. The OMS therapy has been developed up to Phase III clinical trials in the United States for the treatment of recurrent head and neck cancer and in Phase I/II for the treatment of recurrent breast cancer. In addition, Phase IV pre-marketing studies to support the commercialization of the OMS system in Europe were also performed for the treatment of primary and recurrent head and neck cancers and cutaneous skin cancers. The previous sponsor of these studies (Inovio Pharmaceuticals, Inc.) elected not to conclude the clinical testing but rather monetize certain SECTA assets in order to pursue a more focused strategy for development of DNA vaccines.

We believe that one of the distinctive features of the system is both the preservation of healthy tissue and killing of cancerous cells at the margins of the tumor. We anticipate the system may therefore afford advantages over surgery in preserving function and improving the quality of life for cancer patients who would otherwise face significant morbidity associated with cancer surgery or other methods of treatment. In addition, we believe that the OMS ElectroOncology approach will have pharmacoeconomic advantages over existing therapies and will be more readily accepted by both physicians and patients alike.

### Table of Contents

#### **Clinical Program**

We expect to initiate three Phase II clinical trials to assess the cancer-destroying and tissue-sparing properties of the OMS ElectroImmunotherapy technology in patients with melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma during 2011. Our lead OMS ElectroImmunotherapy candidate for these trials is a DNA plasmid coding for IL-12 that is delivered using our OMS electroporation device. While the DNA IL-12 immunotherapy is administered locally, results from preclinical and Phase I clinical trials indicated that the therapy was safe and without toxic side effects. Although Phase I trials are designed to study only safety and tolerability, our Phase I trial appeared to suggest that our OMS ElectroImmunotherapy produced both a local and systemic effect against cancerous cells. In the Phase I human study, 15% of patients demonstrated 100% clearance of distant, untreated metastatic melanoma tumors; wherein only 0.25% would normally be expected to clear on their own if left untreated. We expect all three Phase II clinical trials will be open label, multi-center trials.

Phase II Melanoma Trial (OMS-1100)

Our planned melanoma trial, entitled Phase II trial of intratumoral pIL-12 electroporation in advanced stage cutaneous and in transit malignant melanoma, will be a single dose trial treating approximately 25 patients. The primary endpoint is the objective response rate (local and distant) at six months. Secondary trial endpoints include time to objective response (complete and partial responses), duration of distant response and overall survival. We are building on positive Phase I dose escalation trial results in 24 patients with metastatic melanoma treated with pIL-12 in combination with electroporation. That study established safety and tolerability and suggested a systemic objective response in more than half of the subjects; 15% of patients showed 100% clearance of distant, non-treated tumors. Based on historical data, less than 0.25% of patients would have been expected to see regression in their untreated tumors. Our melanoma study will be a physician-sponsored trial that will be lead by the University of California at San Francisco.

Phase II Merkel Cell Carcinoma Trial (OMS-I110)

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

Phase II Cutaneous T-Cell Lymphoma (OMS-I120)

Cutaneous T-cell lymphoma, or CTCL, is a rare disease affecting approximately 3,000 people each year with current therapies requiring life-long management and treatment. Today s treatment methods delivered either locally or systemically all result in systemic toxicities. Cytokine therapies have shown some therapeutic benefit, however, the requirement for high dose systemic concentrations results in unwanted toxicities

and eventual resistance to the therapy. In contrast, our OMS ElectroImmunotherapy treatment uses locally delivered low dose plasmid-DNA coding for IL-12, which induces a systemic immune response designed to target and destroy cancerous cells. A previous Phase I clinical trial in 24 melanoma patients demonstrated a strong safety profile for this mode of treatment. The planned clinical trial, entitled Phase II trial of intratumoral IL-12 plasmid electroporation in cutaneous lymphoma, will be an open label, multi-center study and is expected to enroll at least 27 patients. The trial s primary endpoint is to assess the objective response rate (both local and distant) at six months post-treatment, with safety and progression-free survival as secondary endpoint measures. OMS ElectroImmunotherapy is a new treatment for patients suffering from CTCL, who currently have few options to treat this chronic life-altering disease. This study is a physician-sponsored trial that will be initiated at the University of California at San Francisco and via a collaboration with the University of Pennsylvania.

### Scientific Advisory Panel

We have consulted with senior and respected oncology researchers to provide counsel as part of our scientific advisory panel for our OMS ElectroImmunotherapy clinical program, each of whom is employed elsewhere on a full-time basis. As a result, they can only spend a limited amount of time on our affairs. We expect to access scientific and medical experts in academia, as needed, to support our scientific advisory panel. The scientific advisory panel assists us on issues related to potential product applications, product development and clinical testing.

### Table of Contents

#### Commercialization

Our business model is based on a commercialization strategy that leverages previous in-depth clinical experiences, previous approvals for the electroporation-based devices and late stage clinical studies in the United States (Phase III) and Europe (Phase IV). We plan to seek regulatory approvals to initiate specific studies in target markets to collect clinical, reimbursement, and pharmacoeconomic data in order to advance our commercialization strategy. Our 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. Our strategy also includes expanding the addressable markets for the OMS therapies through the addition of relevant indications and partnering and/or co-developing OMS ElectroOncology in developing geographic locations, such as Eastern Europe and Asia, where local resources are best leveraged and appropriate collaborators can be secured.

### Competition

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

Examples of competitive therapies include the following:

• <u>Surgical Resection.</u> In 90% of cases, the primary treatment for localized and operable tumors or lesions is surgical resection alone or in combination with other modalities such as radiation therapy. Given the ability to cut an appropriate margin around the tumor in order to avoid recurrence from microscopic disease populating the periphery of the tumor mass makes surgery highly effective for early stage cancers. Recent advances in robotic surgical technology have provided more minimally invasive surgical options. However, accessibility of a tumor at times prevents the use of surgery or limits the margin that can be removed especially at sites such as the tongue where the loss of tissue results in the loss of critical function such as speech. The drawback to resecting tissue is potential disfigurement or debilitating effects on organ function. Surgery also requires additional cost in the form of hospitalization and post-operative care.

• <u>Radiation Therapy</u>. Radiation therapy s high-energy rays generated by an external machine or by radioactive materials placed directly into or near the tumor are used to damage and stop growth of malignant cells, which are more sensitive to the effects of radiation. Radiation is often used in combination with surgery and chemotherapy. In cases where a tumor is inoperable or unresponsive to chemotherapy, radiation is often used palliatively to limit the complications of disease progression. Radiation therapy has a number of significant side effects, in that it damages healthy cells surrounding the target area and takes several weeks to administer. It may also be costly due to the number of procedures and cost of administration.

• <u>Chemotherapy</u>. Post-surgery or in cases where surgery is contraindicated, chemotherapy is often used to treat systemic disease and may frequently be combined with radiation therapy. Typically it is used under the following circumstances:

- When cancer is disseminated requiring treatment of systemic or metastatic disease;
- Where the prognosis for local regional disease is poor due to the likelihood of disease progression;
- Where surgery is contraindicated, e.g. certain liver or pancreatic carcinoma or as a result of the patient s overall health condition; and
- For palliation, to achieve tumor shrinkage to ameliorate tumor symptoms or complications.

The cytotoxicity of many existing anti-cancer drugs is well proven, but with many undesirable proven side effects including immunosuppression alopecia (loss of hair), nausea, vomiting, and in some cases drug resistance. Surgery and radiation cannot be used where treatment poses a risk to nearby nerves, blood vessels, or vital organs. All of these practices have limited efficacy in treating cancers of certain organs, such as the pancreas.

| 2 | 7 |
|---|---|
| 5 | 1 |

### Table of Contents

• <u>Alternative treatments.</u> Competitive therapies also include alternative treatments, such as radio frequency ablation, photodynamic therapy, cryoablation, brachytherapy and biologic or immunotherapy:

• <u>Radio Frequency Ablation (RFA</u> This modality uses radio frequency energy to heat tissue to a high enough temperature to cause ablation or cell death. An RFA ablation probe is placed directly into the target tissue. An array of several small, curved electrodes is deployed from the end of the probe. Once sufficient temperatures are reached, the heat kills the target tissue within a few minutes. This treatment has been proven efficacious in treating some solid tumors but suffers from not being tumor specific by destroying healthy as well as malignant tissue.

• <u>Photodynamic Therapy</u>. Photodynamic therapy (PDT) uses intravenous administration of a light-activated drug that accumulates in malignant cells. A non-thermal laser is used to activate the drug, producing free radical oxygen molecules that destroy the cancer. PDT has low risk of damage to adjacent normal tissue, the ability to retreat, and can be used concurrently with other treatment modalities. A major side effect of PDT is patient photosensitivity that can last up to eight weeks. Other side effects include nausea and vomiting. This method is limited by the shallow depth of penetration of the laser light which makes it more applicable to surface lesions on the skin or esophagus.

• <u>Cryoablation</u>. Cryoablation is a technique being used to treat lesions in liver, kidney, prostate, and breast cancer. This method uses liquid nitrogen filled probes inserted into the tumor mass with image guided surgery to freeze cancer cells. Necrosis (cell death) occurs and the dead cells are naturally sloughed off into the body. Cryoablation has been most commonly adopted for use in treating prostate carcinoma where surgery can often lead to impotence. The technology is claimed to limit nerve damage in the prostate allowing for the retention of bladder and sexual function. Therefore, it may afford advantages over surgery and brachytherapy (see below).

• <u>Brachytherapy</u>. Brachytherapy involves the local implantation of radioactive seeds into or near a tumor mass. It has been most widely used in prostate and breast carcinoma in situ. The seeds decay over time resulting in the local destruction of malignant cells. The difficulty with brachytherapy, in addition to the concomitant destruction of nascent healthy tissue, is the investment and training required to administer the therapy. Recent reports also suggest that the therapy may not produce durable responses (i.e. long term cures). Consequently, brachytherapy does not appear to be growing in acceptance in the marketplace.

• <u>Biological Therapy or Immunotherapy</u>. This treatment encompasses many approaches focused on invoking an immune response against a cancer, including vaccine-based treatments and treatments using monoclonal antibodies. The use of monoclonal antibodies as therapeutic agents has had a dramatic impact on the treatment of certain tumors. When the antibodies target growth factor receptors required for tumor cell growth, they can often block the stimulation needed for cell growth and/or cause antibody-mediated cell killing of the tumor cell. Thus products like Herceptin®, Erbitux®, Rituxin® and Avastin® have proven beneficial especially when used in combination with a chemotherapeutic drug regime. The impact on local ablation therapies will most likely stem from improved tumor control that will reduce the incidence of recurrence but not in the primary cancers front line therapy for which surgery is the current therapeutic mainstay.

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

## **Research and Development Expenditures**

We have not incurred expenditures in or conducted any research and development activities over the last two fiscal years. However, we expect to incur significant expenditures in these areas in the future.

### Employees

Concurrent with the asset acquisition, we assembled a senior management team with many years of experience and success in biotech/pharma operations, business and commercial development and capital markets. In addition, we have assembled a clinical and regulatory team that has had many years of experience in developing and advancing novel therapeutic approaches through clinical testing and regulatory approvals. We have a total of eleven full-time employees.

### Table of Contents

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

### **Intellectual Property**

We own intellectual property rights including patents and trademarks relating to the OMS therapies. Specifically, we have licensed intellectual property rights to use certain electroporation technology and intellectual property for delivering DNA-based cytokines as an immunotherapy. In addition, we own intellectual property rights, including patents and trademarks for electroporation assets relating to the use of bleomycin to treat solid tumors. Our success and ability to compete depends upon our intellectual property. We have been issued 27 U.S. patents and have one U.S. patent that is pending application. We have a total of 32 patents in other jurisdictions. The bulk of our patents, including fundamental patents directed toward our proprietary technology, expire between 2014 and 2027. We have four registered trademarks and two pending in the U.S. and other jurisdictions. In addition, we have acquired a non-exclusive, worldwide license to 28 electroporation-related U.S. patents and 80 patents granted in other jurisdictions.

#### **Government Regulation**

#### United States

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

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

- completion of pre-clinical testing and formulation studies in compliance with the FDA s good laboratory practice regulations;
- submission to the FDA of an investigational new drug application, or IND, for human clinical testing, which must become effective before human clinical trials may begin in the United States;
- performance of adequate human clinical trials in accordance with good clinical practices to establish the safety and efficacy of the proposed drug product for each intended use; and

#### ٠

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

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

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

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

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

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

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

### Table of Contents

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

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

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

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

### International Regulation

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

Other Regulatory Requirements and Environmental Matters

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

### Properties

We do not own any real property. In May 2011, we entered into a one year operating lease agreement for office space for our headquarters in San Diego, California. The lease expires on May 30, 2012, with a base annual rent of \$42,000.

### DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

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

| Name                               | Position  | Age | Director / Officer Since |
|------------------------------------|---|-----|--------------------------|
| Avtar Dhillon, M.D. (2)(3)(4)(5)   | Chairman and Director                           | 50  | March 10, 2011           |
| James DeMesa, M.D. (1)(2)(3)       | Director  | 53  | February 3, 2011         |
| Anthony Maida, III, Ph.D (1)(3)(4) | Director  | 59  | June 21, 2011            |
| Punit Dhillon                      | President, Chief Executive Officer and Director | 31  | March 10, 2011           |
| Michael Cross, Ph.D.               | Chief Business Officer                          | 47  | March 10, 2011           |
| Veronica Vallejo                   | Vice President, Finance, and Controller         | 38  | March 10, 2011           |

(1) Member of Audit Committee

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

#### **Business Experience**

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

Avtar Dhillon, M.D., Chairman and Director

Dr. Dhillon served as President and Chief Executive Officer of Inovio Pharmaceuticals, Inc. (formerly Inovio Biomedical Corporation) (NYSE Amex: INO) from October 2001 to June 2009, as President and Chairman of Inovio from June 2009 until October 2009, and as Executive Chairman since October 2009. During his tenure at Inovio, Dr. Dhillon led the successfully turnaround of the company through a restructuring, acquisition of technology from several European and North American companies, and a merger with VGX Pharmaceuticals to develop a vertically integrated DNA vaccine development company with one of the strongest development pipelines in the industry. Dr. Dhillon led nine successful financings, raising over \$136 million for Inovio and concluded several licensing deals valued at over \$200 million that included global giants, Merck and Wyeth (now Pfizer). Prior to joining Inovio, Dr. Dhillon was vice president of MDS Capital Corp. (now Lumira Capital Corp.), one of North America s leading healthcare venture capital organizations. In July 1989, Dr. Dhillon started a medical clinic and subsequently practiced family medicine for over 12 years. Dr. Dhillon has been instrumental in successfully turning around struggling companies and influential as an active member in the biotech community. From March 1997 to July 1988, Dr. Dhillon was a consultant to

CardiomePharma Corp. ( Cardiome ), a biotechnology company listed on the Toronto Stock Exchange and NASDAQ. While at Cardiome, Dr. Dhillon led a turnaround based on three pivotal financings, establishing a clinical development strategy, and procuring a new management team. In his role as a founder and board member of companies, Dr. Dhillon has been involved in several early stage healthcare focused companies listed on the Toronto Stock Exchange and TSX Venture Exchange, which have successfully matured through advances in their development pipeline and subsequent M&A transactions. Most recently, he was a founding board member (May 2003) of Protox Therapeutics, Inc., a publicly traded specialty pharmaceutical company. Dr. Dhillon maintained his board position until the execution of a financing of up to \$35 million with Warburg Pincus in November 2010. Dr. Dhillon currently sits on the Board of Directors of BC Advantage Funds, the largest Venture Capital Corporation in British Columbia. Dr. Dhillon was also a member of the Securities Practice Advisory Committee to the British Columbia Securities Commission from July 1998 to September 2001. From May 2003 to April 2010, Dr. Dhillon was also a director of Auricle Biomedical, a publicly traded capital pool company. Dr. Dhillon has a Bachelor of Science with honors in Human Physiology, and an M.D. from the University of British Columbia. Dr. Dhillon plays a key role on our Board of Directors because of his extensive experience with pharmaceutical and biotech companies, including during his tenure at Inovio.

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

Dr. DeMesa has been a practicing physician and has served as a senior executive with several international pharmaceutical and biotech companies in the areas of corporate management, regulatory affairs, and pre-clinical and clinical pharmaceutical and medical device product development. Most recently, in August 2008, Dr. DeMesa retired from his role as President, Chief Executive Officer and a director of Migenix Inc. (Migenix), a public biotechnology company focused on infectious and neurodegenerative diseases. From 1997 to 2001, he was President, Chief Executive Officer and a director of GenSci Regeneration Sciences Inc., a public

#### Table of Contents

biotech company involved in the field known as orthobiologics, which is the use of biotechnology to treat musculoskeletal disease and injury. From 1992 to 1997, he was Vice President, Medical and Regulatory Affairs at Biodynamics International, Inc., and from 1989 to 1992 was Vice President, Medical and Regulatory Affairs of Bentley Pharmaceuticals. Dr. DeMesa is a co-founder of CommGeniX, a medical communications company, and MedXcel, a medical education company. Dr. DeMesa is a member of the Board of Directors of Stem Cell Therapeutics, a public biotechnology company based in Calgary, and Induce Biologics, a private Toronto-based biotechnology company. Dr. DeMesa attended the University of South Florida where he received his B.A. (Chemistry), M.D. and M.B.A. degrees and did his medical residency at the University of North Carolina. He is the author of two books and speaks regularly to companies and organizations throughout North America. Dr. DeMesa provides the Board with extensive experience with pharmaceutical and biotechnology companies, including his experience during his tenure with Migenix.

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

On June 21, 2011, Dr. Maida, 59, joined our Board of Directors. Dr. Maida has served as a director on the Board of Directors of Spectrum Pharmaceuticals, Inc. since December 2003 and currently serves as the Chair of its Audit Committee and a member of its Compensation Committee, Placement Committee, Nominating and Corporate Governance Committee and Product Acquisition Committee. He is currently Chief Operating Officer at Northwest Biotherapeutics, Inc., a company focused on the development of therapeutic DC cell based vaccines to treat patients with cancer. Dr. Maida has been the acting Chairman of Dendri Therapeutics, Inc., a startup company focused on the clinical development of therapeutic vaccines for patients with cancer, since 2003. He has served as Chairman, Founder and Director of BioConsul Drug Development Corporation and as Principal of Anthony Maida Consulting International since 1999, providing consulting services to large and small biopharmaceutical firms in the clinical development of oncology products and product acquisitions and to venture capital firms evaluating life science investment opportunities. Recently Dr. Maida was Vice President of Clinical Research and General Manager, Oncology, world-wide for PharmaNet, Inc. He served as the President and Chief Executive Officer of Replicon NeuroTherapeutics, Inc., a biopharmaceutical company focused on the therapy of patients with tumors (both primary and metastatic) of the central nervous system, where he successfully raised financing from both venture capital and strategic investors and was responsible for all financial and operational aspects of the company, from June 2001 to July 2003. From 1999 to 2001, he held positions as Interim Chief Executive Officer for Trellis Bioscience, Inc., a privately held biotechnology company that addresses high clinical stage failure rates in pharmaceutical development, and President of CancerVax Corporation, a biotechnology company dedicated to the treatment of cancer. From 1992 until 1999, Dr. Maida served as President and CEO of Jenner Biotherapies, Inc., a biopharmaceutical company. From 1980 to 1992, he held senior management positions with various companies including Vice President Finance and Chief Financial Officer of Data Plan, Inc., a wholly owned subsidiary of Lockheed Corporation. Dr. Maida serves or has served as a consultant and technical analyst for several investment firms, including CMX Capital, LLC, Sagamore Bioventures, Roaring Fork Capital, North Sound Capital, The Bonnie J. Addario Lung Cancer Foundation and Pediaric BioScience, Inc. Additionally, he has been retained by Abraxis BioScience, Inc., Northwest Biotherapeutics, Inc., Takeda Chemical Industries, Ltd. (Osaka, Japan), and Toucan Capital to conduct corporate and technical due diligence on investment opportunities. Dr. Maida formerly served as a member of the board of directors of Sirion Therapeutics, Inc., a privately held ophthalmic-focused company, and GlycoMetrix, Inc., a startup company focused on the development of tests to identify carbohydrates that can indicate cancer. He is a speaker at industry conferences and is a member of the American Society of Clinical Oncology, the American Association for Cancer Research, the Society of Neuro-Oncology, the International Society for Biological Therapy of Cancer, the American Association of Immunologists and the American Chemical Society. Dr. Maida received a B.A. in History from Santa Clara University in 1975, a B.A. in Biology from San Jose State University in 1977, an M.B.A. from Santa Clara University in 1978, an M.A. in Toxicology from San Jose State University in 1986 and a Ph.D. in Immunology from the University of California in 2010. Dr. Maida brings to the Board extensive experience in our industry and significant expertise in clinical development and clinical trials. We believe that his financial and operational experience in our industry will provide important resources to our Board.

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

On March 10, 2011, Mr. Punit Dhillon was appointed Chief Executive Officer. Mr. Dhillon was formerly Vice President of Finance and Operations at Inovio until March 2011. In his corporate finance role, Mr. Dhillon was pivotal to the company raising over \$125 million through multiple financings and several licensing deals including early stage deals with Merck and Wyeth. Mr. Dhillon was responsible for implementation of Inovio s corporate strategy, including achievement of annual budgets and milestones. He was also instrumental to the successful in-licensing of key intellectual property and a number of corporate transactions, including the acquisition and consolidation of Inovio AS, a Norwegian DNA delivery company, and the recent merger with VGX Pharmaceuticals (VGX), which solidified Inovio s position in the DNA vaccine industry. Mr. Dhillon has played an effective role as head of operations for Inovio. He recently completed the integration of the VGX with Inovio, including achieving cost-cutting of over 30% through the synergy assessment of both companies, consolidating four operating locations to two bi-coastal offices, and managing the existing shareholders from both companies. Mr. Dhillon was a director of Auricle Biomedical, a capital pool company, from July 2007 to April 2010. Mr. Dhillon has also been a consultant and board member for several TSX Venture Exchange listed early stage life science companies which matured through advances in their development pipelines and subsequent M&A transactions. Most recently, Mr. Dhillon was involved in the completion of a trilateral merger between three Capital Pool Companies listed on the

### Table of Contents

TSX Venture Exchange, which completed a qualifying transaction in April 2010 with a company specializing in conservation and demand management accessories for the utilities industry. Prior to joining Inovio, Mr. Dhillon worked for a corporate finance law firm as a law clerk. Since September 1999 to July 2002, he worked with MDS Capital Corp. (now Lumira Capital Corp.) as an intern analyst. Mr. Dhillon is an active member in his community and co-founder of Inbalance Network Inc. an organization focused on promoting an active lifestyle and grass roots community involvement, including scholarships to support students pursuing post-secondary education. Mr. Dhillon has a Bachelor of Arts with honors in Political Science and a minor in Business Administration from Simon Fraser University. Mr. Dhillon s in depth knowledge of our business and operations as our Chief Executive Officer, his experience in the biotechnology and pharmaceutical industry, and his experience with publicly traded companies, position him well to serve as a member of our Board of Directors.

### Michael Cross, Ph.D., Chief Business Officer

On March 10, 2011, Dr. Michael Cross was appointed Chief Business Officer. Dr. Cross has nearly two decades of life sciences venture capital and biotech industry experience. Prior to Dr. Cross role with us, Dr. Cross was in senior roles in venture investing and portfolio management at both GrowthWorks as Vice President and Jovian Capital as Senior Vice President in Toronto. In these roles he served on the Boards of both private and public life sciences and biotech companies. Previous to Jovian, Michael had lead operational responsibilities as COO of a public oncology company, Viventia Biotech, where he helped bring an anti-cancer product into worldwide pivotal clinical trials. In addition, Dr. Cross was Managing Director of a contract manufacturing organization that he helped build and sell for its shareholders. From 1996 to 2003, Dr. Cross held a variety of increasingly senior positions at MDS Inc. and MDS Capital and helped start MDS Proteomics. Before joining MDS, Dr. Cross was with the Department of National Defence, including serving as a Post-Doctoral Fellow with the Trauma and Physiology Group of the Defence Research Agency in Toronto. Dr. Cross received his Masters in Business Administration and his Doctorate in Philosophy from the University of Toronto.

#### Veronica Vallejo, Vice President, Finance, and Controller

On March 10, 2011 Veronica Vallejo was appointed Secretary and Treasurer, and serves as Controller and Principal Financial Officer of OncoSec Medical Incorporated. As of June 30, 2011, Ms. Vallejo also serves as our Vice President, Finance. Ms. Vallejo joined the company in February of 2011. Prior to working for us, Ms. Vallejo worked in public accounting since 1997, most recently working as a Senior Manager with Mayer Hoffman McCann P.C., from January 2001 to December 2010. Veronica has extensive experience in public company matters and all finance and accounting functions, including Securities and Exchange Commission reporting filings such as Annual and Quarterly Reports, as well as Registration Statements. Ms. Vallejo also has substantial experience with integrated audits under the provisions of PCAOB s AS 5. Her specialized accounting experience includes areas such as revenue recognition and complex debt and equity transactions. Ms. Vallejo s industry experience includes work in the following industries: biotech, manufacturing & distribution, technology, and VC-backed companies. Veronica holds a B.S. in Business Administration with an emphasis in accounting from San Diego State University. She is a certified public accountant and a member of the American Institute of Certified Public Accountants.

### **Term of Office**

Our directors are elected at each annual meeting of stockholders and serve until the next annual meeting of stockholders or until their successor has been duly elected and qualified, or until their earlier death, resignation or removal. The term of employment of each of our executive officers is governed by his or her employment agreement with us, each of which has an initial term of five years. For more information about each employment agreement, see Executive Compensation, included elsewhere in this prospectus.

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

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

#### Audit Committee

The Audit Committee of our Board of Directors consists of Dr. Anthony Maida and Dr. James DeMesa, with Dr. Maida serving as Chairman. Our Board of Directors has determined that each of the members of our Audit Committee is independent within the meaning of applicable Securities and Exchange Commission rules and Rule 803B of the NYSE Amex LLC Company Guide, and has determined that Dr. Maida is an audit committee financial expert, as such term is defined in the rules and regulations of the Securities and Exchange Commission, and is financially sophisticated within the meaning of Rule 803B of the NYSE Amex LLC Company Guide. The Audit Committee has oversight responsibilities regarding, among other things: the preparation of our financial statements and our financial reporting and disclosure processes; the administration, maintenance and review of our system of internal

### Table of Contents

controls regarding accounting compliance; our practices and processes relating to internal audits of our financial statements; the appointment of our independent registered public accounting firm and the review of its qualifications and independence; the review of reports, written statements and letters from our independent registered public accounting firm; and our compliance with legal and regulatory requirements in connection with the foregoing. Our Board of Directors has adopted a written charter for our audit committee, which is available on our website, www.oncosec.com.

#### **Compensation Committee**

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

#### Nominating and Corporate Governance Committee

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

#### **Clinical and Regulatory Affairs Committee**

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

### Financing Committee

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

## **Family Relationships**

No family relationships exist between any of the directors or executive officers of our company, except that Mr. Punit Dhillon, director, President and Chief Executive Officer, is the nephew of Dr. Avtar Dhillon, a director and our Chairman of the Board.

#### **EXECUTIVE COMPENSATION**

The following table summarizes all compensation recorded by us in each of the fiscal years ended July 31, 2011 and July 31, 2010 for (i) our principal executive officer, (ii) our principal financial officer, (iii) our next most highly compensated executive officers other than our principal executive officer and principal financial officer serving as an executive officer at the end of fiscal year 2011 and whose total compensation exceeded \$100,000 in fiscal year 2011 (one executive officer) and (iii) our former sole executive officer, Mr. Ronald Dela Cruz, whose employment with us terminated on March 10, 2011.

### **Summary Compensation Table**

| Name   | Fiscal<br>Year |    | Salary<br>(\$) | Bonus<br>(\$) | Stock<br>Awards<br>(\$) | Option<br>Awards<br>(\$) | Non-Equity<br>Incentive Plan<br>Compensation<br>(\$) | Nonqualified<br>Deferred<br>Compensation<br>Earnings<br>(\$) | С  | All other<br>ompensation<br>(\$) |    | Total<br>(\$) |
|--|----------------|----|----------------|---------------|-------------------------|--------------------------|--|--|----|----------------------------------|----|---------------|
| Ronald C. Dela Cruz,                               | 2011           |    |                |               |                         |                          |  |  |    |                                  |    |               |
| President (1)                                      | 2010           |    |                |               |                         |                          |  |  |    |                                  |    |               |
| Punit Dhillon, President & CEO (2)                 | 2011           | \$ | 90,000         |               |                         |                          |  |  |    |                                  | \$ | 90,000        |
| Dr. Michael Cross, CBO                             |                |    |                |               |                         |                          |  |  |    |                                  |    |               |
| (3)  | 2011           | \$ | 100,833        |               |                         |                          |  |  | \$ | 3,700                            | \$ | 104,533       |
| Veronica Vallejo, VP<br>Finance and Controller (5) | 2011           | s  | 65,833         |               |                         |                          |  |  |    |                                  | S  | 65,833        |

(1) Mr. Dela Cruz served as our President from our incorporation on February 8, 2008 until March 10, 2011. He received no compensation for his services as our President.

- (2) Mr. Dhillon was appointed our President and Chief Executive Officer on March 10, 2011.
- (3) Dr. Cross was appointed our Chief Business Officer on March 10, 2011.
- (4) Amounts under the All Other Compensation column consist of company-paid auto and housing allowances.
- (5) Ms. Vallejo was appointed our Secretary and Treasurer on March 10, 2011. Ms. Vallejo is also our Principal Financial Officer.

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

There were no outstanding equity awards to the named executive officers listed in the Summary Compensation Table above as of the fiscal year ended July 31, 2011.

### **Option Grants and Exercises**

As of July 31, 2011, there were no option grants or exercises by our named executive officer listed in the Summary Compensation Table above.

#### **Employment Agreements**

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

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

On May 18, 2011, we entered into an Employment Agreement with our Chief Business Officer, Dr. Michael Cross. The Employment Agreement with Dr. Cross provides for the following, among other things: (a) a base annual salary of \$220,000; (b) eligibility to receive an annual bonus at the discretion of the Board of Directors; (c) eligibility to participate in the Company s stock incentive program at the discretion of the Board of Directors; (d) acceleration of vesting of any unvested stock options outstanding upon a change of control of the Company; (e) if Dr. Cross is terminated other than for cause, death or disability, or if he terminates his employment with the Company for good reason, Dr. Cross is entitled to receive (i) severance payments equal to 12 months of his base salary, (ii) a pro rata percentage of the annual bonus he had received the prior fiscal year and (iii) payment of health benefits for 12 months, conditioned on his execution of a release; and (f) if Dr. Cross s employment is terminated for death or disability, he or his estate is entitled to receive a pro rata percentage of the annual bonus he had received for the prior fiscal year. Under the Employment Agreement, Dr. Cross may perform his duties from his current location in Ontario, Canada for 12 months following the effective date of the Employment Agreement. If the Company satisfies certain financial conditions as of April 30, 2012 (as provided in the Company s Form 10-Q for the quarter ending April 30, 2012), Dr. Cross must relocate to the Company s headquarters in San Diego, California. The Company and Dr. Cross will negotiate the terms of such relocation at that time. The Employment Agreement has an initial term of five years.

### Table of Contents

The term good reason is defined to mean termination by Dr. Cross following the occurrence of any of the following events without Mr. Cross s consent: (a) Dr. Cross ceases to report to the Chief Executive Officer or the Board of Directors, provided that such change in reporting relationship results in a material reduction in his authority, duties or responsibilities; (b) any other material reduction in his duties, authority or responsibilities relative to those in effect immediately prior to the reduction; or (c) following Dr. Cross s relocation to San Diego, California, the relocation of Dr. Cross s place of employment more than 50 miles from the Company s current location in San Diego, California.

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

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

On June 30, 2011, our Board of Directors approved the promotion of Ms. Vallejo to Vice President, Finance, and a commensurate increase in her base annual salary to \$160,000.

#### **Compensation of Directors**

Our directors received no fees for their service as directors during the fiscal years ended July 31, 2010 and July 31, 2009. All directors received reimbursement for reasonable out-of-pocket expenses in attending Board of Directors meetings and for promoting our business.

On June 30, 2011, the Board of Directors adopted a new director compensation policy for non-employee directors. According to such policy, the Chairman of our Board of Directors receives an annual fee of \$30,000 and all other independent directors receive an annual fee of \$15,000 for membership on the Board of Directors. In addition, non-employee directors will receive the following compensation for service on the committees of the Board of Directors:

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

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

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

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

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

**Change in Accountants** 

### Dismissal of Previous Independent Registered Public Accounting Firm

On May 27, 2011, we, with the approval of our Board of Directors, dismissed Silberstein Ungar, PLLC (Silberstein) as the independent registered public accounting firm engaged to audit our financial statements.

The reports issued by Silberstein relating to its audit of our balance sheets as of July 31, 2010 and 2009, and the related statements of operations, stockholders equity (deficit) and cash flows for the fiscal years then ended and for the period from inception (February 8, 2008) through July 31, 2010, contained an explanatory paragraph noting that our expected losses, negative working capital, and need to raise capital raised substantial doubt about our ability to continue as a going concern. Other than as disclosed above, such reports did not contain an adverse opinion or a disclaimer of an opinion and was not qualified as to uncertainty, audit scope or accounting principles.

During our two most recent fiscal years and the subsequent interim period preceding the dismissal of Silberstein, there were no disagreements with Silberstein on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Silberstein, would have caused Silberstein to make reference to the subject matter of the disagreements in connection with its report. Pursuant to rules of the Securities and Exchange Commission applicable to smaller reporting companies, Silberstein was not required to provide an attestation as to the effectiveness of our internal control over financial reporting for any period since our inception. However, as disclosed in Item 9A of our Annual Report on Form 10-K for the fiscal year ended July 31, 2010 and Part I, Item 4 of our Form 10-Q for the quarterly period ended January 31, 2011, our management determined that our internal control over financial reporting was not effective as of the end of such periods due to the existence of material weaknesses related to the following:

• inadequate segregation of duties;

• lack of a functioning audit committee due to a lack of a majority of independent members and a lack of a majority of outside directors on the Company s Board of Directors, resulting in ineffective oversight in the establishment and monitoring of required internal controls and procedures; and

• ineffective controls over period end financial disclosures and reporting processes.

Other than as disclosed above, there were no reportable events (as that term is defined in Item 304(a)(1)(v) of Regulation S-K) during our two most recent fiscal years or during the subsequent interim period through May 27, 2011. Our Board of Directors discussed the subject matter of each reportable event with Silberstein. We authorized Silberstein to respond fully and without limitation to all requests of the successor accountant on all matters related to the annual and interim periods audited and reviewed by Silberstein, including with respect to the subject matter of each reportable event.

Pursuant to Securities and Exchange Commission rules, we provided Silberstein with a copy of the above disclosures and requested that Silberstein furnish us a letter addressed to the Securities and Exchange Commission stating whether it agreed with the statements made above

and, if it did not agree, stating the respects in which it did not agree.

### Engagement of New Independent Registered Public Accounting Firm

We, with the approval of our Board of Directors, engaged Mayer Hoffman McCann P.C. (MHM) as our independent registered public accounting firm on May 27, 2011.

During our two most recent fiscal years and during the subsequent interim period through May 27, 2011, neither we nor anyone acting on our behalf consulted with MHM regarding either: (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on our financial statements, and neither a written report nor oral advice was provided that MHM concluded was an important factor considered by us in reaching a decision as to the accounting, auditing or financial reporting issue; or (ii) any matter that was either the subject of a disagreement (as that term is defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions to Item 304 of Regulation S-K) or a reportable event (as defined in Item 304(a)(1)(v) of Regulation S-K).

### CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

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

Other than as described below, since February 8, 2008, there have been no transactions, or currently proposed transactions, in which we were or are to be a participant and the amount involved exceeds the lesser of \$120,000 or one percent of the average of our total assets at year end for the last two completed fiscal years and in which any related person had or will have a direct or indirect material interest.

On February 11, 2011, we entered into a promissory note arrangement with Poma Management S.A. in the amount of \$120,000. Our former director and chief executive officer and a former holder of over 5% of our common stock, Ronald Dela Cruz, is affiliated with Poma Management S.A. The promissory note bore interest at a rate of 10% annually. We made full payment on this promissory note on March 18, 2011.

Mr. Dela Cruz also loaned us an amount of \$33,867 to fund operations, which did not include interest terms. On March 18, 2011, we made full payment on this loan.

#### **Director Independence**

We are not currently listed on any national securities exchange that has a requirement that the Board of Directors be independent. However, our Board of Directors has determined that all of the current members of our Board of Directors would be considered independent under Rule 803A of the NYSE Amex LLC Company Guide as applied to directors and to members of audit, nominating and corporate governance and compensation committees of the Board of Directors, except that Punit Dhillon would not be considered independent because he is our President and Chief Executive Officer. On June 30, 2011, our Board of Directors established the following committees of the Board of Directors: Audit Committee, Nominating and Corporate Governance Committee, Compensation Committee, Clinical and Regulatory Affairs Committee and Financing Committee.

David Marby and Ronald Dela Cruz were the sole members of our Board of Directors during our last completed fiscal year ended July 31, 2010. Mr. Marby would be considered an independent director under Rule 803A of the NYSE Amex LLC Company Guide. Mr. Dela Cruz would not be considered independent because he served as our Chief Executive Officer during our 2010 fiscal year. Mr. Dela Cruz and Mr. Marby resigned from our Board of Directors on March 21, 2011.

#### SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND

## RELATED STOCKHOLDER MATTERS

The following table sets forth certain information regarding the beneficial ownership of our common stock by (i) each person who, to our knowledge, owns more than 5% of our common stock, (ii) each of our directors and executive officers, and (iii) all of our executive officers and directors as a group. Unless otherwise indicated in the footnotes to the following table, the address of each person named in the table is: c/o OncoSec Medical Incorporated, 4690 Executive Drive Suite #250, San Diego, CA 92121. Shares of our common stock subject to options, warrants, or other rights currently exercisable or exercisable within 60 days of October 5, 2011, are deemed to be beneficially owned and outstanding for computing the share ownership and percentage of the person holding such options, warrants or other rights, but are not deemed outstanding for computing the percentage of any other person.

|   | Number of    |              |
|---|--------------|--------------|
|   | Shares       | Percentage   |
|   | Beneficially | Beneficially |
| Name of Beneficial Owner                                | Owned        | Owned (1)    |
| Capital Ventures International (2)                      | 8,000,000    | 12.7%        |
| Hudson Bay Master Fund Ltd. (3)                         | 8,000,000    | 12.7%        |
| Directors and Officers:                                 |              |              |
| Avtar Dhillon   | 9,910,480    | 17.4%        |
| Punit Dhillon (4)                                       | 4,394,000    | 7.7%         |
| James DeMesa  | 250,000      | *            |
| Michael Cross   | 1,214,000    | 2.1%         |
| Veronica Vallejo  | 200,000      | *            |
| Directors and Executive Officers as a Group (5 persons) | 15,968,480   | 28.1%        |

\* Less than 1%

(1) Based on 56,856,000 shares of our common stock issued and outstanding as of October 5, 2011. Except as otherwise indicated, we believe that the beneficial owners of the common stock listed above, based on information furnished by such owners, have sole investment and voting power with respect to such shares, subject to community property laws where applicable. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities.

(2) Includes 6,000,000 shares of common stock issuable upon exercise of warrants exercisable within 60 days of October 5, 2011, all of which were issued in connection with the June Private Placement. 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. The address of Capital Ventures International is 101 California Street, Suite 3250, San Francisco, California 94111.

(3) Includes 6,000,000 shares of common stock issuable upon exercise of warrants exercisable within 60 days of October 5, 2011, all of which were issued in connection with the June Private Placement. 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. The address of Hudson Bay Master Fund Ltd. is 120 Broadway, 40th Floor, New York, New York 10271.

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

### LEGAL MATTERS

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

## EXPERTS

Silberstein Ungar PLLC, an independent registered public accounting firm, has audited our financial statements for the years ended July 31, 2010 and 2009, as stated in its report appearing herein, and such audited financial statements have been so included in reliance upon the report of such firm given upon its authority as experts in accounting and auditing.

## WHERE YOU CAN FIND MORE INFORMATION

We file annual reports, quarterly reports, current reports, proxy statements and other information with the Securities and Exchange Commission (SEC). You may read or obtain a copy of these reports at the SEC s public reference room at 100 F Street, N.E., Washington, D.C. 20549, on official business days during the hours of 10:00 am to 3:00 pm. You may obtain information on the operation of the public reference room and its copy charges by calling the SEC at 1-800-SEC-0330. The SEC maintains a website that contains registration statements, reports, proxy information statements and other information regarding registrants that file electronically with the SEC, which are available free of charge. The address of the website is http://www.sec.gov.

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock being offered by this prospectus. This prospectus is part of that registration statement. This prospectus does not contain all of the information set forth in the registration statement or the exhibits to the registration statement. For further information with respect to us and the shares we are offering pursuant to this prospectus, you should refer to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract, agreement or other document referred to are not necessarily complete, and you should refer to the copy of that contract or other documents filed as an exhibit to the registration statement. You may read or obtain a copy of the registration statement at the SEC s public reference room and website referred to above.

## **OncoSec Medical Incorporated**

(formerly Netventory Solutions, Inc.)

(A Development Stage Company)

## FINANCIAL STATEMENTS

| Index to Financial Statements  |        |
|--|--------|
| Audit Report of Silberstein Ungar, PLLC, Independent Registered Public Accounting Firm   | F-2    |
| Balance Sheets as of the Fiscal Year Ended July 31, 2010 and 2009  | F-3    |
| Statements of Operations for the Fiscal Years Ended July 31, 2010 and 2009   | F-4    |
| Statement of Stockholders Equity (Deficit) for the Fiscal Years Ended July 31, 2010 and 2009   | F-5    |
| Statements of Cash Flows for the Fiscal Years Ended July 31, 2010 and 2009   | F-6    |
| Notes to Financial Statements for the Fiscal Years Ended July 31, 2010 and 2009  | F-7    |
| Unaudited Consolidated Balance Sheets for the Nine Months Ended April 30, 2011 and 2010  | F-10   |
| Unaudited Consolidated Statements of Operations for the Nine Months Ended April 30, 2011 and 2010                                    | F-11   |
| Unaudited Consolidated Statements of Stockholders Equity (Deficit) for the Period From Inception (February 8, 2008) to April 30, 201 | 1 F-12 |
| Unaudited Consolidated Statements of Cash Flows for the Nine Months Ended April 30, 2011 and 2010                                    | F-13   |
| Notes to Consolidated Financial Statements for the Nine Months Ended April 30, 2011 and 2010   | F-14   |
|  |        |

F-1

Phone (248) 203-0080

Fax (248) 281-0940

30600 Telegraph Road, Suite 2175

Bingham Farms, MI 48025-4586

www.sucpas.com

To the Board of Directors

OncoSec Medical Incorporated

(formerly Netventory Solutions, Inc.)

Reno, Nevada

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have audited the accompanying balance sheets of OncoSec Medical Incorporated, a Nevada Corporation, as of July 31, 2010 and 2009 and the related statements of operations, stockholders equity (deficit), and cash flows for the period from February 8, 2008 (date of inception) through July 31, 2010. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of OncoSec Medical Incorporated, as of July 31, 2010 and 2009 and the results of its operations and cash flows for the periods then ended and from February 8, 2008 (date of inception) through July 31, 2010, in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that OncoSec Medical Incorporated will continue as a going concern. As discussed in Note 8 to the financial statements, the Company has incurred losses from operations, has negative working capital, and is in need of additional capital to grow its operations so that it can become profitable. These factors raise substantial doubt about the Company s ability to continue as a going concern. Management s plans with regard to these matters are described in Note 8. The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Silberstein Ungar, PLLC Bingham Farms, Michigan November 15, 2010

F-2

## **OncoSec Medical Incorporated**

## (formerly Netventory Solutions Inc.)

(A Development Stage Company)

## **Balance Sheets**

## As of July 31, 2010 and July 31, 2009

|   | July 31,<br>2010 | July 31,<br>2009 |
|---|------------------|------------------|
| Assets  |                  |                  |
| Current assets  |                  |                  |
| Cash  | \$<br>237        | \$<br>9,756      |
| Prepaid expenses  |                  | 5,610            |
| Total Current Assets  | 237              | 15,366           |
| Other Assets  |                  |                  |
| Website   |                  | 9,000            |
| Total Assets  | \$<br>237        | \$<br>24,366     |
| Liabilities and Stockholders Equity (Deficit)                                     |                  |                  |
| Liabilities   |                  |                  |
| Current liabilities   |                  |                  |
| Accounts payable and accrued expenses   | \$<br>15,929     | \$<br>6,233      |
| Due to stockholder  | 14,367           | 12,034           |
| Total Liabilities   | 30,296           | 18,267           |
| Stockholders Equity (Deficit) (Note 5)  |                  |                  |
| Common stock authorized 3,200,000,000 common shares with a par value of \$0.0001  |                  |                  |
| Common stock issued and outstanding 68,480,000 and 68,480,000 common shares as of |                  |                  |
| July 31, 2010 and July 31, 2009, respectively                                     | 6,848            | 6,848            |
| Additional paid in capital  | 40,152           | 40,152           |
| Deficit accumulated during the development stage                                  | (77,059)         | (40,901)         |
| Total Stockholders Deficit  | (30,059)         | (6,099)          |
| Total Liabilities and Stockholders Deficit  | \$<br>237        | \$<br>24,366     |

The accompanying notes are an integral part of these financial statements

Table of Contents

**OncoSec Medical Incorporated** 

(formerly Netventory Solutions Inc