CHAMPIONS ONCOLOGY, INC.
Form 424B4
June 10, 2016

Filed Pursuant to Rule 424(b)(4)
Registration No. 333-210924

PROSPECTUS

Champions Oncology, Inc.

2,000,000 shares of Common Stock

We are offering 2,000,000 shares of our common stock, par value $0.001 per share, in a firm commitment underwritten offering. The public offering price is $2.25 per share.

Our common stock is currently traded on the Nasdaq Capital Market under the symbol CSBR. On June 9, 2016, the last reported sales price for our common stock was $2.39 per share.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. SEE RISK FACTORS BEGINNING ON PAGE 5 FOR CERTAIN RISK FACTORS THAT YOU SHOULD CONSIDER BEFORE INVESTING IN OUR SECURITIES.

	Per Share	Total
Public offering price	$ 2.25	$ 4,500,000
Underwriting discounts and commissions(1)	$ 0.18	$ 360,000
Proceeds, before expenses, to us	$ 2.07	$ 4,140,000

(1) We have agreed to reimburse the underwriters for certain expenses. See Underwriting on page 47 of this prospectus for a description of the compensation payable to the underwriters.

We have granted the underwriter a 45-day option to purchase up to an additional 300,000 shares of common stock at the public offering price, less underwriting discounts and commissions, to cover over-allotments, if any. The underwriter expects to deliver our securities, against payment, on or about June 15, 2016.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Sole Bookrunner

National Securities Corporation

The date of this prospectus is June 10, 2016

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You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with any information or to make any representations about us, the securities being offered pursuant to this prospectus or any other matter discussed in this prospectus, other than the information and representations contained in this prospectus. If any other information or representation is given or made, such information or representation may not be relied upon as having been authorized by us.

The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock. Neither the delivery of this prospectus nor any distribution of securities in accordance with this prospectus shall, under any circumstances, imply that there has been no change in our affairs since the date of this prospectus. This prospectus will be updated and made available for delivery to the extent required by the federal securities laws.

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PROSPECTUS SUMMARY

This summary highlights certain information appearing elsewhere in this prospectus. For a more complete understanding of this offering, you should read the entire prospectus carefully, including the risk factors and the financial statements. References in this prospectus to we, us, our and Company refer to Champions Oncology, Inc. and its subsidiaries. You should read this prospectus together with additional information described below under the heading Where You Can Find More Information.

The share and per share information in this prospectus gives effect to a 1-for-12 reverse stock split of our outstanding shares of common stock that became effective on August 12, 2015.

Overview of Our Business

We are engaged in the development and sale of advanced technology solutions and products to personalize the development and use of oncology drugs. Utilizing our TumorGraft Technology Platform (the Platform), we provide select services to pharmaceutical and biotechnology companies seeking personalized approaches to drug development. By performing studies to predict the efficacy of oncology drugs, our Platform facilitates drug discovery with lower costs and increased speed of drug development as well as increased adoption of existing drugs.

The current oncology drug development paradigm is challenging for the pharmaceutical and biotechnology industry. We believe that on average, the clinical trial process in oncology currently:

Costs more than $1.2 billion;
Takes approximately 8 years to complete;
Has a 93% failure rate;
Results in approved compounds that cost more than $11,000 per month.

Our Platform provides a novel approach to simulating the results of human clinical trials used in developing oncology drugs. According to a 2013 study conducted by Cutting Edge Information, it can cost up to $100,000 per patient in oncology clinical trials and the typical cost for each phase of development per year increases from approximately $3 million in the pre-clinical setting to approximately $150 million in phase 3. Simulating trials before executing them provides benefits to both pharmaceutical companies and patients. Pharmaceutical companies can lower the risk of spending resources on drugs that do not show significant anti-cancer activities and increase the chance that the clinical development path they pursue will be focused on an appropriate patient population and a successful combination with other drugs.

We plan to continue our efforts to expand our TumorGraft Technology Platform in order to expand our Translational Oncology Solutions (TOS) program, through which we assist pharmaceutical and biotechnology companies with their drug development process. Our Personalized Oncology Solutions (POS) program, through which we offer physicians and patients information to help guide the development of personalized treatment plans, will not be the focus of our growth moving forward.

TumorGraft Technology Platform

Our clinical trial simulation platform consists of processes, physical tumors, and information that we use to personalize the development and use of oncology drugs. Our process technology, which we call TumorGrafting is also known as Patient Derived Xenografts (PDX) and involves the:

implantation of human tumor fragments in immune-deficient mice;

expansion of the original human tumor into a larger colony of mice through the passage of the tumor to a limited number of generations of mice;

treatment of the implanted mice with oncology drugs;

measurement of tumor growth inhibition in treated mice relative to a control group of mice to determine the response of the tumor to the drug; and

permanent cryo-preservation of fragments of tumor tissue for future use in additional clinical trial simulations.

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A growing body of evidence demonstrates the power of PDX to predict the response of individual patients to oncology drugs. Our platform has demonstrated a positive predictive value of approximately 87% and negative predictive value of approximately 94%. As a result, we believe our PDX platform results in simulated clinical studies with approximately 90% accuracy in predicting human response with approximately 90% lower costs than a human clinical trials while shortening the timelines from 2-3 years for human trial to 6 months for PDX studies.

TumorBank

Each tumor from individual patients that we have preserved for future implantation in mice, along with the patient data and molecular information associated with these tumors, are referred to as TumorGrafts or Patient Derived XenoGrafts or PDX Models . The collection of TumorGrafts that we have built is referred to as our TumorBank. We currently have 700 PDX Models in our TumorBank that we believe reflect characteristics of patients who enroll in clinical trials (late stage, pretreated and metastic). We implant tumors in mice to provide pharmaceutical and biotechnology companies the opportunity to test oncology compounds on multiple tumors to test efficacy and simulate the results of human clinical trials.

Increasing breadth and depth of the TumorBank is an important strategic effort of the Company. We invest significant research and development resources to increase the number of PDX Models in our TumorBank and add different sub-types of cancer that we have not historically addressed. In addition, we are also developing an extensive database of information about the tumors in our TumorBank. We expect that this database will include certain information about the patient (e.g. age, gender), the response of the tumors to different oncology drugs or drug combinations, mutational status of key oncogenes, and other genetic and epigenetic data about each tumor. We expect that such data could be valuable to companies seeking to develop new cancer drugs.

Based on our extensive knowledge of the industry, we believe that we are a leading provider of Patient Derived XenoGrafts and a pioneer in the use of PDX Models for use with patients and clinical trial simulations. Our research and development efforts and customer sponsored platform development has contributed to the acceptance of the accuracy of PDX Models as a valuable tool in the development and use of oncology drugs.

Our Growth and Expansion Strategy

Our strategy is to continue to use TumorGrafts as a platform technology to drive multiple synergistic revenue streams.

Our current strategy for growth has three components:

Growing our TumorBank: We grow our TumorBank in two ways. First, we increase the number of TumorGrafts in the bank for our existing tumor types to ensure customers are finding the specific models they need for their studies. Second, we add new tumor types to the bank to enable studies in tumor types that we have not historically been able to run for our pharmaceutical and biotech customers.

Adding new PDX technologies: The fields of oncology research and drug development are evolving. To keep up with new approaches, we add new technologies to our PDX platform. We are currently investing in developing ImmunoGrafts, a new PDX Model that is developed in a mouse with a humanized immune system. These models are built to specifically serve the needs of pharmaceutical and biotech companies developing immune oncology drugs. This is a relatively new area of oncology research that has shown significant promise and is attracting a significant amount of research and development interest.

Increasing the scale of studies: We have facilitated studies for approximately 100 pharmaceutical and biotech companies including 16 of the top 20 pharmaceutical companies. We believe there is significant opportunity to grow

our revenue by increasing the size of the studies these customers run. To accomplish this, we are developing new study designs that offer solutions to compounds that are in phase I and phase II clinical trials. We believe that the total available market size is greater than $1 billion and that the increased budgets of these drugs, as compared to drugs in the pre-clinical stage, will enable us to sell larger studies.

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Competition

Our TumorGraft Technology Platform is proprietary and requires significant know-how to both initiate and operate, but is not patented. It is, therefore, possible for competitors to develop other implantation procedures or to discover the same procedures utilized by the Company that could compete with the Company in its market. Competition in our industry is intense and based significantly on scientific, technological, and market forces, which include the effectiveness of the technology and products and the ability to commercialize technological developments. The Company faces significant competition from other healthcare companies in the United States and abroad. The majority of these competitors are, and will be, substantially larger than the Company, and have substantially greater resources and operating histories. There can be no assurance that developments by other companies will not render our products or technologies obsolete or non-competitive or that we will be able to keep pace with the technological or product developments of our competitors. These companies, as well as academic institutions, governmental agencies, and private research organizations also compete with us in recruiting and retaining highly qualified scientific, technical and professional personnel and consultants.

Corporate Information

Our corporate headquarters are located at One University Plaza, Suite 307, Hackensack, NJ 07601. Our telephone number is (201) 808-8400. Our Internet website is *http://www.championsoncology.com*. Information on our website is not incorporated into or a part of this prospectus.

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The Offering

Securities Offered	2,000,000 shares of our common stock
Offering Price	The purchase price is $2.25 per share.
Common Stock Outstanding Before the Offering	8,710,029 shares(1)
Common Stock Outstanding After the Offering	10,710,029 shares(1)(2)
Underwriter s Over-Allotment Option	We will grant the underwriter an option, exercisable within 45 days after the closing of this offering, to acquire up to an additional 15% of the total number of shares of common stock pursuant to this offering, solely for the purpose of covering over-allotments, if any.
Use of Proceeds	We expect to receive net proceeds from this offering of approximately $3,850,000 after deducting the underwriting discount and our estimated offering expenses. We intend to use the net proceeds of this offering for research and development to grow our TumorGraft platform and the balance of the net proceeds of this offering for working capital and general corporate purposes.
Risk Factors	Investing in our securities involves substantial risks. You should carefully review and consider the Risk Factors section of this prospectus beginning on page 5 and the other information in this prospectus for a discussion of the factors you should consider before you decide to invest in this offering.
Nasdaq Marketplace Symbol	Our common stock currently trades on the Nasdaq Capital Market under the symbol CSBR.

(1) Does not include (i) outstanding stock options to purchase an aggregate of 2,215,257 shares of common stock pursuant to our 2008 and 2010 stock option plans or (ii) outstanding warrants to purchase an aggregate of 2,109,840 shares of common stock.

(2) Assumes the sale of all shares of common stock covered hereby, excluding shares issuable upon the exercise of the underwriter s over-allotment option.

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RISK FACTORS

Any investment in our common stock involves a high degree of risk. Investors should carefully consider the risks described below and all of the information contained in this prospectus before deciding whether to purchase our common stock. Our business, financial condition or results of operations could be materially adversely affected by these risks if any of them actually occur. This prospectus also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks we face as described below and elsewhere in this prospectus.

Risks Related to Our Business

We have historically incurred losses from operating activities and we may not be able to meet our cash requirements without reducing the scope of our activities or obtaining additional capital from external sources. If we are unable to do so, we may not be able to continue as a going concern.

For the years ended April 30, 2015 and 2014, the Company had a net loss of approximately $13.1 million and $7.4 million, respectively. For the nine months ended January 31, 2016 and 2015, the Company had a net loss of approximately $7.9 million and $9.4 million, respectively. As of January 31, 2016, the Company has an accumulated deficit of approximately $60 million. As of January 31, 2016, we had working capital of $1.2 million and cash and cash equivalents of $3.3 million. We believe that our cash and cash equivalents on hand at January 31, 2016 are adequate to fund our operations through at least April 2017, provided that we reduce certain expenses that are not critical to the operation of our business. However, in order for us to continue as a going concern beyond this point, we may need to reduce the scope of our activities or obtain capital from external sources if we are unsuccessful in raising sufficient funds in this offering.

The amount of our losses may vary significantly from year-to-year and quarter-to-quarter and will depend on, among other factors:

the cost of continuing to build out our TumorGraft Technology Platform;
the cost and rate of progress toward growing our TOS business;
the cost and rate of progress toward building our sales forces;
the cost of increasing our research and development;
the cost of renting our laboratory and animal testing facilities and payment for associated services;
the timing and cost of obtaining and maintaining any necessary regulatory approvals;
the cost of expanding and building out our infrastructure; and
the cost incurred in hiring and maintaining qualified personnel.

Currently, the Company derives revenue from POS products and TOS products, while pursuing efforts to further develop bioinformatics from its TumorBank and its TumorGraft Technology Platform. In addition, we are building our sales and marketing operations to grow the sales of our TOS products. Our POS products will not be the focus of our growth moving forward. Accordingly, we expect to generate operating losses in the future until such time as we

are able to generate significantly more revenue.

To become profitable, we will need to generate revenues to offset our operating costs, including our research and development and general and administrative expenses. We may not achieve or, if achieved, sustain our revenue or profit objectives. Our losses may increase in the future, and, ultimately, we may have to cease operations.

In order to grow revenues, we must invest capital to implement our sales and marketing efforts and to successfully develop our bioinformatics from our TumorBank and our TumorGraft Technology Platform. Because we do not have sufficient history of commercial efforts, our sales and marketing efforts may never generate significant increases in revenues or achieve profitability and it is likely that we will be required to raise additional capital to continue our operations as currently contemplated. If we must devote a substantial

We have historically incurred losses from operating activitiesand we may not be able to meet our cash requirements

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amount of time to raising capital, it will delay our ability to achieve our business goals within the time frames that we now expect, which could increase the amount of capital we need. In addition, the amount of time expended by our management on fundraising distracts them from concentrating on our business affairs. If we require additional capital and are not successful in raising the needed capital, we may have to cease operations.

We may incur greater costs than anticipated, which could result in sustained losses.

We use reasonable efforts to assess and predict the expenses necessary to pursue our business strategies. However, implementing our business strategies may require more employees, capital equipment, supplies or other expenditure items than management has predicted. Similarly, the cost of compensating additional management, employees and consultants or other operating costs may be more than we estimate, which could result in ongoing and sustained losses.

We may not be able to implement our business strategies which could impair our ability to continue operations.

Implementation of our business strategies will depend in large part on our ability to (i) attract and maintain a significant number of customers; (ii) effectively provide acceptable services to our customers; (iii) develop and license new products and technologies; (iv) maintain appropriate internal procedures, policies, and systems; (v) hire, train, and retain skilled employees and management; (vi) continue to operate despite increasing competition in our industry; and (vii) establish, develop and maintain our name recognition. Our inability to obtain or maintain any or all these factors could impair our ability to implement our business strategies successfully, which could have material adverse effects on our results of operations and financial condition.

Our laboratories are subject to regulation and licensure requirements, and the healthcare industry is highly regulated; we may face substantial penalties, and our business activities may be impacted, if we fail to comply.

Our TumorGraft products are performed in laboratories that are subject to state regulation and licensure requirements. Such regulation and requirements are subject to change, and may result in additional costs or delays in providing our products to our customers. In addition, the healthcare industry in general is highly regulated in the United States at both the federal and state levels. We seek to conduct our business in compliance with all applicable laws, but many of the laws and regulations potentially applicable to us are vague or unclear. These laws and regulations may be interpreted or applied by an authority in a way that could require us to make changes in our business. We may not be able to obtain all regulatory approvals needed to operate our business or sell our products. If we fail to do so, we could be subject to civil and criminal penalties or fines or lose the authorizations necessary to operate our business, as well as incur additional liabilities from third parties. If any of these events happened, they could hurt our business and financial results.

If our laboratory facilities are damaged or destroyed, or we have a dispute with our landlord, our business would be negatively affected.

We currently utilize two laboratories in Baltimore, Maryland and New York, New York to perform the work of our tumor studies and develop and bank our TumorGraft Technology Platform models. The lab in Baltimore is where a majority of the work is performed. If this facility, or, to a lesser degree, any of our other facilities, were to be significantly damaged or destroyed, we could suffer a loss of our ongoing and future drug studies, as well as our TumorGraft bank. In addition, we lease the space for each of these laboratories from a third party. If we had a dispute with any of our landlords or otherwise could not utilize this space, it would take time to find and move to a new facility, which could negatively affect our results of operations.

Any health crisis impacting our colony of laboratory mice could have a negative impact on our business.

Our TumorGraft operations depend on having a colony of live mice available. If this population experienced a health crisis, such as a virus or other pathogen, such crisis would affect the success of our existing POS and TOS business and future business, as we would have to rebuild the population and repeat current TumorGrafts.

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We have limited experience marketing and selling our products and may need to rely on third parties to successfully market and sell our products and generate revenues.

Currently, we rely on the internet, word of mouth, and a small sales force to market our services. We have to compete with other pharmaceutical, biotechnology and life science technology and service companies to recruit, hire, train, and retain marketing and sales personnel. However, there can be no assurance that we will be able to develop in-house sales, and as a result, we may not be able to generate product revenue.

We will continue to be dependent upon key employees.

Our success, currently, is dependent upon the efforts of several full-time key employees, the loss of the services of one or more of which would have a material adverse effect on our business and financial condition. We intend to continue to develop our management team and attract and retain qualified personnel in all functional areas to expand and grow our business. This may be difficult in the healthcare industry where competition for skilled personnel is intense.

Because our industry is very competitive and many of our competitors have substantially greater capital resources and more experience in research and development, we may not succeed in selling or increasing sales of our products and technologies.

We are engaged in a rapidly changing and highly competitive field. Potential competitors in the United States and abroad are numerous and include providers of clinical research services, most of which have substantially greater capital resources and more experience in research and development capabilities. Furthermore, new companies will likely enter our market from the United States and abroad, as scientific developments surrounding other pre-clinical and clinical services grow in the multibillion dollar oncology marketplace. Our competitors may succeed in selling their products to our pharmaceutical and biotech customers more effectively than we sell our products. In addition, academic institutions, hospitals, governmental agencies, and other public and private research organizations also may conduct similar research, seek patent protection, and may develop and commercially introduce competing products or technologies on their own or through joint ventures. If one or more of our competitors succeeds in developing similar technologies and products that are more effective or successful than any of those that we currently sell or will develop, our results of operations will be significantly adversely affected.

If we are unable to protect our intellectual property, we may not be able to compete as effectively.

It is important in the healthcare industry to obtain patent and trade secret protection for new technologies, products, and processes. Our success will depend, in part, upon our ability to obtain, enjoy, and enforce protection for any products we have, develop or acquire under United States and foreign patent laws and other intellectual property laws, preserve the confidentiality of our trade secrets, and operate without infringing the proprietary rights of third parties. Where appropriate, we will seek patent protection for certain aspects of our technology. However, while our

TumorGraft Technology Platform is proprietary and requires significant know-how to both initiate and operate, it is not patented. It is, therefore, possible for competitors to develop other implantation procedures, or to discover the same procedures utilized by us, that could compete with us in our market.

It also is unclear whether efforts to secure our trade secrets will provide useful protection. While we will use reasonable efforts to protect our trade secrets, our employees or consultants may unintentionally or willfully disclose our proprietary information to competitors resulting in a loss of protection. Enforcing a claim that someone else illegally obtained and is using our trade secrets, like patent litigation, is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Finally, our competitors may independently develop equivalent knowledge, methods and know-how.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

We rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate

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collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We also seek to enter into confidentiality and invention assignment agreements with our employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Our trade secrets may also be obtained by third parties by other means, such as breaches of our physical or computer security systems. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

Claims by others that our products infringe their patents or other intellectual property rights could adversely affect our financial condition.

The healthcare industry has been characterized by frequent litigation regarding patent and other intellectual property rights. Patent applications are maintained in secrecy in the United States and also are maintained in secrecy outside the United States until the application is published. Accordingly, we can conduct only limited searches to determine whether our technology infringes the patents or patent applications of others. Any claims of patent infringement asserted by third parties would be time-consuming and could likely:

result in costly litigation;
divert the time and attention of our technical personnel and management;
require us to develop non-infringing technology; or
require us to enter into royalty or licensing agreements.

Patients are unable to obtain reimbursement from third-party payers for our services, limiting the market acceptance of our services, and as a result we may not achieve significant revenues.

Currently, patients are unable to obtain reimbursement from third party payers for our services. Furthermore, the continuing efforts of government and insurance companies, health maintenance organizations (HMOs) and other payers of healthcare costs to contain or reduce costs of health care could affect our revenues and profitability. In the U.S., given recent federal and state government initiatives directed at lowering the total cost of health care, the U.S. Congress and state legislatures will likely continue to focus on health care reform, the cost of prescription pharmaceuticals and on the reform of the Medicare and Medicaid systems. While we cannot predict whether any such legislative or regulatory proposals will be adopted, the inability to obtain reimbursement from third party payers for our services limits the market acceptance of our services. As a result, we may not achieve significant revenues.

Our ability to expand our business may depend in part on the extent to which appropriate reimbursement levels for the cost of our proposed formulations and products and related treatments are obtained by governmental authorities, private health insurers and other organizations, such as HMOs. The trend toward managed health care in the U.S. and the concurrent growth of organizations such as HMOs, which could control or significantly influence the purchase of

health care services and drugs, as well as legislative proposals to reform health care or reduce government insurance programs, may all result in lower prices for or rejection of our services.

TOS studies are subject to cancellation based on changes in customer s development plans.

Our revenue is primarily derived from studies performed for pharmaceutical and biotech companies to assist in the development of oncology drugs. There are many factors that could result in the change of our customers development plans for specific drugs, including without limitation to their research and development budgets and drug development strategies. These changes could lead to the cancelation or modification of on-going or planned studies. This would have a negative impact on the company s revenue growth and profit margin.

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Risks Related to Our Common Stock

If our stockholders equity continues to remain below $2,500,000, or if we fail to maintain a board of directors consisting of a majority of independent directors, our common stock may be subject to delisting from the Nasdaq Stock Market.

On March 21, 2016, we received a notification letter from Nasdaq advising us of our failure to comply with the required minimum of $2,500,000 in stockholders equity for continued listing on the Nasdaq Capital Market, pursuant to Nasdaq listing rule 5550(b)(1). We fell below the minimum requirement with reported stockholders equity of $2,259,000 in our Quarterly Report on Form 10-Q for the quarterly period ended January 31, 2016. Nasdaq stated in the letter that, pursuant to the Nasdaq listing rules, we have 45 calendar days to submit a plan to regain compliance. If the plan is accepted by Nasdaq, Nasdaq may grant us an extension of up to 180 calendar days from March 21, 2016 (or until September 19, 2016) to regain compliance. If the plan is not accepted by Nasdaq, we may appeal the decision to a Nasdaq Hearings Panel.

While we intend to present a viable plan to regain compliance, there can be no assurance that Nasdaq will grant our request for continued listing on the Nasdaq Capital Market, or that our plans to comply with the required minimum of $2,500,000 in shareholders equity will be successful. To the extent that we are unable to resolve the listing deficiency, there is a risk that our common stock may be delisted from Nasdaq and would likely trade only on the over-the-counter market (the OTC). If our common stock were to trade on the OTC, selling our common stock could be more difficult because smaller quantities of shares would likely be bought and sold, transactions could be delayed, and it may be difficult to attract security analysts coverage. In addition, in the event our common stock is delisted, broker-dealers transacting in our common stock would be subject to certain additional regulatory burdens, which may discourage them from effecting transactions in our common stock, thus further limiting the liquidity of our common stock and potentially resulting in lower prices and larger spreads in the bid and ask prices for our common stock.

In addition, on October 28, 2015 we received a notification letter from Nasdaq confirming our notification to Nasdaq of our non-compliance with Nasdaq listing rule 5605(b)(1)(A), which requires that our board consist of a majority of independent directors. Such non-compliance occurred when a former director of ours did not stand for re-election at our most recent annual stockholder meeting. As of April 11, 2016, we appointed an additional independent director. Therefore, our board currently consists of four independent directors and three non-independent directors. However, if we fail to maintain compliance with this requirement, our shares may be delisted.

We have a limited market for our common stock, which makes our securities very speculative.

Trading activity in our common stock is and has been limited. As a result, an investor may find it difficult to dispose of, or to obtain accurate quotations of the price of our common stock. There can be no assurance that a more active market for our common stock will develop, or if one should develop, there is no assurance that it will be sustained. This could severely limit the liquidity of our common stock, and would likely have a material adverse effect on the market price of our common stock and on our ability to raise additional capital.

Investment in our common stock may be diluted if we issue additional shares in the future.

We may issue additional shares of common stock, which will reduce shareholders percentage ownership and may dilute per share value. Our Certificate of Incorporation authorizes the issuance of 200,000,000 shares of common stock. As of June 9, 2016, we had 8,971,923 shares of common stock issued and 8,710,029 shares outstanding. The future issuance of all or part of the remaining authorized common stock would result in substantial dilution in the percentage of the common stock held by existing shareholders. The issuance of common stock for future services, acquisitions, or other corporate actions may have the effect of diluting the value of the shares held by existing shareholders, and might have an adverse effect on any market for our common stock.

To the extent that we raise additional funds by issuing equity securities or convertible debt securities in the future, our stockholders may experience significant dilution. Sale of additional equity and/or convertible debt securities at prices below certain levels will trigger anti-dilution provisions with respect to certain

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securities we have previously sold. If additional funds are raised through a credit facility or the issuance of debt securities or preferred stock, lenders under the credit facility or holders of these debt securities or preferred stock would likely have rights that are senior to the rights of holders of our common stock, and any credit facility or additional securities could contain covenants that would restrict our operation.

The exercise of outstanding options and warrants may dilute current shareholders.

As of June 9, 2016, there were outstanding warrants and options to purchase 4,325,097 shares of common stock. The exercise of a substantial number of these outstanding warrants and options could adversely affect our share price and dilute current shareholders.

Our stock price is volatile and therefore investors may not be able to sell their common stock at or above the price they paid for it.

The stock market in general and the market for biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the price they paid for it. The market price for our common stock may be influenced by many factors, including:

regulatory developments in the United States and foreign countries;
variations in our financial results or those of companies that are perceived to be similar to us;
changes in the healthcare payment system overseas to the degree we receive revenue from such healthcare systems overseas;
announcements by us of significant acquisition, strategic partnerships, joint ventures or capital commitments;
sales of significant shares of stock by large investors;
intellectual property, product liability, or other litigation against us; and
the other key facts described in this Risk Factors section.

Certain provisions of our charter and bylaws and of our contractual agreements contain provisions that could delay and discourage takeover attempts and any attempts to replace our current management by shareholders.

Certain provisions of our certificate of incorporation and bylaws, and our contractual agreements could make it difficult for or prevent a third party from acquiring control of us or changing our board of directors and management. These provisions include:

requirements that our stockholders comply with advance notice procedures in order to nominate candidates for election to our board of directors or to place stockholders proposals on the agenda for consideration at meetings of stockholders; and
in connection with private placements of our stock in 2011, 2013 and 2015, we covenanted that we would not merge or consolidate with another company unless either the transaction, the purchase price per share or the trading volume

of our stock met certain thresholds and qualifications or we obtained the consent of certain of the investors who purchased our stock in those private placements.

Certain provisions of Delaware law make it more difficult for a third party to acquire us and make a takeover more difficult to complete, even if such a transaction were in the stockholders interest.

The Delaware General Corporation Law contain provisions that may have the effect of making it more difficult or delaying attempts by others to obtain control of us, even when these attempts may be in the best interests of our stockholders. We also are subject to the anti-takeover provisions of the Delaware General Corporation Law, which prohibit us from engaging in a business combination with an interested stockholder unless the business combination is approved in a prescribed manner and prohibit the voting of shares held by persons acquiring certain numbers of shares without obtaining requisite approval. The statutes have the effect of making it more difficult to effect a change in control of a Delaware company.

Certain provisions of our charter and bylaws and of ourcontractual agreements contain provisions that could delay a

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Our management and six significant stockholders collectively own a substantial majority of our common stock.

Collectively, our officers, our directors and six significant stockholders own or exercise voting and investment control of approximately 70% of our outstanding common stock. As a result, investors may be prevented from affecting matters involving our company, including:

the composition of our board of directors and, through it, any determination with respect to our business direction and policies, including the appointment and removal of officers;

any determinations with respect to mergers or other business combinations;

our acquisition or disposition of assets; and

our corporate financing activities.

Furthermore, this concentration of voting power could have the effect of delaying, deterring or preventing a change of control or other business combination that might otherwise be beneficial to our stockholders. This significant concentration of share ownership may also adversely affect the trading price for our common stock because investors may perceive disadvantages in owning stock in a company that is controlled by a small number of stockholders.

We have not paid any cash dividends in the past and have no plans to issue cash dividends in the future, which could cause the value of our common stock to have a lower value than other similar companies which do pay cash dividends.

We have not paid any cash dividends on our common stock to date and do not anticipate any cash dividends being paid to holders of our common stock in the foreseeable future. While our dividend policy will be based on the operating results and capital needs of the business, it is anticipated that any earnings will be retained to finance our future expansion. As we have no plans to issue cash dividends in the future, our common stock could be less desirable to other investors and as a result, the value of our common stock may decline, or fail to reach the valuations of other similarly situated companies who have historically paid cash dividends in the past.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business or our market, or if they change their recommendations regarding our common stock adversely, the price of our common stock and trading volume could decline.

The trading market for our common stock may be influenced by the research and reports that securities or industry analysts may publish about us, our business, our market or our competitors. If any of the analysts who may cover us change their recommendation regarding our common stock adversely, or provide more favorable relative recommendations about our competitors, the price of our common stock would likely decline. If any analyst who may cover us was to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause the price of our common stock or trading volume to decline.

Certain provisions of Delaware law make it more difficult for athird party to acquire us and make a takeover more di

Risks Related to this Offering

We may allocate net proceeds from this offering in ways which differ from our estimates based on our current plans and assumptions discussed in the section entitled Use of Proceeds and with which you may not agree.

The allocation of net proceeds of the offering set forth in the Use of Proceeds section below represents our estimates based upon our current plans and assumptions regarding industry and general economic conditions, our future revenues and expenditures. The amounts and timing of our actual expenditures will depend on numerous factors, including market conditions, cash generated by our operations, business developments and related rate of growth. We may find it necessary or advisable to use portions of the proceeds from this offering for other purposes. Circumstances that may give rise to a change in the use of proceeds and the alternate purposes for which the proceeds may be used are discussed in the section entitled

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Use of Proceeds below. You may not have an opportunity to evaluate the economic, financial or other information on which we base our decisions on how to use our proceeds. As a result, you and other stockholders may not agree with our decisions. See Use of Proceeds section for additional information.

Future sales by our stockholders may adversely affect our stock price and our ability to raise funds in new stock offerings.

All the securities sold in this offering will be freely tradable without restrictions or further registration under the Securities Act, except for any shares held by our affiliates as defined in Rule 144 under the Securities Act. Sales of our common stock by our stockholders and warrant or option holders following this offering could lower the market price of our common stock. Sales may also make it more difficult for us to sell equity securities or equity-related securities in the future at a time and price that our management deems acceptable or at all. The issuance of approximately 4,325,097 shares issuable upon exercise of outstanding options, warrants and convertible notes as of the date of this prospectus could also lower the market price of our common stock.

You will experience immediate and substantial dilution as a result of this offering and may experience additional dilution in the future.

You will incur immediate and substantial dilution as a result of this offering. After giving effect to the sale by us of 2,000,000 shares of common stock in this offering at a public offering price of $2.25 per share, and after deducting underwriter commissions and estimated offering expenses payable by us, investors in this offering can expect an immediate dilution of $1.74 per share, or 77.3%, at the public offering price.

Our ability to use our net operating loss carry-forwards and certain other tax attributes may be limited.

Under Section 382 of the Internal Revenue Code of 1986, as amended, referred to as the Internal Revenue Code, if a corporation undergoes an ownership change (generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period), the corporation s ability to use its pre-change net operating loss carry-forwards and other pre-change tax attributes (such as research tax credits) to offset its post-change income may be limited. We believe that, with this offering, taken together with our private placements within a three-year period and other transactions that have occurred over the past three years, we may have triggered an ownership change limitation. We may also experience ownership changes in the future as a result of subsequent shifts in our stock ownership, including as a result of the completion of this offering when it is taken together with other transactions we may consummate in the succeeding three-year period. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carry-forwards to offset U.S. federal taxable income may be subject to limitations, which potentially could result in increased future tax liability to us.

In making your investment decision, you should understand that we have not authorized any other party to provide you with information concerning us or this offering.

We may allocate net proceeds from this offering in ways whichdiffer from our estimates based on our current plans

You should carefully evaluate all of the information in this prospectus before investing in our company. We may receive media coverage regarding our company, including coverage that is not directly attributable to statements made by our officers, that incorrectly reports on statements made by our officers or employees, or that is misleading as a result of omitting information provided by us, our officers or employees. We have not authorized any other party to provide you with information concerning us or this offering, and you should not rely on this information in making an investment decision.

In making your investment decision, you should understand thatwe have not authorized any other party to provide y

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus, including, without limitation, statements regarding the assumptions we make about our business, strategy and other plans and objectives for our future operations, are forward-looking statements.

These forward-looking statements include declarations regarding our management s beliefs and current expectations. In some cases, you can identify forward-looking statements by terminology such as may, will, should, would, co expects, plans, contemplates, anticipates, believes, estimates, predicts, projects, intend or continue such terms or other comparable terminology, although not all forward-looking statements contain these identifying words. Forward-looking statements are subject to inherent risks and uncertainties in predicting future results and conditions that could cause the actual results to differ materially from those projected in these forward-looking statements. Some, but not all, of the forward-looking statements contained in this prospectus include, among other things, statements about the following:

We historically incurred losses from operating activities, expect losses for the foreseeable future, require significant capital and may never achieve profitability.

We may not be able to maintain or increase our revenues due to our reduction in POS service prices, the length of time it takes to conduct TumorGrafts, the uncertainty of whether TumorGrafts will successfully implant and the limited information about the correlation between the response to drugs of a tumor in mice with the response to those drugs of the tumor in patients.

Our business could be adversely impacted by changes in the FDA s regulations.

Our laboratory is subject to regulation and licensure requirements, and the healthcare industry is highly regulated; we may face substantial penalties, and our business activities may be impacted, if we fail to comply.

If our laboratory facility is damaged or destroyed, we have a dispute with our landlord, or our mice population has a health crisis, our business would be negatively affected.

We have limited experience marketing and selling our products and may need to rely on third parties to successfully market and sell our products and generate revenues.

We will continue to be dependent upon key employees.

Because our industry is very competitive and many of our competitors have substantially greater capital resources and more experience in research and development, we may not succeed in selling or increasing sales of our products and technologies.

If we are unable to protect our intellectual property, we may not be able to compete as effectively.

Claims by others that our products infringe their patents or other intellectual property rights could adversely affect our financial condition.

Insiders own a significant amount of the outstanding common stock.

You should also read the matters described in Risk Factors and the other cautionary statements made in this prospectus as being applicable to all related forward-looking statements wherever they appear in this prospectus. The forward-looking statements in this prospectus may not prove to be accurate and therefore you are encouraged not to place undue reliance on forward-looking statements. You should read this prospectus completely.

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USE OF PROCEEDS

We estimate that we will receive up to $3,850,000 in net proceeds from the sale of common stock in this offering, based on a price of $2.25 per share of common stock and after deducting the underwriting discount and estimated offering expenses payable by us. If the underwriter s over-allotment option to purchase additional shares of our common stock from us is exercised in full, we estimate that our net proceeds will be approximately $4,475,000.

We intend to use the net proceeds of this offering for research and development to grow our TumorGraft platform, and the balance of the net proceeds of this offering for working capital and general corporate purposes.

We are not a party to any commitments or agreements with respect to any acquisitions as of the date of this prospectus.

The expected use of the net proceeds of the offering set forth above represents our estimates based upon our current plans and assumptions regarding industry and general economic conditions, our future revenues and expenditures. The amounts and timing of our actual expenditures will depend upon numerous factors, including market conditions, cash generated by our operations, business developments and related rate of growth. We may find it necessary or advisable to use portions of the proceeds from this offering for other purposes.

From time to time, we evaluate these and other factors and we anticipate continuing to make such evaluations to determine if the existing allocation of resources, including the proceeds of this offering, is being optimized. Pending such uses, we intend to invest the net proceeds of this offering in short-term, interest-bearing, investment-grade securities such as money market funds, certificates of deposit, commercial paper and guaranteed obligations of the U.S. government.

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PRICE RANGE OF COMMON STOCK

Our shares of common stock are currently quoted on the Nasdaq Capital Market under the symbol CSBR. Our common stock commenced trading on the Nasdaq Capital Market on August 21, 2015. Prior to such date, our shares of common stock were traded over-the-counter and quoted on the OTCQB Marketplace.

The table below sets forth the high and low bid prices of our common stock, as reported on Nasdaq or the OTCQB Marketplace for the periods shown (as adjusted for the reverse stock split of our outstanding shares of common stock at a ratio of 1-for-12 that became effective on August 12, 2015):

	High	Low
Fiscal Year 2016		
Fourth Quarter	$ 4.10	$ 3.40
Third Quarter	$ 5.46	$ 3.50
Second Quarter	$ 7.50	$ 4.65
First Quarter	$ 8.40	$ 5.28
Fiscal Year 2015		
Fourth Quarter	$ 9.00	$ 2.76
Third Quarter	$ 8.40	$ 4.44
Second Quarter	$ 10.68	$ 6.60
First Quarter	$ 12.60	$ 10.68
Fiscal Year 2014		
Fourth Quarter	$ 14.16	$ 10.80
Third Quarter	$ 15.12	$ 10.32
Second Quarter	$ 22.80	$ 12.96
First Quarter	$ 13.80	$ 5.28

The closing price of our common stock on the Nasdaq Capital Market on June 9, 2016 was $2.39 per share. As of June 9, 2016, there were approximately 2,100 record holders of our common stock.

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DIVIDEND POLICY

Holders of our common stock are entitled to receive such dividends as may be declared by our board of directors. No dividends have been paid with respect to our common stock and no dividends are anticipated to be paid in the foreseeable future. Any future decisions as to the payment of dividends will be at the discretion of our board of directors, subject to applicable law.

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CAPITALIZATION

The following table sets forth our cash and total capitalization as of January 31, 2016 on:

an actual basis; and

on a pro forma, as adjusted basis to give effect to the sale of 2,000,000 shares of common stock in this offering, and the initial application of the estimated net proceeds therefrom.

You should read this table in conjunction with Use of Proceeds, Management s Discussion and Analysis of Financial Condition and Results of Operations and the financial statements and related notes appearing elsewhere in this prospectus.

	As of January 31, 2016	
	Actual	Pro Forma, As Adjusted
	(unaudited)	
Cash and cash equivalents	$3,293	$ 7,143
Common stock, $001 par value; 200,000,000 shares authorized; 8,963,590 shares issued and 8,702,237 shares outstanding as of January 31, 2016	9	11
Treasury stock, at cost, 269,686 common shares as of January 31, 2016	(1,252)	(1,252)
Additional paid-in capital	63,394	67,892
Accumulated deficit	(59,892)	(60,542)
Total stockholders' equity	2,259	6,109

The above discussion and table do not include the following:

2,215,257 shares of common stock issuable upon exercise of outstanding stock options, at a weighted average exercise price of $5.58 per share, under our equity incentive plan; and

2,109,840 shares of common stock issuable upon exercise of outstanding warrants, with current exercise prices ranging from $4.80 per share to $5.76 per share.

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DILUTION

If you purchase securities in this offering, your ownership interest will be diluted immediately to the extent of the difference between the public offering price of $2.25 per share, and the pro forma as adjusted net tangible book value per share of our common stock immediately following this offering.

Our net tangible book value as of January 31, 2016 was approximately $1,590,000 or approximately $0.18 per share. Net tangible book value per share represents our total tangible assets less our total liabilities, divided by the number of shares of common stock outstanding as of January 31, 2016.

Net tangible book value dilution per share of common stock to new investors represents the difference between the amount per share paid by purchasers in this offering and the pro forma net tangible book value per share of common stock immediately after completion of this offering. After giving effect to our sale of 2,000,000 shares in this offering at a public offering price of $2.25 per share, and after deducting the underwriting discount and estimated offering expenses, our as adjusted net tangible book value as of January 31, 2016 would have been $5.4 million, or $0.51 per share. This represents an immediate increase in net tangible book value of $0.33 per share to existing stockholders and an immediate dilution in net tangible book value of $1.74 per share to purchasers in this offering, as illustrated in the following table:

Public offering price per share		$ 2.25
Net tangible book value per share as of January 31, 2016	$ 0.18	
Increase in pro forma net tangible book value per share attributable to new investors	0.33	
As adjusted net tangible book value per share as of January 31, 2016, after giving effect to this offering		0.51
Net tangible book value dilution per share to new investors in this offering		$ 1.74

The above discussion and table do not include the following (which will subject investors in this offering to increased dilution if and when such securities are exercised):

2,215,257 shares of common stock issuable upon exercise of outstanding stock options, at a weighted average exercise price of $5.58 per share, under our equity incentive plan; and
2,109,840 shares of common stock issuable upon exercise of outstanding warrants, with current exercise prices ranging from $4.80 per share to $5.76 per share.

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MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS

You should read the following discussion and analysis together with our consolidated financial statements and the related notes included elsewhere in this prospectus. This discussion contains forward-looking statements that are based on our current expectations, estimates and projections about our business and operations. Our actual results may differ materially from those currently anticipated and expressed in such forward-looking statements as a result of a number of factors, including those we discuss under Risk Factors and elsewhere in this prospectus.

Overview

We are engaged in the development and sale of advanced technology solutions and products to personalize the development and use of oncology drugs. Utilizing our TumorGraft Technology Platform, we provide select services to pharmaceutical and biotechnology companies seeking personalized approaches to drug development. By performing studies to predict the efficacy of oncology drugs, our Platform facilitates drug discovery with lower costs and increased speed of drug development as well as increased adoption of existing drugs.

Our Platform provides a novel approach to simulating the results of human clinical trials used in developing oncology drugs. We believe it costs more than $100,000 per patient in oncology clinical trials and the typical cost for each phase of development per year increases from approximately $3 million in the pre-clinical setting to approximately $150 million in phase 3. Simulating trials before executing them provides benefits to both pharmaceutical companies and patients. Pharmaceutical companies can lower the risk of spending resources on drugs that do not show significant anti-cancer activities and increase the chance that the clinical development path they pursue will be focused on an appropriate patient population and a successful combination with other drugs.

We plan to continue our efforts to expand our TumorGraft Technology Platform in order to expand our TOS program. Our POS program will not be the focus of our growth moving forward.

Results of Operations

Three Months and Nine Months Ended January 31, 2016 Compared to Three Months and Nine Months Ended January 31, 2015

The following table summarizes our operating results for the periods presented below (dollars in thousands):

	For the Three Months Ended January 31,				
	2016	% of Revenue	2015	% of Revenue	% Change
Operating revenue:					
Personalized oncology solutions	$ 416	16.3 %	$ 453	24.8 %	(8.2)%
Translational oncology solutions	2,136	83.7	1,376	75.2	55.2
Total operating revenue	2,552	100.0	1,829	100.0	39.5

Costs and operating expenses:					
Cost of personalized oncology solutions	479	18.8	674	36.9	(28.9)
Cost of translational oncology solutions	1,627	63.8	1,301	71.1	25.1
Research and development	999	39.1	1,093	59.8	(8.6)
Sales and marketing	779	30.5	1,094	59.8	(28.8)
General and administrative	1,041	40.8	1,086	59.4	(4.1)
Total costs and operating expenses	4,925	193.0	5,248	286.9	(6.2)
Operating loss	$ (2,373)	(93.0)%	$ (3,419)	(186.9)%	(30.6)

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	For the Nine Months Ended January 31,				
	2016	% of Revenue	2015	% of Revenue	% Change
Operating revenue:					
Personalized oncology solutions	$ 1,387	16.6 %	$ 1,245	22.1 %	11.4 %
Translational oncology solutions	6,958	83.4	4,377	77.9	59.0
Total operating revenue	8,345	100.0	5,622	100.0	48.4
Costs and operating expenses:					
Cost of personalized oncology solutions	1,661	19.9	2,190	39.0	(24.2)
Cost of translational oncology solutions	4,683	56.1	3,225	57.4	45.2
Research and development	3,018	36.2	3,757	66.8	(19.7)
Sales and marketing	2,688	32.2	3,340	59.4	(19.5)
General and administrative	4,062	48.7	3,944	70.2	3.0
Total costs and operating expenses	16,112	193.1	16,456	292.7	(2.1)
Operating loss	$ (7,767)	(93.1)%	(10,834)	(192.7)%	(28.3)

Operating Revenues

Operating revenues were $2.6 million and $1.8 million for the three months ended January 31, 2016 and 2015, respectively, an increase of $800,000 or 39.5%. Operating revenues were $8.3 million and $5.6 million for the nine months ended January 31, 2016 and 2015, respectively, an increase of $2.7 million or 48.4%.

POS revenues were $416,000 and $453,000 for the three months ended January 31, 2016 and 2015, respectively, a decrease of $37,000, or (8.2%). The decrease is due to a decline of $215,000 in implant and panel revenue offset by an increase of $162,000 in sequencing revenue. POS revenues were $1.39 million and $1.25 million for the nine months ended January 31, 2016 and 2015, respectively, an increase of $140,000, or 11.4%. The increase is the result of growth in our sequencing revenue offset by a decline in implant and panel revenue.

TOS revenues were $2.1 million and $1.4 million for the three months ended January 31, 2016 and 2015, respectively, an increase of $700,000, or 55.2%. TOS revenues were $7.0 million and $4.4 million for the nine months ended January 31, 2016 and 2015, respectively, an increase of $2.6 million, or 59%. The increase is due to increased bookings, both in the number and size of the studies, in prior quarters due to the expansion of the TOS sales team and growth of the platform.

Cost of Personalized Oncology Solutions

Cost of POS for the three months ended January 31, 2016 and 2015 were $479,000 and $674,000, respectively, a decrease of $195,000, or (28.9%). Cost of POS for the nine months ended January 31, 2016 and 2015 were $1.7 million and $2.2 million, respectively, a decrease of $500,000 or (24.2%). For the three months ended January 31, 2016 and 2015, gross margins for POS were (15.1%) and (48.8%), respectively. For the nine months ended January 31, 2016 and 2015, gross margins for POS were (19.8)% and (75.9)%, respectively. The improvement in gross margin is attributed to the increase in higher margin, sequencing revenue, and aggressively managing our lab costs.

Cost of Translational Oncology Solutions

Cost of TOS for the three months ended January 31, 2016 and 2015 were $1.6 million and $1.3 million, respectively, an increase of $300,000, or 25.1%. Cost of TOS for the nine months ended January 31, 2016 and 2015 were $4.7

million and $3.2 million, respectively, an increase of $1.5 million, or 45.2%. For the three months ended January 31, 2016 and 2015, gross margins for TOS were 23.8% and 5.5%, respectively. For the nine months ended January 31, 2016 and 2015, gross margins for TOS were 32.7% and 26.3%, respectively. Gross margins vary quarterly based on timing differences between expense and revenue recognition. The improvement in gross margin was due to higher TOS revenue leveraged off the fixed cost component of the lab and effective management of the variable lab costs.

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Research and Development

Research and development expenses for the three months ended January 31, 2016 and 2015 were $1 million and $1.1 million, respectively, a decrease of $100,000, or (8.6%). Research and development expenses for the nine months ended January 31, 2016 and 2015 were $3.0 million and $3.8 million, respectively, a decrease of $800,000, or (19.7%). The decrease is due to lower expenses in genomic characterization of our TumorGraft Bank.

Sales and Marketing

Sales and marketing expenses for the three months ended January 31, 2016 and 2015 were $779,000 and $1.1 million, respectively, a decrease of $321,000, or (28.8%). Sales and marketing expenses for the nine months ended January 31, 2016 and 2015 were $2.7 million and $3.3 million, respectively, a decrease of $600,000, or (19.5%). The decrease is due to the consolidation of the sales and marketing resources of the POS and TOS division, including combining both under one commercial business leader.

General and Administrative

General and administrative expenses for the three months ended January 31, 2016 and 2015 were $1.04 million and $1.09 million, respectively, a decrease of $50,000, or (4.1%). General and administrative expenses for the nine months ended January 31, 2016 and 2015 were $4.1 million and $3.9 million, respectively, an increase of $200,000, or 3%. The increase is due to an increase in stock based compensation for the President and Chief Executive Officer.

Other Income (Expense)

Other income (expense) for the three months ended January 31, 2016 and 2015 were ($8,000) and $615,000, a decrease in income of $623,000. Other income (expense) for the nine months ended January 31, 2016 and 2015 were ($29,000) and $1.4 million, a decrease in income of $1.4 million. The change is mainly due to the gain on fair value of warrants that were accounted for as liabilities in during fiscal year 2015 which were reclassified into equity. See note 7 to our audited financial statements contained elsewhere in this prospectus for further discussion.

Inflation

Inflation does not have a meaningful impact on the results of our operations.

Year Ended April 30, 2015 Compared to Year Ended April 30, 2014

The following table summarizes our operating results for the periods presented below (dollars in thousands):

	For the Years Ended April 30,				
	2015	% of Revenue	2014	% of Revenue	% Change
Operating revenue:					
Personalized oncology solutions	$ 1,663	18.8 %	$ 2,264	19.6 %	(26.5)%
Translational oncology solutions	7,200	81.2	9,286	80.4	(22.5)
Total operating revenue	8,863	100.0	11,550	100.0	(23.3)

Costs and operating expenses:					
Cost of personalized oncology solutions	2,733	30.8	2,731	23.6	0.1
Cost of translational oncology solutions	4,900	55.3	3,532	30.6	38.7
Research and development	4,845	54.7	2,265	19.6	113.9
Sales and marketing	4,283	48.3	3,155	27.3	35.8
General and administrative	5,340	61.4	6,127	53.0	(11.2)
Total costs and operating expenses	22,101	250.5	17,810	154.2	24.7
Loss from operations	$ (13,238)	(150.5)%	$ (6,260)	(54.2)%	113.1 %

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Operating Revenues

Operating revenues for the years ended April 30, 2015 and 2014 were $8.9 million and $11.6 million, respectively, a decrease of $2.7 million, or 23.3%, primarily driven by the decrease in TOS revenue.

Personalized Oncology Solutions Revenues

POS revenues were $1.7 million and $2.3 million for the years ended April 30, 2015 and 2014, respectively, a decrease of $0.6 million or 26.5%. Core revenues, consisting of implants and drug panels, were $1.4 million and $1.8 million for the years ended April 30, 2015 and 2014, respectively, a decrease of 21%. The number of implants during fiscal 2015 was 245, an increase of 1% over fiscal 2014. The number of patients for whom studies were completed was 90 for fiscal 2015, an increase of 3% over fiscal 2014. The decrease in core revenue is due to a reduction in the number of tests per panel resulting in a $300,000 decrease in panel revenue. Non-core revenues, consisting of tumor boards and sequencing, decreased $212,000.

Translational Oncology Solutions Revenues

TOS revenues were $7.2 million and $9.3 million for the years ended April 30, 2015 and 2014, respectively, a decrease of $2.1 million or 22.5%. The decrease was due in part to slower recognition of study revenue caused by longer duration in study times and study extensions.

Cost of Personalized Oncology Solutions

POS cost of sales were $2.7 million for both years ended April 30, 2015 and 2014. For the years ended April 30, 2015 and 2014, gross margins for POS were negative 64% and negative 21%, respectively. The decline in gross margin is attributed to the decline in core POS revenue and a fixed component to the cost of sales. Non-core revenue, which has lower cost of sale and higher margins, declined, contributing to lower overall margins.

Cost of Translational Oncology Solutions

TOS cost of sales were $4.9 million and $3.5 million for the years ended April 30, 2015 and 2014, respectively, an increase of $1.4 million, or 38.7%. For the years ended April 30, 2015 and 2014, gross margins for TOS were 32% and 63%, respectively. The increase in TOS cost of sales is mainly due to an increase in TOS studies, the revenue of which will be recognized upon study completion.

Research and Development

Research and development expense was $4.8 million and $2.3 million for the years ended April 30, 2015 and 2014, respectively, an increase of $2.5 million or 114%. The increase is largely due to investment in characterizing the TumorBank.

Sales and Marketing

Sales and marketing expense was $4.3 million and $3.2 million for the years ended April 30, 2015 and 2014, respectively, an increase of $1.1 million, or 35.8%. The increase was due to the expansion of the TOS sales force offset by reduced sales and marketing expense for POS.

General and Administrative

General and administrative expense was $5.3 million and $6.1 million for the years ended April 30, 2015 and 2014, respectively, a decrease of $0.8 million, or 11.2%.

Other Income/(Expense)

Other Income/(expense) consists of the change in the fair value of warrants that were accounted for as liabilities and are described further below and in Note 7 to the accompanying consolidated financial statements, a modification charge due to the extinguishment of the liability as stated in the amended 2011 and 2013 Warrant Agreements both of which are described further below and in Note 7 to the accompanying consolidated financial statements and other miscellaneous charges. Other Income/(expense) was $225,000 and

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($1.1) million for the years ended April 30, 2015 and 2014, respectively. This change in the fair value of the warrant liability was a result of revaluing the warrant liability based on the Monte Carlo simulation valuation model, impacted primarily by the quoted price of our common stock. The revaluation of the warrant liability has no impact on our cash balances.

Inflation

Inflation does not have a meaningful impact on the results of our operations.

Liquidity and Capital Resources

Our liquidity needs have typically arisen from the funding of our research and development programs and the launch of new products, working capital requirements, and other strategic initiatives. In the past, we have met these cash requirements through our sales of products and services, cash and cash equivalents, working capital management, and proceeds from certain private placements of our securities. As of January 31, 2016, we had positive working capital of $1.2 million and cash and cash equivalents on hand of $3.3 million. We believe that our cash and cash equivalents on hand at January 31, 2016 are adequate to fund our operations through at least April 2017, provided that we reduce certain expenses that are not critical to the operation of our business. However, in order for us to continue as a going concern beyond this point, we may need to obtain capital from external sources. If we are unsuccessful in raising sufficient funds in this offering or we are unable to obtain additional financing subsequent to this offering, we may be required to reduce the scope of, or delay or eliminate, some of our research and development and other activities, which could harm our financial condition and operating results. Financing may not be available on acceptable terms or at all, and our failure to raise capital when needed could negatively impact our growth plans and our financial condition and results of operations. Additional equity financing may be dilutive to the holders of our common stock and debt financing, if available, may involve significant cash payment obligations and covenants and/or financial ratios that restrict our ability to operate our business.

On December 1, 2014, the Company entered into note purchase agreements with and issued convertible promissory notes in the principal amount of $1 million each to Joel Ackerman, the Company s Chief Executive Officer, and Dr. Ronnie Morris, the Company s President, to finance the operations of the Company. The transaction was approved by the Company s audit committee.

The notes bore interest at 12% per annum and had an initial term of 90 days. The notes, including any accrued but unpaid interest, were convertible at the option of each noteholder: (a) upon the closing of any equity financing that occurred during the term of the notes, into the securities offered in the financing to other investors at a 5% discount to the price per share paid by other investors in the financing; and (b) upon the maturity date of the notes, into the Company s common stock at the volume weighted average closing price of the common stock for the five trading days prior to such conversion.

On February 28, 2015, the Company entered into amendments to the convertible promissory notes issued on December 1, 2014. The amendments extended the maturity dates of the convertible promissory notes to April 1, 2015. The amendments were approved by the Company s audit committee.

On March 11, 2015, the convertible promissory notes and accrued interest were converted into 451,754 shares of common stock and warrants to purchase 248,465 shares of common stock at an exercise price of $5.76, which warrants expire on March 11, 2020, as part of the 2015 Securities Purchase Agreement.

On March 11, 2015, the Company entered into a 2015 Securities Purchase Agreement (the 2015 Securities Purchase Agreement) with Battery Ventures IX, L.P. and Battery Investment Partners IX, LLC (collectively, Battery), New Enterprise Associates 14, Limited Partnership (NEA), Joel Ackerman, Chief Executive Officer and a director of the Company (Ackerman), Dr. Ronnie Morris, President and a director of the Company (Morris), Daniel Mendelson, a director of the Company (Mendelson) and certain other investors (collectively with Battery, NEA, Ackerman, Morris and Mendelson, the Investors), for the sale to the Investors of units, each unit consisting of one share of the Company s common stock and a warrant to buy 0.55 shares of common stock at $5.76 per share (the Warrants), at a purchase price of $4.80 per unit, for an aggregate of $14,000,000. The Warrants expire five years after the closing date.

Ackerman and Morris

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converted convertible promissory notes dated December 1, 2014 in the principal amounts of $1 million each, plus accrued interest, into the units at a 5% discount, pursuant to the terms of the convertible promissory notes.

The Investors have the right to require the Company to repurchase the purchased shares (the Put Option) for cash for $4.80 per share upon a change of control or sale or exclusive license of substantially all of the Company s assets only if approved by the Company s board of directors. The Put Option will terminate upon the achievement of certain financial and other milestones relating to the stock price of our common stock and our issuance of shares in a public offering of at least $15,000,000.

The Investors have certain participation rights with respect to future financings of the Company, but not in public offerings like this offering. The Company registered the resale of the shares of common stock issued to the Investors and the shares of Common Stock issuable upon exercise of the Warrants pursuant to a 2015 Amended and Restated Registration Rights Agreement and are required to keep such registration statement effective until March 2017, unless all of the securities registered thereunder are sold, or may be sold pursuant to Rule 144 during any 90-day period without volume restrictions, prior to such date.

The issuance of the shares of common stock under the 2015 Securities Purchase Agreement resulted in the Company issuing an additional 155,488 shares of common stock to investors who purchased shares of common stock pursuant to a Securities Purchase Agreement dated as of March 24, 2011 (the 2011 Securities Purchase Agreement) due to contractual antidilution provisions in that 2011 Securities Purchase Agreement. The Company also amended and restated the 2011 Securities Purchase Agreement to eliminate these antidilution provisions going forward, and conform aspects of the put option in that 2011 Securities Purchase Agreement to terms of the Put Option in the 2015 Securities Purchase Agreement. The Company also issued an additional 131,945 warrants to its investors under the 2011 Warrant Agreements under the 2011 Securities Purchase Agreement and had its investors agree on certain amendments of the warrants to eliminate the antidilution rights for future transactions, by extending the term of the warrants by one year, and revising the exercise price to $4.80.

The Company and its investors have amended and restated its Securities Purchase Agreement dated January 28, 2013 (the 2013 Securities Purchase Agreement) to conform aspects of the put option in that 2013 Securities Purchase Agreement to the Put Option in the 2015 Securities Purchase Agreement. The Company issued an additional 100,750 warrants to investors under the 2013 Warrant Agreements under the 2013 Securities Purchase Agreement and had its investors agree on certain amendments of these warrants issued in connection with the 2013 Securities Purchase Agreement to eliminate the antidilution rights for future transactions, by extending the term of the warrants by one year, and revising the exercise price to $4.80.

Cash Flows

The following discussion relates to the major components of our cash flows:

Cash Flows from Operating Activities

Net cash used in operating activities was $9.6 million and $3.4 million for the years ended April 30, 2015 and 2014, respectively. The increase of $6.2 million cash used in operations relates to a decrease in revenues in conjunction with increase in costs for business expansion.

Cash Flows from Investing Activities

Cash used in investing activities was $114,000 and $234,000 for the years ended April 30, 2015 and 2014, respectively. These cash flows relate to the purchase of property and equipment.

Cash Flows from Financing Activities

Net cash provided by financing activities was $13.2 million and $21,000 for the years ended April 30, 2015 and 2014, respectively. These cash flows in 2015 primarily relate to the private placement of common stock and warrants that occurred on March 13, 2015, and the exercise of stock options and warrants.

Critical Accounting Policies

We believe that of our significant accounting policies set forth in the notes to our audited financial statements contained herein, the following may involve a higher degree of judgment and complexity:

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General

Our discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States or GAAP. The preparation of the consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosure of contingent assets and liabilities. Significant estimates of the Company include, among other things, accounts receivable realization, revenue recognition (replacement of licensed tumors), valuation allowance for deferred tax assets, valuation of goodwill, and stock compensation and warrant assumptions. We have not identified any estimates that require a significant level of judgment or are otherwise subject to an inherent degree of uncertainty. We base our estimates on historical experience, our observance of trends in particular areas and information or valuations and various other assumptions that we believe to be reasonable under the circumstances and which form the basis for making judgments about the carrying value of assets and liabilities that may not be readily apparent from other sources. Actual amounts could differ significantly from amounts previously estimated.

Revenue Recognition

The Company derives revenue from its POS and TOS businesses. Personalized oncology solutions assist physicians by providing information to help guide the development of personalized treatment plans for their patients using our core offerings, including testing oncology drugs and drug combinations on personalized TumorGrafts, and through other products. Translational oncology solutions offer a preclinical TumorGraft platform to pharmaceutical and biotechnology companies using proprietary TumorGraft studies, which the Company believes may be predictive of how drugs may perform in clinical settings. The Company recognizes revenue when the following four basic criteria are met: (i) a contract has been entered into with its customers; (ii) delivery has occurred or services rendered to its customers; (iii) the fee is fixed and determinable as noted in the contract; and (iv) collectability is reasonably assured. The Company utilizes a proportional performance revenue recognition model for its TOS business, under which it recognizes revenue as performance occurs, based on the relative outputs of the performance that have occurred up to that point in time under the respective agreement, typically the delivery of reports to its customers documenting the results of testing protocols.

When a POS or TOS arrangement involves multiple elements, the items included in the arrangement (deliverables) are evaluated to determine whether they represent separate units of accounting. We perform this evaluation at the inception of an arrangement and as each item in the arrangement is delivered. Generally, we account for a deliverable (or a group of deliverables) separately if: (i) the delivered item(s) has standalone value to the customer, and (ii) we have given the customer a general right of return relative to the delivered item(s) and the delivery or performance of the undelivered item(s) or service(s) is probable and substantially in our control. Revenue on multiple element arrangements is recognized using a proportional method for each separately identified element. All revenue from contracts determined not to have separate units of accounting is recognized based on consideration of the most substantive delivery factor of all the elements in the contract or if there is no predominant deliverable upon delivery of the final element of the arrangement.

Share-Based Payments

We typically recognize expense for share-based payments based on the fair value of awards on the date of grant. We use the Black-Scholes option pricing model to estimate fair value. The option pricing model requires us to estimate certain key assumptions such as expected life, volatility, risk free interest rates, and dividend yield to determine the fair value of share-based awards. These assumptions are based on historical information and management judgment.

We expense share-based payments over the period that the awards are expected to vest, net of estimated forfeitures. If actual forfeitures differ from management s estimates, compensation expense is adjusted. We report cash flows resulting from tax deductions in excess of the compensation cost recognized from those options (excess tax benefits) as financing cash flows when the cash tax benefit is received.

Goodwill

Goodwill represents the excess of the cost over the fair market value of the net assets acquired including identifiable assets. Goodwill is tested annually, or more frequently, if circumstances indicate potential

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impairment, by comparing its fair value to its carrying amount. The determination of whether or not goodwill is impaired involves significant judgment. Although we believe our goodwill is not impaired, changes in strategy or market conditions could significantly impact the judgments and may require future adjustments to the carrying value of goodwill. We use a two-step process to test for goodwill impairment. The first step is to screen for potential impairment, while the second step measures the amount of the impairment, if any. The first step of the goodwill impairment test compares the fair value of each reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying value, goodwill is not impaired. If the carrying value of the reporting unit s net assets, including goodwill, exceeds the fair value of the reporting unit, then we determine the implied fair value of goodwill. If the carrying value of goodwill exceeds its implied fair value, then an impairment of goodwill has occurred and an impairment loss would be recognized for the difference between the carrying amount and the implied fair value of goodwill as a component of operating income. The implied fair value of goodwill is calculated by subtracting the fair value of tangible and intangible assets associated with the reporting unit from the fair value of the unit.

In addition, we evaluate impairment if events or circumstances change between the annual assessments, indicating a possible impairment. Examples of such events or circumstances include: (i) a significant adverse change in legal factors or in the business climate; (ii) an adverse action or assessment by a regulator; or (iii) a significant decline in market capitalization as compared to book value.

We have two operating segments and two reporting units. Judgments regarding the existence of impairment indicators are based on legal factors, market conditions and operational performance of the acquired businesses. Future events, including but not limited to continued declines in economic activity, loss of contracts or a significant number of customers or a rapid increase in costs or capital expenditures, could cause us to conclude that impairment indicators exist and that goodwill is impaired. Any resulting goodwill impairment could have a material adverse impact on our financial condition and results of operations.

Accounting for Income Taxes

We use the asset and liability method to account for income taxes. Significant management judgment is required in determining the provision for income taxes, deferred tax assets and liabilities and any valuation allowance recorded against net deferred tax assets. In preparing the consolidated financial statements, we are required to estimate income taxes in each of the jurisdictions in which we operate. This process involves estimating the actual current tax liability together with assessing temporary differences resulting from differing treatment of items, such as deferred revenue, depreciation on property, plant and equipment, goodwill and losses for tax and accounting purposes. These differences result in deferred tax assets, which include tax loss carry-forwards, and liabilities, which are included within the consolidated balance sheet. We then assess the likelihood that deferred tax assets will be recovered from future taxable income, and to the extent that recovery is not likely or there is insufficient operating history, a valuation allowance is established. To the extent a valuation allowance is established or increased in a period, we include an expense within the tax provision of the consolidated statements of operations.

Off-Balance Sheet Financing

We have no off-balance sheet debt or similar obligations. We have no transactions or obligations with related parties that are not disclosed, consolidated into or reflected in our reported results of operations or financial position. We do not guarantee any third-party debt.

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BUSINESS

Overview

We are engaged in the development and sale of advanced technology solutions and products to personalize the development and use of oncology drugs. Utilizing our TumorGraft Technology Platform, we provide select services to pharmaceutical and biotechnology companies seeking personalized approaches to drug development. By performing studies to predict the efficacy of oncology drugs, our Platform facilitates drug discovery with lower costs and increased speed of drug development as well as increased adoption of existing drugs.

The current oncology drug development paradigm is challenging for the pharmaceutical and biotechnology industry. We believe that on average, the clinical trial process in oncology currently:

Costs more than $1.2 billion;
Takes approximately 8 years to complete;
Has a 93% failure rate;
Results in approved compounds that cost more than $11,000 per month.

Our Platform provides a novel approach to simulating the results of human clinical trials used in developing oncology drugs. According to a 2013 study conducted by Cutting Edge Information, it can cost up to $100,000 per patient in oncology clinical trials and the typical cost for each phase of development per year increases from approximately $3 million in the pre-clinical setting to approximately $150 million in phase 3. Simulating trials before executing them provides benefits to both pharmaceutical companies and patients. Pharmaceutical companies can lower the risk of spending resources on drugs that do not show significant anti-cancer activities and increase the chance that the clinical development path they pursue will be focused on an appropriate patient population and a successful combination with other drugs.

TumorGraft Technology Platform

Our clinical trial simulation platform consists of processes, physical tumors, and information that we use to personalize the development and use of oncology drugs. Our process technology, which we call TumorGrafting is also known as Patient Derived Xenografts and involves the:

implantation of human tumor fragments in immune-deficient mice;
expansion of the original human tumor into a larger colony of mice through the passage of the tumor to a limited number of generations of mice;
treatment of the implanted mice with oncology drugs;
measurement of tumor growth inhibition in treated mice relative to a control group of mice to determine the response of the tumor to the drug; and
permanent cryo-preservation of fragments of tumor tissue for future use in additional clinical trial simulations.

A growing body of evidence demonstrates the power of PDX to predict the response of individual patients to oncology drugs. Our platform has demonstrated a positive predictive value of approximately 87% and negative predictive value of approximately 94%. As a result, we believe our PDX platform results in simulated clinical studies with approximately 90% accuracy in predicting human response with approximately 90% lower costs than a human clinical trials while shortening the timelines from 2-3 years for human trial to 6 months for PDX studies.

TumorBank

Each tumor from individual patients that we have preserved for future implantation in mice, along with the patient data and molecular information associated with these tumors, are referred to as TumorGrafts or Patient Derived XenoGrafts of PDX Models . The collection of TumorGrafts that we have built is referred to as our TumorBank. We currently have 700 PDX models in our TumorBank that we believe reflect

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characteristics of patients who enroll in clinical trials (late stage, pretreated and metastic). We implant tumors in mice to provide pharmaceutical and biotechnology companies the opportunity to test oncology compounds on multiple tumors to test efficacy and simulate the results of human clinical trials.

Increasing breadth and depth of the TumorBank is an important strategic effort of the company. We invest significant research and development resources to increase the number of PDX Models in our TumorBank and add different sub-types of cancer that we have not historically addressed. In addition, we are also developing an extensive database of information about the tumors in our TumorBank. We expect that this database will include certain information about the patient (e.g. age, gender), the response of the tumors to different oncology drugs or drug combinations, mutational status of key oncogenes, and other genetic and epigenetic data about each tumor. We expect that such data could be valuable to companies seeking to develop new cancer drugs.

Based on our extensive knowledge of the industry, we believe that we are a leading provider of Patient Derived XenoGrafts and a pioneer in the use of PDX models for use with patients and clinical trial simulations. Our research and development efforts and customer sponsored platform development has contributed to the acceptance of the accuracy of PDX models as a valuable tool in the development and use of oncology drugs.

Our Strategy

Our strategy is to use TumorGrafts as a platform technology to drive multiple synergistic revenue streams. We continue to build this platform with investments in research and development. Our goal is to populate our TumorBank and its related database with tumors and information we receive from patients, research collaborations and validation studies. The tumors and information in the TumorBank are then available for work with pharmaceutical company customers. In addition, we are looking for additional opportunities to utilize the data we are gathering about the tumors to develop proprietary biomarkers and signatures of response that can predict the resistance or sensitivity of individual patients to oncology drugs.

Translational Oncology Solutions Business

Our TOS business utilizes our technology platform to assist pharmaceutical and biotechnology companies with their drug development process. We provide studies, or license tumors for use in studies, which we believe may predict the efficacy of experimental oncology drugs or approved drugs as stand-alone therapies or in combination with other drugs and can stimulate the results of human clinical trials. These studies include in vivo studies that rely on implanting multiple tumors from our TumorBank in mice and testing the therapy of interest on these tumors. Studies may also include bioinformatics analyses that reveal the differences in the genetic signatures of the tumors that responded to a therapy as compared to the tumors that did not respond. Our studies can be used to determine which types of cancer, if any, may be inhibited by a drug. The studies can also be used to identify specific sub-populations, often characterized by particular genetic mutations that are differentially sensitive or resistant to a drug or drug combination. These studies, used in pre-clinical testing or during phase I or II of a clinical trial, can help guide the clinical development path of new compounds or find new indications or combinations for compounds that are already approved by the United States Food and Drug Administration, or FDA. We believe that the results may lead to lower costs and shorter timeframes for drug development.

We have performed more than 450 studies for approximately 100 different pharmaceutical and biotech over the past five years. We have a high rate of repeat business with more than 75 companies having used our platform for more than one study. Typical studies range in price from $50,000 $250,000. We have completed approximately ten studies with prices above $500,000. Revenue from this business segment has grown at a cumulative annual growth rate of

34% since the current management team joined the company in fiscal 2010.

Our sales and marketing efforts are dependent on a dedicated sales force that sells our services directly to pharmaceutical and biotechnology companies. We have a team of eight professionals dedicated to this sales and marketing effort. The team is focused on identifying and selling studies to new customers as well as increasing our revenue from existing customers. We spend significant resources in informing our current buyers and reaching out to new buyers within companies that we currently serve. These efforts are aimed at moving our customers along the adoption curve for PDX-based clinical trial simulation and increasing the

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number of studies and the average study size at our existing customers. The success in these efforts is demonstrated by the 15 customers who have spent more than $500,000 with Champions over the past three years.

Personalized Oncology Solutions Business

Our POS business offers to physicians and patients information to help guide the development of personalized treatment plans. Our core products, TumorGraft implants and drug panels, utilize TumorGraft technology to empirically test the response of a patient s tumor to multiple oncology drugs or drug combinations. The response of the tumors in the mice is tracked over time and analyzed to determine which drug or drug combination is providing the highest level of tumor growth inhibition in the mice. This process simulates the results of multiple, simultaneous clinical trials in which a patient might consider participating. We provide this product with the primary goal of adding PDX models to our TumorBank, and gaining valuable data about the accuracy of PDX models in predicting patient response and in building the operational capabilities to collect, implant and grow tumors from patients, physicians and hospitals around the United States and internationally. Our data, which is currently limited in nature, indicates that there may be a correlation between the response to drugs of a tumor in a mouse with the response to drugs of a tumor in a patient.

In addition to our core TumorGraft POS products, we offer non-core related POS products to our customers, including personalized tumor boards, previously known as tumor panels, and gene sequencing. Personalized tumor boards are designed to provide access to oncologists with expertise in particular tumor types. We also provide access to gene sequencing that analyzes the genetic makeup of a patient s tumor for the purpose of identifying potentially useful drugs. We will continue to offer related personal oncology products to our customers; however, we expect future POS revenues to be driven by our core products.

We rely on the internet, word of mouth and a small sales force to market these services to patients and physicians.

Our POS business will not be the focus of our growth moving forward.

Our Growth and Expansion Strategy

Our strategy is to continue to use TumorGrafts as a platform technology to drive multiple synergistic revenue streams.

Our current strategy for growth has three components:

Growing our TumorBank: We grow our TumorBank in two ways. First, we increase the number of TumorGrafts in the bank for our existing tumor types to ensure customers are finding the specific models they need for their studies. Second, we add new tumor types to the bank to enable studies in tumor types that we have not historically been able to run for our pharmaceutical and biotech customers.

Adding new PDX technologies: The fields of oncology research and drug development are evolving. To keep up with new approaches, we add new technologies to our PDX platform. We are currently investing in developing ImmunoGrafts, a new PDX model that is developed in a mouse with a humanized immune system. These models are built to specifically serve the needs of pharmaceutical and biotech companies developing immune oncology drugs. This is a relatively new area of oncology research that has shown significant promise and is attracting a significant amount of research and development interest.

Increasing the scale of studies: We have facilitated studies for approximately 100 pharmaceutical and biotech companies including 16 of the top 20 pharmaceutical companies. We believe there is significant opportunity to grow our revenue by increasing the size of the studies these customers run. To accomplish this, we are developing new

study designs that offer solutions to compounds that are in phase I and phase II clinical trials. We believe that the total available market size is greater than $1 billion and that the increased budgets of these drugs, as compared to drugs in the pre-clinical stage, will enable us to sell larger studies.

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Competition

Our TumorGraft Technology Platform is proprietary and requires significant know-how to both initiate and operate, but is not patented. It is, therefore, possible for competitors to develop other implantation procedures or to discover the same procedures utilized by the Company that could compete with the Company in its market. Competition in our industry is intense and based significantly on scientific, technological, and market forces, which include the effectiveness of the technology and products and the ability to commercialize technological developments. The Company faces significant competition from other healthcare companies in the United States and abroad. The majority of these competitors are, and will be, substantially larger than the Company, and have substantially greater resources and operating histories. There can be no assurance that developments by other companies will not render our products or technologies obsolete or non-competitive or that we will be able to keep pace with the technological or product developments of our competitors. These companies, as well as academic institutions, governmental agencies, and private research organizations also compete with us in recruiting and retaining highly qualified scientific, technical and professional personnel and consultants.

Research and Development

For the years ended April 30, 2015 and 2014, we spent approximately $4.8 million and $2.3 million, respectively, to develop our TumorGraft Technology Platform. We continue to expand our TumorBank through the inclusion of tumor tissue and implanted models from our POS business. In addition, we expect to grow our TumorBank through research collaborations and relationships with hospitals and academic institutions. Our research and development efforts were focused on increasing our understanding of our TumorGraft models, their clinical predictability, improving growth and tumor take rates, and other biological and molecular characteristics of the models.

Government Regulation

The research, development, and marketing of our products, the performance of our POS testing services, and the operation of our facilities are generally subject to federal, state, local, or foreign legislation, including licensure of our laboratories located in Baltimore, Maryland and New York, New York by the States of Maryland and New York, respectively, and compliance with federal, state, local or foreign legislation applicable to the use of live animals in scientific testing, research and education.

The FDA has claimed regulatory authority over laboratory developed tests such as our POS products, but has generally not exercised it. The FDA has announced regulatory and guidance initiatives that could increase federal regulation of our business. We are subject to federal and international regulations with regard to shipment of hazardous materials, including the Department of Transportation and the International Air Transit Authority. These regulations require interstate, intrastate, and foreign shipments comply with applicable labeling, documentation, and training requirements.

Employees

As of June 9, 2016, we had 71 full-time employees, including 26 with doctoral or other advanced degrees. Of our workforce, 51 employees are engaged in research and development and laboratory operations, 13 employees are engaged in sales and marketing, and 7 employees are engaged in finance and administration. None of our employees are represented by a labor union or covered by collective bargaining agreements. We have never experienced a work stoppage and believe our relationship with our employees is good.

Company History

We were incorporated as a merger and acquisition company under the laws of the State of Delaware on June 4, 1985, under the name International Group, Inc. In September 1985, the Company completed a public offering and shortly thereafter acquired the world-wide rights to the Champions sports theme restaurant concept and changed its name to Champions Sports, Inc. In 1997, the Company sold its Champions service mark and concept to Marriott International, Inc. and until 2005, was a consultant to Marriott International, Inc. and operated one Champions Sports Bar Restaurant. In January 2007, the Company changed its business direction to focus on biotechnology and subsequently changed its name to Champions Biotechnology, Inc. On May 18, 2007, the Company acquired Biomerk, Inc., at which time we began focusing on our current line of business.

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Properties

We currently lease our office facilities. Rent expenses totaled $216,000 and $168,000 for the nine months ended January 31, 2016 and 2015, respectively, which included a former facility located in Singapore, which was closed in January of 2015. We consider our facilities adequate for our current operational needs.

We lease the following facilities under non-cancelable operating lease agreements:

One University Plaza, Suite 307, Hackensack, New Jersey 07601, which, since November 2011, serves as the Company s corporate headquarters and consists of approximately 3,800 square feet of office space. The lease expires in November 2016. The Company recognized $85,000 and $75,000 of rental costs relative to this lease for fiscal 2015 and 2014, respectively.

855 North Wolfe Street, Suite 619, Baltimore, Maryland 21205, which consists of laboratories and office space where the Company conducts operations related to its primary service offerings. This lease expires in June 2016. The Company recognized $86,000 and $85,000 of rental costs relative to this lease for fiscal 2015 and 2014, respectively.

450 East 29th Street, New York, New York, 10016, which is a laboratory at which we implant tumors. This lease expires in September 2016 and can be renewed by the Company for subsequent one year terms. The Company recognized $47,000 and $4,000 of rental costs relative to this lease for fiscal 2015 and 2014, respectively.

Legal Proceedings

From time to time, we may become involved in various lawsuits and legal proceedings that arise in the ordinary course of business. However, we are currently not aware of any such legal proceedings or claims that we believe will have a material adverse effect on our business, financial condition or operating results.

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MANAGEMENT

Directors and Executive Officers

The directors and executive officers of the Company as of the date of this prospectus are as follows:

Name	*Position(s) Presently Held*
David Sidransky, M.D.	Director, Chairman of the Board
Joel Ackerman	Chief Executive Officer, Director
Ronnie Morris, M.D.	President and Director
David Miller	Vice President of Finance
Daniel Mendelson	Director
Abba David Poliakoff	Director
Scott R. Tobin	Director
Philip Breitfeld	Director

David Sidransky, M.D., age 55, has served as Chairman of the Company since October 2007 and a director of the Company since August 2007. Dr. Sidransky is the Director of the Head and Neck Cancer Research Division at Johns Hopkins University School of Medicine and is a Professor of Oncology, Otolaryngology-Head and Neck Surgery, Cellular & Molecular Medicine, Urology, Genetics, and Pathology at Johns Hopkins University and Hospital. In the field of oncology, Dr. Sidransky is one of the most highly-cited researchers in clinical and medical journals in the world, with over 400 peer-reviewed publications in the past decade. He has also contributed to more than 60 cancer reviews and chapters. Dr. Sidransky is a founder of a number of biotechnology companies and holds numerous biotechnology patents. He has served as Vice Chairman of the Board of Directors of ImClone Systems, Inc., a global biopharmaceutical company committed to advancing oncology care, and was a director, until its merger with Eli Lilly. Dr. Sidransky remains Chairman of Tamir Biotechnology and serves on the boards of directors of KV Pharmaceutical Company and Rosetta Genomics. Dr. Sidransky is serving and has served on scientific advisory boards of MedImmune, Roche, Amgen and Veridex, LLC (a Johnson & Johnson diagnostic company), among others. From 2005 to 2008, Dr. Sidransky served as Director of the American Association for Cancer Research (AACR) and was the Chairperson of the first and second (September 2006 and 2007) AACR International Conferences on Molecular Diagnostics in Cancer Therapeutic Development: Maximizing Opportunities for Individualized Treatment. Dr. Sidransky is the recipient of many awards and honors, including the 1997 Sarstedt International Prize from the German Society of Clinical Chemistry, the 1998 Alton Ochsner Award Relating Smoking and Health by the American College of Chest Physicians, and the 2004 Hinda and Richard Rosenthal Award from the AACR. Dr. Sidransky is certified in Internal Medicine and Medical Oncology by the American Board of Medicine. Dr. Sidransky received his bachelor s degree from Brandeis University and his medical degree from the Baylor College of Medicine.

Dr. Sidransky is well-qualified to serve as the non-executive Chairman of the Company and a member of the Company s Board of Directors, based on his extensive experience in clinical and medical oncology, his stature as a leading researcher in the field, and his experience with biotechnology companies.

Joel Ackerman, age 50, has served as Chief Executive Officer and a director of the Company since October 2010. Mr. Ackerman received a bachelor s degree from Columbia University, where he graduated summa cum laude in 1988, and a master s degree in Physics from Harvard University in 1990. From 1990 to 1993, Mr. Ackerman was an associate with Mercer Management Consulting, a global strategy consulting firm. From 1993 to 2008, Mr. Ackerman was employed by Warburg Pincus, LLC, a global private equity investment firm. There, Mr. Ackerman served in

various capacities including Managing Director, Head of Healthcare Services, and as a member of the firm s executive management team. During 2010, Mr. Ackerman served as a senior portfolio fellow with Acumen Fund, a non-profit global venture fund that uses entrepreneurial approaches to address global poverty. Mr. Ackerman is currently a member of the board of directors of Kindred Healthcare, Inc., a publicly traded company that operates hospitals and nursing homes. Mr. Ackerman s employment agreement with the Company provides that the Company will nominate him for election as a director for so long as he serves as an executive officer of the Company.

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Mr. Ackerman is well-qualified to serve as a member of the Company s Board of Directors, due to his broad and extensive operational and financial experience in the healthcare and biomedical industries.

Ronnie Morris, M.D., age 49, has served as President and a director of the Company since October 2010. Dr. Morris received his medical degree from the University of Medicine and Dentistry of New Jersey in 1993, completed his residency at the Long Island Jewish Medical Center in 1996, and obtained his certification from the American Board of Internal Medicine in 1996. From 1996 to 2004, Dr. Morris practiced internal medicine and was a managing partner of Prohealth Medical Group in Boca Raton, Florida where, in addition to his personal medical practice of more than 2,500 patients, he managed over 30 physicians in a multi-specialty practice, was responsible for the practice s financial operations, and coordinated and created ancillary revenue services for the practice. From 2004 to 2006, Dr. Morris was Vice President and Medical Director of AllianceCare Inc. in Boynton Beach, Florida, a company that provides home health care, physical therapy, and doctor house calls . In that capacity, Dr. Morris was responsible for the physician house call business, developed new markets, managed and directed 150 employees, tripled revenue and brought his division to profitability. In 2001, in Boca Raton, Florida, Dr. Morris co-founded MDVIP, Inc., a personalized healthcare services company. Until 2009, when MDVIP was acquired by Procter and Gamble Co., Dr. Morris served on MDVIP s Board of Directors, as Medical Director, and as a member of its executive management team. In those capacities, Dr. Morris conceptualized, developed and helped build MDVIP from a start-up company into a national leader in personalized healthcare services, with a network of 400 doctors in 29 states and 125,000 consumers/patients. Since 2009, Dr. Morris has been a private investor. Dr. Morris s employment agreement with the Company provides that the Company will nominate him for election as a director for so long as he serves as an executive officer of the Company.

Dr. Morris is well-qualified to serve as a member of the Company s Board of Directors, due to his extensive operational and managerial experience in the healthcare industry.

David Miller, age 47, has served as our Vice President, Finance since June 2013. Prior to joining the Company, Mr. Miller served as the Vice President of Finance and Operations at DMCWW, LLC, a private equity company focused on investing and operating start-up enterprises in the consumer technology space. From January 2006 to March 2010, Mr. Miller served as the Chief Financial Officer of NAF Funding, LLC, a nationwide financial services firm that brokers transactions involving the trading of life insurance policies. From January 2000 to December 2005, Mr. Miller was the Vice President of Finance and Operations at IDT Corp., where he led the creation and growth of the consumer phone services division to over one million customers of local and long distance service. From 1997 to 1999, he was an Assistant Vice President of the Internal Audit Department at Deutche Bank. Mr. Miller also held Senior Accountant positions at Schonbraun, Safris, Sternlieb, LLC and Margolin, Winer and Evans. Mr. Miller earned a B.S. from Yeshiva University in 1991 and an MBA from Fordham in 1999. He is a Certified Public Accountant.

Daniel Mendelson, age 51, has served as a director of the Company since March 2013. Mr. Mendelson is the Chief Executive Officer and founder of Avalere Health, a strategic advisory company focused on devising innovative solutions to complex healthcare problems. The firm s customer base includes Fortune 500 healthcare companies, provider organizations, medical foundations, and government. Mr. Mendelson is also currently Adjunct Professor of Business Administration at The Fuqua School of Business at Duke University and sits on the board of directors of HMS Holdings Corp., a publicly traded company that provides cost containment services to government and private healthcare payers and sponsors. From 1998 to 2000, Mr. Mendelson served as Associate Director for Health at the Office of Management and Budget (OMB). Prior to joining OMB, Mr. Mendelson was Senior Vice President of The Lewin Group and Director of the Medical Technology practice. He holds an undergraduate degree in economics and viola performance from Oberlin College, and a M.P.P. from the Kennedy School of Government at Harvard University.

Mr. Mendelson is well-qualified to serve as a member of the Company s Board of Directors, due to his business experience in healthcare companies, government experience and business administration education.

Abba David Poliakoff, age 64, has served as a director of the Company since March 2008. Mr. Poliakoff is a member of the law firm of Gordon Feinblatt LLC in Baltimore, Maryland, and chair of its Securities Law Group. He is a member of the Maryland State Bar Association s Business Law Section, former Chair of its Committee on Securities, and a former member of the Business Regulations Article Review Committee of the

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Committee to Revise the Maryland Annotated Code. Mr. Poliakoff is the Chairman Emeritus of the Maryland Israel Development Center, a joint venture between the State of Maryland Department of Business and Economic Development and the State of Israel Ministry of Industry and Trade. Governor Lawrence J. Hogan, Jr. has appointed Mr. Poliakoff to co-chair the Business Regulation Review Commission. Previously, Governor Martin J. O Malley of Maryland has appointed Mr. Poliakoff to the Governor s International Advisory Council on International Commerce and Trade. Before that, he was appointed by Maryland Governor Robert C. Ehrlich, Jr. to the Governor s Transition Committee. He currently serves on a number of boards, including the board of visitors of the University of Maryland School of Medicine, the board of directors of the BioTechnical Institute of Maryland, the board of directors of the JET Incubator of Baltimore and on several advisory boards. In his community work, he is Vice President and on the board of directors of the Baltimore Jewish Council, and on the board of directors of The Associated Jewish Community Federation of Baltimore, and a founder and past president of the Jewish Arbitration and Mediation Board of Baltimore. He is also on the board of directors of Levindale Hebrew Geriatric Center and Hospital, a member company of LifeBridge Health, and on the Investment Committee of LifeBridge Health.

Mr. Poliakoff is well-qualified to serve as a member of our board due to his extensive experience with biotechnology, start-up companies, venture capital, and experience as a corporate attorney.

Scott R. Tobin, age 45, has served as a director of the Company since June 2011, pursuant to the terms of the Securities Purchase Agreement dated March 24, 2011 between the Company, Battery Ventures IX, L.P. (Battery) and certain other investors and the Securities Purchase Agreement dated January 28, 2013 between the Company, Battery and certain other investors, in which the Company agreed to appoint one nominee nominated by Battery to become a member of our board. In 1997, Mr. Tobin joined Battery Partners IX, LLC, the general partner of Battery, where he has been a managing member of various funds since May 2000. Prior to joining Battery Partners IX, LLC, Mr. Tobin held positions at First Albany Corp. and at Future Vision, a venture-backed software company that was sold to Softkey International. Mr. Tobin received a bachelor s degree with honors in International Relations and Islamic and Middle Eastern Studies from Brandeis University in 1992.

Mr. Tobin is well-qualified to serve as a member of the Company s Board of Directors due to his extensive corporate finance and multi-national operational experience.

Philip Breitfeld, age 63, has served as a director of the Company since April 2016. Dr. Breitfeld was most recently Global Vice President at Quintiles, responsible for the Therapeutic Centers of Excellence. Prior to that, he led the Oncology Center of Excellence at Quintiles where he worked with many large, mid-size and emerging biopharmaceutical firms. He held senior clinical development positions at Merck KGaA (EMD Serono in the US), where he led oncology development in the US, and at BioCryst, where he led oncology development and was Associate Chief Medical Officer. Prior to his career in industry, he held academic positions at Harvard, University of Massachusetts, Indiana University, and Duke. He has approximately 50 publications in the literature dealing with basic cell and molecular biology, and translational and clinical oncology. He was trained in Pediatric Hematology/Oncology at the Dana-Farber Cancer Institute, was a visiting scientist at the Whitehead Institute at MIT, received his medical degree (MD) from the University of Rochester, and his undergraduate degree (AB in chemistry) from Princeton.

Dr. Breitfeld is well-qualified to serve as a member of the Company s Board of Directors due to his extensive experience with clinical oncology development, operational experience and research.

The term of office of each director is until the next annual election of Directors and until a successor is elected and qualified or until the Director s earlier death, resignation or removal. Officers are appointed by the board of Directors and serve at the discretion of the board. There is no family relationship between or among any of the Company s

directors or officers.

Leadership Structure and Risk Oversight

While the board believes that there are various structures which can provide successful leadership to the Company, we currently have separate individuals serving in the roles of Chairman of the Board and Chief Executive Officer in recognition of the differences between the two roles. The Chief Executive Officer is responsible for setting the strategic direction for the Company and the day-to-day leadership of the Company,

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while the Chairman of the Board provides guidance to the Chief Executive Officer and presides over meetings of the full board. This structure is appropriate at this time to the Company s business because it reflects the industry experience, vision and energy brought to the board of directors by the Chairman, Dr. Sidransky, and the Chief Executive Officer, Mr. Ackerman.

Management is responsible for the day-to-day management of risks the Company faces, while the board, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, the board of directors has the responsibility to satisfy itself that the risk management process designed and implemented by management are adequate and functioning as designed. To do this, the Chairman of the Board meets regularly with management to discuss strategy and the risks facing the Company. Senior management attends the board meetings and is available to address any questions or concerns raised by the board on risk management and any other matters. The Chairman of the Board and independent members of the board work together to provide strong, independent oversight of the Company s management and affairs through its standing committees and, when necessary, special meetings of independent directors.

Independence of Directors

The board of directors has determined that Messrs. Mendelson, Poliakoff, Tobin and Breitfeld are independent as defined in Rule 5605(a)(2) of the Nasdaq Stock Market Rules (Nasdaq Rules). On October 28, 2015 we received a notification letter from Nasdaq confirming our notification to Nasdaq of our non-compliance with Nasdaq listing rule 5605(b)(1)(A), which requires that our board consist of a majority of independent directors. Such non-compliance occurred when a former director of ours did not stand for re-election at our most recent annual stockholder meeting. On April 11, 2016, Dr. Breitfeld joined the board. Our board currently consists of four independent directors and three non-independent directors.

Board Committees

The board has the following committees, each of which meets at scheduled times:

Audit Committee. The Audit Committee is appointed by the board to assist the board in its duty to oversee the Company s accounting, financial reporting and internal control functions and the audit of the Company s financial statements. The role of the Audit Committee is to oversee management in the performance of its responsibility for the integrity of the Company s accounting and financial reporting and its systems of internal controls, the performance and qualifications of the company s independent auditor, including the independent auditor s independence, the performance of the Company s internal audit function; and the Company s compliance with legal and regulatory requirements.

The current members of the Audit Committee are: (i) Scott Tobin, who is serving as Chairperson, (ii) Abba David Poliakoff and (iii) Daniel Mendelson, each of whom is independent under the Nasdaq Rules. Our board of directors has reviewed whether our Audit Committee members meet the heightened independence standards of Rule 10A-3 of the Securities Exchange Act of 1934, as amended, and the Nasdaq Rules, and concluded that each member meets such requirements. The board has also examined the SEC s definition of audit committee financial expert and determined that Mr. Tobin satisfies this definition. Accordingly, Mr. Tobin has been designated by the board as the Company s audit committee financial expert. The Audit Committee met four times during the fiscal year ended April 30, 2015.

Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee is responsible for developing and implementing policies and procedures that are intended to assure that the board of

directors will be appropriately constituted and organized to meet its fiduciary obligations to the Company and the stockholders on an ongoing basis. The Nominating and Corporate Governance Committee makes recommendations to the board regarding matters and practices concerning the board, its committees and individual directors; evaluates the current composition and governance structure of the board and determines its future requirements; makes recommendations concerning the qualifications, compensation and retirement age of directors; recommends nominees for election to the board and establishes and administers a board evaluation process; makes recommendations to the board about the appointment of directors to the Board Committees and the selection of the Chairpersons of the board committees; and reviews timely nominations by stockholders for the election of directors and ensures that such stockholders are advised of any action taken by the board with respect thereto.

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The current members of Nominating and Corporate Governance Committee are: (i) Daniel Mendelson, who is serving as Chairperson and (ii) Abba David Poliakoff, each of whom is independent under the Nasdaq Rules. The Nominating and Corporate Governance Committee met one time during the fiscal year ended April 30, 2015. The policy of our board is to encourage the selection of directors who will contribute to our company. The Nominating and Corporate Governance Committee considers recommendations from stockholders, as well as other people, as it deems appropriate. Stockholders wishing to nominate a director candidate must comply with certain procedures. We explain the procedures for nominating a director candidate at next year s annual meeting in Other Matters.

Compensation Committee. The Compensation Committee is charged with reviewing and determining the compensation of the Chief Executive Officer and the other executive officers of the Company. The Compensation Committee, among other things, reviews all forms of compensation for senior management of the Company, including the form and amount of current salary, deferred salary, cash and non-case benefits and all compensation plans of the Company; approves base salary amounts, incentive and bonus compensation amounts and individual stock and/or option grants and awards for all corporate officers at or above the Vice President level (including the President) and all other reporting officers of the Company; administers the Company s 2010 Equity Incentive Plan; prepares and approves reports to stockholders on compensation matters required by the Securities and Exchange Commission, or the SEC, and other government bodies; performs an annual performance appraisal for the President and other senior managers designated by the board; and establishes levels of director compensation.

The current members of the Compensation Committee are: (i) Abba David Poliakoff, who is serving as Chairperson; (ii) Scott Tobin; and (iii) Daniel Mendelson, each of whom is independent under the Nasdaq Rules. The Compensation Committee met one time during the fiscal year ended April 30, 2015.

Director Compensation

The following table summarizes the compensation paid to directors, other than directors who are also named executive officers and whose compensation as directors is reflected in the Summary Compensation Table in the Executive Compensation section of this prospectus, for the fiscal year ended April 30, 2015.

Name[1]	Fees Earned or Paid in cash ($)	Stock awards ($)	Option awards ($)[2]	All other compensation ($)	Total ($)
Arthur G. Epker, III[3]			101,675		101,675
Daniel Mendelson			97,615		97,615
Abba David Poliakoff			80,016		80,016
David Sidransky			133,360		133,360
Scott R. Tobin			100,293		100,293

(1) Joel Ackerman and Ronnie Morris are named executive officers whose compensation is set forth in the Summary Compensation Table and related disclosure in the Executive Compensation section of this proxy statement. Mr. Ackerman and Dr. Morris did not receive any additional compensation for their service as directors.

(2) Included in the Option Awards column is the grant date fair value of stock option grants, calculated in accordance with FASB ASC Topic 718.

(3)

On August 28, 2015, Arthur G. Epker III notified the Company of his decision not to stand for re-election to the board at the Company s 2015 Annual Meeting of Stockholders held on October 13, 2015. All of Mr. Epker s stock options vested upon his resignation and expire five years from the date of issuance.

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Mr. Epker received options to purchase 8,334 shares for his services on the board of directors and its committees in fiscal 2015. Messrs. Mendelson, Poliakoff and Tobin each received an option to purchase 10,000 shares for their services on the board of directors and its committees in fiscal 2015. Mr. Sidransky received an option award to purchase 16,667 shares for his service as the Chairman of the Board in fiscal 2015.

Code of Ethics

The Company has a Code of Ethics that applies to all Company employees as well as members of the board of directors. The Company s Code of Ethics has been filed as Exhibit 14 to the Company s Annual Report on Form 10-KSB for the year ended April 30, 2008.

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EXECUTIVE COMPENSATION

In this section, information is discussed with respect to named executive officers, as defined by the SEC regulations applicable to the Company, which includes all individuals who served as the Company s principal executive officer during the year ended April 30, 2015, the Company s two most highly compensated executive officers whose total compensation for the fiscal year ended April 30, 2015 exceeded $100,000 (other than the principal executive officer) and who were serving in such capacities on April 30, 2015, and up to two additional individuals for whom disclosure would have been provided as the two most highly compensated executive officers but for the fact that they were not serving as executive officers on April 30, 2015. The Company s only principal executive officer during fiscal 2015 was Mr. Ackerman and the Company s two most highly compensated other executive officers at April 30, 2015 and during fiscal 2015 were Dr. Morris and Mr. McGorry.

Summary Compensation Table

The following table sets forth information regarding the total compensation paid or earned by the named executive officers as compensation for their services in all capacities during the fiscal years ended April 30, 2015 and 2014.

Name and Principal Position	Fiscal Year	Base Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)[1]	All Other Compensation	Total ($)
Joel Ackerman	2014	53,182			3,126,571		3,179,753
Chief Executive Officer	2015	79,856			325,000		404,856
Ronnie Morris	2014	43,527			3,126,571		3,170,098
President	2015	65,359			305,000		370,359
James J. McGorry	2014	181,250			1,061,700		1,242,950
Former Executive Vice President and General Manager, Translational Oncology Solutions[2]	2015	275,000	36,667		12,334		324,001

(1) The amounts shown on the Option Awards column reflect the grant date value of the stock option awards computed in accordance with Financial Accounting Standards Board ASC Topic 718. For a discussion of valuation assumptions, see note 6 to our audited financial statements included elsewhere in this prospectus.

(2) Mr. McGorry commenced his employment on September 3, 2013 and subsequently resigned from office on July 2, 2015.

The Compensation Committee has the right to change and increase the compensation of executive officers at any time.

Employment Agreements

Joel Ackerman, Chief Executive Officer

The Company entered into an employment agreement with Mr. Ackerman dated November 5, 2013, which provides for Mr. Ackerman s continued employment as Chief Executive Officer, and provides further that his annual salary will be $325,000 per year. The agreement also provides that for so long as Mr. Ackerman serves as an executive officer of the Company, the board shall nominate him as a director. On March 16, 2015, the Company amended the employment agreement, whereby compensation for the current year would consist only of stock options. For the third year,

compensation will consist of $325,000 in cash. Mr. Ackerman will be eligible to receive an annual bonus, with a target of 50% of his annual salary upon achievement of the Company s annual plan and a maximum payout of 75% of his annual salary, which bonus may be payable in cash or equity at the discretion of our board of directors. On March 16, 2015, the options received pursuant to the employment agreement were exchanged for new options as follows: (i) an option to purchase 112,332 shares, subject to time-based vesting and (ii) an option to purchase 112,332 shares, subject to performance-based vesting, both under the Company s 2010 Equity Incentive Plan and both with an exercise price of $4.92 per share. In addition, all options will vest immediately upon a change of control of the Company.

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Ronnie Morris, M.D., President

The Company entered into an employment agreement with Mr. Morris dated November 5, 2013, which provides for Mr. Morris continued employment as President of the Company and provides further that his annual salary will be $305,000 per year. The agreement also provides that for so long as Dr. Morris serves as an executive officer of the Company, the board shall nominate him as a director. On March 16, 2015, the Company amended the employment agreement, whereby compensation for the current year would consist only of stock options. For the third year, compensation will consist of $305,000 in cash. Mr. Morris will be eligible to receive an annual bonus, with a target of 50% of his annual salary upon achievement of the Company s annual plan and a maximum payout of 75% of his annual salary, which bonus may be payable in cash or equity at the discretion of our board of directors. On March 16, 2015, the options received pursuant to the employment agreement were exchanged as follows: (i) an option to purchase 112,332 shares, subject to time-based vesting and (ii) an option to purchase 112,332 shares, subject to performance-based vesting, both under the Company s 2010 Equity Incentive Plan and both with an exercise price of $4.92 per share. In addition, all options will vest immediately upon a change of control of the Company.

James J. McGorry, Former Executive Vice President and General Manager, Translational Oncology Services

Mr. McGorry accepted an offer letter from the Company, dated August 12, 2013, to serve as the Company s Executive Vice President and General Manager, Translational Oncology Services. Pursuant to such offer letter, Mr. McGorry s compensation included an annual base salary of $276,000, participation in the Company s employee benefit plans, an option to purchase 74,239 shares, and a target bonus between 33% and 50% of his annual base salary for his first year of employment. On July 2, 2015, Mr. McGorry resigned from his position and is no longer with the Company. Mr. McGorry s stock options expired unexercised on such date.

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OUTSTANDING EQUITY AWARDS AT 2015 FISCAL YEAR END

The following table sets forth, for each of the named executive officers, information with respect to unexercised options as of the Company s fiscal year at April 30, 2015:

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date[1]
Joel Ackerman[2]	365,160		$ 4.92	10/25/2020
	46,805	65,527	$ 4.92	11/04/2023
	16,101		$ 4.92	11/04/2023
		112,332	$ 4.92	11/04/2023
	72,213	24,071	$ 4.92	03/16/2025
Ronnie Morris, M.D.[2]	365,160		$ 4.92	10/25/2020
	46,805	65,527	$ 4.92	11/04/2023
	16,101		$ 4.92	11/04/2023
		112,332	$ 4.92	11/04/2023
	67,770	22,589	$ 4.92	03/16/2025
James G. McGorry[3]	39,182	35,057	$ 4.92	9/03/2023
	1,375		$ 4.92	05/20/2024

(1) All vested options will be exercisable over a ten-year period expiring on the tenth anniversary of the grant date, subject to earlier termination upon certain events.

(2) Comprised of 365,160 exchange options issued on March 16, 2015.

(3) Comprised of 39,182 options of a total of 74,239 options which vested prior to his resignation on July 2, 2015.

Equity Compensation Plan Information

The following table provides information, as of April 30, 2015, with respect to all compensation arrangements maintained by the Company, including individual compensation arrangements, under which shares are authorized for issuance. The weighted-average exercise price does not include restricted stock.

Plan Category (a)	Number of Securities to be issued upon exercise of outstanding options and rights (b)	Weighted-average exercise price of outstanding options and rights (c)	Number of securities remaining available for future issuance under equity compensation plans

			(excluding securities reflected in columns (a) and (c))
Equity compensation plans approved by stockholders 2010 Equity Incentive Plan	1,982,757	$ 5.65	28,017,243
Equity compensation plans not approved by stockholders Directors Compensation Plan 2008 Equity Incentive Plan	31,750	$ 10.29	5,978,250
Total	2,014,507	$ 5.72	33,995,493

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RELATED PARTY TRANSACTIONS

We engaged in the following transactions with our directors, executive officers, immediate family members of our directors or executive officers, and beneficial owners of 5% or more of our common stock.

Dr. Sidransky, who is one of our directors, our Chairman of the Board, and who beneficially owned 11.2% of our common stock as of the date of this prospectus, received $150,000 in consulting fees from us during the fiscal year ended April 30, 2014, and $62,500 in consulting fees from us during the fiscal year ended April 30, 2015.

On March 13, 2015, in connection with a private placement, we sold 2,939,252 units, each unit consisting of one share of our common stock and a warrant to buy 0.55 shares of common stock, at a purchase price of $4.80 per unit, for an aggregate of approximately $14,000,000 (net proceeds of approximately $13 million, which included the conversion of $2 million in convertible notes issued in December 2014). As part of the $14 million transaction, Mr. Ackerman and Dr. Morris converted convertible promissory notes dated December 1, 2014 in the principal amounts of $1 million each, plus accrued interest, into the units at a 5% discount, pursuant to the terms of the convertible promissory notes. Mr. Ackerman and Dr. Morris also each received 5,902 shares of common stock due to certain anti-dilution rights invoked by such private placement. Battery Ventures IX, L.P. and Battery Investment Partners IX, LLC also received 95,837 and 958 additional shares of common stock, respectively, due to certain anti-dilution rights invoked by such private placement. As discussed, Scott Tobin, one of our directors, is an employee of the Battery entities pursuant to agreements we have with the Battery entities, including the securities purchase agreement for the January 2013 private placement. Dan Mendelson, one of our directors, also participated in the private placement for $300,000 and received 62,500 shares and warrants to purchase 34,375 shares.

Arthur G. Epker, III, was one of our directors, is a Vice President and partner of PAR Capital Management, Inc., an investment adviser that manages PAR Investment Partners, L.P., and had been one of our directors pursuant to an agreement we have with PAR Investment Partners, L.P. in the securities purchase agreement for the January 2013 private placement. He is no longer one of our directors.

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PRINCIPAL STOCKHOLDERS

The following table sets forth, as of the date of this prospectus, the total number of common stock owned beneficially by (i) each of our named executive officers, (ii) each of our directors, (iii) all of our current directors and officers as a group and (iv) the present owners of 5% or more of the outstanding shares of our common stock. For purposes of calculating beneficial ownership, the applicable percentage of ownership is based upon 8,710,029 shares of common stock outstanding as of the date of this prospectus. Shares issuable pursuant to options or warrants exercisable within 60 days after the date of this prospectus are deemed outstanding for purposes of computing the percentage ownership of the person holding such options or warrants, but are not deemed outstanding for computing the percentage of ownership for any other person. Unless otherwise indicated in the footnotes to this table, beneficial ownership of shares of our common stock represents sole voting and investment power with respect to those shares.

Name	Shares of Common Stock	% of Common Stock Before Offering	% of Common Stock After Offering
Directors and Named Executive Officers[1]			
Joel Ackerman[2]	1,115,968	11.4 %	9.7 %
Daniel Mendelson[3]	139,097	1.6 %	1.3 %
David Miller[4]	18,655	*	*
Ronnie Morris, M.D.[5]	1,112,175	11.4 %	9.7 %
Abba David Poliakoff[6]	87,387	*	*
David Sidransky, M.D.[7]	989,999	11.2 %	9.2 %
Scott R. Tobin[8]	2,528,340	27.2 %	22.4 %
Philip Breitfeld	4,167	*	*
All directors and executive officers as a group (8 persons)[9]	5,995,787	62.0 %	52.9 %
5% Owners (not already included above)			
Entities affiliated with Battery Ventures[10]	2,490,007	26.9 %	22.1 %
New Enterprise Associates 14, L.P.[11]	2,421,875	25.3 %	20.9 %
PAR Capital Management Inc.[12]	970,833	11.0 %	9.0 %
PAR Group, L.P.[13]	970,833	11.0 %	9.0 %
PAR Investment Partners, L.P.[14]	970,833	11.0 %	