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

Form 10-K

(Mark One)

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

For the fiscal year ended April 30, 2020

or

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

For the transition period from to

Commission file number 001-11504

CHAMPIONS ONCOLOGY, INC.

(Exact name of registrant as defined in its charter)

Delaware	**52-1401755**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
One University Plaza, Suite 307 Hackensack, New Jersey	**07601**
(Address of principal executive offices)	*(Zip Code)*

Registrant's telephone number, including area code:
(201) 808-8400

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

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, par value $0.001 per share	CSBR	Nasdaq Capital Market

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by checkmark whether the registrant has filed a report on the attestation to its management's effectiveness of its internal control over financial reporting under section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262 (b) by the registered public accounting firm that prepared or issued its audit report. ☐

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

The approximate aggregate market value of the voting stock held by non-affiliates of the Registrant as of October 31, 2019 was $31.0 million based on the closing price of the Registrant's common stock as quoted on the Nasdaq Capital Market as of that date.

The number of shares of common stock of the Registrant outstanding as of July 17, 2020 was 12,726,728.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive Proxy Statement for its 2020 Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended, are incorporated by reference into Part III of this Form 10-K.

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As used in this Annual Report on Form 10-K (the "Annual Report"), "Champions Oncology, Inc.," "Champions," the "Company," "we," "ours," and "us" refer to Champions Oncology, Inc. and its subsidiaries, except where the context otherwise requires or as otherwise indicated.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") that inherently involve risk and uncertainties. Forward-looking statements may be identified by the words "project," "believe," "anticipate," "plan," "expect," "estimate," "intend," "should," "would," "could," "will," "may," "likely" or similar expressions. Forward-looking statements in this Annual Report include statements about our business strategies and products development activities, including the anticipated benefits and risks associated with those strategies as well as statements about the sufficiency of our capital resources. One should not place undue reliance on these forward-looking statements. We cannot guarantee that we will achieve the plans, intentions or expectations expressed or implied in our forward-looking statement. There are a number of important factors that could cause actual results, levels of activity, performance or events to differ materially from those expressed or implied in the forward-looking statements we make. These important factors are described under "Risk Factors" set forth below. In addition, any forward-looking statements we make in this Annual Report speak only as of the date of this document, and we do not intend to update any such forward-looking statements to reflect events or circumstances that occur after that date, except as required by law. As a result of these and other factors, our stock price may fluctuate dramatically.

PART I

Item 1. *Business*

Overview

We are engaged in the development and sale of advanced technology solutions and products utilized in the development and use of oncology drugs. Utilizing our TumorGraft Technology Platform (the "Platform"), a comprehensive bank of unique, well-characterized "Patient Derived XenoGrafts" or "PDX Models", 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; and
- 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. 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 III clinical trials. 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. 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". Our process technology involves the following:

- 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 trial while shortening the timelines from 2-3 years for human trial to 6 months for PDX studies.

TumorBank

The collection of TumorGrafts that we have built is referred to as our "TumorBank". We currently have approximately 1,500 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 unique and different sub-types of cancer that we have not historically addressed. In addition, we have developed a proprietary data tool containing comprehensive information derived from our clinical studies. This database includes 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. This data may be used by pharmaceutical 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 efficacy studies, 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 currently working on a platform to monetize 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 Translational Oncology Solutions ("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 analysis 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 studies for approximately 500 different pharmaceutical and biotechnology companies over the past eight years. We have a high rate of repeat business. Typical studies are in the $100,000 price range, with an increasing number of studies in the $250,000 to $500,000 range. Revenue from this business has grown at a cumulative annual growth rate of 32% since 2015.

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 27 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 customers and reaching out to new contacts 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 number of studies and the average study size of our existing customers. Our success in these efforts is demonstrated by the growing number of customers who have increased their annual spend on our services over the past three years.

For the year ended April 30, 2020, revenues from our TOS products totaled approximately $31.3 million, an increase of approximately 21.5% from the previous year.

Personalized Oncology Solutions Business

Our Personalized Oncology Solutions ("POS") business, offers 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. By providing this product over the years, we achieved an important goal of adding PDX Models to our TumorBank, and gained valuable genomic data, both of which supports our TOS business.

As previously disclosed, however, our POS business is not the focus of our growth moving forward. We will continue to phase out our POS offerings.

For the year ended April 30, 2020, revenues from our POS business totaled approximately $790,000, a decrease of approximately 38.1% from the previous year.

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 multiple 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 biotechnology 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 biotechnology 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 over 500 pharmaceutical and biotechnology 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 increased budgets of these drugs, as compared to drugs in the pre-clinical stage, will enable us to sell larger studies.

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, 2020 and 2019, we spent approximately $5.9 million and $4.8 million, respectively, to develop our TumorGraft Technology Platform. We continue to expand our TumorBank through the inclusion of tumor tissue and implanted models 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. Additionally, during fiscal year 2020 we invested resources for the development of new product offerings.

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 laboratory located in Rockville, Maryland by the State of Maryland 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 July 15, 2020, we had 143 full-time employees, including 44 with doctoral or other advanced degrees. Of our workforce, 105 employees are engaged in research and development and laboratory operations, 27 employees are engaged in sales and marketing, and 11 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. In April 2011, the Company changed its name to Champions Oncology, Inc. to reflect the Company's new strategic focus on developing advanced technologies to personalize the development and use of oncology drugs.

Available Information

Our internet website address is www.championsoncology.com. Information on our website is not part of this Annual Report. Through our website, we make available, free of charge, access to all reports filed with the United States Securities and Exchange Commission, or SEC, including our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K, our Proxy Statements on Schedules 14A and amendments to those reports, as filed with or furnished to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Copies of any materials we file with, or furnish to, the SEC can also be obtained free of charge through the SEC's website at http://www.sec.gov or at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

Item 1A. ***Risk Factors***

You should carefully consider the risks described below together with all of the other information included in this Annual Report. The risks and uncertainties described below are not the only ones we face. Additional risks not presently known, or those we currently consider insignificant, may also impair our business operations in the future.

We historically incurred losses from operating activities, may require significant capital and may never achieve sustained profitability.

For the years ended April 30, 2020 and 2019, the Company had a net loss of approximately $2.0 million and net income of approximately $128,000, respectively. As of April 30, 2020, the Company has an accumulated deficit of approximately $72.7 million. As of April 30, 2020, we had working capital of $1.4 million and cash of $8.3 million. We believe that our cash on hand, together with continued improved cash flows from operations, are adequate to fund our operations through at least August 2021.

The amount of our losses and liquidity requirements 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 businesses;
- 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 TOS products and POS 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 further grow the sales of our TOS products. Our POS products have not been the focus of our growth since fiscal 2016.

To become sustainably 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. If our losses increase in the future and we are unable to obtain sufficient capital either from operations or externals sources, 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 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 business could be adversely impacted by changes in FDA's regulatory oversight of laboratory-developed tests such as our POS services that are currently under consideration or by other changes in the regulatory requirements applicable to our POS services imposed by the FDA or regulatory authorities in other countries in which our services are provided.

The FDA has claimed regulatory authority over all laboratory-developed tests, or LDTs, such as our POS services, but has generally not exercised its regulatory authority for most LDTs performed by CLIA-certified laboratories such as our facilities. The FDA has announced several regulatory and guidance initiatives that may impact our business, including by increasing FDA's regulation of LDTs.

On July 31, 2014 the FDA notified Congress of the FDA's intent to issue a draft oversight framework for LDTs based on risk to patients rather than whether they were made by a conventional manufacturer or a single laboratory. This draft oversight framework includes pre-market review for higher-risk LDTs, like those used to guide treatment decisions, including the many companion diagnostics that have entered the market as LDTs. In addition, under the draft framework, the FDA would continue to exercise enforcement discretion for low-risk LDTs and LDTs for rare diseases, among others. The framework would be phased in over many years. In January 2017, FDA summarized comments it had received on the 2014 draft guidance in a discussion paper which noted that it would not be issuing a final guidance on oversight of LDTs for the time being. Final guidance on the framework has not since been issued by FDA although various legislative approaches to regulation over LDTs remain in discussion. If this framework or one similar to it is implemented, these initiatives may lead to an increased regulatory burden on our Company, which may result in a requirement for FDA review and clearance or approval of our POS services. Any increased regulatory burdens would probably result in an increase in the cost of our POS services and could keep us from selling POS services until such time as any required FDA clearance or approval is obtained. If our POS services become subject to FDA's approval and oversight as medical devices, the additional regulatory burdens may be significant, and may require the addition of experienced medical device quality, regulatory and compliance personnel to assume these burdens. Any POS services that we provide in other countries may be similarly subject to regulation by foreign regulatory agencies, which would also increase our costs. These matters could hurt our business and our financial results of business.

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 one of our landlords, our business would be negatively affected.

We currently utilize two laboratories in Rockville, Maryland. We moved into one of the labs in August, 2017 and the other in January, 2019. If either facility was to be significantly damaged or destroyed, we could suffer a loss of our ongoing and future drug studies, as well as our TumorBank. In addition, we lease the laboratories from a third party. If we had a dispute with our landlord or otherwise could not utilize these spaces, 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 and future TOS business, as we would have to rebuild the population and repeat current TumorGrafts.

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 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 biotechnology 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 cancellation or modification of on-going or planned studies. This would have a negative impact on the Company's revenue growth and profit margin.

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 our 2016 public offering, taken together with our private placements 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. 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.

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. Furthermore, like many stocks quoted on the Nasdaq Capital Market, trading in our common stock is thin and characterized by wide fluctuations in trading prices, due to many factors that may have little to do with our operations or business prospects. This volatility could depress the market price of our common stock for reasons unrelated to operating performance.

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 July 17, 2020, we had 12,726,728 shares of common stock issued and 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 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.

Potential future sales or issuances of our common stock to raise capital, or the perception that such sales could occur, could cause dilution to our current stockholders and the price of our common stock to fall.

We have historically supported our operations through the issuance of equity and may continue to do so in the future. Although we may not be successful in obtaining financing through equity sales on terms that are favorable to us, if at all, any such sales that do occur could result in substantial dilution to the interests of existing holders of our common stock.

Additionally, the sale of a substantial number of shares of our common stock or other equity securities to any new investors, or the anticipation of such sales, could cause the trading price of our common stock to fall.

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 and 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 contains 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.

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

Collectively, our officers, our directors and three significant stockholders own or exercise voting and investment control of approximately 53% of our outstanding common stock as of July 17, 2020. 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.

A pandemic, epidemic, or outbreak of an infectious disease in the United States or elsewhere may adversely affect our business.

In December 2019, a novel strain of coronavirus, COVID-19, was first identified in Wuhan, China. This virus continues to spread globally and, as of July 2020, has spread to over 200 countries, including the United States. The spread of COVID-19 from China to other countries has resulted in the World Health Organization declaring the outbreak of COVID-19 as a "pandemic," or a worldwide spread of a new disease, on March 11, 2020. Many countries around the world have imposed quarantines and restrictions on travel and mass gatherings to slow the spread of the virus. Employers are also required to increase, as much as possible, the capacity and arrangement for employees to work remotely. In addition, on March 11, 2020, the President of the United States issued a proclamation to restrict travel to the United States from foreign nationals who have recently been in certain European and Latin American countries. Although, to date, these restrictions have not impacted our operations, the effect on our business, from the spread of COVID-19 and the actions implemented by the governments of the United States and elsewhere across the globe, may worsen over time.

Any outbreak of contagious diseases, or other adverse public health developments, could have a material and adverse effect on our business operations. These could include disruptions or restrictions on our ability to travel, pursue partnerships and other business transactions, receive shipments of biologic materials, as well as be impacted by the temporary closure of the facilities of suppliers. The spread of an infectious disease, including COVID-19, may also result in the inability of our suppliers to deliver supplies to us on a timely basis. In addition, health professionals may reduce staffing and reduce or postpone meetings with clients in response to the spread of an infectious disease. Though we have not yet experienced such events, if they would occur, they could result in a period of business disruption, and in reduced operations, any of which could materially affect our business, financial condition and results of operations. However, as of the date of this Annual Report on Form 10-K, we have not experienced a material adverse effect on our business nor the need for reduction in our work force; and, currently, we do not expect any material impact on our long-term activity. The extent to which COVID-19 impacts our business will depend on future developments which are highly uncertain and cannot be predicted, including, but not limited to, new information which may emerge concerning the increased severity of COVID-19, the actions to contain COVID-19, or treat its impact.

Item 1B. ***Unresolved Staff Comments***

None.

Item 2. ***Properties***

The Company currently leases its office and laboratory facilities under non-cancelable operating leases. Rent expense for operating leases is recognized on a straight-line basis over the lease term from the lease commencement date through the scheduled expiration date. Rent expenses totaled $955,000 and $822,000 for the years ended April 30, 2020 and 2019, respectively. The Company considers its facilities adequate for its current operational needs.

The Company leases the following facilities:

- One University Plaza, Suite 307, Hackensack, New Jersey 07601, which, since November 2011, serves as the Company's corporate headquarters. The lease expires in November 2021. The Company recognized $94,000 and $91,000 of rental costs relative to this lease for fiscal 2020 and 2019, respectively.
- 1330 Piccard Drive, Suite 025, Rockville, MD 20850, which consists of laboratory and office space where the Company conducts operations related to its primary service offerings. The Company executed this lease on January 11, 2017. The operating commencement date was August 11, 2017. This lease expires in August 2028. The Company recognized $604,000 of rental expense for both fiscal 2020 and 2019. On March 30, 2020, the Company executed the first amendment to this lease to expand the existing premises at 1330 Piccard Drive, Suite 025 ("Expansion Premises") to Suites 050 and 104. This amendment also extended the current lease term by six months. The Expansion Premises operating lease commencement date was June 1, 2020 and the lease expires February 28, 2029. In accordance with ASC 842, "Leases", the Company evaluated the first amendment and also performed a reassessment of the existing lease to determine the impact of the six-month term extension. The Company did not recognize rental expense under this amendment during fiscal 2020 as the Expansion Premises operating lease commencement date is during fiscal 2021. Upon the Expansion Premises operating lease commencement date, the Company will recognize an operating ROU asset and related operating lease liability of $3.8 million, each, respectively. The Company will also recognize an operating ROU asset and related operating lease liability of approximately $118,000 and $125,000, respectively, related to the extension of the current lease, as well as interest and amortization expense of $7,000.
- 910 Clopper Road, Suites 260S and 280S, Gaithersburg, Maryland 20878, which consisted of laboratory and office space where the Company conducted operations related to its primary service offerings. The Company executed this lease on April 1, 2018. The operating commencement date was May 1, 2018. The Company transitioned its activities from this location to the New Location, as defined below, and terminated this lease seven days after the commencement date of the New Location. The Company recognized $0 and $41,000 of rental expense for fiscal 2020 and 2019, respectively.
- 1405 Research Boulevard, Suite 125, Rockville, Maryland 20850 ("New Location"), which consists of laboratory and office space where the Company conducts operations related to its primary service offerings. The Company executed this lease on November 1, 2018. The operating commencement date was January 17, 2019. This lease expires in April 2024. The Company recognized $257,000 and $86,000 of rental expense for fiscal 2020 and 2019, respectively. The Company terminated this lease on June 30, 2020 and transition its activities from this location to the Expansion Premises, as defined above, during the first quarter of fiscal 2021. Upon lease termination, the Company will recognize a decrease in the related operating ROU asset and operating lease liability of approximately $850,000 and 926,000, respectively, as well as a gain on lease termination of $76,000.

Item 3. ***Legal Proceedings***

None.

Item 4. ***Mine Safety Disclosures***

None.

PART II

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

Principal Market or Markets

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 for the periods shown:

	High	Low
Fiscal Year Ended April 30, 2020:		
First quarter	$ 10.44	$ 6.40
Second quarter	7.41	5.01
Third quarter	8.80	4.98
Fourth quarter	8.49	4.02

	High	Low
Fiscal Year Ended April 30, 2019:		
First quarter	$ 9.18	$ 3.97
Second quarter	17.47	7.50
Third quarter	15.11	7.29
Fourth quarter	11.62	7.51

Approximate Number of Holders of Common Stock

As of July 17, 2020 there were approximately 1,900 record holders of the Company's common stock.

Dividends

Holders of our common stock are entitled to receive such dividends as may be declared by our Board of Directors. No dividends have been declared or 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.

Recent Sales by the Company of Unregistered Securities

None.

Repurchases of Securities

None.

Use of Proceeds

None.

Item 6. *Selected Financial Data*

Not applicable.

Item 7. *Management's Discussion and Analysis of Financial Condition 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 Annual Report. 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 Item 1A – "Risk Factors" and elsewhere in this Annual Report.

Overview and Recent Developments

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 III clinical trials. 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. We have previously disclosed that our POS program would not be the focus of our growth moving forward and this plan remains unchanged.

Results of Operations

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

	For the Years Ended April 30,				
	2020	% of Revenue	2019	% of Revenue	% Change
Oncology services revenue	$ 32,123	100.0 %	$ 27,067	100.0%	18.7 %
Costs and operating expenses:					
Cost of oncology services	16,882	52.6	14,265	52.7	18.3
Research and development	5,853	18.2	4,798	17.7	22.0
Sales and marketing	4,242	13.2	3,056	11.3	38.8
General and administrative	6,614	20.6	4,678	17.3	41.4
Goodwill Impairment	335	1.0	—	—	100.0
Total costs and operating expenses	33,926	105.6	26,797	99.0	26.6
Income (loss) from operations	$ (1,803)	(5.6)%	$ 270	1.0%	(767.8)%

Oncology Services Revenue

Oncology services revenue for the years ended April 30, 2020 and 2019 were $32.1 million and $27.1 million, respectively, an increase of $5.1 million, or 18.7%. The increase in revenue is due to increased sales, both in number and size of studies, an increase in demand for our services, the growth of the platform, and expansion of our product line. Additionally, customers are seeking more complex study designs and end point analysis testing, leading to larger contracts, which contributed to revenue growth.

Cost of Oncology Services

Cost of oncology services were $16.9 million and $14.3 million for the years ended April 30, 2020 and 2019, respectively, an increase of $2.6 million or 18.3%. For the years ended April 30, 2020 and 2019, gross margins were 47.4% and 47.3%, respectively. The increase in cost of oncology services was mainly due to an increase in compensation, supply, and outsourced lab service expenses. With the exception of outsourced lab services, the overall expense increase is generally in line with the expected contribution based on the growth in revenue, study volume, and expansion into new services. Gross margin varies based on timing differences between expense and revenue recognition and was impacted by the increase in costs ahead of revenue related to the increase in number of studies performed. Additionally, the cost of outsourced lab services magnifies this effect.

Research and Development

Research and development expense was $5.9 million and $4.8 million for the years ended April 30, 2020 and 2019, respectively, an increase of $1.1 million or 22.0%. The increase is due to increased compensation and mice and lab supply expenses as we replenished the models in our Bank and continued to develop new service capabilities and endpoint analysis testing.

Sales and Marketing

Sales and marketing expense was $4.2 million and $3.1 million for the years ended April 30, 2020 and 2019, respectively, an increase of $1.2 million or 38.8%. The increase is mainly due to compensation expense driven by the continued expansion of our sales force and commissions earned on increased sales.

General and Administrative

General and administrative expense was $6.6 million and $4.7 million for the years ended April 30, 2020 and 2019, respectively, an increase of $1.9 million, or 41.4%. The increase was mainly due to an increase in compensation expense which included a bonus awarded to the CEO.

Goodwill Impairment

We recognized an impairment on goodwill of approximately $335,000 for the year ended April 30, 2020. This charge was attributable to the Company's POS business operations. As disclosed in prior fiscal years, the POS business ceased to be the focus of our growth strategy moving forward. As a result of our annual evaluation of goodwill impairment, the Company determined that the recording of the impairment charge was warranted.

Other Expense

Other Expense was $42,000 and $39,000 for the years ended April 30, 2020 and 2019, respectively. The current year expense is mainly due to foreign currency transaction losses and foreign fees offset by a gain on disposal of equipment.

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 cash on hand, working capital management, proceeds from certain private placements and public offerings of our securities and sales of products and services. For the years ended April 30, 2020 and 2019, the Company had a net loss of approximately $2.0 million and net income of $128,000, respectively. As of April 30, 2020, the Company had an accumulated deficit of approximately $72.7 million, working capital of $1.4 million and cash of $8.3 million. We believe that our cash on hand, together with continued improved cash flows from operations, are adequate to fund operations through at least August 2021. Should the Company be required to raise additional capital, there can be no assurance that management would be successful in raising such capital on terms acceptable to us, if at all.

Cash Flows

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

Cash Flows from Operating Activities

Net cash provided by operating activities was $2.9 million and $1.9 million for the years ended April 30, 2020 and 2019, respectively. The increase in cash provided of $1.0 million relates to our revenue growth and increase in bookings, along with the timing of ordinary business operating activities.

Cash Flows from Investing Activities

Net cash used in investing activities was $2.2 million and $834,000 for the years ended April 30, 2020 and 2019, respectively. These cash flows were used for the purchase and finance leasing of lab equipment.

Cash Flows from Financing Activities

Net cash provided by financing activities was $4.4 million and $1.2 million for the years ended April 30, 2020 and 2019, respectively. The increase in cash flows provided in fiscal year 2020 was due to exercises of stock options and warrants.

Critical Accounting Policies

The following discussion of critical accounting policies identifies the accounting policies that require application of management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. It is not intended to be a comprehensive list of all of our significant accounting policies, which are more fully described in Note 2 of the notes to the consolidated financial statements included in this document. In many cases, the accounting treatment of a particular transaction is specifically dictated by generally accepted accounting principles, with no need for management's judgment in their application. There are also areas in which the selection of an available alternative policy would not produce a materially different result.

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-based compensation and warrant assumptions. 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

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-19, *Revenue from Contracts with Customers (Topic 606)* which was added to the FASB's Accounting Standards Codification (ASC) as ASC 606. The Company adopted ASC 606 on May 1, 2018 using the modified retrospective method for all contracts not completed as of the date of adoption. The reported results for the twelve months ended April 30, 2020 and April 30, 2019 reflect the application of ASC 606. In accordance with ASC 606, revenue is now recognized when, or as, a customer obtains control of promised services. The amount of revenue recognized reflects the consideration to which the Company expects to be entitled to receive in exchange for these services.

A performance obligation is a promise (or a combination of promises) in a contract to transfer distinct goods or services to a customer and is the unit of accounting under ASC 606 for the purposes of revenue recognition. A contract's transaction price is allocated to each separate performance obligation based upon the standalone selling price and is recognized as revenue, when, or as, the performance obligation is satisfied. The majority of the Company's contracts have a single performance obligation because the promise to transfer individual services is not separately identifiable from other promises in the contracts, and therefore, is not distinct.

The majority of the Company's revenue arrangements are service contracts that are completed within a year or less. There are a few contracts that range in duration between 1 and 3 years. Substantially all of the Company's performance obligations, and associated revenue, are transferred to the customer over time. Most of the Company's contracts can be terminated by the customer without cause. In the event of termination, the Company's contracts provide that the customer pay the Company for services rendered through the termination date. The Company generally receives compensation based on a predetermined invoicing schedule relating to specific milestones for that contract. In addition, in certain instances a customer contract may include forms of variable consideration such as performance increases or other provisions that can increase or decrease the transaction price. This variable consideration is generally awarded upon achievement of certain performance metrics. For the purposes of revenue recognition, variable consideration is assessed on a contract-by-contract basis and the amount to be recorded is estimated based on the assessment of the Company's anticipated performance and consideration of all information that is reasonably available. Variable consideration is recognized as revenue if and when it is deemed probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved in the future.

Amendments to contracts are common. The Company evaluates each amendment which meets the criteria of a contract modification under ASC 606. Each modification is further evaluated to determine whether the contract modification should be accounted for as a separate contract or as a continuation of the original agreement.

The Company accounts for amendments as a separate contract when they meet the criteria under ASC 606-10-25-12.

Stock-Based Payments

We typically recognize expense for stock-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 stock-based awards. These assumptions are based on historical information and management judgment. We expense stock-based payments over the period that the awards are expected to vest. In the event of forfeitures, 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 purchase price over the fair value of the net tangible and identifiable intangible assets acquired in a business combination. The Company evaluates the carrying value of goodwill annually in connection with the annual budgeting and forecast process and also between annual evaluations if events occur or circumstances change that would more likely than not reduce the fair value of the reporting unit to which goodwill was allocated to below its carrying amount. Such circumstances could include, but are not limited to: (1) a significant adverse change in legal factors, market conditions, or in business climate, (2) unanticipated competition, or (3) an adverse action or assessment by a regulator. When evaluating goodwill for impairment, we may first perform an assessment qualitatively whether it is more likely than not that a reporting unit's carrying amount exceeds its fair value, referred to as a "step zero" approach. Subsequently (if necessary after step zero), an entity should perform its goodwill impairment test by comparing the fair value of a reporting unit with its carrying value. Under FASB's ASU 2014-02, Topic 350, "Intangibles—Goodwill and Other" goodwill impairment is measured as the excess of the carrying amount of the reporting unit over its fair value.

The impairment evaluation test involves comparing the current fair value of each business unit to its carrying value, including goodwill. Fair value is typically estimated using a discounted cash flow analysis, which requires the Company to estimate the future cash flows anticipated to be generated by the business unit being tested for impairment as well as to select a risk-adjusted discount rate to measure the present value of the anticipated cash flows. When determining future cash flow estimates, the Company considers historical results adjusted to reflect current and anticipated operating conditions. The Company estimates cash flows for the business unit over a discrete period (typically four or five years) and the terminal period (considering expected long term growth rates and trends). Estimating future cash flows requires significant judgment by management in such areas as future economic conditions, industry-specific conditions, product pricing, and necessary capital expenditures. The use of different assumptions or estimates for future cash flows or significant changes in risk-adjusted discount rates due to changes in market conditions could produce substantially different estimates of the fair value of the business unit.

We have one reportable segment. The Company evaluated its TOS and POS business operations (or business units) and determined that the POS operations no longer qualified as a separate reportable segment primarily due to its revenue representing approximately 2.5% of total revenue. The Company assesses goodwill by business unit, which are also 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. As a result of its annual assessment, which included an estimation of the future cash flows of the POS operations as described above, the Company determined that, under a discounted cash flow model, the fair value of the POS business/reporting unit was below its carrying amount as of April 30, 2020. The Company recognized goodwill impairment for the quarter and year ended April 30, 2020 of $335,000. As of April 30, 2020 and 2019, goodwill was $335,000 and $670,000, respectively.

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. As of April 30, 2020 and 2019, we have established a full valuation allowance for all deferred tax assets.

As of April 30, 2020 and 2019, we recognized a liability for uncertain tax positions on the balance sheet relative to foreign operations in the amount of $178,000 and $151,000, respectively. We do not anticipate any significant unrecognized tax benefits will be recorded during the next 12 months. Any interest or penalties related to unrecognized tax benefits is recognized in income tax expense. The Company has accrued $27,000 for penalties and interest during the year ended April 30, 2020.

Accounting Pronouncements Being Evaluated

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments - Credit Losses". This update requires immediate recognition of management's estimates of current expected credit losses ("CECL"). Under the prior model, losses were recognized only as they were incurred. The new model is applicable to all financial instruments that are not accounted for at fair value through net income. The standard is effective for fiscal years beginning after December 15, 2022 for public entities qualifying as smaller reporting companies. Early adoption is permitted. We are currently assessing the impact of this update on our consolidated financial statements and do not expect a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, which amends ASC 350-40, Intangibles—Goodwill and Other—Internal-Use Software, to address a customer's accounting for implementation costs incurred in a cloud computing arrangement ("CCA") that is a service contract. This update aligns the accounting for costs incurred to implement a CCA that is a service arrangement with the guidance on capitalizing costs associated with developing or obtaining internal-use software. The update is effective for public business entities for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption of the amendments in this update is permitted, including adoption in any interim period. We are currently assessing the impact of this update on our consolidated financial statements and do not expect a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (ASC 820) — Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement. ASU 2018-13 removes certain disclosures, modifies certain disclosures and adds additional disclosures. ASU 2018-13 is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2019. Early adoption is permitted. We are currently assessing the potential impact of the amendments in this ASU on our consolidated financial statements and do not expect a material impact on our consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, Income Taxes (ASC 740) — Simplifying the Accounting for Income Taxes. ASU 2019-12 which modifies ASC 740 to simplify the accounting for income taxes. The ASU removes certain exceptions for recognizing deferred taxes for investments, performing intra-period allocation and calculating income taxes in interim periods. The ASU also adds guidance to reduce complexity in certain areas, including recognizing deferred taxes for tax goodwill and allocating taxes to members of a consolidated group. ASU 2019-12 is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2020. We are currently assessing the potential impact of this ASU on our consolidated financial statements and do not expect a material impact on our consolidated financial statements.

Recently Adopted Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, "Leases", (Topic 842), which required the Company to recognize lease assets and lease liabilities (related to leases previously classified as operating under previous U.S. GAAP) on its consolidated balance sheet for all leases in excess of one year in duration. The ASU was effective for the Company on May 1, 2019. The Company elected to adopt ASU 2016-02 using the modified retrospective method and, therefore, have not recast comparative periods presented in its unaudited consolidated financial statements. As permitted under ASU 2016-02, the Company elected to account for the non-lease components together with the lease components as a single lease component. The Company recorded an operating lease right-of-use ("ROU") asset of $3.2 million, net of deferred rent of $900,000 and an operating lease liability of $4.1 million as of May 1, 2019. Refer to "Note 13. Leases" for additional information.

In August 2016, the FASB issued ASU No. 2016-15, "Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments". The new standard attempts to reduce diversity in practice in how cash receipts and cash payments are presented and classified in the statement of cash flows. ASU No. 2016-15 provides guidance on eight specific cash flow issues. The new guidance was effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years. The Company adopted ASU 2016-15 on May 1, 2018 and it did not have a material impact on its consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, "Restricted Cash (a consensus of the FASB Emerging Issues Task Force)" ("ASU 2016-18"), which addresses classification and presentation of changes in restricted cash on the statement of cash flows. ASU 2016-18 requires an entity's reconciliation of the beginning-of-period and end-of-period total amounts shown on the statement of cash flows to include in cash and cash equivalents amounts generally described as restricted cash and restricted cash equivalents. ASU 2016-18 is effective for public business entities for annual and interim periods in fiscal years beginning after December 15, 2017. The Company adopted ASU 2016-18 on May 1, 2018 and did not have a material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, “Intangibles - Goodwill and Other” (Topic 350): Simplifying the Test for Goodwill Impairment (ASU 2017-04). This new standard simplifies how an entity is required to test goodwill for impairment by eliminating a step from the goodwill impairment test. ASU 2017-04 allows for prospective application and is effective for fiscal years beginning after December 15, 2019, and interim periods therein with early adoption permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company adopted this guidance on May 1, 2019 and it did not have an impact on its consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, "Compensation-Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting". This ASU expands the scope of Topic 718, Compensation—Stock Compensation (which currently only includes share-based payments to employees) to include share-based payments issued to nonemployees for goods or services. Under the new guidance, the existing employee guidance will apply to nonemployee share-based transactions (as long as the transaction is not effectively a form of financing), with the exception of specific guidance related to the attribution of compensation cost. The cost of nonemployee awards will continue to be recorded as if the grantor had paid cash for the goods or services. The new accounting guidance was effective for the Company on May 1, 2019. The Company early adopted ASU 2018-07 beginning with its financial reporting for the quarter ended January 31, 2019. The adoption did not have a material impact on the Company's consolidated financial statements.

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.

Item 7A. ***Quantitative and Qualitative Disclosures About Market Risk***

Not applicable.

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

The consolidated financial statements required pursuant to this item are included in Item 15 of this annual report and are presented beginning on page F-1

Item 9. ***Changes in and Disagreements With Accountants on Accounting and Financial Disclosure***

None.

Item 9A. ***Controls and Procedures***

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

As required by Rule 13a-15 under the Exchange Act , our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, have reviewed and evaluated our disclosure controls and procedures (as defined in the Securities Exchange Act Rule 13a-15(e)) as of April 30, 2020. Based on that evaluation, these officers have concluded that, as of April 30, 2020, our disclosure controls and procedures were effective to achieve their stated purpose.

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules, regulations, and forms. Disclosure controls and procedures include, without limitation,

controls and procedures designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is accumulated and communicated to management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding disclosure.

Limitations on the Effectiveness of Controls

Our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met. Because of inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a–15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on control criteria framework, *Internal Control – Integrated Framework,* issued by the Committee of Sponsoring Organizations, or COSO. Based on our evaluation, management concluded that our internal control over financial reporting was effective as of April 30, 2020.

Management's Report on Changes in Internal Controls

In connection with the evaluation required by Exchange Act Rule 13a-15(d), our management, including our Chief Executive Officer and Chief Financial Officer, concluded that there were no changes in our internal control over financial reporting during the quarter ended April 30, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. ***Other Information***

None.

PART III

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

The information required by this item will be contained in our 2020 Proxy Statement and such information is incorporated herein by this reference.

Item 11. ***Executive Compensation***

The information required by this item will be contained in our 2020 Proxy Statement and such information is incorporated herein by this reference.

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

The information required by this item will be contained in our 2020 Proxy Statement and such information is incorporated herein by this reference.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence***

The information required by this item will be contained in our 2020 Proxy Statement and such information is incorporated herein by this reference.

Item 14. ***Principal Accounting Fees and Services***

The information required by this item will be contained in our 2020 Proxy Statement and such information is incorporated herein by this reference.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules***

(a)1. Financial Statements

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(a)2. Financial Statement Schedules

All schedules have been omitted because they are not applicable.

(a)3. Exhibits required to be filed by Item 601 of Regulation S-K.

Exhibit No.	
3.1	Amended and Restated Articles of Incorporation (incorporated by reference to Appendix A to the Company's Information Statement on Schedule 14C filed March 7, 2011)
3.1.1	Certificate of Amendment to Amended and Restated Articles of Incorporation (incorporated by reference to Exhibit 3(i) to the Company's Current Report on Form 8-K filed April 28, 2015)
3.2	Amended and Restated Bylaws, as amended (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed May 9, 2017)
4.1	Description of Registered Securities *
10.1	Employment Agreement, dated November 5, 2013, between the Company and Ronnie Morris, M.D. (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed November 12, 2013)

10.2	Amendment to Employment Agreement, dated March 16, 2015, between the Company and Ronnie Morris (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed March 20, 2015)
10.3	Offer letter dated June 3, 2013 between the Company and David Miller (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed June 3, 2013)
10.4	2010 Equity Incentive Plan (incorporated by reference to Appendix B to the Company's Definitive Information Statement on Schedule 14C filed March 7, 2011)
10.5	Form of Note Purchase Agreement, dated December 1, 2014, between the Company and each of Joel Ackerman and Ronnie Morris (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 5, 2014)
10.6	Form of Convertible Promissory Note, dated December 1, 2014, issued to each of Joel Ackerman and Ronnie Morris in connection with the Note Purchase Agreement, dated December 1, 2014 between the Company and each of Joel Ackerman and Ronnie Morris incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed December 5, 2014)
10.7	Amendment No. 1 to Convertible Promissory Note, dated December 1, 2014 issued to Joel Ackerman in connection with the Note Purchase Agreement, dated December , 2014, between the Company and each of Joel Ackerman and Ronnie Morris (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed March 2, 2015)
10.8	Amendment No. 1 to Convertible Promissory Note, dated December 1, 2014 issued to Ronnie Morris in connection with the Note Purchase Agreement, dated December , 2014, between the Company and each of Joel Ackerman and Ronnie Morris (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed March 2, 2015)
10.9	Amended and Restated 2011 Securities Purchase Agreement, dated March 13, 2015, between the Company and each person or entities that are signatories to the Securities Purchase Agreement, dated March 24, 2011, between the Company and each investor identified on the signature pages thereto (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed March 17, 2015)
10.10	Form of warrant issued to each person or entities that are signatories to the Securities Purchase Agreement, dated March 24, 2011, between the Company and each investor identified on the signature page thereto (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed January 30, 2013)
10.11	Amendment No. 1 to warrants, dated March 13, 2015, between the Company and each person or entities that are signatories to the Securities Purchase Agreement, dated March 24, 2011, between the Company and each investor identified on the signature pages thereto (incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed March 17, 2015)
10.12	Amended and Restated 2013 Securities Purchase Agreement, dated March 13, 2015, between the Company and each person or entities that are signatories to the Securities Purchase Agreement, dated January 28, 2013, between the Company and each investor identified on the signature pages thereto (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed March 17, 2015)
10.13	Form of warrant issued to each person or entities that are signatories to the Securities Purchase Agreement, dated January 28, 2013, between the Company and each investor identified on the signature page thereto (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed January 30, 2013)
10.14	Amendment No. 1 to warrants, dated March 13, 2015, between the Company and each person or entities that are signatories to the Securities Purchase Agreement, dated January 28, 2013, between the Company and each investor identified on the signature pages thereto (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed March 17, 2015)
10.15	Put Right Agreement, dated January 29, 2014, between the Company and each of Joel Ackerman and Ronnie Morris (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed March 6, 2014)
10.16	Securities Purchase Agreement, dated March 11, 2015, between the Company and each investor identified on the signature pages thereto (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed March 12, 2015)

10.17	Amended and Restated Registration Rights Agreement, dated March 13, 2015, between the Company and each person or entities that are signatories to (i) the Securities Purchase Agreement, dated March 24, 2011, between the Company and each investor identified on the signature page thereto, (ii) the Securities Purchase Agreement, dated January 28, 2013, between the Company and each investor identified on the signature page thereto, and (iii) the Securities Purchase Agreement, dated March 11, 2015, between the Company. And each investor identified on the signature page thereto (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed March 17, 2015)
10.18	Form of Investor Warrant issued to each person or entities that are signatories to the Securities Purchase Agreement, dated March 11, 2015, between the Company and each investor identified on the signature page thereto (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed March 17, 2015)
10.19	Option Exchange Agreement, dated March 16, 2015, between the Company and Joel Ackerman (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed March 20, 2015)
10.20	Option Exchange Agreement, dated March 16, 2015, between the Company and Ronnie Morris (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed March 20, 2015)
10.21	Option Exchange Agreement, dated March 16, 2015, between the Company and David Miller (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed March 20, 2015)
14	Code of Ethics (incorporated by reference to Exhibit 14 of the April 30, 2008 Form 10-KSB)
21	List of Subsidiaries (incorporated by reference to Exhibit 21 of the Company's Form 10-K filed July 28, 2017)
23.1	Consent of Independent Registered Public Accounting Firm*
31.1	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer*
31.2	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer*
32.1	Section 1350 Certifications**
101.INS*	XBRL Instance Document.
101.SCH*	XBRL Taxonomy Extension Schema Document.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.

* Filed herewith

** Furnished hereto.

Item 16. ***Form 10-K Summary***

Not Required.

SIGNATURES

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

CHAMPIONS ONCOLOGY, INC.

July 28, 2020

/s/ RONNIE MORRIS

Ronnie Morris

Chief Executive Officer

(principal executive officer)

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

Signature	Title	Date
/s/ RONNIE MORRIS Ronnie Morris	Chief Executive Officer and Director *(principal executive officer)*	July 28, 2020
/s/ DAVID MILLER David Miller	Chief Financial Officer *(principal financial and accounting officer)*	July 28, 2020
/s/ JOEL ACKERMAN Joel Ackerman	Director, Chairman of the Board of Directors	July 28, 2020
/s/ DAVID SIDRANSKY David Sidransky	Director	July 28, 2020
/s/ ABBA D. POLIAKOFF Abba D. Poliakoff	Director	July 28, 2020
/s/ SCOTT R. TOBIN Scott R. Tobin	Director	July 28, 2020
/s/ DANIEL MENDELSON Daniel Mendelson	Director	July 28, 2020
/s/ PHILIP BREITFELD Philip Breitfeld	Director	July 28, 2020

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Champions Oncology, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Champions Oncology, Inc. and Subsidiaries (the "Company") as of April 30, 2020 and 2019, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the years then ended, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Company as of April 30, 2020 and 2019, and the consolidated results of their operations and their cash flows for each of the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 1 to the financial statements, the Company has changed its method of accounting for leases in fiscal year 2020 due to the adoption of Accounting Standards Codification Topic 842, Leases.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ EisnerAmper LLP

We have served as the Company's auditor since 2015.

EISNERAMPER LLP
Iselin, New Jersey
July 28, 2020

CHAMPIONS ONCOLOGY, INC.
CONSOLIDATED BALANCE SHEETS
AS OF APRIL 30
(In Thousands except for shares)

	2020	2019
ASSETS		
Current assets:		
Cash	$ 8,342	$ 3,237
Accounts receivable, net	4,770	4,377
Prepaid expenses and other current assets	385	308
Total current assets	13,497	7,922
Operating lease right-of-use assets, net	2,798	—
Property and equipment, net	3,993	2,546
Other long term assets	128	128
Goodwill	335	669
Total assets	$ 20,751	$ 11,265
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 3,140	$ 2,807
Accrued liabilities	2,502	1,180
Current portion of operating lease liabilities	$ 503	$ —
Current portion of finance lease	125	16
Deferred revenue	5,815	4,022
Total current liabilities	12,085	8,025
Deferred rent	—	851
Non-current portion operating lease liabilities	3,170	—
Other non-current liabilities	178	151
Total liabilities	$ 15,433	$ 9,027
Stockholders' equity:		
Common stock, $.001 par value; 200,000,000 shares authorized; 12,726,728 and 11,619,538 shares issued and 12,726,728 and 11,619,538 shares outstanding as of April 30, 2020 and April 30, 2019, respectively	13	12
Additional paid-in capital	77,978	72,924
Accumulated deficit	(72,673)	(70,698)
Total stockholders' equity	5,318	2,238
Total liabilities and stockholders' equity	$ 20,751	11,265

The accompanying notes are an integral part of these Consolidated Financial Statements.

CHAMPIONS ONCOLOGY, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Dollars in Thousands Except Share and Per Share Amounts)

	Year Ended April 30,	
	2020	**2019**
Oncology services revenue	$ 32,123	$ 27,067
Costs and operating expenses:		
Cost of oncology services	16,882	14,265
Research and development	5,853	4,798
Sales and marketing	4,242	3,056
General and administrative	6,614	4,678
Goodwill Impairment	335	—
Total costs and operating expenses	33,926	26,797
Income (loss) from operations	(1,803)	270
Other expense:		
Other expense	(42)	(39)
Income (loss) before income tax expense	(1,845)	231
Provision for income tax	130	103
Net income (loss)	$ (1,975)	$ 128
Net income (loss) per common share outstanding		
basic	$ (0.17)	$ 0.01
and diluted	$ (0.17)	$ 0.01
Weighted average common shares outstanding		
basic	11,843,463	11,340,184
and diluted	11,843,463	14,096,117

The accompanying notes are an integral part of these Consolidated Financial Statements.

CHAMPIONS ONCOLOGY, INC.
CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY
(In Thousands except for shares)

	Common Stock		Treasury Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount			
Balance, April 30, 2018	11,003,228	$ 11	269,685	$ (1,252)	$ 72,070	$ (70,826)	$ 3
Stock-based compensation and modification expense	—	—	—	—	636	—	636
Issuance of common stock for services	5,462	—	—	—	6	—	6
Issuance of common stock on exercise of stock options and warrants	610,848	1	(269,685)	1,252	212	—	1,465
Net Income	—	—	—	—	—	128	128
Balance, April 30, 2019	11,619,538	$ 12	—	$ —	$ 72,924	$ (70,698)	$ 2,238
Stock-based compensation	—	—	—	—	600	—	600
Issuance of common stock on exercise of stock options and warrants	1,107,190	1	—	—	4,454	—	4,455
Net loss	—	—	—	—	—	(1,975)	(1,975)
Balance, April 30, 2020	12,726,728	$ 13	—	$ —	$ 77,978	$ (72,673)	$ 5,318

The accompanying notes are an integral part of these Consolidated Financial Statements.

CHAMPIONS ONCOLOGY, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Dollars in Thousands)

	Year Ended April 30,	
	2020	**2019**
Operating activities:		
Net income (loss)	$ (1,975)	$ 128
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Stock-based compensation expense	600	636
Depreciation and amortization expense	825	606
Gain on disposal of equipment	(52)	—
Operating lease right-of-use assets	403	—
Deferred rent	—	397
Goodwill impairment	335	—
Allowance for doubtful accounts	277	71
Issuance of common stock for services	—	6
Changes in operating assets and liabilities:		
Accounts receivable	(670)	(531)
Prepaid expenses and other current assets	(77)	(21)
Other long term assets	—	(12)
Accounts payable	333	653
Accrued liabilities	1,322	611
Operating lease liabilities	(235)	—
Other non-current liability	27	—
Deferred revenue	1,792	(682)
Net cash provided by operating activities	2,905	1,862
Investing activities:		
Purchase of property and equipment	(2,220)	(834)
Net cash used in investing activities	(2,220)	(834)
Financing activities:		
Proceeds from exercise of options and warrants	4,455	1,465
Finance lease payments	(35)	(262)
Net cash provided by financing activities	4,420	1,203
Increase in cash	5,105	2,231
Cash, beginning of year	3,237	1,006
Cash, end of year	$ 8,342	$ 3,237
Non-cash investing and financing activities:		
Purchased equipment under finance lease	212	235
Right-of-use assets obtained in exchange for operating lease liabilities	3,201	—
Credit received on purchase of equipment	160	—

The accompanying notes are an integral part of these Consolidated Financial Statements.

Note 1. Organization and Basis of Presentation

Background

Champions Oncology, Inc. (the "Company"), is engaged in an end-to-end range of research and development technology solutions and services to improve the development and use of oncology drugs. The Company's TumorGraft Technology Platform is a novel approach to personalizing cancer care based upon the implantation of human tumors in immune-deficient mice. The Company uses this technology, in conjunction with related services, to offer solutions for two consumer groups: Translational Oncology Solutions ("TOS") and Personalized Oncology Solutions ("POS"). The Company's TOS business offers a technology 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. POS assists physicians in developing personalized treatment options for their cancer patients through tumor specific data obtained from drug panels and related personalized oncology services.

The Company has two operating subsidiaries: Champions Oncology (Israel), Limited and Champions Biotechnology U.K., Limited. For the years ended April 30, 2020 and 2019, there were no revenues earned by these subsidiaries.

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The Company operates in one reportable business segment.

Note 2. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All material intercompany balances and transactions have been eliminated in consolidation.

Foreign Currency

The Company's foreign subsidiaries functional currency is the U.S. dollar. Transaction gains and losses are recognized in earnings. The Company is subject to foreign exchange rate fluctuations in connection with the Company's international operations.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates include, among other things, accounts receivable realization, revenue recognition (replacement of licensed tumors), valuation allowance for deferred tax assets, valuation of goodwill, and stock-based compensation and warrant assumptions. 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.

Cash and Cash Equivalents

The Company considers only those investments which are highly liquid, readily convertible to cash, and with original maturities of three months or less to be cash equivalents. As of April 30, 2020 and 2019 the Company had cash balances of $8.3 million and $3.2 million, respectively, and no cash equivalents.

Liquidity

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 cash on hand, working capital management, proceeds from certain private placements and public offerings of our securities, and sales of products and services. For the year ended April 30, 2020, the Company had a net loss of approximately $2.0 million, an accumulated deficit of approximately $72.7 million, working capital of $1.4 million and cash and cash equivalents of $8.3 million. We believe that our cash on hand, together with continued improved cash flows from operations, are adequate to fund operations through at least August 2021. Should the Company be required to raise additional capital, there can be no assurance that management would be successful in raising such capital on terms acceptable to us, if at all.

Fair Value

The carrying value of cash, accounts receivable, prepaid expenses, deposits and other receivables, accounts payable, and accrued liabilities approximate their fair value based on the liquidity or the short-term maturities of these instruments. The fair value hierarchy promulgated by GAAP consists of three levels:

- *Level one* — Quoted market prices in active markets for identical assets or liabilities;
- *Level two* — Inputs other than level one inputs that are either directly or indirectly observable; and
- *Level three* — Unobservable inputs developed using estimates and assumptions, which are developed by the reporting entity and reflect those assumptions that a market participant would use.

Determining which category an asset or liability falls within the hierarchy requires significant judgment. The Company evaluates its hierarchy disclosures each quarter. The Company has no assets that are measured at fair value on a recurring basis and there were no assets or liabilities measured at fair value on a non-recurring basis during the years ended April 30, 2020 and 2019.

Property and Equipment

Property and equipment is recorded at cost and primarily consists of laboratory equipment, furniture and fixtures, and computer hardware and software. Assets in progress include equipment or software not yet placed in service. Depreciation and amortization is calculated on a straight-line basis over the estimated useful lives of the various assets ranging from three to nine years.

Leases

Effective May 1, 2019, the Company accounts for its leases under Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 842, Leases ("ASC 842"). Under this guidance, arrangements meeting the definition of a lease are classified as operating or financing leases and are recorded on the consolidated balance sheet as both a right-of-use asset and lease liability, calculated by discounting fixed lease payments over the lease term at the rate implicit in the lease or the Company's incremental borrowing rate. As the Company's leases do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. Lease liabilities are increased by interest and reduced by payments each period, and the right-of-use asset is amortized over the lease term. For operating leases, interest on the lease liability and the amortization of the right-of-use asset result in straight-line rent expense over the lease term. The Company continues to account for leases in the prior period financial statements in accordance with ASC Topic 840.

Impairment of Long-Lived Assets

Impairment losses are to be recognized when the carrying amount of a long-lived asset is not recoverable or exceeds its fair value. The Company evaluates its long-lived assets for impairment whenever events or changes in circumstances indicate that a carrying value may not be recoverable. The Company uses estimates of future cash flows over the remaining useful life of a long-lived asset or asset group to determine the recoverability of the asset. These estimates only include the net cash flows directly associated with, and that are expected to arise as a direct result of, the use and eventual disposition of the asset or asset group. The

Company has not recognized any impairment losses for the Company's long-lived assets for the years ending April 30, 2020 and 2019.

Other long term assets

Other long term assets represents amounts relating to lease deposits for our Hackensack, New Jersey and Rockville, Maryland locations.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired in a business combination. The Company evaluates the carrying value of goodwill annually in connection with the annual budgeting and forecast process and also between annual evaluations if events occur or circumstances change that would more likely than not reduce the fair value of the reporting unit to which goodwill was allocated to below its carrying amount. Such circumstances could include, but are not limited to: (1) a significant adverse change in legal factors, market conditions, or in business climate, (2) unanticipated competition, or (3) an adverse action or assessment by a regulator. When evaluating goodwill for impairment, we may first perform an assessment qualitatively whether it is more likely than not that a reporting unit's carrying amount exceeds its fair value, referred to as a "step zero" approach. Subsequently (if necessary after step zero), an entity should perform its goodwill impairment test by comparing the fair value of a reporting unit with its carrying value. Under FASB's Accounting Standards Update ("ASU") 2014-02, Topic 350, "Intangibles—Goodwill and Other" goodwill impairment is measured as the excess of the carrying amount of the reporting unit over its fair value.

The impairment evaluation test involves comparing the current fair value of each business unit to its carrying value, including goodwill. Fair value is typically estimated using a discounted cash flow analysis, which requires the Company to estimate the future cash flows anticipated to be generated by the business unit being tested for impairment as well as to select a risk-adjusted discount rate to measure the present value of the anticipated cash flows. When determining future cash flow estimates, the Company considers historical results adjusted to reflect current and anticipated operating conditions. The Company estimates cash flows for the business unit over a discrete period (typically four or five years) and the terminal period (considering expected long term growth rates and trends). Estimating future cash flows requires significant judgment by management in such areas as future economic conditions, industry-specific conditions, product pricing, and necessary capital expenditures. The use of different assumptions or estimates for future cash flows or significant changes in risk-adjusted discount rates due to changes in market conditions could produce substantially different estimates of the fair value of the business unit.

We have one reportable segment. The Company evaluated its TOS and POS business operations (or business units) and determined that the POS operations no longer qualified as a separate reportable segment primarily due to its revenue representing approximately 2.5% of total revenue. The Company assesses goodwill by business unit, which are also 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. As a result of its annual assessment, which included an estimation of the future cash flows of the POS operations as described above, the Company determined that, under a discounted cash flow model, the fair value of the POS business/reporting unit was below its carrying amount as of April 30, 2020. The Company recognized goodwill impairment for the quarter and year ended April 30, 2020 of $335,000. As of April 30, 2020 and 2019, goodwill was $335,000 and $670,000, respectively.

Deferred Revenue

Deferred revenue represents payments received in advance for products to be delivered. When products are delivered, deferred revenue is then recognized as earned.

Other Non-Current Liabilities

Other non-current liabilities represent amounts for uncertain tax positions relating to one of our foreign entities.

Cost of Oncology Services

Cost of oncology services relates to our TOS and POS business units. TOS costs consist of direct costs related to mice purchases and maintenance costs for studies completed internally and charges from Contract Research Organization's for studies handled externally. Indirect costs include salaries for personnel directly engaged in providing TOS products. All costs of performing studies

in-house are expensed as incurred. All TOS costs of performing studies from external sources, are expensed when incurred. POS consists of costs related to implantations, drug panels, tumor boards, and gene sequencing services, as well as indirect internal costs, such as salaries for personnel directly engaged in these products. Direct costs associated with implantation revenues are primarily related to mice purchases and maintenance and shipping of tumor tissue. Direct drug panel costs are primarily incurred from mice purchases and maintenance and drug purchases. Direct tumor board costs are primarily related to physicians' honorariums and any tumor board participation costs such as travel, lodging and meals. Direct gene sequencing costs are primarily related to costs billed from the gene sequencing service provider. All POS costs are expensed as incurred.

Research and Development

Research and development costs represent both costs incurred internally for research and development activities, including personnel costs and mice purchases and maintenance, as well as costs incurred externally to facilitate research activities, such as tumor tissue procurement and characterization expenses. All research and development costs are expensed as incurred.

Sales and Marketing

Sales and marketing expenses represent costs incurred to promote the Company's products offered, including salaries, benefits and related costs of our sales and marketing personnel, and represent costs of advertising and other selling and marketing expenses. All sales and marketing costs, including advertising costs, are expensed as incurred.

Earnings Per Share

Basic net income or loss per share is computed by dividing the net income or loss for the period by the weighted-average number of shares of common stock outstanding during the period. Diluted net income per share is computed by dividing the net income for the period by the weighted-average number of shares of common stock plus dilutive potential common stock considered outstanding during the period. Such dilutive shares consist of incremental shares that would be issued upon exercise of the Company's common stock purchase warrants and stock options.

Stock-based Payments

The Company typically recognizes expense for stock-based payments based on the fair value of awards on the date of grant. The Company uses the Black-Scholes option pricing model to estimate fair value. The Black-Scholes option valuation model was developed for use in estimating the fair value of short-traded options that have no vesting restrictions and are fully transferable. The option pricing model requires the Company to estimate certain key assumptions such as expected life, volatility, risk free interest rates and dividend yield to determine the fair value of stock-based awards. These assumptions are based on historical information and management judgment. The risk-free interest rate used is based on the United States treasury security rate with a term consistent

with the expected term of the award at the time of the grant. Since the Company has limited option exercise history, it has generally elected to estimate the expected life of an award based upon the Securities and Exchange Commission-approved "simplified method" noted under the provisions of Staff Accounting Bulletin No. 107 with the continued use of this method extended under the provisions of Staff Accounting Bulletin No. 110. Estimated volatility is based upon the historical volatility of the Company's common stock. The Company does not anticipate paying a dividend, and therefore, no expected dividend yield was used.

The Company expenses stock-based payments over the period that the awards are expected to vest. In the event of forfeitures, compensation expense is adjusted. The Company expenses modification charges in the period of modification and, if required, over the remaining period the awards are expected to vest. The Company will report cash flows resulting from tax deductions in excess of the compensation cost recognized from those options (excess tax benefits) as financing cash flows, if they should arise.

Income Taxes

Deferred income taxes have been provided to show the effect of temporary differences between the recognition of expenses for financial and income tax reporting purposes and between the tax basis of assets and liabilities, and their reported amounts in the consolidated financial statements. In assessing the realizability of deferred tax assets, the Company assesses the likelihood that deferred tax assets will be recovered through tax planning strategies or from future taxable income, and to the extent that recovery is not likely or there is insufficient operating history, a valuation allowance is established. The Company adjusts the valuation allowance in the period management determines it is more likely than not that net deferred tax assets will or will not be realized. Changes in valuation allowances from period to period are included in the tax provision in the period of change. As of April 30, 2020 and 2019, the Company provided a valuation allowance for all net deferred tax assets, as recovery is not more likely than not based on an insufficient history of earnings.

Tax positions are positions taken in a previously filed tax return or positions expected to be taken in a future tax return that are reflected in measuring current or deferred income tax assets and liabilities reported in the consolidated financial statements. Tax positions include, but are not limited to, the following:

- An allocation or shift of income between taxing jurisdictions;
- The characterization of income or a decision to exclude reportable taxable income in a tax return; or
- A decision to classify a transaction, entity or other position in a tax return as tax exempt.

The Company reflects tax benefits only if it is more likely than not that we will be able to sustain the tax position, based on its technical merits. If a tax benefit meets this criterion, it is measured and recognized based on the largest amount of benefit that is cumulatively greater than 50% likely to be realized. As of April 30, 2020 and 2019 the Company has recorded $178,000 and $151,000, respectively, of liabilities related to uncertain tax positions relative to one of its foreign operations.

The Company's practice is to recognize interest and/or penalties related to income tax matters in income tax expense. The Company accrued $27,000 and $0, for interest and penalties on the Company's statement of operations for the years ended April 30, 2020 and 2019, respectively. The Company does not anticipate any significant unrecognized tax benefits to be recorded during the next 12 months. For the year ended April 30, 2020 and 2019, the Company recognized a provision for income taxes of $130,000 and $103,000, respectively, related to state and foreign taxes.

Revenue Recognition

In May 2014, the FASB issued ASU 2014-19, *Revenue from Contracts with Customers (Topic 606)* which was added to the FASB's Accounting Standards Codification as ASC 606. The objective of the standard is to establish a single comprehensive revenue recognition model that is designed to create greater comparability of financial statements across industries and jurisdictions. Under new standard, companies recognize revenue to depict the transfer of goods or services to customers in amounts that reflect the consideration to which the company expects to be entitled in exchange for those goods or services. The Company adopted ASU 2014-09 on May 1, 2018 using the modified retrospective method for all contracts not completed as of the date of adoption and by recognizing the cumulative effect of applying the standard as an adjustment to the Company's Balance Sheet.

All revenue is generated from contracts with customers. The Company's arrangements are service type contracts that mainly have a duration of less than a year. The Company recognizes revenue when control of these services is transferred to the customer in an amount, referred to as the transaction price, that reflects the consideration to which the Company is expected to be entitled in exchange for those services. The Company determines revenue recognition utilizing the following five steps: (1) identification of the contract with a customer, (2) identification of the performance obligations in the contract (promised goods or services that are distinct), (3) determination of the transaction price, (4) allocation of the transaction price to the performance obligations, and (5) recognition of revenue when, or as, the Company transfers control of the product or service for each performance obligation. The Company records revenues net of any tax assessments by governmental authorities, such as value added taxes, that are imposed on and concurrent with specific revenue generating transactions.

Pharmacology Study, POS Services and Other Services

The Company generally enters into contracts with customers to provide oncology services with payments based on fixed-fee arrangements. At contract inception, the Company assesses the services promised in the contracts with customers to identify the performance obligations in the arrangement. The Company's fixed-fee arrangements for oncology services are considered a single performance obligation because the Company provides a highly-integrated service.

The Company recognizes revenue over time using a progress-based input method since there is no single output measure that would fairly depict the transfer of control over the life of the performance obligation. Revenue is recognized for the single performance obligation over time due to the Company's right to payment for work performed to date and the performance does not create an asset with an alternative use. The Company recognizes revenue as portions of the overall performance obligation are completed as this best depicts the progress of the performance obligation.

Incremental Costs of Obtaining a Contract (Sales Commissions)

Under ASC 606, the costs of obtaining a contract can be expensed immediately, rather than capitalized and amortized, if the amortization period is one year or shorter. Sales commissions for the Company represent contract costs with a term of one year or less. Therefore, under ASC 606, the Company elected the practical expedient to expense these costs as incurred.

Variable Consideration

In some cases, contracts provide for variable consideration that is contingent upon the occurrence of uncertain future events, such as the success of the initial performance obligation. Variable consideration is estimated at the expected value or at the most likely amount depending on the type of consideration. Estimated amounts are included in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. The estimate of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of its anticipated performance and all information (historical, current and forecasted) that is reasonably available to the Company.

Trade Receivables, Unbilled Services and Deferred Revenue

In general, billings and payments are established by contractual provisions including predetermined payment schedules, which may or may not correspond to the timing of the transfer of control of the Company's services under the contract. In general, the Company's intention in its invoicing (payment terms) is to maintain cash neutrality over the life of the contract. Upfront payments, when they occur, are intended to cover certain expenses the Company incurs at the beginning of the contract. Neither the Company nor its customers view such upfront payments and contracted payment schedules as a means of financing. Unbilled services primarily arise from timing of payment terms and when an input method of revenue recognition is utilized and revenue recognized exceeds the amount billed to the customer.

Deferred revenue consists of unearned payments received in excess of revenue recognized. As the contracted services are subsequently performed and the associated revenue is recognized, the deferred revenue balance is reduced by the amount of the revenue recognized during the period. Deferred revenue is classified as a current liability on the condensed consolidated balance sheet as the Company expects to recognize the associated revenue in less than one year.

Accounting Pronouncements Being Evaluated

In June 2016, the Financial Accounting Standards Board (FASB) FASB issued Accounting Standards Update (ASU) No. 2016-13, "Financial Instruments - Credit Losses". This update requires immediate recognition of management's estimates of current expected credit losses ("CECL"). Under the prior model, losses were recognized only as they were incurred. The new model is applicable to all financial instruments that are not accounted for at fair value through net income. The standard is effective for fiscal years beginning after December 15, 2022 for public entities qualifying as smaller reporting companies. Early adoption is permitted. We are currently assessing the impact of this update on our consolidated financial statements and do not expect a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, which amends ASC 350-40, Intangibles—Goodwill and Other—Internal-Use Software, to address a customer's accounting for implementation costs incurred in a cloud computing arrangement ("CCA") that is a service contract. This update aligns the accounting for costs incurred to implement a CCA that is a service arrangement with the guidance on capitalizing costs associated with developing or obtaining internal-use software. The update is effective for public business entities for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption of the amendments in this update is permitted, including adoption in any interim period. We are currently assessing the impact of this update on our consolidated financial statements and do not expect a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (ASC 820) — Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement. ASU 2018-13 removes certain disclosures, modifies certain disclosures and adds additional disclosures. ASU 2018-13 is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2019. Early adoption is permitted. We are currently assessing the potential impact of the amendments in this ASU on our consolidated financial statements and do not expect a material impact on our consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, Income Taxes (ASC 740) — Simplifying the Accounting for Income Taxes. ASU 2019-12 which modifies ASC 740 to simplify the accounting for income taxes. The ASU removes certain exceptions for recognizing deferred taxes for investments, performing intraperiod allocation and calculating income taxes in interim periods. The ASU also adds guidance to reduce complexity in certain areas, including recognizing deferred taxes for tax goodwill and allocating taxes to members of a consolidated group. ASU 2019-12 is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2020. We are currently assessing the potential impact of this ASU on our consolidated financial statements and do not expect a material impact on our consolidated financial statements.

Recently Adopted Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, "Leases", (Topic 842), which required the Company to recognize lease assets and lease liabilities (related to leases previously classified as operating under previous U.S. GAAP) on its consolidated balance sheet for all leases in excess of one year in duration. The ASU was effective for the Company on May 1, 2019. The Company elected to adopt ASU 2016-02 using the modified retrospective method and, therefore, have not recast comparative periods presented in its unaudited consolidated financial statements. As permitted under ASU 2016-02, the Company elected to account for the non-lease components together with the lease components as a single lease component. The Company recorded an operating lease right-of-use ("ROU") asset of $3.2 million, net of deferred rent of $900,000 and an operating lease liability of $4.1 million as of May 1, 2019. Refer to "Note 13. Leases" for additional information.

In August 2016, the FASB issued ASU No. 2016-15, “Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments”. The new standard attempts to reduce diversity in practice in how cash receipts and cash payments are presented and classified in the statement of cash flows. ASU No. 2016-15 provides guidance on eight specific cash flow issues. The new guidance was effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years. The Company adopted ASU 2016-15 on May 1, 2018 and it did not have a material impact on its consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, "Restricted Cash (a consensus of the FASB Emerging Issues Task Force)" ("ASU 2016-18"), which addresses classification and presentation of changes in restricted cash on the statement of cash flows. ASU 2016-18 requires an entity's reconciliation of the beginning-of-period and end-of-period total amounts shown on the statement of cash flows to include in cash and cash equivalents amounts generally described as restricted cash and restricted cash equivalents. ASU 2016-18 is effective for public business entities for annual and interim periods in fiscal years beginning after December 15, 2017. The Company adopted ASU 2016-18 on May 1, 2018 and did not have a material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, “Intangibles - Goodwill and Other” (Topic 350): Simplifying the Test for Goodwill Impairment (ASU 2017-04). This new standard simplifies how an entity is required to test goodwill for impairment by eliminating a step from the goodwill impairment test. ASU 2017-04 allows for prospective application and is effective for fiscal years beginning after December 15, 2019, and interim periods therein with early adoption permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company adopted this guidance on May 1, 2019 and it did not have an impact on its consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, "Compensation-Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting". This ASU expands the scope of Topic 718, Compensation—Stock Compensation (which currently only includes share-based payments to employees) to include share-based payments issued to nonemployees for goods or services. Under the new guidance, the existing employee guidance will apply to nonemployee share-based transactions (as long as the transaction is not effectively a form of financing), with the exception of specific guidance related to the attribution of compensation cost. The cost of nonemployee awards will continue to be recorded as if the grantor had paid cash for the goods or services. The new accounting guidance was effective for the Company on May 1, 2019. The Company early adopted ASU 2018-07 beginning with its financial reporting for the quarter ended January 31, 2019. The adoption did not have a material impact on the Company's consolidated financial statements.

Note 3. Accounts Receivable, Unbilled Services and Deferred Revenue

Accounts receivable and unbilled services were as follows (in thousands):

	April 30, 2020	April 30, 2019
Accounts receivable	$ 2,655	$ 1,982
Unbilled services	2,404	2,417
Total accounts receivable and unbilled services	5,059	4,399
Less: allowance for doubtful accounts	(289)	(22)
Total accounts receivable, net	$ 4,770	$ 4,377

Deferred revenue was as follows (in thousands):

	April 30, 2020	April 30, 2019
Deferred revenue	$ 5,815	$ 4,022

Deferred revenue is shown as a current liability on the Company's balance sheet.

Note 4. Property and Equipment

Property and equipment consisted of the following (in thousands):

	April 30,	
	2020	2019
Furniture and fixtures	$ 181	$ 142
Computer equipment and software	1,551	1,104
Laboratory equipment	4,475	3,358
Assets in progress	554	16
Leasehold improvements	4	—
Total property and equipment	6,765	4,620
Less: Accumulated depreciation and amortization	(2,772)	(2,074)
Property and equipment, net	$ 3,993	$ 2,546

Depreciation and amortization expense was $825,000 and $606,000 for the years ended April 30, 2020 and 2019, respectively. Depreciation and amortization expense, excluding expense recorded under finance leases, was $683,000 and $490,000 for the twelve months ended April 30, 2020 and 2019.

As of April 30, 2020 and 2019, property, plant and equipment included gross assets held under finance leases of $343,000 and $366,000, respectively. Related depreciation expense for these assets was $142,000 and $116,000 for the years ended April 30, 2020 and 2019. As of April 30, 2020, assets in progress includes approximately $300,000 of capitalized software development costs.

During the year ended April 30, 2020, specifically during the quarter ended October 31, 2019, the Company traded in and disposed of a $235,000 leased asset that was previously included in the laboratory equipment category. At the time of disposal, the accumulated depreciation related to that asset was written off in the amount of $127,000 (see also paragraph below). As of January 31, 2020, the remaining leased asset included in the laboratory equipment category was fully depreciated resulting in a net balance of nil.

Finance Lease

In November 2014, the Company entered into a finance lease for laboratory equipment. The lease had costs of approximately $149,000, at inception, through November 2019. The final lease payment under this finance lease of $2,000 was paid during the three months ended January 31, 2020.

In July 2018, the Company entered into a second finance lease for laboratory equipment. The lease had total costs of approximately $266,000, inclusive of interest and taxes, with a monthly payment of approximately $11,000. Although the lease was originally due to mature in July 2020, the Company decided to pay the outstanding balance on February 1, 2019. During the quarter ended October 31, 2019, the Company traded in this asset and received a $160,000 reduction in the purchase price of two newly acquired assets. The net book value of the asset traded in at the time of trade in was $108,000, which resulted in the gain on the disposal of the asset of $52,000, which is included as an offset in the other expense line within the Company's consolidated statement of operations for the year ended April 30, 2020.

In December 2019, the Company entered into a finance lease for laboratory equipment. The lease had costs of approximately $231,000, at inception, through November 2020. This lease expires December 2020. The current monthly finance lease payment is approximately $19,000. The future minimum lease payments remaining under this finance lease at April 30, 2020 are $135,000. The present value of minimum future obligations is calculated based on interest rate of 4.75%. Depreciation and amortization expense related to this finance lease was $88,500 for the year ended April 30, 2020.

Note 5. Revenue from Contracts with Customers

Oncology Services Revenue

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-19, *Revenue from Contracts with Customers (Topic 606)* which was added to the FASB's Accounting Standards Codification as ASC 606. The Company adopted ASC 606 on May 1, 2018 using the modified retrospective method for all contracts not completed as of the date of adoption. The reported results for the twelve months ended April 30, 2020 and 2019 reflect the application of ASC 606. In accordance with ASC 606, revenue is now recognized when, or as, a customer obtains control of promised services. The amount of revenue recognized reflects the consideration to which the Company expects to be entitled to receive in exchange for these services.

A performance obligation is a promise (or a combination of promises) in a contract to transfer distinct goods or services to a customer and is the unit of accounting under ASC 606 for the purposes of revenue recognition. A contract's transaction price is allocated to each separate performance obligation based upon the standalone selling price and is recognized as revenue, when, or as, the performance obligation is satisfied. The majority of the Company's contracts have a single performance obligation because the promise to transfer individual services is not separately identifiable from other promises in the contracts, and therefore, is not distinct.

The majority of the Company's revenue arrangements are service contracts that are completed within a year or less. There are a few contracts that range in duration between 1 and 3 years. Substantially all of the Company's performance obligations, and associated revenue, are transferred to the customer over time. Most of the Company's contracts can be terminated by the customer without cause. In the event of termination, the Company's contracts provide that the customer pay the Company for services rendered through the termination date. The Company generally receives compensation based on a predetermined invoicing schedule relating to specific milestones for that contract. In addition, in certain instances a customer contract may include forms of variable consideration such as performance increases or other provisions that can increase or decrease the transaction price. This variable consideration is generally awarded upon achievement of certain performance metrics. For the purposes of revenue recognition, variable consideration is assessed on a contract-by-contract basis and the amount to be recorded is estimated based on the assessment of the Company's anticipated performance and consideration of all information that is reasonably available. Variable consideration is recognized as revenue if and when it is deemed probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved in the future.

Amendments to contracts are common. The Company evaluates each amendment which meets the criteria of a contract modification under ASC 606. Each modification is further evaluated to determine whether the contract modification should be accounted for as a separate contract or as a continuation of the original agreement.

The Company accounts for amendments as a separate contract as they meet the criteria under ASC 606-10-25-12.

Other TOS revenue represents services provided to the pharmaceutical and biotechnology companies. The Company does not consider these services part of their core product offerings.

The following table represents disaggregated revenue for the twelve months ended April 30, 2020 and 2019:

	Year Ended April 30,	
	2020	2019
Pharmacology services	$ 31,262	$ 25,484
Personalized oncology services	790	1,277
Other TOS revenue	71	306
Total oncology services revenue	$ 32,123	$ 27,067

Contract Balances

Contract assets include unbilled amounts typically resulting from revenue recognized in excess of the amounts billed to the customer for which the right to payment is subject to factors other than the passage of time. These amounts may not exceed their net realizable value. Contract assets are classified as current. Contract liabilities consist of customer payments received in advance of performance and billings in excess of revenue recognized, net of revenue recognized from the balance at the beginning of the period. Contract assets and liabilities are presented on the balance sheet on a net contract-by-contract basis at the end of each reporting period.

Note 6. Significant Customers

For the year ended April 30, 2020, none of our customers accounted for more than 10.0% of our total revenue.

For the year ended April 30, 2019, one of our customers accounted for more than 10.0% of our total revenue in the amount of $2.9 million, or 10.7% . The revenue from this customer is part of the TOS business and was captured in the consolidated oncology services revenue line item within the statement of operations.

As of April 30, 2020 and 2019, none of our customers accounted for more than 10.0% of our total accounts receivable balance.

Note 7. Commitments and Contingencies

Covid-19

In December 2019, a novel strain of coronavirus, COVID-19, was first identified in Wuhan, China. This virus continues to spread globally and, as of July 2020, has spread to over 200 countries, including the United States. The spread of COVID-19 from China to other countries has resulted in the World Health Organization declaring the outbreak of COVID-19 as a "pandemic," or a worldwide spread of a new disease, on March 11, 2020. Many countries around the world have imposed quarantines and restrictions on travel and mass gatherings to slow the spread of the virus. Employers are also required to increase, as much as possible, the capacity and arrangement for employees to work remotely. In addition, on March 11, 2020, the President of the United States issued a proclamation to restrict travel to the United States from foreign nationals who have recently been in certain European and Latin American countries. Although, to date, these restrictions have not impacted our operations, the effect on our business, from the spread of COVID-19 and the actions implemented by the governments of the the United States and elsewhere across the globe, may worsen over time.

Any outbreak of contagious diseases, or other adverse public health developments, could have a material and adverse effect on our business operations. These could include disruptions or restrictions on our ability to travel, pursue partnerships and other business transactions, receive shipments of biologic materials, as well as be impacted by the temporary closure of the facilities of suppliers. The spread of an infectious disease, including COVID-19, may also result in the inability of our suppliers to deliver supplies to us on a timely basis. In addition, health professionals may reduce staffing and reduce or postpone meetings with clients in response to the spread of an infectious disease. Though we have not yet experienced such events, if they would occur, they could result in a period of business disruption, and in reduced operations, any of which could materially affect our business, financial condition and results of operations. However, as of the date of this Annual Report on Form 10-K, we have not experienced a material adverse effect on our business nor the need for reduction in our work force; and, currently, and we do not expect any material impact on our long-term activity. The extent to which COVID-19 impacts our business will depend on future developments which are highly uncertain and cannot be predicted, including, but not limited to, new information which may emerge concerning the increased severity of COVID-19, the actions to contain COVID-19, or treat its impact.

Legal Matters

The Company is not currently party to any legal matters to its knowledge. The Company is not aware of any other matters that would have a material impact on the Company's financial position or results of operations.

Registration Payment Arrangements

The Company has entered into an Amended and Restated Registration Rights Agreement in connection with the March 2015 Private Placement. This Amended and Restated Registration Rights Agreement contains provisions that may call for the Company to pay penalties in certain circumstances. This registration payment arrangement primarily relates to the Company's ability to file a registration statement within a particular time period, have a registration statement declared effective within a particular time period and to maintain the effectiveness of the registration statement for a particular time period. The Company has not accrued any liquidated damages associated with the Amended and Restated Registration Right Agreement as the Company has filed the required registration statement and anticipates continued compliance with the agreement.

Royalties

The Company contracts with third-party vendors to license tumor samples for development into PDX models and use in our TOS business. These types of arrangements have an upfront fee ranging from nil to $7,000 per tumor sample depending on the successful growth of the tumor model and ability to develop them into a sellable product. The upfront costs are expensed as incurred. In addition, under certain agreements, for a limited period of time, the Company is subject to royalty payments if the licensed tumor models are used for sale in our TOS business, ranging from 2% to 5% of the contract price after recouping certain initiation costs. As of April 30, 2020, no royalties have been paid or accrued.

Note 8. Stock-based Payments

Stock-based compensation in the amount of $600,000 and $649,000 was recognized for years ended April 30, 2020 and 2019, respectively. Included in stock-based compensation expense for the twelve months ended April 30, 2020 and April 30, 2019 under "general and administrative" line item is nil and $6,000, respectively related to the issuance of common stock as compensation for services performed. Stock-based compensation costs were recorded as follows (in thousands):

	Year Ended April 30,	
	2020	**2019**
General and administrative	$ 328	$ 458
Sales and marketing	237	91
Research and development	13	14
TOS cost of sales	21	86
POS cost of sales	1	—
Total stock-based compensation expense	$ 600	$ 649

2010 Equity Incentive Plan

On February 18, 2011, shareholders owning a majority of the issued and outstanding shares of the Company executed a written consent approving the 2010 Equity Incentive Plan ("2010 Equity Plan"). The purpose of the 2010 Equity Plan is to grant (i) Non-statutory Stock Options; (ii) Restricted Stock Awards; and (iii) Stock Appreciation Rights (collectively, stock-based compensation) to its employees, directors and non-employees. Total stock awards under the 2010 Equity Plan shall not exceed 30,000,000 shares of common stock. Options and Stock Appreciation Rights expire no later than ten years from the date of grant and the awards vest as determined by the Board of Directors. Options and Stock Appreciation Rights have a strike price not less than 100% of the fair market value of the common stock subject to the option or right at the date of grant.

2008 Equity Incentive Plan

The Company has previously granted (i) Non-statutory Stock Options; (ii) Restricted Stock Awards; and (iii) Stock Appreciation Rights (collectively, stock-based compensation) to its employees, directors and non-employees under a 2008 Equity Incentive Plan (the "2008 Equity Plan"). Such awards may be granted by the Company's Board of Directors. Options granted under the 2008 Equity Plan expire no later than ten years from the date of grant and the awards vest as determined by the Board of Directors.

For stock-based payments to non-employee consultants under both the 2010 and 2008 Equity Plan, the fair value of the stock-based consideration issued is used to measure the transaction, as management believes this to be a more reliable measure of fair value than the services received. The fair value of the award is expensed over the period service is provided to the Company; however, it is ultimately measured at the price of the Company's common stock or the fair value of stock options using the Black-Scholes valuation model on the date that the commitment for performance by the non-employee consultant has been reached or performance is complete, which is generally the vesting date of the award.

Director Compensation Plan

On December 12, 2013, the Compensation Committee of the Board of Directors of the Company adopted changes to the Director Compensation Plan of 2010 (the "Director Plan") effective December 1, 2013. Under the Director Plan, independent directors of the Company are entitled to an annual award of a five-year option to purchase 8,333 shares of the Company's common stock, and the Chairman of the Board of the Company is entitled to an annual award of a five years option to purchase 16,667 shares of the Company's common stock. Independent directors who serve as chairperson of a committee will also receive an annual grant of a five-year option to purchase 1,667 shares of the Company's common stock. All options issued under the Director Plan vest quarterly at a rate of 25%. Option grants will typically be issued after the annual shareholder meeting which will generally be held in October of each year. New directors will receive a grant upon joining the Board equal to the pro-rata annual grant for the remainder of the year. Options issued under the Director Plan are issued pursuant to the 2010 Equity Plan.

Stock Option Grants

Black-Scholes assumptions used to calculate the fair value of options granted during the years ended April 30, 2020 and 2019 were as follows:

	Year Ended April 30,	
	2020	**2019**
Expected term in years	3 - 6	3 - 6
Risk-free interest rates	1.3% - 1.8%	2.6% - 3.0%
Volatility	69% - 71%	65% - 85%
Dividend yield	—%	—%

The weighted average fair value of stock options granted during the years ending April 30, 2020 and 2019, was $5.33 and $6.03, respectively. The Company's stock options activity and related information as of and for the years ended April 30, 2020 and 2019 is as follows:

	Non-Employees	**Directors and Employees**	**Total**	**Weighted Average Exercise Price**	**Weighted Average Remaining Contractual Life (Years)**	**Aggregate Intrinsic Value**
Outstanding, May 1, 2019	50,000	2,373,626	2,423,626	$ 3.19	5.3	$ 14,557,000
Granted	—	229,833	229,833	5.33	8.1	$ 544,000
Exercised	—	(248,495)	(248,495)	2.31		
Canceled	—	(11,824)	(11,824)	7.96		
Forfeited	—	(44,813)	(44,813)	7.85		
Expired	(6,668)	(70,001)	(76,669)	8.04		
Outstanding, April 30, 2020	43,332	2,228,326	2,271,658	3.23	5.0	$ 10,663,000
Vested and expected to vest as of April 30, 2020	43,332	2,228,326	2,271,658	3.23	5.0	$ 10,663,000
Vested as of April 30, 2020	17,501	1,926,117	1,943,618	2.83	4.5	$ 9,898,000

	Non-Employees	Directors and Employees	Total	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding, May 1, 2018	50,000	2,655,845	2,705,845	$ 2.85	5.9	$ 5,265,000
Granted	—	206,790	206,790	9.86	7.9	77,000
Exercised	—	(363,383)	(363,383)	2.22		
Canceled	—	(49,766)	(49,766)	3.20		
Forfeited	—	(9,750)	(9,750)	3.50		
Expired	—	(66,110)	(66,110)	15.10		
Outstanding, April 30, 2019	50,000	2,373,626	2,423,626	3.19	5.3	$ 14,557,000
Vested and expected to vest as of April 30, 2019	50,000	2,373,626	2,423,626	3.19	5.3	$ 14,557,000
Vested as of April 30, 2019	18,335	2,115,585	2,133,920	2.70	4.9	$ 13,785,000

On June 30, 2017, the Board of Directors extended the expiration terms of a previous employee's vested grants to November 2018. As a result of this modification, the Company had an additional stock option expense of $56,529, which was expensed under the "General and Administrative" line item on the income statement for the twelve months ended April 30, 2019.

Stock Purchase Warrants

As of April 30, 2020, the Company had zero warrants outstanding for the purchase of shares of its common stock, as all those that were exercisable as of April 30, 2019 were either exercised or expired by March 2020. For the year ending April 30, 2020, the Company received cash proceeds related to the exercise of these warrants of approximately $3.9 million. Activity related to warrants is summarized in the following table. Approximately 161,000 shares noted as exercised below were done so via a cash-less exercise basis.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding, May 1, 2019	1,671,440	$ 6.20	0.9	$ 5,730,000
Granted	—	—	—	—
Exercised	(858,695)	5.62	—	10,045,000
Forfeited	(760,601)	5.76	—	8,587,000
Expired	(52,144)	4.85	—	700,000
Outstanding, April 30, 2020	—	$ —	—	$ —

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding, May 1, 2018	2,004,284	$ 5.57	1.8	$ —
Granted	—	—	—	—
Exercised	(247,468)	5.28	—	905,000
Forfeited	(85,376)	4.80	—	388,000
Expired	—	—	—	—
Outstanding, April 30, 2019	1,671,440	$ 6.20	0.9	$ 5,730,000

Note 9. Common Stock

On June 15, 2016, the Company closed a public offering ("The June 2016 Public Offering") of 2,000,000 registered shares of its common stock at an offering price of $2.25 per share. In addition, the underwriter exercised a partial exercise of the over-allotment option granted to the underwriter to purchase an additional 258,749 shares of its common stock at the public offering price. All of the shares were offered by the Company.

The net proceeds from The June 2016 Public Offering, including the partial exercise of the over-allotment option, was $4.3 million, after deducting the underwriting discount and offering-related expenses of $742,000. The Company used the net proceeds of this offering for research and development to grow the TumorGraft platform, and the balance of the net proceeds for working capital and general corporate purposes.

For the year ended April 30, 2020, the Company did not issue any common stock for consulting services. For the year ended April 30, 2019, the Company issued a total of 5,462 shares of common stock valued at $20,600 in consideration for consulting services, approximately $14,600 of which was accrued for at April 30, 2019.

Note 10. Provision for Income Taxes

The components of the provision for income taxes are as follows (in thousands):

	Year Ended April 30, 2020			
	Federal	State	Foreign	Total
Current	$ —	$ 3	$ 127	$ 130
Total	$ —	$ 3	$ 127	$ 130

	Year Ended April 30, 2019			
	Federal	State	Foreign	Total
Current	$ —	$ 2	$ 101	$ 103
Total	$ —	$ 2	$ 101	$ 103

A reconciliation between the Company's effective tax rate and the United States statutory tax rate for the years ended April 30, 2020 and 2019 is as follows:

	Year Ended April 30,	
	2020	2019
Federal income tax at statutory rate	21.0 %	21.0%
US vs. foreign tax rate difference	(0.5)	1.1
State income tax, net of federal benefit	(0.2)	0.9
Permanent differences	(15.0)	(25.4)
Increase in uncertain tax position	(1.5)	—
Goodwill impairment	(3.8)	—
Change in valuation allowance	(7.1)	41.0
Changes in tax rates	—	6.1
Income tax expense	(7.1)%	44.7%

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities as of April 30, 2020 and 2019 consist of the following (in thousands):

	As of April 30,	
	2020	2019
Accrued liabilities	$ 303	$ 385
Depreciation and amortization	(175)	(99)
Stock-based compensation expense	4,109	4,207
Net operating loss carry-forward	11,174	10,460
Total deferred tax assets	15,411	14,953
Less: Valuation allowance	(15,411)	(14,953)
Net deferred tax asset	$ —	$ —

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was signed into law. The Act contains several new or changed income tax provisions, including but not limited to the following: increased limitation threshold for determining deductible interest expense; class life changes to qualified improvements (in general, from 39 years to 15 years); and

the ability to carry back net operating losses incurred from tax years 2018 through 2020 up to the five preceding tax years. The Company has evaluated the new tax provisions of the CARES Act and determined the impact to be either immaterial or not applicable.

Management has evaluated the available evidence about future tax planning strategies, taxable income, and other possible sources of realization of deferred tax assets and has established a full valuation allowance against its net deferred tax assets as of April 30, 2020 and 2019. For the years ended April 30, 2020 and 2019, the Company recorded a valuation allowance of $15.4 million and $15.0 million, respectively.

As of April 30, 2020 and 2019, the Company's estimated U.S. net operating loss carry-forwards were approximately $45.0 million and $43.0 million, respectively. Net operating losses generated prior to May 1, 2018 have a 20-year carryforward and will begin expiring in 2025 for federal and 2031 for state purposes. Losses generated in the fiscal years ended April 30, 2020 and 2019 can be carried forward indefinitely. A valuation allowance has been recorded against all of these loss carryforwards.

Under the provisions of the Internal Revenue Code, certain substantial changes in the Company's ownership may result in a limitation on the amount of net operating losses that may be utilized in future years. During the fiscal year ended April 30, 2013, approximately $12.0 million of the Company's net operating losses became subject to limitation under Internal Revenue Code Section 382 in connection with an ownership change on January 28, 2013. As a result of the ownership change, the Company's annual limitation is approximately $432,000.

The Company files income tax returns in various jurisdictions with varying statutes of limitations. As of April 30, 2020, the earliest tax year still subject to examination for state purposes is fiscal 2017. The Company's tax years for periods ending April 30, 2002 and forward are subject to examination by the United States and certain states due to the carry-forward of unutilized net operating losses.

The following table indicates the changes to the Company's uncertain tax positions for the period and years ended April 30, 2020 and 2019 in thousands:

	Year Ended April 30,	
	2020	2019
Balance, beginning of the year	$ 151	$ 151
Addition based on tax positions related to prior years	—	—
Payment made on tax positions related to prior years	—	—
Addition based on tax positions related to current year	27	—
Balance, end of year	$ 178	$ 151

As of April 30, 2020 the above amount of $178,000 was included in other long-term liabilities.

Note 11. Earnings Per Share

A reconciliation of net income (loss) and number of shares used in computing basic and diluted earnings (loss) per share was as follows:

	Year Ended April 30,	
	2020	2019
Basic and diluted net loss per share computation (dollars in thousands):		
Net income (loss) attributable to common stockholders	$ (1,975)	$ 128
Weighted Average common shares - basic	11,843,463	11,340,184
Basic net income (loss) per share	$ (0.17)	$ 0.01
Diluted income (loss) per share computation		
Net income (loss) attributable to common stockholders	$ (1,975)	$ 128
Income (loss) available to common stockholders	$ (1,975)	$ 128
Weighted Average common shares	11,843,463	11,340,184
Incremental shares from assumed exercise of warrants and stock options	—	2,755,933
Adjusted weighted average share – diluted	11,843,463	14,096,117
Diluted net income (loss) per share	$ (0.17)	$ 0.01

The following table reflects the total potential stock-based instruments outstanding at April 30, 2020 and 2019 that could have an effect on the future computation of dilution per common share:

	Year Ended April 30	
	2020	2019
Stock options	2,271,658	2,423,626
Warrants	—	1,671,440
Total common stock equivalents	2,271,658	4,095,066

Note 12. Related Party Transactions

Related party transactions include transactions between the Company and its shareholders, management, or affiliates. The following transactions were in the normal course of operations and were measured at the exchange amount, which is the amount of consideration established and agreed to by the parties.

Consulting Services

For both years ended April 30, 2020 and 2019, the Company paid a member of its Board of Directors $72,000 for consulting services unrelated to his duties as a board member. During the years ended April 30, 2020 and 2019, the Company paid another board member $48,000 and $73,000, respectively, for consulting services unrelated to his duties as a board member. All of the amounts paid to these related parties have been recognized in expense in the period the services were performed.

Note 13. Leases

In February 2016, the FASB issued ASU 2016-02, “Leases” Topic 842, which amends the guidance in former ASC Topic 840, Leases. The new standard increases transparency and comparability most significantly by requiring the recognition by lessees of right-of-use (“ROU”) assets and lease liabilities on the balance sheet for all leases longer than 12 months. Under the standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing,

and uncertainty of cash flows arising from leases. For lessees, leases will be classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the income statement.

Effective May 1, 2019, the Company accounts for its leases under Topic 842 using the modified retrospective transition approach, applying the new standard to all of its leases existing at the date of initial application which is the effective date of adoption. Under this guidance, arrangements meeting the definition of a lease are classified as operating or financing leases, and are recorded on the consolidated balance sheet as both an operating lease ROU asset and operating lease liability, calculated by discounting fixed lease payments over the lease term at the rate implicit in the lease or the Company's incremental borrowing rate. Lease liabilities are increased by interest and reduced by payments each period, and the right of use asset is amortized over the lease term. For operating leases, interest on the lease liability and the amortization of the right of use asset result in straight-line rent expense over the lease term. Variable lease expenses, if any, are recorded when incurred. The Company has elected to apply the short-term lease exemption practical expedient for each class of underlying assets and excludes short-term leases having initial terms of 12 months or less. The Company recognizes rent expense on a straight-line basis over the lease term for these short-term leases. The Company has determined that no material embedded leases exist. Under Topic 842, the Company determined if an arrangement is a lease at inception. ROU assets and liabilities are recognized at commencement date based on the present value of remaining lease payments over the lease term. For this purpose, the Company considers only payments that are fixed and determinable at the time of commencement. As the Company's leases do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments.

The adoption of the new guidance resulted in the recognition of an operating ROU asset of $3.2 million, net of deferred rent of $900,000 and an operating lease liability of $4.1 million as of May 1, 2019. The incremental borrowing rate based on the information available at commencement date was 7.25%. The weighted average remaining lease term and the weighted average discount rate at the adoption date were 7.68 years and 7.25%, respectively. The Company continues to account for leases in the prior period financial statements in accordance with ASC Topic 840.

Operating Leases

The Company currently leases certain office equipment and its office and laboratory facilities under non-cancelable operating leases. Rent expense for operating leases is recognized on a straight-line basis over the lease term from the lease commencement date through the scheduled expiration date. Rent expenses totaled $955,000 and $822,000 for the years ended April 30, 2020 and 2019, respectively. The Company considers its facilities adequate for its current operational needs.

The Company leases the following facilities:

- One University Plaza, Suite 307, Hackensack, New Jersey 07601, which, since November 2011, serves as the Company's corporate headquarters. The lease expires in November 2021. The Company recognized $94,000 and $91,000 of rental costs relative to this lease for fiscal 2020 and 2019, respectively.
- 1330 Piccard Drive, Suite 025, Rockville, MD 20850, which consists of laboratory and office space where the Company conducts operations related to its primary service offerings. The Company executed this lease on January 11, 2017. The operating commencement date was August 11, 2017. This lease expires in August 2028. The Company recognized $604,000 of rental expense for both fiscal 2020 and 2019. On March 30, 2020, the Company executed the first amendment to this lease to expand the existing premises at 1330 Piccard Drive, Suite 025 ("Expansion Premises") to Suites 050 and 104. This amendment also extended the current lease term by six months. The Expansion Premises operating lease commencement date was June 1, 2020 and the lease expires February 28, 2029. In accordance with ASC 842, "Leases", the Company evaluated the first amendment and also performed a reassessment of the existing lease to determine the impact of the six-month term extension. The Company did not recognize rental expense under this amendment during fiscal 2020 as the Expansion Premises operating lease commencement date is during fiscal 2021. Upon the Expansion Premises operating lease commencement date, the Company will recognize an operating ROU asset and related operating lease liability of $3.8 million, each, respectively. The Company will also recognize an operating ROU asset and related operating lease liability of approximately $118,000 and $125,000, respectively, related to the extension of the current lease, as well as interest and amortization expense of $7,000.
- 910 Clopper Road, Suites 260S and 280S, Gaithersburg, Maryland 20878, which consisted of laboratory and office space where the Company conducted operations related to its primary service offerings. The Company executed this lease on April 1, 2018. The operating commencement date was May 1, 2018. The Company transitioned its activities from this location to the New Location, as defined below, and terminated this lease seven days after the commencement date of the New Location. The Company recognized $0 and $41,000 of rental expense for fiscal 2020 and 2019, respectively.
- 1405 Research Boulevard, Suite 125, Rockville, Maryland 20850 ("New Location"), which consists of laboratory and office space where the Company conducts operations related to its primary service offerings. The Company executed this lease on November 1, 2018. The operating commencement date was January 17, 2019. This lease expires in April 2024. The Company

recognized $257,000 and $86,000 of rental expense for fiscal 2020 and 2019, respectively. The Company terminated this lease on June 30, 2020 and transition its activities from this location to the Expansion Premises, as defined above, during the first quarter of fiscal 2021. Upon lease termination, the Company will recognize a decrease in the related operating ROU asset and operating lease liability of approximately $850,000 and 926,000, respectively, as well as a gain on lease termination of $76,000.

ROU assets and lease liabilities related to our current operating leases are as follows (in thousands):

	April 30, 2020	May 1, 2019
Operating lease right-of-use assets, net	2,798	3,201
Current portion of operating lease liabilities	503	438
Non-current portion of operating lease liabilities	3,170	3,709

As of April 30, 2020, the weighted average remaining operating lease term and the weighted average discount rate were 6.89 years and 7.25%, respectively.

Future minimum lease payments due each fiscal year as follows (in thousands):

2021	$	1,697
2022		1,851
2023		1,818
2024		1,844
2025		1,867
Thereafter		7,268
Total	$	16,345

The following disclosure as of April 30, 2019 continues to be stated in accordance with ASC 840. Future minimum lease payments for operating and capital leases at April 30, 2019 were as follows:

2021	$	1,471
2022		1,445
2023		1,404
2024		1,419
2025		1,002
Thereafter		3,398
Total		$10,139

Refer to Note 4, Property and Equipment, for more information on financing leases.

Note 14. Subsequent Events

Subsequent events are defined as those events or transactions that occur after the balance sheet date, but before the financial statements are filed with the Securities and Exchange Commission.

During the fourth quarter of fiscal 2020, the Company executed the first amendment to its operating lease at 1330 Piccard Drive in Rockville, Maryland. This amendment expands the premises ("Expansion Premises") for which the Company leases laboratory and office space and extends the existing lease by six months to match the term of the Expansion Premises lease. The Expansion Premises operating lease commencement date is June 1, 2020 and the lease expires February 28, 2029. In accordance with ASC 842, "Leases", the Company evaluated the first amendment and also performed a reassessment of the existing lease to determine the impact of the six-month term extension.

The Company did not recognize rental expense under this amendment during fiscal 2020 as the Expansion Premises operating lease commencement date is during fiscal 2021. Upon the Expansion Premises operating lease commencement date, the Company will recognize an operating ROU asset and related operating lease liability of $3.8 million, respectively, related to the Expansion Premises lease. The Company will also recognize an operating ROU asset and related operating lease liability of approximately $118,000 and $125,000, respectively, related to the extension of the current lease, as well as interest and amortization expense of $7,000.

On June 30, 2020, the Company terminated its operating lease at 1405 Research Boulevard in Rockville, Maryland, where it also leased laboratory and office space, in order to transition its activities from this location to the Expansion Premises, as defined above, during the first quarter of fiscal 2021. Upon lease termination, the Company will recognize a decrease in the related operating ROU asset and operating lease liability of approximately $850,000 and $926,000, respectively, as well as a gain on lease termination of $76,000.

Exhibit Index

Exhibit No.	
3.1	Amended and Restated Articles of Incorporation (incorporated by reference to Appendix A to the Company's Information Statement on Schedule 14C filed March 7, 2011)
3.1.1	Certificate of Amendment to Amended and Restated Articles of Incorporation (incorporated by reference to Exhibit 3(i) to the Company's Current Report on Form 8-K filed April 28, 2015)
3.2	Amended and Restated Bylaws, as amended (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed May 9, 2017)
4.1	Description of Registered Securities *
10.1	Employment Agreement, dated November 5, 2013, between the Company and Ronnie Morris, M.D. (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed November 12, 2013)
10.2	Amendment to Employment Agreement, dated March 16, 2015, between the Company and Ronnie Morris (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed March 20, 2015)
10.3	Offer letter dated June 3, 2013 between the Company and David Miller (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed June 3, 2013)
10.4	2010 Equity Incentive Plan (incorporated by reference to Appendix B to the Company's Definitive Information Statement on Schedule 14C filed March 7, 2011)
10.5	Form of Note Purchase Agreement, dated December 1, 2014, between the Company and each of Joel Ackerman and Ronnie Morris (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 5, 2014)
10.6	Form of Convertible Promissory Note, dated December 1, 2014, issued to each of Joel Ackerman and Ronnie Morris in connection with the Note Purchase Agreement, dated December 1, 2014 between the Company and each of Joel Ackerman and Ronnie Morris incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed December 5, 2014)
10.7	Amendment No. 1 to Convertible Promissory Note, dated December 1, 2014 issued to Joel Ackerman in connection with the Note Purchase Agreement, dated December , 2014, between the Company and each of Joel Ackerman and Ronnie Morris (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed March 2, 2015)
10.8	Amendment No. 1 to Convertible Promissory Note, dated December 1, 2014 issued to Ronnie Morris in connection with the Note Purchase Agreement, dated December , 2014, between the Company and each of Joel Ackerman and Ronnie Morris (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed March 2, 2015)
10.9	Amended and Restated 2011 Securities Purchase Agreement, dated March 13, 2015, between the Company and each person or entities that are signatories to the Securities Purchase Agreement, dated March 24, 2011, between the Company and each investor identified on the signature pages thereto (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed March 17, 2015)
10.10	Form of warrant issued to each person or entities that are signatories to the Securities Purchase Agreement, dated March 24, 2011, between the Company and each investor identified on the signature page thereto (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed January 30, 2013)
10.11	Amendment No. 1 to warrants, dated March 13, 2015, between the Company and each person or entities that are signatories to the Securities Purchase Agreement, dated March 24, 2011, between the Company and each investor identified on the signature pages thereto (incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed March 17, 2015)
10.12	Amended and Restated 2013 Securities Purchase Agreement, dated March 13, 2015, between the Company and each person or entities that are signatories to the Securities Purchase Agreement, dated January 28, 2013, between the Company and each investor identified on the signature pages thereto (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed March 17, 2015)

10.13	Form of warrant issued to each person or entities that are signatories to the Securities Purchase Agreement, dated January 28, 2013, between the Company and each investor identified on the signature page thereto (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed January 30, 2013)
10.14	Amendment No. 1 to warrants, dated March 13, 2015, between the Company and each person or entities that are signatories to the Securities Purchase Agreement, dated January 28, 2013, between the Company and each investor identified on the signature pages thereto (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed March 17, 2015)
10.15	Put Right Agreement, dated January 29, 2014, between the Company and each of Joel Ackerman and Ronnie Morris (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed March 6, 2014)
10.16	Securities Purchase Agreement, dated March 11, 2015, between the Company and each investor identified on the signature pages thereto (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed March 12, 2015)
10.17	Amended and Restated Registration Rights Agreement, dated March 13, 2015, between the Company and each person or entities that are signatories to (i) the Securities Purchase Agreement, dated March 24, 2011, between the Company and each investor identified on the signature page thereto, (ii) the Securities Purchase Agreement, dated January 28, 2013, between the Company and each investor identified on the signature page thereto, and (iii) the Securities Purchase Agreement, dated March 11, 2015, between the Company. And each investor identified on the signature page thereto (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed March 17, 2015)
10.18	Form of Investor Warrant issued to each person or entities that are signatories to the Securities Purchase Agreement, dated March 11, 2015, between the Company and each investor identified on the signature page thereto (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed March 17, 2015)
10.19	Option Exchange Agreement, dated March 16, 2015, between the Company and Joel Ackerman (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed March 20, 2015)
10.20	Option Exchange Agreement, dated March 16, 2015, between the Company and Ronnie Morris (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed March 20, 2015)
10.21	Option Exchange Agreement, dated March 16, 2015, between the Company and David Miller (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed March 20, 2015)
14	Code of Ethics (incorporated by reference to Exhibit 14 of the April 30, 2008 Form 10-KSB)
21	List of Subsidiaries (incorporated by reference to Exhibit 21 of the Company's Form 10-K filed July 28, 2017)
23.1	Consent of Independent Registered Public Accounting Firm*
31.1	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer*
31.2	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer*
32.1	Section 1350 Certifications**
101.INS*	XBRL Instance Document.
101.SCH*	XBRL Taxonomy Extension Schema Document.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.

101.PRE* XBRL Taxonomy Extension Presentation Linkbase Document.

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* Filed herewith

** Furnished hereto.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement of Champions Oncology, Inc. on Form S--8(No. 333-182747) of our report dated July 28, 2020, on our audits of the consolidated financial statements as of April 30, 2020 and 2019 and for each of the years then ended, which report is included in this Annual Report on Form 10-K to be filed on or about July 28, 2020.

/s/ EisnerAmper LLP

EISNERAMPER LLP
Iselin, New Jersey
July 28, 2020

EXHIBIT 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

I, Ronnie Morris, certify that:

1. I have reviewed this Annual Report on Form 10-K of Champions Oncology, Inc., a Delaware corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15(d)-15(e)) and internal control over financial reporting (as defined in the Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiary, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Ronnie Morris

Ronnie Morris
Chief Executive Officer
(Principal Executive Officer)

Date: July 28, 2020

EXHIBIT 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

I, David Miller, certify that:

1. I have reviewed this Annual Report on Form 10-K of Champions Oncology, Inc., a Delaware corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15(d)-15(e)) and internal control over financial reporting (as defined in the Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiary, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ David Miller

David Miller
Chief Financial Officer
(Principal Financial Officer)

Date: July 28, 2020

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE U.S. SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Champions Oncology, Inc. (the "Company") on Form 10-K for the year ended April 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned, in the capacities and on the dates indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the U.S. Sarbanes-Oxley Act of 2002, that to the best of our knowledge:

(i) the Report fully complies with the requirements of section 13(a) or 15(d) of the U.S. Securities Exchange Act of 1934; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Ronnie Morris

Ronnie Morris
Chief Executive Officer
(Principal Executive Officer)

/s/ David Miller

David Miller
Chief Financial Officer
(Principal Financial Officer)

Date: July 28, 2020

Exhibit 4.1

RIDER X

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

As of the April 30, 2020, Champions Oncology, Inc. has authorized capital stock consisting of 200,000,000 shares of common stock, par value $0.001 per share. The following description summarizes the material terms of common stock.

Holders of our common stock are entitled to one vote per share. Our certificate of incorporation, as amended, does not provide for cumulative voting. Holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared by our board of directors out of legally available funds. Upon liquidation, dissolution or winding-up, the holders of our common stock are entitled to share ratably in all of our assets which are legally available for distribution, after payment of our provision for all liabilities.