

CESCA THERAPEUTICS INC.

Form S-1/A

February 05, 2018

As filed with the Securities and Exchange Commission on February 5, 2018.

Registration No. 333-222658

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1

to

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

CESCA THERAPEUTICS INC.

(Exact name of registrant as specified in its charter)

Delaware

3821

94-3018487

(State or other jurisdiction of
incorporation or organization)

(Primary Standard Industrial
Classification Code Number)

(I.R.S.
Employer
Identification
No.)

2711 Citrus Road

Rancho Cordova, California 95742

(916) 858-5100

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Vivian Liu

Chief Operating Officer

2711 Citrus Road

Rancho Cordova, California 95742

(916) 858-5100

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Curt P. Creely, Esq.

John Wolfel, Esq.

Foley & Lardner LLP

100 North Tampa Street, Suite 2700

Tampa, Florida 33602

Phone: (813) 229-2300

Fax: (813) 221-4210

Barry I. Grossman, Esq.

Sarah E. Williams, Esq.

Ellenoff Grossman & Schole LLP

1345 Avenue of the Americas

New York, NY 10105

(212) 370-1300

Approximate date of commencement of proposed sale to the public:

As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box:

Table of Contents

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a 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	(Do not check if a smaller reporting company)	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 pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price⁽¹⁾⁽²⁾	Amount of Registration Fee
Common Stock, \$0.001 par value per share	\$ 17,250,000	\$ 2,149
Total:	\$ 17,250,000	\$ 2,149*

Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(o) of the

(1) Securities Act of 1933, as amended (the "Act"). Includes the offering price of any additional securities that the underwriters have the option to purchase.

Pursuant to Rule 416 under the Act, the shares being registered herein include such indeterminate number of
(2) shares as may be issued with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

* \$1,868 of fee previously paid

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

Table of Contents

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

SUBJECT TO COMPLETION, DATED FEBRUARY 5, 2018

PRELIMINARY PROSPECTUS

\$15,000,000 of Shares of Common Stock

We are offering \$15,000,000 of shares of our common stock, par value \$0.001 per share, at an assumed public offering price of \$2.80 per share (the last reported sale price of our common stock on February 2, 2018). Our common stock is listed on The Nasdaq Capital Market under the symbol "KOOL." On February 2, 2018, the closing sale price of our common stock on The Nasdaq Capital Market was \$2.80 per share.

Investing in our common stock involves a high degree of risk. Please read "Risk Factors" beginning on page of this prospectus and in the documents incorporated by reference into this prospectus.

	Per Share	Total
Public offering price	\$	\$
Underwriting discounts and commissions ⁽¹⁾	\$	\$
Proceeds to us, before expenses	\$	\$

(1) See "Underwriting" beginning on page 23 of this prospectus for a description of the compensation payable to the underwriters.

We have granted to the underwriters an option to purchase up to \$2,250,000 of additional shares of common stock at the public offering price, less the underwriting discounts and commissions, for 45 days after the date of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

Delivery of the shares of common stock is expected to be made on or about _____, 2018.

Maxim Group LLC

The date of this prospectus is _____, 2018

Table of Contents**TABLE OF CONTENTS**

	Page
<u>PROSPECTUS SUMMARY</u>	2
<u>THE OFFERING</u>	5
<u>RISK FACTORS</u>	6
<u>CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	17
<u>USE OF PROCEEDS</u>	17
<u>CAPITALIZATION</u>	18
<u>DILUTION</u>	19
<u>DESCRIPTION OF CAPITAL STOCK</u>	20
<u>DIVIDEND POLICY</u>	23
<u>UNDERWRITING</u>	23
<u>LEGAL MATTERS</u>	25
<u>EXPERTS</u>	25
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	26
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	26

Unless the context otherwise requires, references in this prospectus to “we,” “us,” “our” or similar terms, as well as references to “Cesca” or the “Company,” refer to Cesca Therapeutics Inc. and its consolidated subsidiaries. This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission, which we refer to as the SEC or the Commission, utilizing a registration process. It is important for you to read and consider all of the information contained in this prospectus and all documents incorporated by reference into this prospectus before making a decision whether to invest in the common stock. You should also read and consider the information contained in the exhibits filed with our registration statement, of which this prospectus is a part, as described in “Where You Can Find More Information” in this prospectus.

You should rely only on the information contained in this prospectus and any applicable prospectus supplement, including the information incorporated by reference. We have not authorized anyone to provide you with different information. We are not offering to sell or soliciting offers to buy, and will not sell, any securities in any jurisdiction where it is unlawful. You should assume that the information contained in this prospectus or any prospectus supplement, as well as information contained in a document that we have previously filed or in the future will file with the SEC is accurate only as of the date of this prospectus, any applicable prospectus supplement or the document containing that information, as the case may be.

Table of Contents

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus, and does not contain all of the information that you should consider before investing in our common stock. You should read this summary together with the entire prospectus, including our financial statements, the notes to those financial statements and the additional information described in this prospectus under the heading “Where You Can Find More Information,” before making an investment decision. See the “Risk Factors” section of this prospectus beginning on page 6 and in the documents incorporated by reference into this prospectus for a discussion of the risks involved in investing in our securities.

Overview

Cesca develops, commercializes and markets a range of automated technologies for cell-based therapeutics. Cesca’s device subsidiary, ThermoGenesis Corp. (“ThermoGenesis”), provides a full suite of solutions for automated clinical biobanking, point-of-care applications, and automation for immuno-oncology. Through the acquisition of the assets and business of SygGen Inc. in July 2017, Cesca is now developing its proprietary CAR-TXpress™ platform as an automated system for manufacturing cell therapies such as chimeric antigen receptor therapies (“CAR-T”). We believe our CAR-TXpress™ platform will improve the efficiency and cost of manufacturing these novel cell therapies and increase the number of patients who can receive them. Our strategy is to expand into new growth areas in cellular processing for immune-oncology product development and manufacturing while continuing to support the performance and competitiveness of our product lines in the cord blood banking arena.

Recent Developments

On July 7, 2017, our then wholly-owned subsidiary, ThermoGenesis, acquired the business and substantially all of the assets of SynGen Inc., a privately held Sacramento, California-based technology company that developed, marketed, and sold advanced cell separation tools and accessories (“SynGen”). In the transaction (the “SynGen Transaction”), ThermoGenesis acquired substantially all of SynGen’s operating assets, including its proprietary cell processing platform. In exchange, ThermoGenesis issued to SynGen shares of ThermoGenesis common stock that, after giving effect to the issuance, constitute 20% of ThermoGenesis’ outstanding common shares, and ThermoGenesis also made a one-time cash payment of \$1.0 million to SynGen. Immediately prior to the SynGen Transaction, Cesca contributed the assets, business, and current liabilities of its blood and bone-marrow processing device business to ThermoGenesis now operates such business (together with the acquired business) through the ThermoGenesis subsidiary. Prior to the SynGen Transaction, Cesca’s device business was owned and operated directly by Cesca, and from and after the SynGen Transaction, Cesca’s device business (together with the business acquired from SynGen) is and will be owned and operated by ThermoGenesis.

In August 2017, our board of directors approved changing our fiscal year from a year ending on June 30 to a calendar year ending on December 31. As a result, we will file a transition report on Form 10-K for the six month period ended December 31, 2017.

On August 21, 2017, ThermoGenesis entered into a new distribution agreement with Boyalife WSN Ltd. to market and distribute Cesca's biobanking and point-of-care solutions in China, India, Singapore and the Philippines (the "Territory"). This agreement will combine Cesca's technology leadership in cellular processing with Boyalife WSN's distribution capabilities in the Territory. The agreement replaced our prior distribution agreement with Golden Meditech, which expired in August 2017. The term of the agreement is for three years with ThermoGenesis having the right to renew the agreement for successive two-year periods at its option. In December 2017, we learned from China Cord of their intention to discontinue purchases of AXP. As a result, we expect AXP revenue in China to decline in 2018. However, we anticipate this decline will be partially offset by higher domestic AXP sales.

On September 13, 2017, we entered into an Amendment No. 1 to Revolving Credit Agreement (the "Amended Credit Agreement") with Boyalife Investment Fund II, Inc., an Illinois corporation (the "Lender"). The Amended Credit Agreement amended the Revolving Credit Agreement originally entered into by Cesca and Lender on March 6, 2017, by increasing our maximum borrowing availability thereunder from \$5.0 million to \$10.0 million. In connection with such amendment, Cesca and Lender entered into an Amended and Restated Convertible Promissory Note to reflect the new aggregate maximum principal amount of \$10.0 million. As of January 31, 2018, an aggregate of \$6.7 million in principal amount has been borrowed and was outstanding under the Amended Credit Agreement.

On November 21, 2017, the U.S. Patent and Trademark Office (USPTO) awarded our ThermoGenesis subsidiary a new U.S Patent, No. 9,821,111, entitled "Cell Separation Devices, Systems, and Methods." This new patent covers ThermoGenesis' proprietary method for separating rare, therapeutically critical target cells from blood, bone marrow, leukapheresis product, and other cell sources, while maintaining the viability of the cells under aseptic conditions. This advanced cell separation technology, known as Buoyancy-Activated Cell Separation, is key to the ongoing development of Cesca's CAR-TXpress™ platform.

On December 1, 2017, we closed a public offering of common stock consisting of an aggregate of 898,402 shares of common stock at a price to the public of \$3.00 per share for aggregate offering proceeds of \$2.7 million. After deducting the placement agent's commission and other estimated offering expenses payable by us, the net proceeds to us in the offering were approximately \$2.4 million.

Table of Contents

Cesca's Device Segment

The operations and assets of Cesca's device segment are conducted through our ThermoGenesis subsidiary, which is a pioneer and market leader in the development and commercialization of automated technologies for cell-based therapeutics and bio-processing. The device segment's automated solution offerings include:

Clinical BioBanking

AXP® + BioArchive® provide automated isolation, collection and storage of cord blood stem cell concentrates.

Point-of-Care Solutions for Cell-Based Therapeutics

PXP™ allows for the rapid, automated processing of autologous peripheral or bone marrow derived stem cells at the point-of-care, such as surgical centers or clinics.

Cellular Processing for Immuno-Oncology Applications

CXP™ + BioArchive® allow for the automated manufacturing, expansion and storage of cellular therapies for immuno-oncology, including various T-cell and natural killer (NK) cell based therapies.

The device segment's product pipeline includes:

AutoXpress® System ("AXP") – a proprietary, automated system for the isolation and collection of hematopoietic stem cells from cord blood and peripheral blood.

PXP™ for Point-of-Care Applications – a proprietary, automated system for the rapid, automated processing of autologous peripheral or bone marrow derived stem cells for cell-based therapies at point-of-care situations, such as surgical centers or clinics.

CAR-TXpress (“CXP™”) – a proprietary, automated system for the isolation and collection of cells derived from biological sources, for various laboratory based downstream applications and novel cell therapies such as CAR-T. CXP uses advanced cell separation technology, known as Buoyancy-Activated Cell Separation, which is key to the ongoing development of Cesca’s CAR-TXpress™ platform.

BioArchive® System – an automated, cryogenic system used by cord blood banks for the cryopreservation and storage of cord blood stem cell concentrate for future use.

Cesca’s Clinical Development Segment

Using its proprietary AutoXpress® technology platform, Cesca’s clinical development segment is developing autologous (utilizing the patient’s own cells) stem cell-based therapeutics that Cesca believes will address significant unmet medical needs for applications within the vascular, cardiology and orthopedic markets. Cesca is currently looking for co-development partners to advance each of its clinical development programs.

Vascular Diseases – Critical Limb Ischemia (“CLI”) – Cesca is currently in late stage development of its proprietary, point-of-care, autologous stem cell-based therapeutic for the treatment of patients with CLI. The Company’s 362 patient, multi-center pivotal Phase III Critical Limb Ischemia Rapid Stem Cell Treatment (“CLIRST”) trial is designed to evaluate the safety and efficacy of autologous stem cell-based therapy to stimulate the regeneration of blood vessels, promote wound healing and prevent amputation. Previous clinical studies using Cesca’s proprietary, point-of-care-technologies have successfully demonstrated the regeneration of blood vessels and improved blood circulation in the limbs, using a patient’s own bone marrow derived stem cells.

Cardiology – Acute Myocardial Infarction – Cesca is developing a proprietary, point-of-care autologous stem cell-based therapy intended as an adjunct treatment for patients who have suffered an acute ST-elevated myocardial infarction (“STEMI”), the most serious type of heart attack. Such treatments are aimed at minimizing the adverse remodeling of the heart post-STEMI.

Table of Contents

Orthopedics – OsteoArthritis (“OA”) - Cesca is in early stage development of an autologous stem cell based therapy intended to treat patients with cartilage tissue degeneration that may lead to progressive cartilage loss and painful joint diseases. Localized articular cartilage defects can potentially be repaired by transplantation of autologous cell therapy. Therapies in development using Cesca’s proprietary PXP system are expected to delay further deterioration and repair the damaged joint cartilage. Treatment is typically via a single procedure in the hospital or clinic.

Corporate Information

We are a Delaware corporation with principal executive offices located at 2711 Citrus Road, Rancho Cordova, CA 95742. Our telephone number is (916) 858-5100 and our web site is www.cescatherapeutics.com. The information contained in, and that which can be accessed through, our website is not incorporated into and does not form a part of this prospectus.

Table of Contents

THE OFFERING

Common stock offered by us	5,357,142 shares assuming a public offering price of \$2.80 per share (the last reported sale price of our common stock on February 2, 2018).
Offering price	\$ per share.
Underwriters' option to purchase additional shares of common stock from us	We have granted the underwriters an option for a period of 45 days from the date of this prospectus to purchase an additional 803,571 shares of common stock assuming a public offering price of \$2.80 per share (the last reported sale price of our common stock on February 2, 2018).
Common stock to be outstanding after this offering	16,229,570 shares, or 17,033,141 shares if the underwriters exercise their option to purchase additional shares of our common stock in full assuming a public offering price of \$2.80 per share (the last reported sale price of our common stock on February 2, 2018).
Use of proceeds	We intend to use the net proceeds from this offering for general corporate purposes, including working capital. See "Use of Proceeds" on page 17.
Market for our common stock	Our common stock is quoted and traded on The Nasdaq Capital Market under the symbol "KOOL."
Risk factors	You should read the "Risk Factors" section of this prospectus and in the documents incorporated by reference into this prospectus for a discussion of factors to consider before deciding to invest in our common stock.

The number of shares of common stock outstanding after this offering as reflected in the table above, is based on the actual number of shares outstanding as of January 31, 2018, which was 10,872,428, and does not include, as of that date:

81,325 shares of our common stock issuable upon the exercise of outstanding stock options under our 2006 Incentive Plan, having a weighted average exercise price of \$12.98 per share;

416 shares of our common stock issuable upon the vesting of restricted stock units under our 2006 Equity Incentive Plan;

12,396 shares of our common stock issuable upon the exercise of outstanding stock options under our 2012 Independent Director Plan, having a weighted average exercise price of \$21.87 per share;

1,055,392 shares of our common stock issuable upon the exercise of outstanding stock options under our 2016 Equity Incentive Plan, having a weighted average exercise price of \$3.01 per share; and

4,130,194 shares of our common stock issuable upon the exercise of outstanding vested warrants, having a weighted average exercise price of \$9.60 per share.

Unless otherwise indicated, all information contained in this prospectus assumes no exercise by the underwriters of the option to purchase additional shares of our common stock.

Table of Contents

RISK FACTORS

An investment in our securities involves a high degree of risk. Before deciding to invest in our securities or to maintain or increase your investment, you should carefully consider the risks described below, in addition to the other information contained in this prospectus, our Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports filed on Form 8-K, and in our other filings with the Securities and Exchange Commission. The risks and uncertainties described below are not the only ones that we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business and results of operations. If any of these risks actually occur, our business, financial condition or results of operations could be seriously harmed. In that event, the market price for our common stock could decline and you may lose all or part of your investment.

Risks Related to Our Business

Lack of Demonstrated Clinical Utility of Cord Blood Derived Stem Cells Beyond Hematopoietic Transplantation May Result in a Decline in Demand for Cord Blood Banking Services, Adversely Affecting Sales of Our Products.

Transplants using stem cells derived from cord blood and cord tissue have become a standard procedure for treating blood cell lineage disorders including leukemia, lymphoma and anemia. However, clinical research demonstrating the utility of cord blood stem cells for use in treating other diseases or injuries has been minimal, leaving claims of broad clinical utility of cord blood stem cells by cord blood banks largely unsubstantiated. The low utilization rate of banked cord blood samples coupled with the lack of demonstrated clinical results for multiple treatment indications has led to consumer skepticism regarding the benefits of cord blood banking and in turn, a significant reduction in collection rates in a number of geographies in Europe and the U.S. A continued lack of investment in the research and development of supporting clinical data for additional applications may lead to greater skepticism globally, further adversely affecting demand for cord blood banking services and our revenues.

We have Limited Operating History In the Emerging Regenerative Medicine Industry.

We are in the business of research, development and commercialization of autologous cell-based therapeutics for use in the emerging regenerative medicine industry, and therefore, we have a limited operating history in such industry on which to base an evaluation of our business and prospects. We will be subject to the risks inherent in the operation of a company in an emerging industry such as regulatory setbacks and delays, fluctuations in expenses, competition, and governmental regulation.

The Equity in our ThermoGenesis Subsidiary is 20% Owned by a Third Party that Holds Certain Minority Investor Rights in that Subsidiary, and Those Rights Could Limit or Delay Our Ability to Take Certain Major Actions Relating to ThermoGenesis.

Immediately prior to our acquisition of the assets and business of SynGen Inc. in July 2017, we contributed the assets and business of our blood and bone-marrow processing device business to our ThermoGenesis Corp. subsidiary. Substantially all of our historical revenues are attributable to our device business, and as a result of such contribution, the device business is now owned and operated by ThermoGenesis. In connection with the SynGen asset acquisition, we issued shares of ThermoGenesis common stock to SynGen resulting in SynGen owning 20% of the outstanding stock of ThermoGenesis on a post-transaction basis, and such common stock was thereafter transferred to Bay City Capital Fund V, L.P. and an affiliated fund (“Bay City”). Under the agreements relating to the SynGen asset acquisition, although we continue to own 80% of the outstanding capital stock of ThermoGenesis, Bay City was granted certain minority investor rights in ThermoGenesis. These rights include board representation rights, a right of first refusal over sales of ThermoGenesis stock by us, co-sale rights with respect to any sale of ThermoGenesis stock by us, and supermajority protective voting rights over certain major decisions, such as a sale of ThermoGenesis, raising capital in ThermoGenesis with preferred stock, transfers of ThermoGenesis assets, or redemptions of ThermoGenesis stock. In addition, the board of directors of ThermoGenesis is comprised of 5 persons, two of whom are designated by us, one of whom is designated by Bay City, one of whom is designated by us but must be independent, and one of whom is designated by Bay City but must be independent. The foregoing minority investor rights in ThermoGenesis could limit or delay our ability or flexibility to take certain major actions or make major decisions relating to ThermoGenesis that might be beneficial to our stockholders, unless such actions or decisions have the consent or support of Bay City. Accordingly, the minority investor rights in ThermoGenesis could have a negative impact on the market price of our common stock.

Table of Contents

We May Not be Able to Successfully Recognize the Anticipated Benefits from the SynGen Asset Acquisition or Retain Key Acquisition Employees.

On July 7, 2017, our ThermoGenesis subsidiary acquired the business and substantially all of the assets of SynGen, a privately held Sacramento, California-based technology company that develops, markets, and sells advanced cell separation tools and accessories. The success of the SynGen asset acquisition depends on our ability to leverage the intellectual property, other assets, and acquired personnel of SynGen in order to increase our sales and profitability. In order to successfully achieve this, we will need to integrate the businesses and employees of SynGen and ThermoGenesis and motivate such employees. This will place significant demands on our management, our operational and financial systems, our infrastructure, and our other resources. If we do not effectively manage this process, our ability to grow the consolidated business in the manner anticipated by the acquisition will suffer, and we may lose key employees that we acquired from SynGen.

Our Controlling Stockholder Has Significant Influence Over Us Which Could Limit Your Ability to Influence the Outcome of Key Transactions, Including a Change of Control, and Could Negatively Impact the Market Price of Our Common Stock By Discouraging Third Party Investors.

As of January 31, 2018, approximately 63% of our outstanding common stock is owned by Boyalife (Hong Kong) Limited. In addition, pursuant to the terms of a Nomination and Voting Agreement we entered into with Boyalife (Hong Kong) Limited and Boyalife Investment Inc. in February 2016, Boyalife (Hong Kong) Limited and Boyalife Investment Inc. have the right to designate up to three of the seven members to our board of directors until such time as they collectively no longer hold at least 50% of our common stock.

Boyalife (Hong Kong) Limited is 100% owned by Yishu Li, the spouse of Dr. Xiaochun Xu, our CEO and chairman of our board of directors. Boyalife Investment, Inc. is also controlled by Dr. Xu. As a result of their ownership and ability to designate up to three members of our board of directors, Boyalife (Hong Kong) Limited and Boyalife Investment Inc. (including Dr. Xu and his spouse Ms. Li) are able to exercise significant influence over all matters affecting us, including the election of directors, formation and execution of business strategy and approval of mergers, acquisitions and other significant corporate transactions, which may have an adverse effect on our stock price and ability to execute our strategic initiatives. They may have conflicts of interest and interests that are not aligned with those of other investors in all respects. As a result of the concentrated ownership of our common stock, Dr. Xu and Ms. Li, acting together, are able to control all matters requiring stockholder approval, including the election of directors, the adoption of amendments to our certificate of incorporation and bylaws, and approval of a sale of our company, and other significant corporate transactions. This concentration of ownership may delay or prevent a change in control and may have a negative impact on the market price of our common stock by discouraging third party investors from investing or making tender offers for our shares.

Our Potential Cell Therapy Products and Technologies Are In Early Stages Of Development.

The development of new cell therapy products is a highly risky undertaking, and there can be no assurance that any future research and development efforts we may undertake will be successful. Our potential products in vascular, orthopedic, hematological/oncological and wound care indications will require extensive additional research and development and regulatory approval before any commercial introduction. There can be no assurance that any future research, development and clinical trial efforts will result in viable products or meet efficacy standards.

We Intend To Rely On Third Parties For Certain Functions In Conducting Clinical Trials Of Our Product Candidates.

We intend to rely on third parties for certain clinical trial activities of our products. In this regard, we have an agreement with Fortis Healthcare Limited, a hospital chain networked throughout India and Asia, for contract clinical trial services programs among other services. The agreement expired in August 2017 and we are currently in discussions to renew the agreement. Termination, or non-renewal, of this agreement could jeopardize or delay development of our products.

We May Be Unable to Obtain Marketing Approval from the FDA For Our Point-of-Care System for Critical Limb Ischemia (CLI) Indication.

At the end of 2016, the Company received approval from the U.S. Food and Drug Administration (FDA) for the Company's amended pivotal study protocol for treatment of CLI. The amended CLI clinical trial is designed to demonstrate the safety and efficacy of the Company's point-of-care system for the treatment of CLI patients with limited or no treatment options. The changes approved by the FDA are intended to increase patient enrollment by expanding the patient pool from Rutherford Category 5 patients only, to also include Rutherford Category 4 patients, or patients with a less severe form of the disease. The study population has been expanded to include patients who are poor candidates for either surgery or endovascular therapies. The sample size of the CLI trial was increased from 224 to 362 patients. With the FDA approval of our amended phase III clinical trial protocol of CLI, the company is actively looking for an external strategic partner to move forward with the CLI clinical trial program. The marketing approval of point-of-care device for the treatment of CLI indication is subject to a successful strategic partnership, successful completion of our phase III study with statistical significant results and acceptance of the results by the FDA for the disease indication. Our inability to successfully complete any of the above mentioned steps can affect our ability to obtain marketing approval in the United States.

Table of Contents

Delays In The Commencement Or Completion Of Clinical Testing Of Our Products Could Result In Increased Costs To Us And Delay Our Ability To Generate Revenues.

Delays in the commencement or completion of clinical testing could significantly impact our product development costs. We do not know whether current or planned clinical trials will begin on time or be completed on schedule, if at all. The commencement of clinical trials can be delayed for a variety of reasons, including delays in:

- Obtaining regulatory approval to commence a clinical trial;
- Having the necessary funding in place to conduct the clinical trial;
- Reaching agreement on acceptable terms with prospective contract research organizations and clinical trial sites for Phase II and III trials;
- Obtaining proper devices for any or all of the product candidates;
- Obtaining institutional review board approval to conduct a clinical trial at a prospective site; and
- Recruiting participants for a clinical trial.

In addition, once a clinical trial has begun, it may be suspended or terminated by us or the FDA or other regulatory authorities due to a number of factors, including:

- Failure to conduct the clinical trial in accordance with regulatory requirements;
- Inspection of the clinical trial operations or clinical trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;
- Failure to achieve certain efficacy and/or safety standards;
- Reports of serious adverse events including but not limited to death of trial subjects; or
- Lack of adequate funding to continue the clinical trial.

Our clinical therapy candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs that we expect to pursue.

We May Seek To Enter Into Collaborative Arrangements To Develop and Commercialize Products Which May Not Be Successful.

We may seek to enter into collaborative arrangements to develop and commercialize some of our potential products and product candidates both in North America and international markets. There can be no assurance that we will be able to negotiate collaborative arrangements on favorable terms or at all or that current or future collaborative arrangements will be successful.

A Significant Portion of Revenue is Derived from Customers Outside the United States. We may Lose Revenues, Market Share, and Profits due to Exchange Rate Fluctuations and Political and Economic Changes Related to its Foreign Business.

In the year ended June 30, 2017, sales to customers outside the U.S. comprised approximately 54% of revenues. This compares to 57% in fiscal 2016. Our foreign business is subject to economic, political and regulatory uncertainties and risks that are unique to each area of the world. Fluctuations in exchange rates may also affect the prices that foreign customers are willing to pay, and may put us at a price disadvantage compared to other competitors. Potentially volatile shifts in exchange rates may negatively affect our financial position and results.

Table of Contents

The Loss of a Significant Distributor or End User Customer may Adversely Affect Financial Condition and Results of Operations.

Revenues from a significant distributor and a significant customer comprised 42% of revenues for the year ended June 30, 2017. In August 2017, we did not renew the contract with this significant distributor and signed a contract with a new distributor which is an affiliate of the Company. The loss of a large end user customer or distributor may decrease revenues.

We may be Exposed to Liabilities under the Foreign Corrupt Practices Act and any Determination that we Violated these Laws could have a Material Adverse Effect on our Business.

We are subject to the Foreign Corrupt Practices Act ("FCPA"), and other laws that prohibit improper payments or offers of payments to foreign governments and their officials and political parties by U.S. persons and issuers as defined by the statute, for the purpose of obtaining or retaining business. It is our policy to implement safeguards to discourage these practices by our employees. However, our existing safeguards and any future improvements may prove to be less than effective and our employees, consultants, sales agents or distributors may engage in conduct for which we might be held responsible. Violations of the FCPA may result in severe criminal or civil sanctions and we may be subject to other liabilities, which could negatively affect our business, operating results and financial condition.

Adverse Results of Legal Proceedings could have a Material Adverse Effect on Us.

We are subject to, and may in the future be subject to, a variety of legal proceedings and claims that arise out of the ordinary conduct of our business. Results of legal proceedings cannot be predicted with certainty. Irrespective of their merits, legal proceedings may be both lengthy and disruptive to our operations and may cause significant expenditure and diversion of management attention. We may be faced with significant monetary damages or injunctive relief against us that could have a material adverse effect on a portion of our business operations or a material adverse effect on our financial condition and results of operations.

Our Pending Litigation with Mavericks Capital could have a Material Adverse Effect on Us.

We are currently defending a lawsuit brought by Mavericks Capital LLC and Mavericks Capital Securities LLC against us and our CEO in California Superior Court arising from a July 2015 Agreement between us and Mavericks in which Mavericks agreed to assist our company in finding strategic partners. The complaint in the lawsuit alleges that we breached the Mavericks agreement by failing to pay Mavericks a \$1 million "Transaction Fee" in

connection with investment transactions between us and the Boyalife companies. Mavericks alleges that the Boyalife investment and associated conversion of Boyalife debt was a "Sale of the Company" within the meaning of the Mavericks agreement and therefore allegedly triggered the payment of a fee to Mavericks. The complaint seeks compensatory and special damages, interest, costs, and attorneys' fees. On June 22, 2017, we answered the complaint, denying all material allegations. In October 2017, to streamline the case and without acknowledging any liability, we deposited \$1.0 million with the court in the case (obtained from drawing down our line of credit with Boyalife Investment Fund II, Inc.). Mavericks has also dismissed our CEO from the case without liability. As of January 31, 2018, the parties were engaged in discovery, and no trial date has been set. Although we deny liability in this case and intend to defend it vigorously, there is no assurance that the outcome of the case and resulting legal fees will not have a material adverse effect on our financial condition.

Risks Related to Our Operations

Our Ability to Conduct a CLIRST III Clinical Trial Is Substantially Dependent on Our Ability to Enter into a Strategic Partnership and There Are No Assurances That Such Funding Source will Materialize.

We will need additional funding to commence the CLIRST III clinical trial and we are actively looking for a strategic partner to co-sponsor the trial with us. We cannot assure that such funding will be available on a timely basis, in needed quantities, or on terms favorable to us, if at all.

We Do Not Have Commercial-Scale Manufacturing Capability And Lack Commercial Manufacturing Experience.

We operate GMP manufacturing facilities for both devices and cellular production; however, they are not of sufficient size for medium to large commercial production of product candidates. We will not have large scale experience in cell-drug formulation or manufacturing, and will lack the resources and the capability to manufacture any of our product candidates on a clinical or commercial scale. Accordingly, we expect to depend on third-party contract manufacturers for the foreseeable future. Any performance failure on the part of our contract manufacturers could delay clinical development, regulatory approval or commercialization of our current or future products, depriving us of potential product revenues and resulting in additional losses.

Table of Contents

We Have Limited Sales, Marketing and Distribution Experience in Pharmaceutical Products.

We have limited experience in the sales, marketing, and distribution of pharmaceutical products. There can be no assurance that we will be able to establish sales, marketing, and distribution capabilities or make arrangements with current collaborators or others to perform such activities or that such effort will be successful. If we decide to market any of our new products directly, we must either partner, acquire or internally develop a marketing and sales force with technical expertise and with supporting distribution capabilities. The acquisition or development of a sales, marketing and distribution infrastructure would require substantial resources, which may not be available to us or, even if available, divert the attention of our management and key personnel, and have a negative impact on further product development efforts.

Our Inability to Protect our Patents, Trademarks, Trade Secrets and other Proprietary Rights could Adversely Impact our Competitive Position.

We believe that our patents, trademarks, trade secrets and other proprietary rights are important to our success and our competitive position. Accordingly, we commit substantial resources to the establishment and protection of our patents, trademarks, trade secrets and proprietary rights. We use various methods, including confidentiality agreements with employees, vendors, and customers, to protect our trade secrets and proprietary know-how for our products. We currently hold patents for products, and have patents pending in certain countries for additional products that we market or intend to market. However, our actions to establish and protect our patents, trademarks, and other proprietary rights may be inadequate to prevent imitation of our products by others or to prevent others from claiming violations of their trademarks and proprietary rights by us. If our products are challenged as infringing upon patents of other parties, we may be required to modify the design of the product, obtain a license, or litigate the issues, all of which may have an adverse business effect on us.

We may be Subject to Claims that our Products or Processes Infringe the Intellectual Property Rights of Others, which may Cause us to Pay Unexpected Litigation Costs or Damages, Modify our Products or Processes or Prevent us from Selling our Products.

Although it is our intention to avoid infringing or otherwise violating the intellectual property rights of others, third parties may nevertheless claim that our processes and products infringe their intellectual property and other rights. Our strategies of capitalizing on growing international demand as well as developing new innovative products across multiple business lines present similar infringement claim risks both internationally and in the U.S. as we expand the scope of our product offerings and markets. We compete with other companies for contracts in some small or specialized industries, which increase the risk that the other companies will develop overlapping technologies leading to an increased possibility that infringement claims will arise. Whether or not these claims have merit, we may be subject to costly and time-consuming legal proceedings, and this could divert management's attention from operating our business. In order to resolve such proceedings, we may need to obtain licenses from these third parties or

substantially re-engineer or rename our products in order to avoid infringement. In addition, we might not be able to obtain the necessary licenses on acceptable terms, or at all, or be able to re-engineer or rename our products successfully.

We Commercially, in Co-Branding with Fortis Healthcare, Bank and Store Private Cord Blood Stem Cells in our TotipotentRX GMP Facility. We could be Subject to Unexpected Litigation Costs or Damages for Loss of One or More Family Owned Units of Cord Blood or if one of the Cord Blood Units We Store Causes Bodily Injury.

We face an inherent business risk of exposure to product liability claims if our products or product candidates are alleged or found to have caused injury, or cannot be used for some reason within our control and are found to result in injury or death. While we believe that our current liability insurance coverage is adequate for our present clinical and commercial activities we may not be able to maintain insurance on acceptable terms or at all. If we are unable to obtain insurance or any claims against us substantially exceed our coverage, then our business could be adversely impacted.

If our Cord Blood Processing and Storage Facility in Gurgaon, India is Damaged or Destroyed, our Business, Programs and Prospects could be Negatively Affected.

We process and store our customers' umbilical cord blood at our facility within Fortis Memorial Research Institute (a hospital) in Gurgaon, India. If this facility or the equipment in the facility were to be significantly damaged or destroyed, we could suffer a loss of some or all of the stored cord blood units. Depending on the extent of loss, such an event could reduce our ability to provide cord blood stem cells when requested, could expose us to significant liability from our cord blood banking customers and could affect our ability to continue to provide umbilical cord blood preservation services.

Table of Contents

We may not be able to Protect our Intellectual Property in Countries Outside the United States.

Intellectual property law outside the United States is uncertain and in many countries is currently undergoing review and revisions. The laws of some countries do not protect our patent and other intellectual property rights to the same extent as United States laws. This is particularly relevant to us as a significant amount of our current and projected future sales are outside of the United States. Third parties may attempt to oppose the issuance of patents to us in foreign countries by initiating opposition proceedings. Opposition proceedings against any of our patent filings in a foreign country could have an adverse effect on our corresponding patents that are issued or pending in the United States. It may be necessary or useful for us to participate in proceedings to determine the validity of our patents or our competitors' patents that have been issued in countries other than the U.S. This could result in substantial costs, divert our efforts and attention from other aspects of our business, and could have a material adverse effect on our results of operations and financial condition.

Any Failure to Achieve and Maintain the High Design and Manufacturing Standards that our Products Require may Seriously Harm our Business.

Our products require precise, high-quality manufacturing. Achieving precision and quality control requires skill and diligence by our personnel as well as our vendors. Our failure to achieve and maintain these high manufacturing standards, including the incidence of manufacturing errors, design defects or component failures could result in patient injury or death, product recalls or withdrawals, delays or failures in product testing or delivery, cost overruns or other problems that could seriously hurt our business. Additionally, the large amount of AXP disposable inventory certain distributors and end-users maintain may delay the identification of a manufacturing error and expand the financial impact. A manufacturing error or defect, or previously undetected design defect, or uncorrected impurity or variation in a raw material component, either unknown or undetected, could affect the product. Despite our very high manufacturing standards, we cannot completely eliminate the risk of errors, defects or failures. If we or our vendors are unable to manufacture our products in accordance with necessary quality standards, our business and results of operations may be negatively affected.

Our Revenues and Operating Results may be Adversely Affected as a Result of our Required Compliance with the Adopted EU Directive on the Restriction of the Use of Hazardous Substances in Electrical and Electronic Equipment, as well as other Standards Around the World.

A number of domestic and foreign jurisdictions seek to restrict the use of various substances, a number of which have been or are currently used in our products or processes. For example, the EU Restriction of Hazardous Substances in Electrical and Electronic Equipment ("RoHS") Directive now requires that certain substances, which may be found in certain products we have manufactured in the past, be removed from all electronics components. Other countries, such as China, have enacted or may enact laws or regulations similar to RoHS. Eliminating such substances from our manufacturing processes requires the expenditure of additional research and development funds to seek alternative

substances for our products, as well as increased testing by third parties to ensure the quality of our products and compliance with the RoHS Directive. While we have implemented a compliance program to ensure our product offerings meet these regulations, there may be instances where alternative substances will not be available or commercially feasible, or may only be available from a single source, or may be significantly more expensive than their restricted counterparts. Therefore, we have focused our compliance efforts on those products and geographical areas in which we have the highest revenue potential. Our failure to comply with past, present and future similar laws could result in reduced sales of our products, substantial product inventory write-offs, reputation damage, penalties and other sanctions, any of which could harm our business and operating results.

Compliance with Government Regulations Regarding the Use of “Conflict Minerals” may Result in Additional Expense and Affect our Operations.

The SEC has adopted a final rule to implement Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, which imposes new disclosure requirements regarding the use of “conflict minerals” mined from the Democratic Republic of Congo and adjoining countries. These minerals include tantalum, tin, gold and tungsten. We may incur significant costs associated with complying with the new disclosure requirements, including but not limited to costs related to determining which of our products may be subject to the rules and identifying the source of any “conflict minerals” used in those products. Additionally, implementing the new requirements could adversely affect the sourcing, supply and pricing of materials used in the manufacture of our products. We may also face reputational challenges if we are unable to verify through our compliance procedures the origins for all metals used in our products.

Table of Contents

Our Products may be Subject to Product Recalls which may Harm our Reputation and Divert our Managerial and Financial Resources.

The FDA and similar governmental authorities in other countries have the authority to order the mandatory recall of our products or order their removal from the market if the governmental entity finds our products might cause adverse health consequences or death. The FDA may also seize product or prevent further distribution. A government-mandated or voluntary recall by us could occur as a result of component failures, manufacturing errors or design defects (including labeling defects). In the past we have initiated voluntary recalls of some of our products and we could do so in the future. Any recall of our products may harm our reputation with customers, divert managerial and financial resources and negatively impact our profitability.

We are Dependent on our Suppliers and Manufacturers to Meet Existing Regulations.

Certain of our suppliers and manufacturers are subject to heavy government regulations, including FDA QSR compliance, in the operation of their facilities, products and manufacturing processes. Any adverse action by the FDA against our suppliers or manufacturers could delay supply or manufacture of component products required to be integrated or sold with our products. Although we attempt to mitigate this risk through inventory held directly or through distributors, and audit our suppliers, there are no assurances we will be successful in identifying issues early enough to allow for corrective action or transition to an alternative supplier, or in locating an alternative supplier or manufacturer to meet product shipment or launch deadlines. As a result, our sales, contractual commitments and financial forecasts may be significantly affected by any such delays.

Dependence on Suppliers for Disposable Products and Custom Components May Impact the Production Schedule.

We obtain certain disposable products and custom components from a limited number of suppliers. If the supplier raises the price or discontinues production, we may have to find another qualified supplier to provide the item or re-engineer the item. In the event that it becomes necessary for us to find another supplier, we would first be required to qualify the quality assurance systems and product quality of that alternative supplier. Any operational issues with re-engineering or the alternative qualified supplier may impact the production schedule, therefore delaying revenues, and this may cause the cost of disposables or key components to increase.

Failure to Meet the Financial Covenant in our Technology License and Escrow Agreement could Decrease our AXP Revenues.

Under our license and escrow agreement with CBR Systems, Inc. if we fail to meet the financial covenant of cash balance and short-term investments net of debt or borrowed funds that are payable within one year of not less than \$2,000,000, they may take possession of the escrowed intellectual property and initiate manufacturing of the applicable device and disposables. If this were to occur, our revenues would be negatively impacted. In order to remain compliant, we may have to complete additional financings or provide consideration to the counter party to modify the obligations.

Failure to Retain or Hire Key Personnel may Adversely Affect our Ability to Sustain or Grow our Business.

Our ability to operate successfully and manage our potential future growth depends significantly upon retaining key research, technical, clinical, regulatory, sales, marketing and managerial personnel. Our future success partially depends upon the continued services of key technical and senior management personnel. Our future success also depends on our continuing ability to attract, retain and motivate highly qualified managerial and technical personnel. The inability to retain or attract qualified personnel could have a significant negative effect upon our efforts and thereby materially harm our business and future financial condition.

Most of Our Operations Are Conducted At A Single Location. Any Disruption At Our Facilities Could Delay Revenues Or Increase Our Expenses.

Our U.S. device operations are conducted at a single location although we contract the manufacturing of certain devices, disposables and components. We take precautions to safeguard our facilities, through insurance, health and safety protocols, and off-site storage of computer data. However, a natural disaster, such as a fire, flood or earthquake, could cause substantial delays in our operations, damage or destroy our manufacturing equipment or inventory, and cause us to incur additional expenses. The insurance we maintain against fires, floods, and other natural disasters may not be adequate to cover our losses in any particular case.

Table of Contents

Failure to Maintain and/or Upgrade Our Information Technology Systems May Have an Adverse Effect on Our Operations.

We rely on various information technology systems to manage our operations, and we evaluate these systems against our current and expected requirements. We are currently evaluating alternatives to our legacy ERP system. Until a new system is purchased and implemented, any information technology system disruptions, if not anticipated and appropriately mitigated, could have an adverse effect on our business and operations.

If we Fail to Maintain Proper and Effective Internal Controls, our Ability to Produce Accurate and Timely Financial Statements Could be Impaired, which Could Harm our Operating Results, our Ability to Operate our Business and Investors' Views of Us.

We are required to establish and maintain adequate internal control over financial reporting, which are processes designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. We are also required to comply with Section 404 of the Sarbanes-Oxley Act of 2002, which (among other things) requires public companies to conduct an annual review and evaluation of their internal control over financial reporting. However, as a "smaller reporting company," we are not required to obtain an auditor attestation regarding our internal control over financial reporting. If, in the future, we require an attestation report from our independent registered public accounting firm and that firm is unable to provide an unqualified attestation report on the effectiveness of our internal controls over financial reporting, investor confidence and, in turn, our stock price could be materially adversely affected.

Risks Related to Our Industry

Our Business is Heavily Regulated, Resulting in Increased Costs of Operations and Delays in Product Sales.

Many of our products require FDA approval or clearance to sell in the U.S. and will require approvals from comparable agencies to sell in foreign countries. These authorizations may limit the U.S. or foreign markets in which our products may be sold. Further, our products must be manufactured under requirements of our quality system for continued CE-Marking so they can continue to be marketed and sold in Europe. These requirements are similar to the QSR of both the FDA and California Department of Public Health. Failure to comply with or incorrectly interpret these quality system requirements and regulations may subject us to delays in production while we correct deficiencies found by the FDA, the State of California, or our notifying body as a result of any audit of our quality system. If we are found to be out of compliance, we could receive a Warning Letter or an untitled letter from the FDA or even be temporarily shut down in manufacturing and product sales while the non-conformances are rectified. Also, we may have to recall products and temporarily cease their manufacture and distribution, which would increase our

costs and reduce our revenues. The FDA may also invalidate our PMA or 510(k) if appropriate regulations relative to the PMA or 510(k) product are not met. The notified bodies may elect to not renew CE-Mark certification. Any of these events would negatively impact our revenues and costs of operations.

Changes in Governmental Regulations may Reduce Demand for our Products or Increase our Expenses.

We compete in many markets in which we and our customers must comply with federal, state, local and international regulations, such as environmental, health and safety and food and drug regulations. We develop, configure and market our products to meet customer needs created by those regulations. Any significant change in regulations could reduce demand for our products or increase our expenses. For example, many of our instruments are marketed to the industry for enabling new regenerative therapies. Changes in the FDA's regulation of the devices and products directed at regenerative medicine, and development process for new therapeutic applications could have an adverse effect on the demand for these products.

To Sell in International Markets, We will be Subject to Regulation in Foreign Countries.

In cooperation with our distribution partners, we intend to market our current and future products both domestically and in many foreign markets. A number of risks are inherent in international transactions. In order for us to market our products in certain non-U.S. jurisdictions, we need to obtain and maintain required regulatory approvals or clearances and must comply with extensive regulations regarding safety, manufacturing processes and quality. These regulations, including the requirements for approvals or clearances to market, may differ from the FDA regulatory scheme. International sales also may be limited or disrupted by political instability, price controls, trade restrictions and changes in tariffs. Additionally, fluctuations in currency exchange rates may adversely affect demand for our products by increasing the price of our products in the currency of the countries in which the products are sold.

Table of Contents

There can be no assurance that we will obtain regulatory approvals or clearances in all of the countries where we intend to market our products, or that we will not incur significant costs in obtaining or maintaining foreign regulatory approvals or clearances, or that we will be able to successfully commercialize current or future products in various foreign markets. Delays in receipt of approvals or clearances to market our products in foreign countries, failure to receive such approvals or clearances or the future loss of previously received approvals or clearances could have a substantial negative effect on our results of operations and financial condition.

To Operate In Foreign Jurisdictions, We Are Subject to Regulation by Non-U.S. Authorities.

We have operations in India, and as such are subject to Indian regulatory agencies. A number of risks are inherent in conducting business and clinical operations overseas. In order for us to operate as a majority owned foreign corporation in India, we are subject to financial regulations imposed by the Reserve Bank of India. This includes the rules specific to the capital funding, pledging of assets, repatriation of funds and payment of dividends from and to the foreign subsidiaries and from and to us in the U.S.

In order for us to manufacture and/or market our services and products in India, we need to obtain and maintain required regulatory approvals or clearances and must comply with extensive regulations regarding safety, manufacturing processes and quality. These regulations, including the requirements for approvals or clearances to market, and/or export may differ from the FDA regulatory scheme. Additionally, in order for us to complete clinical trials, clinical trial services and cell banking in India, and other foreign jurisdictions, we need to obtain and maintain approvals and licenses which comply with extensive regulations of the appropriate regulatory body.

International operations also may be limited or disrupted by political, economic or social instability, price controls, trade restrictions and changes in tariffs as ordered by various governmental agencies. Additionally, fluctuations in currency exchange rates may adversely affect the cost of production for our products by increasing the price of materials and other inputs for our products in the currency of the countries in which the products are sold.

If Our Competitors Develop and Market Products That Are More Effective Than Our Product Candidates Or Obtain Regulatory and Market Approval For Similar Products Before We Do, Our Commercial Opportunity May Be Reduced Or Eliminated.

The development and commercialization of new pharmaceutical products which target cardiovascular, orthopedic, chronic dermal wounds and other conditions addressed by our current and future products is competitive, and we will face competition from numerous sources, including major biotechnology and pharmaceutical companies worldwide. Many of our competitors have substantially greater financial and technical resources, and development, production and marketing capabilities than we do. In addition, many of these companies have more experience than we do in

pre-clinical testing, clinical trials and manufacturing of compounds, as well as in obtaining FDA and foreign regulatory approvals. As a result, there is a risk that one of the competitors will develop a more effective product for the same indications for which we are developing a product or, alternatively, bring a similar product to market before we can. With regards to the BioArchive and AXP Systems, numerous larger and better-financed medical device manufacturers may choose to enter this market.

Influence by the Government and Insurance Companies may Adversely Impact Sales of our Products.

Our business may be materially affected by continuing efforts by government, third party payers such as Medicare, Medicaid, and private health insurance plans, to reduce the costs of healthcare. For example, in certain foreign markets the pricing and profit margins of certain healthcare products are subject to government controls. In addition, increasing emphasis on managed care in the U.S. will continue to place pressure on the pricing of healthcare products. As a result, continuing efforts to contain healthcare costs may result in reduced sales or price reductions for our products. To date, we are not aware of any direct impact on our pricing or product sales due to such efforts by governments to contain healthcare costs, and we do not anticipate any impact in the near future.

Table of Contents

Product Liability and Uninsured Risks May Adversely Affect the Continuing Operations.

We operate in an industry susceptible to significant product liability claims. We may be liable if any of our products cause injury, illness, or death. These claims may be brought by individuals seeking relief or by groups seeking to represent a class. We also may be required to recall certain of our products should they become damaged or if they are defective. We are not aware of any material product liability claims against us. However, product liability claims may be asserted against us in the future based on events we are not aware of at the present time. We maintain a product liability policy and a general liability policy that includes product liability coverage. However, a product liability claim against us could have a material adverse effect on our business or future financial condition.

We Commercially Process Stem Cells under a Physician's Order for use in Clinical Applications in India.

Our GMP laboratory within Fortis Memorial Research Institute in Gurgaon, India, processes stem cells for certain uses under a physician's order, and we charge for these services. This service is primarily focused on our growing initiative in bone marrow transplant. We could face product or service liability claim(s) for a bodily injury asserted by a claimant as a result from our GMP services. We mitigate our risks by adhering to international standards, maintain international certification by BSI to GMP, are U.S FDA registered for such activities and are inspected by the Drugs Controller General of India. We believe our global liability insurance is sufficient to cover claims, but in the event it is not it could materially impact our financial health.

Risks Related to Operating Results and Financial Markets

We Have Incurred Net Losses and We Anticipate that our Losses will Continue.

We have not been profitable for a significant period. For the fiscal years ended June 30, 2017 and 2016, we had a net loss of \$29,095,000 and \$18,588,000, respectively, and an accumulated deficit at June 30, 2017, of \$185,357,000. We will continue to incur significant costs as we develop and market our current products and related applications. Although we are executing our business plan to develop, market and launch new products, continuing losses may impair our ability to fully meet our objectives for new product sales or threaten our ability to continue as a going concern in future years.

We Will Need to Raise Additional Capital to Fund our Operations and in Furtherance of Our Business Plan.

We will need to raise additional capital in the near future to fund our future operations and in furtherance of our business plan, including progression of the clinical trials and development of other new products. The proposed financing may include shares of common stock, shares of preferred stock, warrants to purchase shares of common stock or preferred stock, debt securities, units consisting of the forgoing securities, equity investments from strategic development partners or some combination of each. Any additional equity financings may be financially dilutive to, and will be dilutive from an ownership perspective to our stockholders, and such dilution may be significant based upon the size of such financing. Additionally, we cannot assure that such funding will be available on a timely basis, in needed quantities, or on terms favorable to us, if at all.

Our Future Financial Results Could be Adversely Impacted by Asset Impairment Charges.

We are required to test both goodwill and intangible assets for impairment on an annual basis. We have chosen to perform our annual impairment reviews of goodwill and other intangible assets during the fourth quarter of each fiscal year. We also are required to test for impairment between annual tests if events occur or circumstances change that would more likely than not reduces our fair value below book value. These events or circumstances could include results of our on-going clinical trials, activities and results of our competitor's clinical trials, a significant change in the regulatory climate, legal factors, operating performance indicators, or other factors. If the fair market value is less than the book value, we could be required to record an impairment charge. The valuation requires judgment in estimating future cash flows, discount rates and estimated product life cycles. In making these judgments, we evaluate the financial health of the business, including such factors as industry performance, changes in technology and operating cash flows.

As of September 30, 2017, we have a goodwill balance of \$13,794,000 and a net intangible assets balance of \$21,809,000, out of total assets of \$48,942,000. As a result, the amount of any annual or interim impairment could be significant and could have a material adverse effect on our reported financial results for the period in which the charge is taken.

Table of Contents

We may Incur Significant Non-operating, Non-cash Charges Resulting from Changes in the Fair Value of Warrants.

Our Series A warrants are a derivative instrument; as such they have been recorded at their respective relative fair values at the issuance date and will be recorded at their respective fair values at each subsequent balance sheet date. Any change in value between reporting periods will be recorded as a non-operating, non-cash charge at each reporting date. The impact of these non-operating, non-cash charges could have an adverse effect on the Company's financial results. The fair value of the warrants is tied in large part to our stock price. If the stock price increases between reporting periods, the warrants become more valuable. As such, there is no way to forecast what the non-operating, non-cash charges will be in the future or what the future impact will be on our financial statements.

Risks Related to This Offering

Management will have Broad Discretion with Respect to the Use of the Proceeds From this Offering.

Our management will have broad discretion as to the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of the offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. It is possible that our management may use the net proceeds for corporate purposes that may not improve our financial condition or market value.

You will Experience Immediate and Substantial Dilution as a Result of this Offering.

You will suffer substantial dilution as a result of this offering. See "Dilution" in this prospectus for more information of the dilution you will incur in this offering.

If the Price of our Common Stock does not Meet the Requirements of the NASDAQ Capital Market ("NASDAQ"), Our Shares may be Delisted. Our Ability to Publicly or Privately Sell Equity Securities and the Liquidity of Our Common Stock Could be Adversely Affected if We Are Delisted.

The listing standards of NASDAQ provide, among other things, that a company may be delisted if the bid price of its stock drops below \$1.00 for a period of 30 consecutive business days. Delisting from NASDAQ could adversely affect our ability to raise additional financing through the public or private sale of equity securities, would

significantly affect the ability of investors to trade our securities and would negatively affect the value and liquidity of our common stock. Delisting could also have other negative results, including the potential loss of confidence by employees, the loss of institutional investor interest and fewer business development opportunities.

The Historically Low Liquidity of our Common Stock and/or Future Equity Sales Could Impact Our Stock Price and Your Ability to Sell Shares of Our Common Stock.

Although there is a public market for our common stock, trading volume has been historically low, which could impact the stock price and the ability to sell shares of our common stock. We can give no assurance that an active and liquid public market for the shares of the common stock will continue in the future. In addition, future sales of large amounts of common stock could adversely affect the market price of our common stock and our ability to raise capital. The price of our common stock could also drop as a result of the exercise of options for common stock or the perception that such sales or exercise of options could occur. These factors could also have a negative impact on the liquidity of our common stock and our ability to raise funds through future stock offerings.

We do not Pay Cash Dividends.

We have never paid any cash dividends on our common stock and do not intend to pay cash dividends in the foreseeable future. Instead, we intend to apply earnings, if any, to the expansion and development of our business. Thus, the liquidity of your investment is dependent upon your ability to sell stock at an acceptable price. The price can go down as well as up and may limit your ability to realize any value from your investment, including the initial purchase price.

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements in this prospectus and the documents incorporated by reference constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”) and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These statements relate to future events concerning our business and to our future revenues, operating results and financial condition. In some cases, you can identify forward-looking statements by terminology such as “may,” “will,” “could,” “would,” “should,” “expect,” “plan,” “anticipate,” “intend,” “believe,” “estimate,” “forecast,” “predict,” “propose,” “potential” or “continue,” or the negative of those or other comparable terminology.

Any forward looking statements contained in this prospectus and the documents incorporated by reference are only estimates or predictions of future events based on information currently available to our management and management’s current beliefs about the potential outcome of future events. Whether these future events will occur as management anticipates, whether we will achieve our business objectives, and whether our revenues, operating results or financial condition will improve in future periods are subject to numerous risks. There are a number of important factors that could cause actual results to differ materially from the results anticipated by these forward-looking statements. These important factors include those that we discuss under the heading “Risk Factors” in this prospectus and in other sections of our Annual Report on Form 10-K for the year ended June 30, 2017, as subsequently amended and filed with the SEC, our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2017, as filed with the SEC, as well as in our Current Reports filed on Form 8-K from time to time with the SEC, that are incorporated by reference into this prospectus. You should read these factors and the other cautionary statements made in this prospectus and in the documents we incorporate by reference into this prospectus as being applicable to all related forward-looking statements wherever they appear in this prospectus or the documents we incorporate by reference into this prospectus. If one or more of these factors materialize, or if any underlying assumptions prove incorrect, our actual results, performance or achievements may vary materially from any future results, performance or achievements expressed or implied by these forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately \$ _____ million from the sale of the shares of common stock offered by us in this offering, after deducting underwriting discounts and commissions and estimated offering costs payable by us.

We intend to use the net proceeds from this offering for general corporate purposes, including working capital. We have not determined the amounts we plan to spend on more specific areas or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds from this offering. Pending application

of the net proceeds as described above, we intend to invest the net proceeds of this offering in short-term, investment-grade, interest-bearing securities.

Table of Contents**CAPITALIZATION**

The following table sets forth our cash, cash equivalents and capitalization as of September 30, 2017:

on an actual basis;

on a pro forma basis to reflect the sale of an aggregate of 898,402 shares of common stock at a price of \$3.00 per share on December 1, 2017 for net proceeds of approximately \$2.4 million; and

on a pro forma as adjusted basis to give further effect to the assumed sale of 5,357,142 shares of common stock in this offering at an assumed public offering price of \$2.80 per share (the last reported sale price of our common stock on February 2, 2018), after deducting underwriting discounts and commissions and estimate offering expenses payable by us.

You should read this information in conjunction with our consolidated financial statements and notes thereto incorporated by reference into this prospectus.

	Actual*	Pro Forma	Pro Forma As Adjusted
Cash and cash equivalents	\$ 2,464,000	\$ 4,832,000	\$ 18,432,000
Total liabilities	\$ 18,109,000	\$ 18,109,000	\$ 18,109,000
Stockholders' equity:			
Preferred stock, \$0.001 par value; 2,000,000 shares authorized, none outstanding	\$ --	\$ --	\$ --
Common stock, \$0.001 par value; 350,000,000 shares authorized; 9,959,943 issued and outstanding on an actual basis, 10,858,345 issued and outstanding on a pro forma basis; 16,215,487 shares outstanding on a pro forma as adjusted basis	\$ 10,000	\$ 11,000	\$ 16,000
Paid in capital in excess of par	\$ 218,801,000	\$ 221,168,000	\$ 234,703,000
Accumulated deficit	\$ (187,707,000)	\$ (187,707,000)	\$ (187,707,000)
Accumulated other comprehensive loss	\$ (34,000)	\$ (34,000)	\$ (34,000)
Total Cesca Therapeutics Inc. stockholders' equity	\$ 31,070,000	\$ 33,438,000	\$ 47,038,000
Noncontrolling interests	\$ (237,000)	\$ (237,000)	\$ (237,000)
Total stockholders' equity	\$ 30,833,000	\$ 33,201,000	\$ 46,801,000

*The above table is based on 9,959,943 shares of our common stock outstanding as of September 30, 2017 and excludes:

83,114 shares of our common stock issuable upon the exercise of outstanding stock options under our 2006 Incentive Plan, having a weighted average exercise price of \$12.85 per share;

416 shares of our common stock issuable upon the vesting of restricted stock units under our 2006 Equity Incentive Plan;

12,396 shares of our common stock issuable upon the exercise of outstanding stock options under our 2012 Independent Director Plan, having a weighted average exercise price of \$21.87 per share;

324,408 shares of our common stock issuable upon the exercise of outstanding stock options under our 2016 Equity Incentive Plan, having a weighted average exercise price of \$3.04 per share;

8,750 shares of our common stock issuable upon the vesting of restricted stock units under our 2016 Equity Incentive Plan; and

4,130,192 shares of our common stock issuable upon the exercise of outstanding vested warrants, having a weighted average exercise price of \$9.60 per share.

Table of Contents**DILUTION**

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the price you pay for each share of common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value is the amount of our total tangible assets less our related liabilities and excludes the amount allocated to our non-controlling interests. Our historical net tangible book value per share is our historical net tangible book value divided by the number of shares of common stock outstanding as of September 30, 2017. Our historical net tangible book value as of September 30, 2017, was approximately \$2,435,000, or \$0.24 per share of common stock. Our pro forma net tangible book value as of September 30, 2017 was \$4,803,000 or \$0.44 per share of common stock, after giving effect to sale of an aggregate of 898,402 shares of common stock at a price of \$3.00 per share on December 1, 2017 for net proceeds of approximately \$2.4 million.

Pro forma as adjusted net tangible book value is our pro forma net tangible book value, after giving further effect to the assumed sale of 5,357,142 shares of our common stock in this offering at an assumed public offering price of \$2.80 per share (the last reported sale price of our common stock on February 2, 2018) and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. This amount represents an immediate increase in pro forma net tangible book value of \$0.69 per share to our existing stockholders, and an immediate dilution of \$1.67 per share to new investors participating in this offering. The following table illustrates this calculation on a per share basis.

Assumed public offering price per share of common stock offered	\$ 2.80
Historical Net tangible book value per share of common stock as of September 30, 2017	\$ 0.24
Increase in pro forma net tangible book value per share attributable December 1, 2017 sale of 898,402 shares of common stock	\$ 0.20
Pro forma net tangible book value per share as of September 30, 2017	\$ 0.44
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering	\$ 0.69
Pro forma as adjusted net tangible book value per share as of September 30, 2017 after this offering	\$ 1.13
Dilution in pro forma net tangible book value per share to new investors	\$ 1.67
Dilution in pro forma net tangible book value per share to new investors as a percentage of assumed offering price	59 %

A \$0.25 increase (decrease) in the assumed public offering price of \$2.80 per share would result in an increase (decrease) in our pro forma as adjusted net tangible book value of approximately \$1,232,000 or approximately \$0.08 per share, and would result in an increase (decrease) in the dilution to new investors of approximately \$0.17 per share, assuming that the number of shares of our common stock sold by us remains the same, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or

decrease the number of shares of common stock we are offering from the assumed number of share of common stock set forth above. An increase of 1.0 million in the assumed number of shares of common stock sold by us in this offering would result in an increase in our pro forma as adjusted net tangible book value of approximately \$2.6 million or approximately \$0.08 per share, and would result in a decrease in the dilution to new investors of approximately \$0.09 per share, assuming that the assumed public offering price remains the same, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. A decrease of 1.0 million in the assumed number of shares of common stock sold by us in this offering would result in a decrease in our pro forma as adjusted net tangible book value of approximately \$2.6 million or approximately \$0.09 per share, and would result in an increase in the dilution to new investors of approximately \$0.09 per share, assuming that the assumed public offering price remains the same, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. The information discussed above is illustrative only and will adjust based on the actual public offering price, the actual number of shares sold in this offering and other terms of this offering determined at pricing.

The number of shares of common stock outstanding after this offering as reflected in the table above, is based on the actual number of shares outstanding as of September 30, 2017, which was 9,959,943, and does not include, as of that date:

83,114 shares of our common stock issuable upon the exercise of outstanding stock options under our 2006 Incentive Plan, having a weighted average exercise price of \$12.85 per share;

416 shares of our common stock issuable upon the vesting of restricted stock units under our 2006 Equity Incentive Plan;

12,396 shares of our common stock issuable upon the exercise of outstanding stock options under our 2012 Independent Director Plan, having a weighted average exercise price of \$21.87 per share;

324,408 shares of our common stock issuable upon the exercise of outstanding stock options under our 2016 Equity Incentive Plan, having a weighted average exercise price of \$3.04 per share;

8,750 shares of our common stock issuable upon the vesting of restricted stock units under our 2016 Equity Incentive Plan; and

4,130,192 shares of our common stock issuable upon the exercise of outstanding vested warrants, having a weighted average exercise price of \$9.60 per share.

To the extent that outstanding options or warrants are exercised, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

Table of Contents

DESCRIPTION OF CAPITAL STOCK

The description below of our capital stock and provisions of our amended and restated certificate of incorporation and bylaws are summaries and are qualified by reference to our amended and restated certificate of incorporation and bylaws. These documents are filed as exhibits to the registration statement of which this prospectus is a part.

Our authorized capital stock consists of 350,000,000 shares of common stock, \$0.001 par value, and 2,000,000 shares of preferred stock, \$0.001 par value. As of January 31, 2018, we had 10,872,428 shares of common stock outstanding and no shares of preferred stock outstanding.

Common Stock

Each holder of common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, except matters that relate only to one or more of the series of preferred stock, and each holder does not have cumulative voting rights.

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of common stock are entitled to receive ratably those dividends, if any, as may be declared from time to time by the board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, holders of common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

Holders of common stock have no preemptive or conversion rights or other subscription rights, and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock which we may designate in the future.

Preferred Stock

Under the terms of our amended and restated articles of incorporation, the board of directors is authorized, subject to any limitations prescribed by law, without stockholder approval, to issue such shares of preferred stock in one or more

series. Each such series of preferred stock shall have such rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, as shall be determined by the board of directors.

The purpose of authorizing the board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from acquiring, a majority of our outstanding voting stock.

The effects of issuing preferred stock could include one or more of the following:

decreasing the amount of earnings and assets available for distribution to holders of common stock;

restricting dividends on the common stock;

diluting the voting power of the common stock;

impairing the liquidation rights of the common stock; or

delaying, deferring or preventing changes in our control or management.

Table of Contents

As of the date of this prospectus, there are no shares of preferred stock outstanding.

Effect of Certain Provisions of Certificate of Incorporation and Bylaws

Some provisions of Delaware law and our certificate of incorporation and bylaws, both as amended s contain provisions that could make the following transactions more difficult:

acquisition of our company by means of a tender offer;

acquisition of our company by means of a proxy contest or otherwise; or

removal of incumbent officers and directors.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids and to promote stability in our management. These provisions are also designed to encourage persons seeking to acquire control of our company to first negotiate with our board of directors.

Undesignated Preferred Stock. The ability to authorize undesignated preferred stock makes it possible for our board of directors to issue one or more series of preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of our company. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our company.

Stockholder Meetings. Our bylaws provide that a special meeting of stockholders may be called only by the board of directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals. Our bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of the board of directors.

Board of Directors Size and Vacancies. Under our bylaws, the board of directors has the power to set the size of the board and fill any vacancy on the board of directors, including a vacancy resulting from an enlargement of the board. The ability to increase or decrease the size of the board in conjunction with the ability to fill a vacancy could make it more difficult for a third party to acquire control of our company, or could discourage a third party from acquiring control of our company.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the Delaware General Corporation Law (“DGCL”). This law prohibits a publicly held Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder, unless:

prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned by persons who are directors and also officers and by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

on or subsequent to the date of the transaction, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Table of Contents

Section 203 defines “business combination” to include:

any merger or consolidation involving the corporation and the interested stockholder;

any sale, transfer, pledge or other disposition of 10% or more of our assets involving the interested stockholder;

in general, any transaction that results in the issuance or transfer by us of any of our stock to the interested stockholder; or

the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 of the DGCL defines an “interested stockholder” as an entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Limitation of Liability

The DGCL permits Delaware corporations to eliminate or limit the monetary liability of directors for breach of their fiduciary duty of care, subject to limitations. Our amended and restated certificate of incorporation provides that our directors shall not be liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except to the extent such exemption or limitation thereof is not permitted under the DGCL as the same exists or may hereafter be amended.

The DGCL provides for indemnification of directors, officers, employees and agents, subject to limitations. Both our amended and restated certificate of incorporation and bylaws provide for the indemnification of our directors, officers, employees and agents to the fullest extent permitted by Delaware law. Our directors and officers also are insured against certain liabilities for actions taken in such capacities, including liabilities under the Securities Act.

Section 145(a) of the DGCL provides that a Delaware corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or enterprise, against

expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, if such person had no cause to believe the conduct was unlawful.

Section 145(b) of the DGCL provides that a Delaware corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person acted in any of the capacities set forth above, against expenses actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted under similar standards to those set forth above, except that no indemnification may be made in respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the court in which such action or suit was brought shall determine that despite the adjudication of liability, but in view of all the circumstances of the case, such person is fairly and reasonably entitled to be indemnified for such expenses which the court shall deem proper.

Section 145 of the DGCL further provides that to the extent a director or officer of a corporation has been successful in the defense of any action, suit or proceeding referred to in subsection (a) and (b) or in the defense of any claim, issue or matter therein, such person shall be indemnified against expenses actually and reasonably incurred by such person in connection therewith; that indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and that the corporation may purchase and maintain insurance on behalf of a director or officer of the corporation against any liability asserted against such officer or director and incurred by such person in any such capacity or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

Table of Contents

As permitted by Section 102(b)(7) of the DGCL, our amended and restated certificate of incorporation provides that none of our directors shall be liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director. However, this provision does not eliminate or limit the liability of a director for acts or omissions not in good faith or for breaching such person's duty of loyalty, engaging in intentional misconduct or knowingly violating the law, paying a dividend or approving a stock repurchase which was illegal, or obtaining an improper personal benefit. A provision of this type has no effect on the availability of equitable remedies, such as injunction or rescission, for breach of fiduciary duty.

We have a policy of directors' liability insurance that insures the directors and officers against the cost of defense, settlement or payment of a judgment under certain circumstances.

We believe that the foregoing policies and provisions of our amended and restated certificate of incorporation and bylaws are necessary to attract and retain qualified officers and directors. Insofar as indemnification for liabilities arising under the Securities Act may be permitted with respect to our directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Transfer Agent

The transfer agent and registrar for our common stock is Computershare Investor Services, LLC, 350 Indiana Street, Suite 750, Golden, CO 80401.

Exchange Listing

Our common stock is traded on The NASDAQ Capital Market under the symbol "KOOL."

DIVIDEND POLICY

We currently intend to retain any future earnings to finance the growth and development of our business. Therefore, we do not anticipate declaring or paying any cash dividends in the foreseeable future. Any future determination as to the declaration and payment of dividends, if any, will be at the discretion of our board of directors and will depend on then existing conditions, including our financial condition, operating results, contractual restrictions, capital

requirements, business prospects and other factors our board of directors may deem relevant.

UNDERWRITING

Maxim Group LLC is acting as the representative (the “Representative”) of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

Underwriters	Number of Shares
Maxim Group LLC	
Total	

Over-Allotment Option

We have granted the underwriters an option, exercisable for 45 days from the date of this prospectus, to purchase up to an aggregate of additional shares of common stock to cover over-allotments, if any, at the public offering price set forth on the cover page of this prospectus, less the underwriting discount. The underwriters may exercise this option solely for the purpose of covering overallotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus. If the underwriters exercise this option, the underwriters will be obligated subject to certain conditions, to purchase the additional shares for which the option has been exercised.

Table of Contents**Discount, Commissions and Expenses**

The underwriters have advised us that they proposes to offer the shares of common stock to the public at the public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$ per share. After this offering, the public offering price, concession and reallowance to dealers may be changed by the underwriters. No such change shall change the amount proceeds to be received by us as set forth on the cover page of this prospectus. The shares of common stock are offered by the underwriters stated herein, subject to receipt and acceptance by them and subject to their right to reject any order in whole or in part. The underwriters have informed us that it does not intend to confirm sales to any accounts over which it exercises discretionary authority.

The following table shows the underwriting discount payable to the underwriters by us in connection with this offering. Such amounts are show assuming both no exercise and full exercise of the underwriters' over-allotment option to purchase additional shares.

	Per Share	Total Without Exercise of Over Allotment Option	Total With Exercise of Over Allotment Option
Public Offering Price			
Underwriting discount ⁽¹⁾			
Proceeds, before expenses, to us			

(1) The underwriting discount shall be \$ per share.

The expenses of the offering, not including the underwriting discount, payable by us are estimated to be \$. The estimate includes an aggregate expense reimbursement of \$75,000 to the Representative for its actual out-of-pocket expenses for the offering.

Indemnification

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, and liabilities arising from breaches of representations and warranties contained in the underwriting agreement, or to contribute to payments that the underwriters may be required to make in respect of those liabilities.

Lock-up Agreements

The Company has agreed, subject to certain exceptions, for a period of 60 days after the date of the underwriting agreement, not to offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of, directly or indirectly any shares of common stock or any securities convertible into or exchangeable for our common stock either owned as of the date of the underwriting agreement or thereafter acquired without the prior written consent of the Representative.

The Company's officers, directors and certain shareholders have agreed, subject to limited exceptions, for a period of 60 days after the date of the underwriting agreement, not to offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of, directly or indirectly any shares of common stock or any securities convertible into or exchangeable for our common stock either owned as of the date of the underwriting agreement or thereafter acquired, subject to certain exceptions, without the prior written consent of the Representative.

The Representative may, in its sole discretion and at any time or from time to time before the termination of the lock-up period, without notice, release all or any portion of the securities subject to lock-up agreements.

Stabilization, Short Positions and Penalty Bids

In connection with the offering, the underwriters may engage in stabilizing transactions, short sales and purchases to cover positions created by short sales, and penalty bids or purchases for the purpose of pegging, fixing or maintaining the price of the common stock, in accordance with Regulation M under the Exchange Act:

Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.

Table of Contents

A short position involves a sale by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase in the offering, which creates the syndicate short position. This short position may be either a covered short position or a naked short position. In a covered short position, the number of shares involved in the sales made by the underwriters in excess of the number of shares they are obligated to purchase is not greater than the number of shares that they may purchase by exercising its option to purchase additional shares. In a naked short position, the number of shares involved is greater than the number of shares in its option to purchase additional shares. The underwriters may close out any short position by either exercising its option to purchase additional shares and/or purchasing shares in the open market. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through its option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of the common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on The NASDAQ Capital Market or otherwise and, if commenced, may be discontinued at any time.

Neither we nor the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor the underwriters make any representation that the underwriters will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Other Relationships

If we elect to terminate for any reason even though the Representative was prepared to proceed with this offering, and, if within six (6) months following such termination, we complete any financing of equity, equity-linked or debt or other capital raising activity (other than the exercise by any person or entity of any options, warrants or other convertible securities) with any of the investors contacted by the Representative and that met with us either via an in-person meeting or through a conference call in connection with this offering, then we will pay to the

Representative upon the closing of such financing the same cash fees set forth above with respect to such offering.

From time to time, the underwriters and their affiliates have provided, and may provide in the future, various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which they have received and may continue to receive customary fees and commissions. However, except as disclosed in this prospectus, we have no present arrangements with the underwriters for any further services.

LEGAL MATTERS

Certain legal matters with respect to the shares of common stock offered hereby will be passed upon by Foley & Lardner LLP, Tampa, Florida. Certain other legal matters will be passed upon for the underwriters by Ellenoff Grossman & Schole LLP of New York, New York in connection with this offering.

EXPERTS

The consolidated financial statements of the Company appearing in our Annual Report for the year ended June 30, 2017 filed on Form 10-K, have been audited by Marcum LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of SynGen Inc. as of and for the years ended December 31, 2016 and 2015, appearing in our Current Report on Form 8-K/A dated September 22, 2017, have been audited by Moss Adams LLP, independent auditors, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy and information statements and other information with the SEC. Our SEC filings, including the registration statement, are available to the public from the SEC's website at www.sec.gov. To receive copies of public records not posted to the SEC's website at prescribed rates, you may complete an online form at www.sec.gov, send a fax to (202) 772-9337 or submit a written request to the SEC, Office of FOIA/PA Operations, 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information.

We also make available free of charge on our website, www.cescatherapeutics.com, all materials that we file electronically with the SEC, including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, Section 16 reports and amendments to those reports as soon as reasonably practicable after such materials are electronically filed with, or furnished to, the SEC. Information contained on our website or any other website is not incorporated by reference into this prospectus and does not constitute a part of this prospectus

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below:

Our Annual Report on Form 10-K for the fiscal year ended June 30, 2017, filed with the SEC on September 22, 2017 and as amended on October 20, 2017;

Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, filed with the SEC on November 14, 2017;

Our Current Reports on Form 8-K filed with the SEC on July 11, 2017, and as amended on September 22, 2017, August 4, 2017, August 25, 2017, September 19, 2017, and as amended on September 22, 2017, September 19, 2017, November 15, 2017, November 29, 2017, December 1, 2017, and January 5, 2018; and

The description of our common stock set forth in Item 8.01 of our Current Report on Form 8-K filed on May 18, 2017 pursuant to Section 12(b) of the Exchange Act, including any amendment or report filed for the purpose of updating such description; and

All documents filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus and before we terminate the offering under this prospectus.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon his or her written or oral request, a copy of any or all documents referred to above which have been or may be incorporated by reference into this prospectus but not delivered with this prospectus excluding exhibits to those documents unless they are specifically incorporated by reference into those documents. You can request those documents from us, at no cost, by writing or telephoning us at: Cesca Therapeutics Inc., (916) 858-5100, 2711 Citrus Road, Rancho Cordova, CA 95742, Attention: Corporate Secretary.

The most recent information that we file with the SEC automatically updates and supersedes older information. The information contained in any such filing will be deemed to be a part of this prospectus, commencing on the date on which the filing is made. Information furnished under Items 2.02 or 7.01 (or corresponding information furnished under Item 9.01 or included as an exhibit) in any past or future Current Report on Form 8-K that we file with the SEC, unless we specified in such report, is not incorporated by reference in this prospectus.

Table of Contents

\$15,000,000 of Shares of

Common Stock

PROSPECTUS

Maxim Group LLC

, 2018



Table of Contents**PART II****INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution.**

The following table indicates the expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimated except the Securities and Exchange Commission registration fee and the Financial Industry Regulatory Authority, Inc., or FINRA, filing fee.

	Amount to be Paid
SEC registration fee	\$ 2,149
FINRA filing fee	\$
The Nasdaq Capital Market fee	\$
Printing expenses	\$
Accounting fees and expenses	\$
Legal fees and expenses	\$
Transfer agent and registrar fees	\$
Miscellaneous fees and expenses	\$
Total	\$

Item 14. Indemnification of Directors and Officers.

Section 102(b)(7) of the Delaware General Corporation Law (the “Delaware Law”) enables a corporation, in its original certificate of incorporation or an amendment thereto, to eliminate or limit the personal liability of a director for monetary damages for breach of the director’s fiduciary duty, except (i) for any breach of the director’s duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the Delaware Law (providing for liability of directors for unlawful payment of dividends or unlawful stock purchases or redemptions), or (iv) for any transaction from which the director derived an improper personal benefit. The Company’s Sixth Amended and Restated Certificate of Incorporation, as amended (“Certificate of Incorporation”), contains such a provision.

In addition, Section 145 of the Delaware Law provides that a corporation may indemnify any persons, including officers and directors, who are, or are threatened to be made, party to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), by reason of the fact that such person is or was an officer, director, employee or agent of the corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such officer, director, employee or agent acted in good faith and in a manner the person reasonably believed to be in or not opposed to the corporation's best interests and, with respect to criminal proceedings, had no reasonable cause to believe that the person's conduct was unlawful. A Delaware corporation may indemnify officers or directors in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him or her against expenses (including attorneys' fees) that he or she actually and reasonably incurred. The Company's Certificate of Incorporation and Restated Bylaws provide for indemnification of directors and officers to the fullest extent permitted by the Delaware Law.

Item 15. Recent Sales of Unregistered Securities.

In the three years preceding the filing of this Registration Statement, we issued the securities described below that were not registered under the Securities Act.

On August 31, 2015, we entered into a securities purchase agreement with an institutional accredited investor. Pursuant to the terms of the securities purchase agreement, we sold the investor Senior Secured Convertible Debentures in principal amount of \$15,000,000 ("Debentures"), Series A warrants ("Series A Warrants") to purchase up to 1,102,942 shares of our common stock ("Series A Warrant Shares") at an exercise price equal to \$13.60 per Series A Warrant Share and Series B warrants ("Series B Warrants" and together with the Series A Warrants, "Warrants") to purchase up to 606,618 shares of our common stock ("Series B Warrant Shares" and together with the Series A Warrant Shares, "Warrant Shares") at an exercise price equal to \$13.60 per Series B Warrant Share (the "Financing"). In connection with the Financing, we paid Maxim Group LLC, the placement agent, an aggregate cash fee equal to \$440,000 in connection with the initial closing and paid \$760,000 upon the second closing as well as the reimbursement of certain expenses. The issuance of Debentures and Warrants were completed in accordance with the exemption provided by Rule 506 of Regulation D of the Securities Act of 1933 and/or Section 4(a)(2) of the Securities Act of 1933, as amended.

Table of Contents

We entered into a Purchase Agreement (the “Purchase Agreement”) on February 2, 2016 with Boyalife Investment Inc. (“Boyalife USA”) and Boyalife (Hong Kong) Limited (“Boyalife HK” and, together with Boyalife USA, the “Investors”), pursuant to which we issued to Boyalife USA a secured three-year convertible debenture with an aggregate principal face amount of \$12.5 million (the “Debenture”). Pursuant to the terms of the Debenture, all outstanding principal and accrued and unpaid interest up to and including the maturity date is convertible into shares of our common stock at a per share price of \$3.40 (the “Conversion Price”) at our option at any time prior to maturity, provided that (i) the 20-day simple moving average price of our common stock on the date of conversion is at least 125% of the Conversion Price and (ii) the volume weighted average trading price of our common stock has been greater than the Conversion Price for ten consecutive trading days. On August 22, 2016, we notified Boyalife USA in writing that it elected to convert all outstanding principal and interest accrued and otherwise payable under the Debenture, which included the conversion of \$12,500,000 of principal and \$8,250,000 of interest up to and including the maturity date of the Debentures, effective as of August 22, 2016 (the “Conversion”). Upon the Conversion of the Debenture, we issued an aggregate of 6,102,941 shares of common stock (the “Conversion Shares”) to Boyalife USA. The issuances have been determined to be exempt from registration under the Securities Act of 1933 in reliance on Sections 3(a)(9) and 4(a)(2) of the Securities Act and Rule 506 of Regulation D promulgated thereunder, as transactions by an issuer not involving a public offering, in which the investors have represented that they are accredited, as that term is defined in Regulation D, and have acquired the securities for investment purposes only and not with a view to or for sale in connection with any distribution thereof.

On March 6, 2017, we entered into a Revolving Credit Agreement (the “Credit Agreement”) with Boyalife Investment Fund II, Inc., an Illinois corporation (the “Lender”). The Lender is a wholly owned subsidiary of Boyalife Group Inc., which is a company owned and controlled by Dr. Xiaochun Xu, the Company’s Interim Chief Executive Officer and Chairman of the Board of Directors. The Credit Agreement grants to the Company the right to borrow up to \$5.0 million from Lender in amounts of \$500,000 per advance on an unsecured basis at any time prior to March 6, 2022 (the “Maturity Date”). On September 13, 2017, we entered into an Amendment No. 1 to Credit to reflect the new aggregate maximum principal amount of \$10.0 million (the “Note”). If the Note is not repaid in full on or before the Maturity Date, the Lender has the right after the Maturity Date to convert any unpaid principal and accrued interest into shares of our common stock at a conversion price equal to 90% of the average daily volume-weighted average trading price of our common stock during the 10 trading days immediately prior to the Maturity Date, provided that the number of shares issuable upon such conversion may not exceed 19.99% of our number of outstanding shares of common stock on the date of the Credit Agreement (unless we obtain stockholder approval for such issuance in the manner required by the Marketplace Rules of the Nasdaq Stock Market, Inc.). The offer and sale of the Note was made (and the offer and sale of the shares common stock issuable upon conversion of the Note were and will be made) pursuant to the exemption from registration provided by Section 4(2) of the Securities Act of 1933, as amended, including pursuant to Rule 506 thereunder. Such offer and sale was made solely to an “accredited investor” under Rule 506 and was made without any form of general solicitation and with full access to any information requested by the Lender regarding us, the Note, and our common stock.

Item 16. Exhibits and Financial Statement Schedules.

(a) *Exhibits.*

The exhibits to the registration statement are listed in the Exhibit Index attached hereto and are incorporated by reference herein.

(b) *Financial Statement Schedules.*

All other schedules are omitted because they are not required, are not applicable, or the information is included in the financial statements or the related notes to financial statements thereto.

II-2

Table of Contents

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933 (the “Act”);

(ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the “Calculation of Registration Fee” table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement.

Provided, however, that Paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

If the registrant is subject to Rule 430C (§230.430C of this chapter), each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A (§230.430A of this chapter), shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424 (§230.424 of this chapter);

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

Table of Contents

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Table of Contents

EXHIBIT INDEX

Exhibit No.	Document Description
1.1*	Form of Underwriting Agreement
2.1	<u>Plan of Merger Agreement and Reorganization Agreement between ThermoGenesis Corp. and TotipotentRX, dated July 15, 2013 (Incorporated by reference to Exhibit 2.1 to Form 8-K filed with the SEC July 16, 2013.)</u>
3.1	<u>Sixth Amended and Restated Certificate of Incorporation, as amended (Incorporated by reference to Exhibit 3.1 of Registration Statement on Form S-8 filed with the SEC on May 18, 2017.)</u>
3.2	<u>Restated Bylaws of Cesca Therapeutics Inc. (Incorporated by reference to Exhibit 99.1 to Form 8-K filed with the SEC on October 30, 2014.)</u>
3.4	<u>Certificate of Merger (Incorporated by reference to Exhibit 3.4 to Form 8-K filed with the SEC on February 21, 2014.)</u>
5.1*	Opinion of Foley & Lardner LLP
10.1	<u>Amended and Restated 2006 Equity Incentive Plan (Incorporated by reference to Exhibit 10.6.1 to Form 8-K filed with the SEC on May 1, 2014.)</u>
10.2+	<u>Product Purchase and International Distribution Agreement between ThermoGenesis Corp. and Golden Meditech Holdings Limited (Incorporated by reference to Exhibit 10.1 to Form 8-K filed with the SEC on August 24, 2012 and amended October 24, 2012.)</u>
10.3	<u>2012 Independent Director Plan (Incorporated by reference to Exhibit A of the Company's Definitive Proxy Statement filed with the SEC on October 23, 2012.)</u>
10.4+	<u>Sales and Purchase Agreement between ThermoGenesis Corp. and CBR Systems, Inc. dated December 31, 2013 (Incorporated by reference to Exhibit 10.18 to Form 8-K filed with the SEC on January 7, 2014.)</u>
10.5	<u>Employment Agreement with Robin C. Stracey (Incorporated by reference to Exhibit 10.19 to Form 8-K filed with the SEC on June 15, 2015.)</u>
10.6	<u>Form of Series A Warrant (Incorporated by reference to Exhibit 10.3 to Form 8-K filed with the SEC on September 1, 2015.)</u>
10.6.1	<u>Form of Series A Warrant Amendment (Incorporated by reference to Exhibit 10.7 to Form 8-K filed with the SEC on February 3, 2016.)</u>
10.7	<u>General Release and Waiver between the Company and Kenneth L. Harris (Incorporated by reference to Exhibit 10.1 to Form 8-K filed with the SEC on September 30, 2015.)</u>
10.8	<u>Sixth Amended and Restated Technology License and Escrow Agreement between the Company, ThermoGenesis Corp. and CBR Systems, effective May 15, 2017 (Incorporated by reference to Exhibit 10.1 to Form 8-K filed with the SEC on May 31, 2017.)</u>
10.9	<u>Employment Agreement with Michael Bruch (Incorporated by reference to Exhibit 10.2 to Form 8-K filed with the SEC on October 28, 2015.)</u>
10.10	<u>Purchase Agreement between the Company and Boyalife Investment Inc. and Boyalife (Hong Kong) Limited (Incorporated by reference to Exhibit 10.1 to Form 8-K filed with the SEC on February 3, 2016.)</u>
10.11	<u>Form of Debenture between the Company and Boyalife Investment Inc. and Boyalife (Hong Kong) Limited (Incorporated by reference to Exhibit 10.2 to Form 8-K filed with the SEC on February 3, 2016.)</u>
10.12	<u>Form of Warrant (Incorporated by reference to Exhibit 10.3 to Form 8-K filed with the SEC on February 3, 2016.)</u>
10.13	

- Form of Nomination and Voting Agreement (Incorporated by reference to Exhibit 10.4 to Form 8-K filed with the SEC on February 3, 2016.)
- 10.14 Form of Security Agreement (Incorporated by reference to Exhibit 10.5 to Form 8-K filed with the SEC on February 3, 2016.)
- 10.15 Form of Securities Purchase Agreement between Cesca Therapeutics Inc. and certain institutional accredited investors, dated August 3, 2016 (Incorporated by reference to Exhibit 10.1 to Form 8-K filed with the SEC on August 4, 2016.)
- 10.16 Form of Placement Agency Agreement between Cesca Therapeutics Inc. and Maxim Group LLC, dated August 3, 2016 (Incorporated by reference to Exhibit 10.2 to Form 8-K filed with the SEC on August 4, 2016.)
- 10.17 General Release and Waiver dated November 7, 2016 by and between Cesca Therapeutics, Inc. and Robin Stracey (Incorporated by reference to Exhibit 10.2 to Form 8-K/A filed with the SEC on November 17, 2016.)
- 10.18 Executive Employment Agreement, dated November 13, 2017, between Cesca Therapeutics Inc. and Dr. Xiaochun (Chris) Xu. (Incorporated by reference to Exhibit 10.2 to Form 8-K filed with the SEC on November 15, 2017.)

Table of Contents

- 10.19 Form of Indemnification Agreement (Incorporated by reference to Exhibit 10.1 to Form 8-K/A filed with the SEC on November 17, 2016.)
- 10.20 Cesca Therapeutics Inc. 2016 Equity Incentive Plan, as amended (Incorporated by reference to Exhibit 10.1 to Registration Statement on Form S-8 filed with the SEC on May 18, 2017.)
- 10.20.1 Amendment to the Cesca Therapeutics Inc. 2016 Equity Incentive Plan, effective November 13, 2017. (Incorporated by reference to Exhibit 10.1 to Form 8-K filed with the SEC on November 15, 2017.)
- 10.21 General Release and Waiver between Mr. Michael Bruch and Cesca Therapeutics Inc., effective February 28, 2017 (Incorporated by reference to Exhibit 10.1 to Form 8-K filed with the SEC on March 2, 2017.)
- 10.22 Employment Agreement between Ms. Vivian Liu and Cesca Therapeutics Inc., effective February 24, 2017 (Incorporated by reference to Exhibit 10.2 to Form 8-K filed with the SEC on March 2, 2017.)
- 10.22.1 Amendment No. 1, dated November 13, 2017, to Executive Employment Agreement between Vivian Liu and Cesca Therapeutics Inc. (Incorporated by reference to Exhibit 10.3 to Form 8-K filed with the SEC on November 15, 2017.)
- 10.23 Revolving Credit Agreement, dated March 6, 2017, between Cesca Therapeutics Inc. and Boyalife Investment Fund II, Inc. (Incorporated by reference to Exhibit 10.1 to Form 8-K filed with the SEC on March 10, 2017.)
- 10.24 Amendment No. 1 to Revolving Credit Agreement, dated September 13, 2017, between Cesca Therapeutics Inc. and Boyalife Investment Fund II, Inc. (Incorporated by reference to Exhibit 10.1 to Form 8-K/A filed with the SEC on September 22, 2017.)
- 10.25 Amended and Restated Convertible Promissory Note, dated September 13, 2017, issued by Cesca Therapeutics Inc. to Boyalife Investment Fund II, Inc. (Incorporated by reference to Exhibit 10.2 to Form 8-K/A filed with the SEC on September 22, 2017.)
- 10.26 Asset Acquisition Agreement, dated July 7, 2017, between ThermoGenesis Corp. and SynGen Inc. (Incorporated by reference to Exhibit 2.1 to Form 8-K filed with the SEC on July 11, 2017.)
- 10.27 Voting Agreement, dated July 7, 2017, among the Company, ThermoGenesis Corp., Bay City Capital Fund V, L.P. and Bay City Capital Fund Co-Investment Fund, L.P. (Incorporated by reference to Exhibit 10.1 to Form 8-K filed with the SEC on July 11, 2017.)
- 10.28 Right of First Refusal and Co-Sale Agreement, dated July 7, 2017, among the Company, ThermoGenesis Corp., Bay City Capital Fund V, L.P. and Bay City Capital Fund Co-Investment Fund, L.P. (Incorporated by reference to Exhibit 10.3 to Form 8-K filed with the SEC on July 11, 2017.)
- 10.29 Amended and Restated Certificate of Incorporation of ThermoGenesis Corp. (Incorporated by reference to Exhibit 10.4 to Form 8-K filed with the SEC on July 11, 2017.)
- 10.30+ International Distributor Agreement, dated August 21, 2017, between ThermoGenesis Corp. and Boyalife W.S.N. (Incorporated by reference to Exhibit 10.29 to Form 10-K filed with the SEC on September 22, 2017.)
- 10.31 Form of Stock Option Agreement. (Incorporated by reference to Exhibit 10.4 to Form 8-K filed with the SEC on November 15, 2017.)
- 10.32 ThermoGenesis Corp. 2017 Equity Incentive Plan. (Incorporated by reference to Exhibit 10.1 to Form 8-K filed with the SEC on January 5, 2018.)
- 10.33 Form of Stock Option Agreement under ThermoGenesis Corp. 2017 Equity Incentive Plan. (Incorporated by reference to Exhibit 10.2 to Form 8-K filed with the SEC on January 5, 2018.)
- 23.1 Consent of Marcum LLP, independent registered public accounting firm (filed herewith)
- 23.2 Consent of Moss Adams LLP, independent auditor (filed herewith)
- 23.3* Consent of Foley & Lardner LLP (included in Exhibit 5.1)
- 24.1 Power of Attorney (Incorporated by reference to Exhibit 24.1 to Form S-1 filed with the SEC on January 23, 2018)

99.1* Form of Lock-Up Agreement

* To be filed by amendment.

+ The SEC has granted confidential treatment with respect to certain portions of this exhibit. Omitted portions have been filed separately with the SEC.

II-6

Table of Contents**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Rancho Cordova, State of California, on this 5th day of February, 2018.

Cesca Therapeutics Inc.

By: /s/ Xiaochun Xu
Xiaochun “Chris” Xu, Chief Executive Officer

POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Xiaochun Xu Xiaochun “Chris” Xu	Chief Executive Officer and Chairman of the Board (<i>Principal Executive Officer</i>)	February 5, 2018
/s/ Jeff Cauble Jeff Cauble	Principal Financial and Accounting Officer (<i>Principal Financial Officer and Principal Accounting Officer</i>)	February 5, 2018
/s/ Vivian Liu Vivian Liu	Chief Operating Officer and Director	February 5, 2018
* Russell Medford	Director	February 5, 2018
* Joseph Thomis	Director	February 5, 2018
* Mark Westgate	Director	February 5, 2018
* James Xu	Director	February 5, 2018

*By: /s/ Xiaochun Xu
Xiaochun "Chris"
Xu, as
attorney-in-fact

II-7