

CESCA THERAPEUTICS INC.

Form S-3

May 21, 2014

As filed with the Securities and Exchange Commission on May 21, 2014 Registration No. 333-

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

Form S-3

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

Cesca Therapeutics Inc.
(Exact Name of Registrant as Specified in Its Charter)

Delaware 94-3018487
(State or other jurisdiction of Incorporation or organization) (I.R.S. Employer Identification Number)

2711 Citrus Road
Rancho Cordova, CA 95742
(916) 858-5100
(Address, including zip code, and telephone number, including Area Code of
Registrant's principal executive offices)

Matthew T. Plavan
Chief Executive Officer
2711 Citrus Road
Rancho Cordova, CA 95742
Telephone: (916) 858-5100
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Copy to:
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Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

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

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, 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 of 1933, 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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Securities Exchange Act of 1934.

| | | | | | | | |
|-------------------------|--------------------------|-------------------|--------------------------|---|--------------------------|---------------------------|--------------------------|
| Large accelerated filer | <input type="checkbox"/> | Accelerated filer | <input type="checkbox"/> | Non-accelerated filer | <input type="checkbox"/> | Smaller reporting company | <input type="checkbox"/> |
| | | | | (Do not check if a smaller reporting company) | | | |

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Amount to be registered (1)(2)(3) | Proposed maximum offering price per Unit ⁽³⁾ | Aggregate maximum offering price (3)(4)(5) | Amount of registration fee (3) |
|--|--------------------------------------|---|---|-----------------------------------|
| Common Stock, \$0.001 par value per share | | | | |
| Preferred Stock, \$0.001 par value per share | | | | |
| Warrants | | | | |
| Debt Securities ⁽⁶⁾ | | | | |
| Units ⁽⁷⁾ | | | | |
| Total | \$ 50,000,000.00 | | | \$ 6,440.00 |

(1) Also includes an indeterminate aggregate principal amount and number of securities of each identified class of securities (except for debt securities which will not exceed \$10,000,000.00) up to a proposed aggregate offering price of \$50,000,000.00, which may be offered by the registrant from time to time in unspecified numbers and at indeterminate prices, and as may be issued upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including under any applicable anti-dilution provisions. Except as provided in Rule 426(b) under Securities Act of 1933, in no event will the aggregate offering price of all types of securities (except for debt securities which will not exceed \$10,000,000.00) issued by the Registrant pursuant to this registration statement exceed \$50,000,000.00.

(2) Pursuant to Rule 416 under the Securities Act of 1933, this registration statement also covers any additional securities that may be offered or issued in connection with any stock split, stock dividend or similar transaction.

(3) Pursuant to General Instruction II.C. of Form S-3, the table lists each of the classes of securities being registered and the aggregate proceeds to be raised, but does not specify by each class information as to the amount to be registered, proposed maximum offering price per unit, and proposed maximum aggregate offering price.

(4) The proposed maximum aggregate offering price has been estimated solely to calculate the registration fee in accordance with Rule 457(o) under the Securities Act of 1933.

(5) Includes consideration to be received by the Registrant, if applicable, for registered securities that are issuable upon exercise, conversion or exchange of other registered securities.

(6) In no case shall the aggregate amount of debt securities exceed \$10,000,000.00.

(7) Consisting of some or all of the securities listed above, in any combination, including shares of common stock, shares of preferred stock, warrants and debt securities and Units consisting of share of common stock, shares of preferred stock, warrants and debt securities or a combination thereof.

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 Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this 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 prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

Subject To Completion, Dated May 21, 2014

Prospectus

\$50,000,000.00

Common Stock

Preferred Stock

Warrants

Debt Securities

Units

From time to time, we may offer up to \$50,000,000.00 of our common stock, preferred stock, warrants to purchase common stock or preferred stock, debt securities (which will not exceed \$10,000,000) and/or units consisting of common stock, preferred stock, warrants and debt securities or any combination of these securities, in one or more transactions.

We will provide specific terms of these offerings and securities in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement, and any documents incorporated by reference, may also add, update or change information contained in this prospectus. You should read this prospectus, the applicable prospectus supplement, any documents incorporated by reference and any related free writing prospectus carefully before buying any of the securities being offered.

We may offer and sell these securities to or through one or more underwriters, dealers and agents, or directly to purchasers, on a continuous or delayed basis.

Our common stock is listed on the NASDAQ Capital Market under the symbol "KOOL". The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, of the securities covered by the applicable prospectus supplement. The aggregate market value of our outstanding common stock held by non-affiliates was approximately \$47,877,043 based on 32,641,379 shares of outstanding common stock, of which 9,400,096 shares are held by affiliates, and a price of \$2.06 per share, which was the last reported sale price of our common stock as quoted on NASDAQ Capital Market on April 24, 2014. We have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the prior 12 calendar month period that ends on, and includes, the date of this prospectus.

INVESTING IN OUR SECURITIES INVOLVES RISKS. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING "RISK FACTORS" CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND ANY RELATED FREE WRITING PROSPECTUS, AND UNDER SIMILAR HEADINGS IN THE OTHER DOCUMENTS THAT ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____ 2014.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements in this prospectus and in any prospectus supplement we may file constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. 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”, “potential” or “continue”, or the negative of those terms or other comparable terminology.

Any forward looking statements contained in this prospectus or any prospectus supplement 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” and in other sections of our Annual Report on Form 10-K for the year ended June 30, 2013, Form 10-Q for the quarterly periods ended September 30, and December 31, 2013 and Current Report on Form 8-K dated February 18, 2014, all filed with the SEC, as well as in our other reports filed 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.

ABOUT THIS PROSPECTUS

This document is called a prospectus and is part of a registration statement that we have filed with the Securities and Exchange Commission (“SEC”), using a “shelf” registration process. Under this shelf registration process, we may, from time to time, offer shares of our common stock, preferred stock, warrants to purchase common stock or preferred stock, debt securities and/or units consisting of common stock, preferred stock, warrants and debt securities or any combination of these securities, in one or more transactions and in amounts we will determine from time to time, up to a total dollar amount of \$50,000,000.00.

This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities described in this prospectus, we will provide a prospectus supplement or information that is incorporated by reference into this prospectus, containing more specific information about the terms of the securities that we are offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings and securities. This prospectus, together with applicable prospectus supplements, any information incorporated by reference and any related free writing prospectuses, includes all material information relating to these offerings and securities. We may also add, update or change in the prospectus supplement any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus, including without limitation, a discussion of any risk factors or other special considerations that apply to these offerings or securities or the specific plan of distribution. If there is any inconsistency between the information in this prospectus and a prospectus supplement or information incorporated by reference having a later date, you should rely on the information in that prospectus supplement or incorporated information having a later date. We urge you to read carefully this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described

under the heading “Where You Can Find More Information”, before buying any of the securities being offered.

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You should rely only on the information we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus. We have not authorized anyone to provide you with different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus.

Neither the delivery of this prospectus nor any sale made under it implies that there has been no change in our affairs or that the information in this prospectus is correct as of any date after the date of this prospectus. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under “Where You Can Find More Information”. **THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES, UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.**

In this prospectus, unless the context otherwise requires, references to “we”, “us”, “our” or similar terms, as well as references to “Cesca” or the “Company”, refer to Cesca Therapeutics Inc., its subsidiaries and predecessors.

ABOUT CESCA THERAPEUTICS INC.

On February 18, 2014, TotipotentRX Corporation merged with and into ThermoGenesis Corp. (“Thermo”). In connection with the merger, Thermo changed its name from ThermoGenesis Corp. to Cesca Therapeutics Inc. As a result of the merger, Cesca is a fully integrated regenerative medicine company with the ability and expertise to research, design, and develop devices and disposables necessary to facilitate, or integrate into the design of clinical protocols and applications directed at cell therapies at the point of care, managing both risk of regulatory approval, and channel distribution. Cesca has the ability to develop new products, devices and disposables, and support existing products, while directing new development of products and services to clinical trials.

Our business strategy includes:

Practical, Commercializable Cell Therapies. To deliver a proprietary, commercially viable, highly effective autologous (patient’s own cells) cell therapies to treat major diseases within the existing healthcare delivery system.

Ability to Rapidly and Cost-Effectively Implement New Clinical Trials. To have the ability to rapidly initiate early clinical development of new cell therapies at its U.S. FDA-registered clinical research organization in India and generate high quality data at a fraction of the cost of clinical trials undertaken in the U.S. or Europe.

Positioned to Commercialize in Both Developed and Emerging Markets. To utilize our existing U.S. and Asian footprints to uniquely position it to meet the needs of patients, hospitals and physicians across the globe. This footprint allows flexibility to meet the variable market demands in service and price.

Proprietary and Protected – To possess an unmatched suite of proprietary technological and clinical assets to be deployed in the regenerative medicine markets. Our cell-therapy-related devices and platform technologies, unique cell formulations and treatment protocols are protected via a broad portfolio of patents and intellectual property

filings.

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Cesca was founded in 1986, and our principal executive offices are located at 2711 Citrus Road, Rancho Cordova, California 95742. Our telephone number is (916) 858-5100. Our website is located at www.cescatherapeutics.com. Information contained on, or that can be accessed through, our website is not part of this prospectus.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act of 1933, as amended (“Securities Act”), with respect to the securities covered by this prospectus. This prospectus, which is a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to us and the securities covered by this prospectus, please see the registration statement and the exhibits filed with the registration statement. A copy of the registration statement and the exhibits filed with the registration statement may be inspected without charge at the Public Reference Room maintained by the SEC, located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. The SEC also maintains an Internet website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the website is <http://www.sec.gov>.

We are subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934, as amended (“Exchange Act”) and, in accordance therewith, we file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information are available for inspection and copying at the Public Reference Room and website of the SEC referred to above. We maintain a website at <http://www.cescatherapeutics.com>. You may access our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed pursuant to Sections 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Our website and the information contained on that site, or connected to that site, are not incorporated into and are not a part of this prospectus.

INCORPORATION OF 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 we incorporate by reference is an important part of this prospectus, and certain information that we will later file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below, as well as any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act from the date of the initial registration statement and prior to the effectiveness of this registration statement, and any filings made after the date of this prospectus until we sell all of the securities under this prospectus, except that we do not incorporate any document or portion of a document that was furnished and deemed by the rules of the SEC not to have been filed:

Our Annual Report on Form 10-K for the fiscal year ended June 30, 2013, filed with the SEC on September 4, 2013 and as amended on October 28, 2013;

Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2013, filed with the SEC on November 14, 2013; Quarterly Report on Form 10-Q for the quarter ended December 31, 2013, filed with the SEC on February 14, 2014; and Quarterly Report on Form 10-Q for the quarter ended March 31, 2014, filed with the SEC on May 15, 2014;

Our Current Reports on Form 8-K filed with the SEC on October 30, 2013, October 31, 2013, November 27, 2013, December 13, 2013, January 7, 2014, January 30, 2014, February 21, 2014, as amended on Form 8-K/A filed on April 23, 2014, February 25, 2014, March 5, 2014, April 16, 2014, and May 1, 2014; and

Our definitive proxy statement on Schedule 14A filed on April 4, 2014 for our annual meeting of shareholders held on April 25, 2014.

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Additionally, all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after (i) the date of the initial registration statement and prior to effectiveness of the registration statement; and (ii) the date of this prospectus and prior to the termination or completion of this offering, shall be deemed to be incorporated by reference in this prospectus and to be part hereof from the date of filing of such reports and other documents. Any information that we subsequently file with the SEC that is incorporated by reference as described above will automatically update and supersede any previous information that is part of this prospectus.

We hereby undertake to provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request of any such person, a copy of any and all of the information that has been or may be incorporated by reference in this prospectus, other than exhibits to such documents. Requests for such copies should be directed to our Assistant Corporate Secretary at 2711 Citrus Road, Rancho Cordova, California 95742, Telephone (916) 858-5100.

RISK FACTORS

Investing in our securities involves significant risks. You should review carefully the risks and uncertainties described under the heading “Risk Factors” contained in, or incorporated into, the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference herein or therein. Each of the referenced risks and uncertainties could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities. Additional risks not known to us or that we believe are immaterial may also adversely affect our business, operating results and financial condition and the value of an investment in our securities.

DESCRIPTION OF SECURITIES WE MAY OFFER

We may offer, from time to time, shares of our common stock, shares of our preferred stock, warrants to purchase common stock or preferred stock, debt securities or units to purchase shares of common stock, preferred stock, warrants, debt securities or a combination of these securities, under this prospectus at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. See “Description of Capital Stock”, “Description of Warrants”, “Description of Debt Securities” and “Description of Units” below. Each time we offer a type or series of securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- rates and times of payment of interest or dividends, if any;
 - redemption, conversion or sinking fund terms, if any;
- voting or other rights, if any;
- conversion prices, if any; and
- important federal income tax considerations.

The prospectus supplement and any related free writing prospectus also may supplement, or, as applicable, add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

The terms of any particular offering, the initial offering price and the net proceeds to us will be contained in the prospectus supplement, information incorporated by reference or free writing prospectus relating to such offering.

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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 the amended and restated certificate of incorporation and the bylaws. These documents are filed as exhibits to the registration statement of which this prospectus is a part.

Our amended and restated certificate of incorporation authorizes the issuance of up to 80,000,000 shares of common stock, par value \$0.001 per share, and 2,000,000 shares of preferred stock, par value \$0.001 per share. The rights and preferences of the preferred stock may be established from time to time by our board of directors.

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. Accordingly, the holders of a majority of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they so choose.

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. All outstanding shares of common stock are, and the shares of common stock offered by us in this offering, when issued and paid for, will be fully paid and nonassessable. 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

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

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

Effect of Certain Provisions of our Amended and Restated Certificate of Incorporation and Bylaws and the Delaware Anti-Takeover Statute

Amended and Restated Certificate of Incorporation and Bylaws

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

- acquisition of us by means of a tender offer;
- acquisition of us by means of a proxy contest or otherwise; or
- removal of our 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 us 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 us. 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 Chief Executive Officer or by the board of directors or the Chairman of the Board or by one or more shareholders holding shares in the aggregate entitled to cast not less than 10% of the votes at that meeting.

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 Vacancies. Under our bylaws, any vacancy on the board of directors, including a vacancy resulting from an enlargement of the board of directors, may only be filled by vote of a majority of the remaining directors. The classification of the board of directors and the limitations on the removal of directors and filling of vacancies would have the effect of making it more difficult for a third party to acquire control of us, or of discouraging a third party from acquiring control of us.

Board of Directors Size. Under our bylaws, the board of directors has the power to set the size of the board. The ability to increase or decrease the size of the board in conjunction with the other provisions above could make it more difficult for a third party to acquire control of the Company.

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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.

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 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.

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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.

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.

Listing

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

Transfer Agent and Registrar

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

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DESCRIPTION OF WARRANTS

General

We may issue warrants to purchase common stock or preferred stock. We may issue the warrants independently or together with any underlying securities, and the warrants may be attached or separate from the underlying securities. We may also issue a series of warrants under a separate warrant agreement to be entered into between us and a warrant agent. The warrant agent will act solely as our agent in connection with the warrants of such series and will not assume any obligation or relationship of agency for or with holders or beneficial owners of warrants.

The following description is a summary of selected provisions relating to the warrants that we may issue. The summary is not complete. When warrants are offered in the future, a prospectus supplement, information incorporated by reference or a free writing prospectus, as applicable, will explain the particular terms of those securities and the extent to which these general provisions may apply. The specific terms of the warrants as described in a prospectus supplement, information incorporated by reference, or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

This summary and any description of warrants in the applicable prospectus supplement, information incorporated by reference or free writing prospectus is subject to and is qualified in its entirety by reference to all the provisions of any specific warrant document or agreement. We will file each of these documents, as applicable, with the SEC and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of warrants. See “Where You Can Find Additional Information” and “Incorporation of Information by Reference” above for information on how to obtain a copy of a warrant document when it is filed.

When we refer to a series of warrants, we mean all warrants issued as part of the same series under the applicable warrant agreement.

Terms

The applicable prospectus supplement, information incorporated by reference or free writing prospectus, may describe the terms of any warrants that we may offer, including, but not limited to, the following:

- the title of the warrants;
- the total number of warrants;
- the price or prices at which the warrants will be issued;
- the price or prices at which the warrants may be exercised;
- the currency or currencies that investors may use to pay for the warrants;
- the date on which the right to exercise the warrants will commence and the date on which the right will expire;
- whether the warrants will be issued in registered form or bearer form;
- information with respect to book-entry procedures, if any;
- if applicable, the minimum or maximum amount of warrants that may be exercised at any one time;

if applicable, the designation and terms of the underlying securities with which the warrants are issued and the number of warrants issued with each underlying security;

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- if applicable, the date on and after which the warrants and the related underlying securities will be separately transferable;
- if applicable, a discussion of material United States federal income tax considerations;
 - if applicable, the terms of redemption of the warrants;
- the identity of the warrant agent, if any;
- the procedures and conditions relating to the exercise of the warrants; and
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Warrant Agreement

We may issue the warrants in one or more series under one or more warrant agreements, each to be entered into between us and a bank, trust company or other financial institution as warrant agent. We may add, replace or terminate warrant agents from time to time. We may also choose to act as our own warrant agent or may choose one of our subsidiaries to do so.

The warrant agent under a warrant agreement will act solely as our agent in connection with the warrants issued under that agreement. Any holder of warrants may, without the consent of any other person, enforce by appropriate legal action, on its own behalf, its right to exercise those warrants in accordance with their terms.

Form, Exchange and Transfer

We may issue the warrants in registered form or bearer form. Warrants issued in registered form, i.e., book-entry form, will be represented by a global security registered in the name of a depository, which will be the holder of all the warrants represented by the global security. Those investors who own beneficial interests in a global warrant will do so through participants in the depository's system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depository and its participants. In addition, we may issue warrants in non-global form, i.e., bearer form. If any warrants are issued in non-global form, warrant certificates may be exchanged for new warrant certificates of different denominations, and holders may exchange, transfer or exercise their warrants at the warrant agent's office or any other office indicated in the applicable prospectus supplement, information incorporated by reference or free writing prospectus.

Prior to the exercise of their warrants, holders of warrants exercisable for shares of common stock or preferred stock will not have any rights of holders of common stock or preferred stock purchasable upon such exercise and will not be entitled to dividend payments, if any, or voting rights of the common stock or preferred stock purchasable upon such exercise.

Exercise of Warrants

A warrant will entitle the holder to purchase for cash an amount of securities at an exercise price that will be stated in, or that will be determinable as described in, the applicable prospectus supplement, information incorporated by reference or free writing prospectus. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the applicable offering material. After the close of business on the expiration date, unexercised warrants will become void. Warrants may be redeemed as set forth in the applicable offering material.

Warrants may be exercised as set forth in the applicable offering material. Upon receipt of payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable offering material, we will forward, as soon as practicable, the securities purchasable upon such exercise. If less than all of the warrants represented by such warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

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DESCRIPTION OF DEBT SECURITIES

General

We may issue debt securities which may or may not be converted into shares of common stock. In connection with the issuance of any debt securities which will not exceed \$10,000,000, we do not intend to issue them pursuant to a trust indenture. However, if a trust indenture is requested by a placement agent, underwriter or broker-dealer as a condition of the financing, we will provide and enter into a trust indenture. If a trust indenture is entered into, we do not intend to register the trust indenture under the Trust Indenture Act of 1939 (“Trust Indenture Act”) pursuant to an exemption. Under Section 304(a)(9) of the Trust Indenture Act, the Trust Indenture Act does not apply to any security which is to be issued under an indenture which limits the aggregate principal amount of securities at any time outstanding thereunder to \$10,000,000.00. We do not intend to issue debt securities, if any, pursuant to a trust indenture that will exceed \$10,000,000.00. If a trust indenture is entered into, we will file the trust indenture as an exhibit on Form 8-K before making any offer of debt securities.

The following description is a summary of selected provisions relating to the debt securities that we may issue. The summary is not complete. When debt securities are offered in the future, a prospectus supplement, information incorporated by reference or a free writing prospectus, as applicable, will explain the particular terms of those securities and the extent to which these general provisions may apply. The specific terms of the debt securities as described in a prospectus supplement, information incorporated by reference, or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

This summary and any description of debt securities in the applicable prospectus supplement, information incorporated by reference or free writing prospectus is subject to and is qualified in its entirety by reference to all the provisions of any specific debt securities document or agreement. We will file each of these documents, as applicable, with the SEC and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of warrants. See “Where You Can Find Additional Information” and “Incorporation of Information by Reference” above for information on how to obtain a copy of a warrant document when it is filed.

The indenture agent under an indenture agreement, if any, will act solely as our agent in connection with the debt securities issued under that agreement. Any holder of debt securities may, without the consent of any other person, enforce by appropriate legal action, on its own behalf, its right to exercise those debt securities in accordance with their terms. When we refer to a series of debt securities, we mean all debt securities issued as part of the same series under the applicable indenture.

Terms

The applicable prospectus supplement, information incorporated by reference or free writing prospectus, may describe the terms of any debt securities that we may offer, including, but not limited to, the following:

- the title of the debt securities;
- the total amount of the debt securities;
- the amount or amounts of the debt securities will be issued and interest rate;
- the conversion price at which the debt securities may be converted;
- the date on which the right to exercise the debt securities will commence and the date on which the right will expire;

·if applicable, the minimum or maximum amount of debt securities that may be exercise at any one time;

·if applicable, the designation and terms of the underlying securities with which the debt securities are issued and the amount of debt securities issued with each underlying security;

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- if applicable, a discussion of material United States federal income tax consideration;
- if applicable, the terms of the payoff of the debt securities;
- the identity of the indenture agent, if any;
- the procedures and conditions relating to the exercise of the debt securities; and
- any other terms of the debt securities, including terms, procedure and limitation relating to the exchange or exercise of the debt securities.

Form, Exchange and Transfer

We may issue the debt securities in registered form or bearer form. Debt securities issued in registered form, i.e., book-entry form, will be represented by a global security registered in the name of a depository, which will be the holder of all the debt securities represented by the global security. Those investors who own beneficial interests in a global debt securities will do so through participants in the depository's system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depository and its participants. In addition, we may issue debt securities in non-global form, i.e., bearer form. If any debt securities are issued in non-global form, debt securities certificates may be exchanged for new debt securities certificates of different denominations, and holders may exchange, transfer or exercise their debt securities at the indenture agent's office, if any, or any other office indicated in the applicable prospectus supplement, information incorporated by reference or free writing prospectus.

Prior to the exercise of their debt securities, holders of debt securities exercisable for shares of common stock or preferred will not have any rights of holders of common stock or preferred stock and will not be entitled to dividend payments, if any, or voting rights of the shares of common stock or preferred stock.

Conversion of Debt Securities

A debt security may entitle the holder to purchase for in exchange for the extinguishment of debt an amount of securities at an exercise price that will be stated in the debt security. Debt securities may be converted at any time up to the close of business on the expiration date set forth in the terms of such debt security. After the close of business on the expiration date, debt securities not exercised will be paid in accordance with their terms.

Debt securities may be converted as set forth in the applicable offering material. Upon receipt of a notice of conversion properly completed and duly executed at the corporate trust office of the indenture agent, if any, or to us, we will forward, as soon as practicable, the securities purchasable upon such exercise. If less than all of the debt security represented by such security is converted, a new debt security will be issued for the remaining debt security.

DESCRIPTION OF UNITS

We may issue units composed of any combination of our common stock, preferred stock, warrants and debt securities. We will issue each unit so that the holder of the unit is also the holder of each security included in the unit. As a result, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

The following description is a summary of selected provisions relating to units that we may offer. The summary is not complete. When units are offered in the future, a prospectus supplement, information incorporated by reference or a free writing prospectus, as applicable, will explain the particular terms of those securities and the extent to which

these general provisions may apply. The specific terms of the units as described in a prospectus supplement, information incorporated by reference, or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

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This summary and any description of units in the applicable prospectus supplement, information incorporated by reference or free writing prospectus is subject to and is qualified in its entirety by reference to the unit agreement, collateral arrangements and depositary arrangements, if applicable. We will file each of these documents, as applicable, with the SEC and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of units. See “Where You Can Find Additional Information” and “Incorporation of Information by Reference” above for information on how to obtain a copy of a document when it is filed.

The applicable prospectus supplement, information incorporated by reference or free writing prospectus may describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities composing the units;
- whether the units will be issued in fully registered or global form; and
- any other terms of the units.

The applicable provisions described in this section, as well as those described under “Description of Capital Stock” and “Description of Warrants” above, will apply to each unit and to each security included in each unit, respectively.

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, information incorporated by reference or free writing prospectus, we intend to use the net proceeds from the sale of securities to fund our growth plans, for working capital, and for other general corporate purposes, including capital expenditures related to our growth. We may also use a portion of the net proceeds to acquire or invest in businesses whom, from time to time, we engage and explore the possibility of strategic partnering or investment.

PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus from time to time in one or more transactions, including, without limitation:

- through agents;
- to or through underwriters;
- through broker-dealers (acting as agent or principal);
- directly by us to purchasers (including our affiliates and stockholders), through a specific bidding or auction process, a rights offering or otherwise;
- through a combination of any such methods of sale; or
- through any other methods described in a prospectus supplement.

The distribution of securities may be effected, from time to time, in one or more transactions, including:

block transactions (which may involve crosses) and transactions on the Nasdaq Capital Market or any other organized market where the securities may be traded;

purchases by a broker-dealer as principal and resale by the broker-dealer for its own account pursuant to a prospectus supplement;

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- ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers;
- sales “at the market” to or through a market maker or into an existing trading market, on an exchange or otherwise; and
- sales in other ways not involving market makers or established trading markets, including direct sales to purchasers.

The securities may be sold at a fixed price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices relating to the prevailing market prices or at negotiated prices. The consideration may be cash or another form negotiated by the parties. Agents, underwriters or broker-dealers may be paid compensation for offering and selling the securities. That compensation may be in the form of discounts, concessions or commissions to be received from us or from the purchasers of the securities. Dealers and agents participating in the distribution of the securities may be deemed to be underwriters, and compensation received by them on resale of the securities may be deemed to be underwriting discounts and commissions under the Securities Act. If such dealers or agents were deemed to be underwriters, they may be subject to statutory liabilities under the Securities Act.

We may also make direct sales through subscription rights distributed to our existing stockholders on a pro rata basis, which may or may not be transferable. In any distribution of subscription rights to our stockholders, if all of the underlying securities are not subscribed for, we may then sell the unsubscribed securities directly to third parties or may engage the services of one or more underwriters, dealers or agents, including standby underwriters, to sell the unsubscribed securities to third parties.

Some or all of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell our securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we offer.

Agents may, from time to time, solicit offers to purchase the securities. If required, we will name in the applicable prospectus supplement, document incorporated by reference or free writing prospectus, as applicable, any agent involved in the offer or sale of the securities and set forth any compensation payable to the agent. Unless otherwise indicated, any agent will be acting on a best efforts basis for the period of its appointment. Any agent selling the securities covered by this prospectus may be deemed to be an underwriter of the securities.

If underwriters are used in an offering, securities will be acquired by the underwriters for their own account and may be resold, from time to time, in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale, or under delayed delivery contracts or other contractual commitments. Securities may be offered to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. If an underwriter or underwriters are used in the sale of securities, an underwriting agreement will be executed with the underwriter or underwriters at the time an agreement for the sale is reached. The applicable prospectus supplement will set forth the managing underwriter or underwriters, as well as any other underwriter or underwriters, with respect to a particular underwritten offering of securities, and will set forth the terms of the transactions, including compensation of the underwriters and dealers and the public offering price, if applicable. This prospectus, the applicable prospectus supplement and any applicable free writing prospectus will be used by the underwriters to resell the securities.

If a dealer is used in the sale of the securities, we, or an underwriter, will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. To the extent required, we will set forth in the prospectus supplement, document incorporated by reference or free writing prospectus, as applicable, the name of the dealer and the terms of the transactions.

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We may directly solicit offers to purchase the securities and may make sales of securities directly to institutional investors or others. These persons may be deemed to be underwriters with respect to any resale of the securities. To the extent required, the prospectus supplement, document incorporated by reference or free writing prospectus, as applicable, will describe the terms of any such sales, including the terms of any bidding or auction process, if used.

Agents, underwriters and dealers may be entitled under agreements which may be entered into with us to indemnification by us against specified liabilities, including liabilities incurred under the Securities Act, or to contribution by us to payments they may be required to make in respect of such liabilities. If required, the prospectus supplement, document incorporated by reference or free writing prospectus, as applicable, will describe the terms and conditions of such indemnification or contribution. Some of the agents, underwriters or dealers, or their affiliates may be customers of, engage in transactions with or perform services for us or our subsidiaries or affiliates in the ordinary course of business.

Under the securities laws of some states, the securities offered by this prospectus may be sold in those states only through registered or licensed brokers or dealers.

Any person participating in the distribution of common stock registered under the registration statement that includes this prospectus will be subject to applicable provisions of the Exchange Act, and the applicable SEC rules and regulations, including, among others, Regulation M, which may limit the timing of purchases and sales of any of our common stock by any such person. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of our common stock to engage in market-making activities with respect to our common stock. These restrictions may affect the marketability of our common stock and the ability of any person or entity to engage in market-making activities with respect to our common stock.

Certain persons participating in an offering may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act that stabilize, maintain or otherwise affect the price of the offered securities. If any such activities will occur, they will be described in the applicable prospectus supplement.

In compliance with the guidelines of the Financial Industry Regulatory Authority ("FINRA"), the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of any offering pursuant to this prospectus and any applicable prospectus supplement, as the case may be.

If more than 10% of the net proceeds of any offering of securities made under this prospectus will be received by FINRA members participating in the offering or affiliates or associated persons of such FINRA members, the offering will be conducted in accordance with FINRA Conduct Rule 5110(h).

So long as the aggregate market value of our voting and non-voting common equity held by non-affiliates is less than \$75,000,000.00 and so long as required by the rules of the SEC, the amount of securities we may offer hereunder will be limited such that the aggregate market value of securities sold by us during a period of 12 calendar months cannot exceed one-third of the aggregate market value of the voting and non-voting common equity held by non-affiliates.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution.

LEGAL MATTERS

Weintraub Tobin Chediak Coleman Grodin Law Corporation will pass upon legal matters in connection with the validity of the securities offered hereby for us.

EXPERTS

The consolidated financial statements of Cesca Therapeutics Inc. (formerly ThermoGenesis Corp.) appearing in Cesca Therapeutics Inc.'s (formerly ThermoGenesis Corp.'s) Annual Report (Form 10-K) for the year ended June 30, 2013 have been audited by Ernst & Young 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 MK Alliance, Inc. as of and for the years ended December 31, 2012 and 2011, appearing in Cesca Therapeutics' Form 8-K filed with the SEC on February 25, 2014, have been audited by Ernst & Young 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.

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The estimated expenses payable by the Registrant in connection with the issuance and distribution of the securities being registered are as follows:

| | |
|---|-------------|
| SEC Registration Fee | \$6,440.00 |
| Legal Fees and Expenses* | 10,000.00 |
| Accounting Fees and Expenses* | 10,000.00 |
| <u>Miscellaneous Fees and Expenses*</u> | 5,000.00 |
| TOTAL: | \$31,440.00 |

*Estimated solely for the purposes of this Item. Actual expenses may vary.

Item 15. Indemnification of Directors and Officers

We are incorporated under the laws of the State of Delaware. Section 145 (“Section 145”) of the General Corporation Law of the State of Delaware, as the same exists or may hereafter be amended (the “DGCL”), inter alia, provides that a Delaware corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent to the Company. The DGCL provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise. Article VI of our Bylaws provides for indemnification by us of our directors and officers, as well as persons serving at our request as a director, officer, employee or other agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan, to the fullest extent permitted by the DGCL.

Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (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 DGCL (providing for liability of directors for unlawful payments of dividends or unlawful stock repurchases or redemptions); or (iv) for any transaction from which the director derived an improper personal benefit. Our Amended and Restated Certificate of Incorporation provides for such limitation of liability to the fullest extent permitted by DGCL.

As permitted by Delaware law, we have entered into indemnification agreements with each of our directors and officers. These indemnification agreements require us, among other things, to indemnify our directors and officers for certain expenses related to their service to us, including attorneys’ fees and other costs and expenses, judgments, fines, penalties and settlement amounts reasonably incurred by or on behalf of such persons, subject to certain limitations.

In addition, our directors and officers are covered under directors’ and officers’ liability insurance policies maintained by us, subject to the limits of the policies, insuring such persons against various liabilities.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits. The following exhibits are included herein or incorporated herein by reference:
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| Exhibit No. | Document Description | Reference |
|----------------|---|--|
| 1.1 | Form of Underwriting Agreement with respect to Common Stock | * |
| 1.2 | Form of Underwriting Agreement with respect to Warrants | * |
| 1.3 | Form of Underwriting Agreement with respect to Units | * |
| 2.1 | Plan of Merger Agreement and Reorganization Agreement between ThermoGenesis Corp. and TotipotentRX, dated July 15, 2013. | Incorporated by reference to Form 8-K dated July 16, 2013. |
| 3.2.1 | Bylaws of Cesca Therapeutics Inc. | Incorporated by reference to Cesca Therapeutics' Report on Form 8-K filed with the SEC on May 1, 2014. |
| 3.3 | Certificate of Amendment to the Amended and Restated Certificate of Incorporation of ThermoGenesis Corp. | Incorporated by reference to ThermoGenesis' Current Report on Form 8-K filed with the SEC on August 26, 2010. |
| 3.4 | Certificate of Merger | Incorporated by reference to Form 8-K dated February 18, 2014. |
| 4.1 | Form of Stock Grant Agreement; Common Stock Agreement. | Incorporated by reference to ThermoGenesis' Current Report on Form 8-K filed with the SEC on November 5, 2010. |
| 4.2 | Form of Specimen Common Stock Certificate | * |
| 4.3 | Form of Warrant Agreement (including Form of Warrant Certificate) with respect to Warrants to purchase Common Stock | * |
| 4.4 | Form of Warrant Agreement (including Form of Warrant Certificate) with respect to Warrants to purchase Units | * |
| <u>5.1</u> | Opinion re legality | Filed herewith |
| 10.1 | License Agreement with Pall/Medsep Corporation. | Incorporated by reference to Form 8-K dated April 14, 1997. |
| 10.2.1 | License and Escrow Agreement between ThermoGenesis Corp. and CBR Systems, Inc., effective June 15, 2010. | Incorporated by reference to ThermoGenesis' Quarterly Report on Form 10-Q for the quarter ended December 31, 2010. |
| 10.2.2 | First Amendment to Technology License and Escrow Agreement between ThermoGenesis Corp. and CBR Systems, Inc., effective February 6, 2013. | Incorporate by reference to Form 8-K dated February 12, 2013. |

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|--------|---|--|
| 10.2.3 | Extension Addendum to Escrow Agreement, effective July 26, 2013. | Incorporated by reference to Form 8-K dated August 1, 2013. |
| 10.2.4 | Forbearance Agreement to Technology License and Escrow Agreement dated November 26, 2013. | Incorporated by reference to Form 8-K dated November 26, 2013. |
| 10.3 | Amended 2002 Independent Directors Equity Incentive Plan. | Incorporated by reference to Form 8-K dated December 15, 2004. |

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| Exhibit No. | Document Description | Reference |
|-------------|--|---|
| 10.5+ | License and Distribution Agreement between ThermoGenesis Corp. and BioParadox effective October 13, 2010. | Incorporated by reference to ThermoGenesis' Current Report on Form 8-K filed with the SEC on October 19, 2010. |
| 10.6.1 | Amended and Restated 2006 Equity Incentive Plan. | Incorporated by reference to Cesca Therapeutics' Report on Form 8-K filed with the SEC on May 1, 2014. |
| 10.7 | Distribution and License Agreement between ThermoGenesis Corp. and Asahi Kasei Medical Co. Ltd., dated March 28, 2005. | Incorporated by reference to ThermoGenesis' Current Report on Form 8-K filed with the SEC on March 31, 2005. |
| 10.7.1+ | Option Agreement between ThermoGenesis Corp and Asahi Kasei Kuraray Medical Co., Ltd. | Incorporated by reference to Form 8-K dated June 16, 2010. |
| 10.8 | Amended 1998 Employee Equity Incentive Plan. | Incorporated by reference to Exhibit A to ThermoGenesis' definitive proxy statement for the Special Meeting of Stockholders held on February 2, 1998, filed with the SEC on December 8, 1997. |
| 10.9 | Exclusive Distributor Agreement and License with Arthrex, Inc. | Incorporated by reference to Form 8-K dated January 13, 2012 and amended March 28, 2012. |
| 10.10+ | Product Purchase and International Distribution Agreement between ThermoGenesis Corp. and Golden Meditech Holdings, Limited. | Incorporated by reference to Form 8-K dated August 24, 2012 and amended October 24, 2012. |
| 10.11 | 2012 Independent Director Plan. | Incorporated by reference to Exhibit A of the Company's Definitive Proxy Statement filed October 23, 2012. |
| 10.12 | Form of Lock-up Agreement between ThermoGenesis Corp. and TotipotentRX, dated July 15, 2013. | Incorporated by reference to Form 8-K dated July 16, 2013. |
| 10.13 | Employment Agreement between ThermoGenesis Corp. and Mitchel Sivilotti dated July 15, 2013. | Incorporated by reference to Form 8-K dated July 16, 2013. |
| 10.14 | Employment Agreement between ThermoGenesis Corp. and Kenneth Harris dated July 15, 2013. | Incorporated by reference to Form 8-K dated July 16, 2013. |
| 10.15 | Form of Non-Competition Agreement between ThermoGenesis Corp. and TotipotentRX, dated July 15, 2013. | Incorporated by reference to Form 8-K dated July 16, 2013. |

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|--------|---|---|
| 10.16 | Employment Agreement for Matthew T. Plavan | Incorporated by reference to Form 8-K dated October 30, 2013. |
| 10.17 | Employment Agreement for Dan T. Bessey | Incorporated by reference to Form 8-K dated October 30, 2013. |
| 10.18+ | Sales and Purchase Agreement between ThermoGenesis Corp. and CBR Systems, Inc. dated December 31, 2013. | Incorporated by reference to Form 8-K dated January 7, 2014. |

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| Exhibit No. | Document Description | Reference |
|-------------|--|--------------------------|
| 21.1 | Subsidiaries of Registrant – Argorx Corp.; TotipotentRX Cell Therapy, Pvt. Ltd.; and TotipotentSC Scientific Product Pvt. Ltd. | |
| <u>23.1</u> | Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm for ThermoGenesis Corp. | Filed herewith. |
| <u>23.2</u> | Consent of Ernst & Young LLP, Independent Auditors for MK Alliance, Inc. | Filed herewith. |
| 23.3 | Consent of Weintraub Tobin Chediak Coleman Grodin | Contained in Exhibit 5.1 |
| 24.1 | Power of Attorney | Part of Signature Page |

* To be filed as an amendment or as an exhibit to a document filed under the Exchange Act and incorporated by reference into this registration statement.

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

Item 17. Undertakings

(a) 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.

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth 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.

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

Provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above do not apply if the registration statement is on Form S-3 or Form F-3 and 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 15(d) of the Securities Exchange Act of 1934 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.

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

(i) If the registrant is relying on Rule 430B:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. 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 effective date, 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 effective date; or

(ii) If the registrant is subject to Rule 430C, 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, 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;

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- (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;
- (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.
- (b) 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.
- (c) The undersigned Registrant hereby undertakes that, 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 of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.
- (d) The undersigned Registrant hereby undertakes that, 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.

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 provisions described in Item 15 above, 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.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Rancho Cordova, State of California, on May 19, 2014.

CESCA THERAPEUTICS
INC.

By: /s/ Matthew T. Plavan
Matthew T. Plavan
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints, jointly and severally, Matthew T. Plavan and Dan Bessey, and each of them severally, his true and lawful attorneys-in-fact and agents, each with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act of 1933, as amended, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming that each of said attorneys-in-fact and agents or any of them, or his or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

Dated: May 19, 2014 By: /s/ Matthew T. Plavan
Matthew T. Plavan, Chief Executive Officer
(Principal Executive Officer)

Dated: May 19, 2014 By: /s/ Dan T. Bessey
Dan T. Bessey, Chief Financial Officer
(Principal Financial and Accounting Officer)

Dated: May 19, 2014 By: /s/ Craig W. Moore
Craig W. Moore, Director

Dated: May 19, 2014 By: /s/ Patrick J. McEnany
Patrick J. McEnany, Director

Dated: May 19, 2014 By: /s/ Robin C. Stracey
Robin C. Stracey, Director

Dated: May 19, 2014 By: /s/ Kenneth L. Harris

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Kenneth L. Harris, President and Director

Dated: May 19, 2014 By: /s/ Mahendra Rao
Mahendra Rao, Director
