

THERMOGENESIS CORP
Form 424B5
March 07, 2011

**Prospectus Supplement
(To Prospectus Dated January 6, 2011)**

**Filed pursuant to Rule 424(b)(5)
File No. 333-171563**

**2,250,000 Shares of Common Stock
Warrants to purchase up to 1,125,000 Shares of Common Stock**

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering to investors 2,250,000 shares of our common stock (the "Shares") together with warrants to purchase up to 1,125,000 additional shares of common stock (the "Warrants"). The Shares and Warrants will be sold together as a unit with a per unit purchase price of \$2.00 consisting of one share of common stock and the equivalent of a warrant to purchase one-half share of common stock. The initial exercise price of the Warrants issued in the offering as part of such unit will be \$2.64 per share. The Warrants will be exercisable by the holders at any time on or after the date that is six months following the date of the closing of the offering and will expire on the fifth anniversary of the closing of the offering. The Shares and Warrants will be issued separately but can only be purchased together in this offering. The shares of common stock issuable from time to time pursuant to the exercise of the Warrants are also being offered pursuant to this prospectus supplement and the accompanying prospectus.

Our common stock trades on the NASDAQ Capital Market under the symbol "KOOL". The last reported sale price of our common stock on the NASDAQ Capital Market on March 3, 2011 was \$2.62 per share. There is no established public trading market for the Warrants and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Warrants on any national securities exchange. As of January 3, 2011, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$53,276,493 based on 14,096,366 shares of outstanding common stock, of which 149,640 shares were held by affiliates as of such date, and a price of \$3.82 per share, which was the last reported sale price of our common stock as quoted on the NASDAQ Capital Market on January 3, 2011. 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 a high degree of risk. See the section entitled "Risk Factors" beginning on page S-3 of this prospectus supplement and in the documents we incorporate by reference in this prospectus supplement and the accompanying prospectus. You should carefully consider these risk factors, as well as the information contained in this prospectus supplement and the accompanying prospectus, before you invest.

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

	Per unit	Per share underlying warrants	Total⁽¹⁾
Public offering price	\$2.00		\$4,500,000
Placement agent's fees	\$0.16		\$ 360,000
Proceeds, before expenses, to us	\$1.84		\$4,140,000
Public offering price for shares of common stock underlying Warrants		\$2.64 ⁽²⁾	\$2,970,000 ⁽²⁾
Total proceeds, before expenses, to us from units and shares underlying Warrants			\$7,110,000 ⁽²⁾

(1) Assumes all units offered pursuant to this prospectus supplement are sold.

(2) The exercise price of the Warrants is subject to potential adjustments. See "Description of Securities" on page S-17 of this prospectus supplement.

We have retained Houlihan Lokey Capital, Inc. to act as our exclusive placement agent in connection with this offering. The placement agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of securities but have agreed to use their commercially reasonable efforts to arrange for the sale of all of the units. We have agreed to pay the placement agent a cash fee of 8% of gross offering proceeds. See Plan of Distribution for more information regarding these arrangements. We expect that delivery of the units being offered pursuant to this prospectus supplement will be made to investors on or about March 9, 2011.

Houlihan Lokey

The date of the prospectus supplement is March 7, 2011

TABLE OF CONTENTS

Prospectus Supplement

About This Prospectus Supplement	S-1
Prospectus Supplement Summary	S-2
Risk Factors	S-4
Forward-Looking Statements	S-12
Use of Proceeds	S-13
Capitalization	S-14
Determination of Offering Price	S-15
Dividend Policy	S-15
Dilution	S-16
Description of Securities	S-17
Plan of Distribution	S-19
Legal Matters	S-21
Experts	S-21
Incorporation of Certain Information By Reference	S-22
Where You Can Find More Information	S-23

Prospectus

Cautionary Note Regarding Forward-Looking Statements	1
About this Prospectus	1
About ThermoGenesis Corp	3
Where You Can Find Additional Information	3
Incorporation of Information by Reference	4
Risk Factors	4
Description of Securities We May Offer	4
Use of Proceeds	12
Plan of Distribution	13
Legal Matters	15
Experts	15

ABOUT THIS PROSPECTUS SUPPLEMENT

We are providing this information to you about this offering of securities in two parts. The first part is this prospectus supplement, which provides the specific details regarding the Shares and the Warrants that we are offering and also adds to and updates information contained in or incorporated by reference into the accompanying prospectus. The second part is the base prospectus dated January 6, 2011, included in our registration statement on Form S-3 (SEC File No. 333-171563), which provides a general description of the securities we may offer from time to time under that registration statement, some of which may not apply to the units being offered hereby. This prospectus supplement and the accompanying prospectus are part of a shelf registration statement that we filed with the SEC. Under the shelf registration process, we may, from time to time, offer shares of our common stock, various series of warrants to purchase common stock, either individually or in units, in one or more offerings, in amounts we will determine from time to time, up to a total dollar amount of \$20,000,000, of which this offering is a part.

To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference therein, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date, the statement in the document having a later date modifies or supersedes, as applicable, the earlier statement.

This prospectus supplement 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 supplement is a part, and you may obtain copies of those documents as described below under the section entitled *Where You Can Find More Information*.

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with information that is different. We are offering our securities only in jurisdictions where such offers are permitted. This prospectus supplement and the accompanying prospectus do not constitute an offer to sell or the solicitation of an offer to buy units in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in that jurisdiction. The information contained in this prospectus supplement and the accompanying prospectus is accurate only as of their respective dates, and any information that 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 supplement and the accompanying prospectus, or of any sale of our securities. It is important for you to read and consider all information contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus in making your investment decision. You should also read and consider the information in the documents to which we have referred to you in *Where You Can Find More Information* below.

Thermogenesis®, Thermogenesis Logo, BioArchive®, CryoSeal®, Xpresspack®, AutoXpress™ AXP®, Res-Q™ and TPD™ are the registered and common law trademarks of ThermoGenesis Corp.

Unless stated otherwise, references in this prospectus supplement and the accompanying prospectus to *we*, *us*, or *our* refer to ThermoGenesis Corp., a Delaware corporation.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained in greater detail elsewhere in this prospectus supplement. This summary does not contain all of the information that you should consider before investing in the Shares or the Warrants. You should carefully read the entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, including Risk Factors and the financial statements, before making an investment decision.

Our Business

Overview

We design, develop and commercialize medical products that enable the collection, processing and cryopreservation of stem cells and other cellular tissues used in the practice of regenerative medicine. Regenerative medicine is an emerging field which, among other things, aims to repair or restore lost or damaged tissue and cell function using cell-based therapies. Our current products automate the volume reduction and cryopreservation process of adult stem cell concentrates from cord blood and bone marrow for use in laboratory and point of care settings. Our growth strategy is to expand our offerings in regenerative medicine and partner with other pioneers in the stem cell arena to accelerate our worldwide penetration in this potentially explosive market. We plan to have a product line that encompasses all sources of stem cells, including cord blood, bone marrow, adipose, among others and to leverage our technological investments into profitable adjacent markets, such as platelet rich plasma.

Our Solution

We provide the tools necessary for the collection, separation, storage and delivery of stem cells from adult tissue sources including cord blood and bone marrow, and potentially in the future, adipose and placenta. These tools are being used by healthcare providers in both the laboratory and point of care settings. Our competitive advantage is achieved through applying our advanced research and engineering capabilities to develop a complete tool box for healthcare providers advancing regenerative medicine. Our solutions enable our customers to automate their processes, comply with quality regulations and achieve high stem cell yields. We believe our products significantly enhance the safety and viability of stem cell and regenerative medical products and will ultimately expand the use and success of those products in clinical treatment through their ease of use and high cell recovery rates.

Our Core Products

The AXP is a medical device with an accompanying disposable bag set that isolates and retrieves stem cells from umbilical cord blood. The AXP provides cord blood banks with an automated system to enrich adult stem cells combined with lower labor costs and a reduced risk of contamination under GMP conditions. Self-powered and microprocessor-controlled, the AXP contains flow control optical sensors that achieve precise separation.

The MarrowXpress or MXP, an extension of the AXP, isolates and retrieves stem cells from bone marrow aspirate and its initial application is for the preparation of cells for regeneration of bone in spinal fusion procedures and tissues in cosmetic surgeries.

The Res-Q product is used for bone marrow stem cell processing that can be used in a clinical laboratory or inter-operatively at the point of care. The key advantages of the Res-Q include (a) delivering a high number of target cells from a small sample of bone marrow, and (b) providing a disposable that is highly portable and packaged for the sterile field. These features allow the physician to process bone marrow and return the cells to the patient in as little as 15 minutes.

The BioArchive System is an automated cryogenic system used to cryopreserve and archive stem cells for future transplant and treatment. The BioArchive Systems are used to archive, cryopreserve and store stem cell preparations extracted from human placentas and umbilical cords for future use.

Intended Use of Proceeds

We currently intend to use the net proceeds from this offering for working capital and general corporate purposes. These purposes include new product development initiatives, support of our Asian channel development efforts and acceleration of our product cost reduction initiatives. We have not reserved or allocated specific amounts

for these purposes. Accordingly, our management will have broad discretion as to the application of the offering proceeds.

Corporate Information

We were incorporated in Delaware on July 3, 1986. Our principal executive offices are located at 2711 Citrus Road, Rancho Cordova, California 95742. Our telephone number is (916) 858-5100. Our website is www.thermogenesis.com. The information on, or that can be accessed through, our website does not constitute part of this document.

The Offering

Securities we are offering	2,250,000 shares of common stock Warrants to purchase up to 1,125,000 shares of common stock at an initial exercise price of \$2.64 per share. The Warrants will be exercisable by the holders at any time on or after the date that is six months following the date of the closing of the offering and will expire on the fifth anniversary of the closing of the offering.
Common stock to be outstanding after this offering	16,346,366 shares (1)
Placement Agent's Fees	At the closing, we will pay the placement agent 8% of the gross proceeds of the offering as compensation for their services in connection with this offering.
Use of proceeds	Working capital and/or general corporate purposes. See Use of Proceeds on page S-13.
NASDAQ Capital Market Symbol	KOOL There is no established public trading market for the Warrants and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Warrants on any national securities exchange.
Risk Factors	This investment involves a high degree of risk. See Risk Factors and other information included or incorporated into this prospectus supplement and the accompanying prospectus for a discussion of the factors you should carefully consider before deciding to invest in our units.

(1) The number of shares of common stock shown above to be outstanding after this offering is based on 14,096,366 shares outstanding as of March 3, 2011 and assumes the sale of all units being offered pursuant to this prospectus supplement. Unless otherwise indicated, the number of shares of common stock presented in this prospectus supplement excludes (i) 1,579,331 shares of our common stock that, as of the date of this prospectus supplement, are issuable upon the exercise of outstanding options under our stock plans, at a weighted average exercise price of \$3.81 per share, (ii) 561,907 shares of our common stock available for future equity awards under our 2006 Equity Incentive Plan, (iii) 806,000 shares of our common stock that may be issued to Nanshan Memorial Medical Institute upon the completion of certain milestones pursuant to that certain International Distributor Agreement between us and Nanshan Memorial Medical Institute effective November 3, 2010, and (iv) all shares of our common stock that may be issuable upon exercise of the Warrants covered by this prospectus supplement.

Unless otherwise indicated, this prospectus supplement assumes the sale of the maximum number of units offered hereunder.

S-3

RISK FACTORS

Investment in the securities involves a high degree of risk. You should carefully consider the risks described below, as well as those risks described in the sections entitled Risk Factors and Management's Discussion and Analysis of Financial Condition and Results of Operations, each contained in our most recent Annual Report on Form 10-K for the year ended June 30, 2010, which has been filed with the SEC and is incorporated herein by reference in its entirety, as well as other information in this prospectus supplement and the accompanying prospectus or in any other documents incorporated by reference herein and therein. Each of the risks described in these sections and documents could adversely affect our business, financial condition, results of operations and prospects, and could result in a complete loss of your investment. This prospectus supplement, the accompanying prospectus and the incorporated documents also contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks mentioned above.

Risks Related to Our Business

Our New Products Are at Initial Market Introduction, and We Are Not Sure the Market Will Accept Them.

The market acceptance of our new products will depend upon the medical community and third-party payers accepting the products as clinically useful, reliable, accurate, and cost effective compared to existing and future products or procedures. Market acceptance will also depend on our ability to adequately train technicians on how to use the MXP and Res-Q Systems and future products. Even if our new products are released for sale, their use may not be recommended by the medical profession or hospitals unless acceptable reimbursement from healthcare and third party payers is available. Failure of these new products to achieve significant market share could have material adverse effects on our future long term business, financial condition, and results of operations.

A Significant Portion of our Revenue is Derived from Customers in Foreign Countries. We may Lose Revenues, Market Share, and Profits due to Exchange Rate Fluctuations, Political and Economic Changes related to our Foreign Business.

For the six months ended December 31, 2010, sales to customers in foreign countries comprised approximately 37% of our revenues. This compares to 40% and 42% for the years ended June 30, 2010 and 2009, respectively. Our foreign business is subject to economic, political and regulatory uncertainties and risks that are unique to each area of the world. Fluctuations in exchange rates may also affect the prices that our foreign customers are willing to pay, and may put us at a price disadvantage compared to other competitors. Potentially volatile shifts in exchange rates may negatively affect our future financial position and results.

Outcomes of Pending or Future Clinical Trials May be Negative and the Regenerative Medicine Market May not Expand, or May Not Expand in the Areas Targeted by our Products.

The marketing and sales of new products may depend on successful clinical trial outcomes in the regenerative medicine areas targeted by our products and the approval of regulators. Clinical trials also represent a significant expenditure of resources. Negative clinical trial results in connection with our products or in the areas targeted by us could negatively impact regulatory approval or market acceptance of our products. Failure to attain successful clinical trials, to obtain regulatory approval, or to target areas with successful clinical trials could have material adverse effects on our future long term business, financial condition, and results of operations.

Risks Related to Our Operations

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

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

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

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

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

Certain of our suppliers and manufacturers are subject to heavy government regulations, including U.S. Food and Drug Administration (FDA) Quality System Regulations (QSR) compliance, in the operation of their facilities, products and manufacturing processes. Any adverse action by the FDA against our suppliers or manufacturers could delay supply or manufacture of component products required to be integrated or sold with our products. There are no assurances we will be successful in locating an alternative supplier or manufacturer to meet product shipment or launch deadlines. As a result, our future sales, contractual commitments and financial forecasts may be significantly affected by any such delays.

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

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

Our Products May Be Subject to Product Recalls which May Harm Our Reputation and Divert Our Managerial and Financial Resources.

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

Quality Problems with our Products or Processes could Harm our Reputation for Producing High Quality Products and Decrease our Future Revenues.

Quality is extremely important to us and to our customers due to the consequences of product failure. Our quality certifications and product performance during evaluations and validations are critical to the marketing success of our products. If we fail to meet our customer's quality standards our reputation could be damaged. We could lose current and potential customers and our future revenues could decline as a result.

All of our Operations are Conducted at a Single Location. Any Disruption at our Facility could Delay Revenues or Increase our Expenses.

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

We are Heavily Reliant on a Single Distributor to Market and Sell our AXP Products.

GEHC is the primary distributor of the AXP Platform. We have limited control over their sales and marketing efforts for these products. Although we have added distributors in other territories, we must manage our distribution network effectively. One customer represents over half of the AXP disposable unit sales from GEHC. Since the AXP Platform products are a significant portion of our revenues and projected revenue growth, a delay or failure by our distributor to successfully market these products or loss of a significant end user customer may decrease our future revenues and competitive advantage.

We are Heavily Reliant on a Single Distributor to Market and Sell our MXP and Res-Q Products.

Currently, Celling Technologies is the primary distributor of our MXP and Res-Q products. For orthopedic applications, Celling Technologies has exclusive distribution rights in the U.S. and non-exclusive rights in the rest of the world. Although we have added distributors in other territories and for other indications, we must manage our distribution network effectively to gain additional revenue and gross profit. We have limited control over our distributor's sales and marketing efforts for these products. A delay or failure by our distributors to successfully market these products may decrease our future revenues and competitive advantage.

Our Business is Indirectly Subject to Customer and Distributor Inventory Requirements and Continuity of Inventory Purchasing.

Our end user customers may have separate agreements with our distributors that require them to hold a certain level of inventory. Similarly, other customers have historically purchased ahead of their utilization to insure growth within their business, particularly for the processing of stem cells. Given the tightening of credit and other financial constraints, including possible downturns in collection and processing for cord blood, our customers could reduce the amount of inventory levels our distributors hold, or which they hold internally in lieu of new purchases. In addition, termination of distribution agreements may cause the sale of product inventory by such distributors, which may result in a surplus of product availability in the market. If these events were to occur, future sales of our products could decline significantly, which would have a material adverse effect on our financial performance in any future period where such events occur.

Failure to Meet the Quality and Delivery Metrics specified in the GEHC Distribution Agreements could Decrease our Revenues.

Under the AXP and Res-Q distribution agreements with GE Healthcare Bio-Sciences AB (GEHC), if we fail to meet certain quality and delivery metrics, the price paid by GEHC will be reduced in the following quarter. If this were to occur, our future revenues would be negatively impacted.

Failure to Meet Certain Financial Covenants could Decrease our AXP Revenues.

Under the Cord Blood Registry Systems, Inc. (CBR) license and escrow agreement, if we fail to meet certain financial covenants, CBR may take possession of the escrowed intellectual property and initiate manufacturing of the AXP device and disposables for their own use. If this were to occur, our future revenues would be negatively impacted.

Failure to Meet Certain Financial or Delivery Metrics could Decrease our Future Res-Q Revenues.

Under the BioParadox license and distribution agreement, if we fail to meet certain financial or delivery requirements, the Company may have to place in escrow the detailed instructions for manufacturing the products. BioParadox may subsequently take possession of the escrowed intellectual property and initiate manufacturing of the Res-Q technology for the preparation of platelet-rich plasma for use in the cardiac field if we fail to meet certain supply or delivery metrics. If this were to occur, our future revenues may be negatively impacted.

Failure to Retain or Hire Key Personnel May Adversely Affect Our Ability to Sustain or Grow Our Business.

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

Risks Related to Operating Results and Financial Markets

We Have Incurred Net Losses since Our Inception and Losses May Continue.

Except for net income of \$11,000 for fiscal 1994, we have not been profitable since our inception. For the fiscal year ended June 30, 2010, we had a net loss of \$5,193,000 and an accumulated deficit at June 30, 2010, of \$103,552,000. For the six months ended December 31, 2010, we had a net loss of \$554,000 and an accumulated deficit at December 31, 2010, of \$104,106,000. We will continue to incur significant costs as we develop and market our current products and related applications. Although we are executing on our business plan to develop and market launch new products, continuing losses may impair our ability to fully meet our objectives for new product sales.

We May Need to Raise Additional Capital in the Future to Fund Our Operations. We May be Unable to Raise Funds When Needed or on Acceptable Terms.

During the year ended June 30, 2010, our operating activities used cash of \$4,428,000. As of June 30, 2010, we had a cash balance of \$10,731,000. During the six months ended December 31, 2010, our operating activities used cash of \$518,000. As of December 31, 2010, we had a cash balance of \$10,201,000. Based on our cash balance, historical trends, planned cost reductions and future revenue projections, we believe our current funds are sufficient to provide for our projected needs to maintain operations and working capital requirements for at least the

next 12 months. However, if actual sales do not meet expectations, or product development, marketing and production costs increase significantly, we may need to seek additional financing beyond the next 12 months. We may also raise money for strategic initiatives which may be dilutive. Any additional equity financings may be dilutive to our existing stockholders.

The Continuing Crisis in the U.S. and World Financial and Securities Markets Could Have a Material Adverse Effect on our Customers Business and Effect our Operations and Revenues.

Our products are purchased by cord blood banks and hospitals. We believe these entities have been negatively affected by the deterioration in the U.S. and global economies in several ways. For instance, cord blood banks and hospitals are facing increased pressure from reduction in donations or in government funding that support their operations. The current economic crisis heightens the risk that our customers may lack the funding or credit facilities that they may have previously used for acquiring our products. Such credit or funding restrictions could delay or lower our future revenues.

The Preparation of our Consolidated Financial Statements in Accordance with U.S. Generally Accepted Accounting Principles Requires Us to Make Estimates, Judgments, and Assumptions that may Ultimately Prove to be Incorrect.

The accounting estimates and judgments that management must make in the ordinary course of business affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the periods presented. If the underlying estimates are ultimately proven to be incorrect, subsequent adjustments could have a material adverse effect on our operating results for the period or periods in which the change is identified.

We and our Customers are Subject to Various Political, Economic and Regulatory Changes in the Healthcare Industry that Could Force us to Modify how we Develop and Price our Components, Manufacturing Capabilities and Services, and could Harm our Business.

The healthcare industry is highly regulated and is influenced by changing political, economic and regulatory factors. Federal and state legislatures have periodically considered programs to reform or amend the U.S. healthcare system at both the federal and state levels. Regulations affecting the healthcare industry in general, and the medical device industry in particular, are complex, change frequently and have tended to become more stringent over time. In addition, these regulations may contain proposals to increase governmental involvement in healthcare, lower reimbursement rates or otherwise change the environment in which healthcare industry participants, including medical device companies, operate. While we are not aware of any legislation or regulations specifically targeting the medical device industry that are currently pending, any such regulations could impair our ability to operate profitably. In addition, any failure by us to comply with applicable government regulations could also result in the cessation of portions or all of our operations, impositions of fines and restrictions on our ability to continue or expand our operations.

Risks Related to Our Industry

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

Many of our products require FDA approval or clearance to sell in the U.S. and will require approvals from comparable agencies to sell in foreign countries. These authorizations may limit the U.S. or foreign markets in which our products may be sold. Although the majority of our products related to freezing blood components are currently exempt from the requirement to file a 510(k) or Premarket Approval (PMA), that situation may change in the future if the FDA moves to regulate cell therapy products. In anticipation of possible future regulation by the FDA, we have filed, and are maintaining, a Master File on the BioArchive System and the AXP Platform. However, currently the BioArchive, AXP, and the ThermoLine products are being marketed and sold worldwide. Further, our products must be manufactured under principles of our quality system for continued CE-Marking so they can continue to be marketed and sold in Europe. These principles are similar to the QSR of both the FDA and California Department of Public Health. Failure to comply with or inappropriately interpret these quality system requirements and regulations may subject us to delays in production while it corrects deficiencies found by the FDA, the State of

California, or our Notifying Body as a result of any audit of our quality system. If we are found to be out of compliance, we could receive a Warning Letter or an untitled letter from the FDA or even be temporarily shut down in manufacturing while the non-conformances are rectified. The FDA may also invalidate our PMA if appropriate regulations relative to the PMA product are not met. The Notified Bodies may elect to not renew CE-Mark certification. Any of these events would negatively impact our future revenues and costs of operations.

Future Regulatory Changes May Affect Our Business.

On August 3, 2010, the FDA released for public comment two internal working group reports with numerous recommendations (1) to improve the 510(k) process, and (2) to utilize science in regulatory decision making in ways that encourage innovation yet maintain predictability. Comments are due in 60 days and the FDA is targeting the implementation of or setting timelines for the implementation of non-controversial recommendations by the end of the year. At the same time, the FDA acknowledges that the recommendations are preliminary and no decisions have been made on specific changes to pursue. Nevertheless, we anticipate significant changes will result in the way 510(k) programs will operate and the data requirements, including clinical data, to obtain 510(k) clearance or PMA approval. We cannot predict what effect these reforms will have on our ability to obtain 510(k) clearances or PMA approvals in a timely manner or the effect on our business.

Competition in Our Industry is Intense and Will Likely Involve Companies with Greater Resources than We Have.

We hope to develop a competitive advantage in the medical applications of our products, but there are many competitors that are substantially larger and possess greater financial resources and more personnel than we do. Our current principal market is cord blood banks, and with regards to the BioArchive System and AXP Platform, numerous larger and better-financed medical device manufacturers may choose to enter this market as it develops.

Influence By the Government and Insurance Companies May Adversely Impact Sales of Our Products.

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

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

We operate in an industry susceptible to significant product liability claims. We may be liable if any of our products cause injury, illness, or death. These claims may be brought by individuals seeking relief or by groups seeking to represent a class. We also may be required to recall certain of our products should they become damaged or if they are defective. We are not aware of any material product liability claims against us. However, product liability claims may be asserted against us in the future based on events we are not aware of at the present time. We maintain a general liability policy that includes product liability coverage of \$1,000,000 per occurrence and \$2,000,000 per year in the aggregate. However, a product liability claim against us could have a material adverse effect on our business or future financial condition.

Risks Related to our Common Stock

Trading Prices for our Common Stock Have Been, and May Continue To Be, Volatile.

The trading price of our common stock has been subject to wide fluctuations and may continue to be volatile in the future. Trading price fluctuations can be caused by a variety of factors, many of which are beyond our control, including, among other things:

Variations in operating results,

Regulatory actions, such as product recalls,

Governmental regulatory acts,

Biological or medical discoveries,

Changes in earnings estimates by securities analysts, and

Market conditions in our industry and the economy as a whole.

If our revenues or operating results fall below the expectations of securities analysts and investors, the price of our common stock would likely decline. In the last few years, the stock market experienced extreme price and volume fluctuations due to the unprecedented turmoil and upheaval of the credit markets and the financial services industry, which have particularly affected the market prices for emerging biotechnology and medical device companies, and has adversely affected the market price of our common stock.

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

One of the requirements for continued listing on the NASDAQ Capital Market requires a company's minimum bid price to be above \$1.00 per share. On August 9, 2010, our Board of Directors declared a one for four reverse stock split effective at the close of business on August 26, 2010, which resulted in a \$2.08 per share stock price. If our share price falls below \$1.00 for 30 days, our shares may be delisted or we may have to take other action to avoid delisting. Delisting from NASDAQ could adversely affect our ability to raise additional financing through the public or private sale of equity securities, would significantly affect the ability of investors to trade our securities and would negatively affect the value and liquidity of our common stock. Delisting could also have other negative results, including the potential loss of confidence by employees, the loss of institutional investor interest and fewer business development opportunities.

We Do Not Pay Cash Dividends.

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

Risks Related to the Offering

Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively or in a manner that increases the value of your investment.

We have not designated the amount of net proceeds from this offering to be used for any particular purpose. Accordingly, our management will have broad discretion as to the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our profitability or market value.

You will experience immediate and substantial dilution in the book value per share of the common stock underlying the units you purchase.

Because the price per share of our common stock being offered is substantially higher than the book value per share of our common stock, you will suffer immediate and substantial dilution in the net tangible book value of the common stock underlying the units you purchase in this offering. Based on an assumed offering price to the public of \$2.00 per unit (and assuming a value per share of common stock offered in each unit of \$2.00 per share and attributing no value to the Warrants included in each unit), if you purchase units in this offering, you will suffer immediate and substantial dilution of \$0.67 per share in the net tangible book value of the common stock at December 31, 2010. As of March 3, 2011, there were 1,579,331 shares of common stock reserved for issuance upon exercise of outstanding options with a weighted average exercise price of \$3.81 per share. To the extent that any of

these outstanding options are exercised, there may be further dilution to new investors. See the section entitled Dilution below for a more detailed discussion of the dilution you will incur if you purchase units in this offering.

There is no public market for the Warrants, and one is not expected to develop.

There is no established trading market for the Warrants and no market for the Warrants is expected to exist or develop in the future. The Warrants will not be listed for trading on any stock exchange and we do not intend to apply for listing of the Warrants on any national securities exchange. Without an active market, the liquidity of the Warrants will be limited. Accordingly, the holders of the Warrants are not likely to be able to trade the Warrants and may be forced to convert the Warrants in order to sell or transfer their interest in the Warrants.

S-11

FORWARD-LOOKING STATEMENTS

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

Any forward looking statements contained in this 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 fiscal year ended June 30, 2010, as well as in our other reports filed from time to time with the SEC that are incorporated by reference into this prospectus supplement and the accompanying prospectus. You should read these factors and the other cautionary statements made in this prospectus supplement, the accompanying prospectus and in the documents we incorporate by reference into this prospectus supplement and the accompanying prospectus as being applicable to all related forward-looking statements wherever they appear in this prospectus supplement or the documents we incorporate by reference into this prospectus supplement and the accompanying 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.

S-12

USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of the units in this offering will be approximately \$3,880,000 million, after deducting fees due to the placement agent and our estimated offering expenses, as described in the section entitled *Plan of Distribution* on page S-19. In addition, we may receive proceeds of up to \$2,970,000 if all of the Warrants are exercised for cash.

We expect to use the net proceeds from this offering for general working capital purposes. These purposes include new product development initiatives, support of our Asian channel development efforts and acceleration of our product cost reduction initiatives. Specifically, we are evaluating and prioritizing product line extensions and enhancements as well as novel product designs according to their potential for near term, high margin, revenue generation. These opportunities include but are not limited to the development of new disposable collection, processing and storage technologies for stem cells sourced from cord blood, bone marrow and adipose tissues. Additionally, we believe there are near term opportunities to achieve lower manufacturing costs for certain of our key disposable products while maintaining high product quality and our proprietary ownership through new contract manufacturing relationships in certain Asian and Far East countries. We believe these new, lower cost bases will allow us to expand our business profitably into more price sensitive markets and to improve our margins on products in existing markets. We have not reserved or allocated specific amounts for these purposes. Accordingly, our management will have broad discretion as to the application of the offering proceeds and the amount and timing of our actual expenditures may vary significantly. Pending our use of the net proceeds, we may invest them in short-term, investment-grade, interest-bearing securities.

S-13

CAPITALIZATION

The following table sets forth our capitalization as of December 31, 2010:

on an actual basis; and

on an as-adjusted basis, to give effect to the sale of 2,250,000 units offered by us in this offering, at a price of \$1.72 per unit after deducting the placement agent's commissions, and estimated offering expenses payable by us, but excluding 1,125,000 shares of common stock issuable upon the exercise of the Warrants included in the units issued to the investors in this offering.

This table should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and notes thereto incorporated by reference in this prospectus supplement and the accompanying prospectus.

	As of December 31, 2010	
	Actual	As adjusted
	(in thousands)	
Stockholders' equity:		
Preferred stock, \$0.001 par value; 2,000,000 shares authorized; no shares issued or outstanding, actual and as adjusted		
Common stock, \$0.001 par value; 80,000,000 shares authorized; 14,096,366 shares issued and outstanding, actual; 16,346,366 shares issued and outstanding, as adjusted	\$ 14,000	\$ 16,000
Additional paid-in capital	121,931,000	125,809,000
Accumulated deficit	(104,106,000)	(104,106,000)
Total stockholders' equity	\$ 17,839,000	\$ 21,719,000

DETERMINATION OF OFFERING PRICE

We determined the offering price of the units being offered by this prospectus supplement based principally on negotiations between us, the placement agent and the selected institutional and other qualified purchasers and on our consideration of the closing prices (including high, low and average prices) and trading volumes of our common stock on the NASDAQ Capital Market primarily during the 30 trading days preceding the date we determined the offering price. No independent appraisal or valuation was obtained in determining the offering price. The offering price for the units in this offering reflects a discount of approximately 23.6% from the reported closing price per share of our common stock of \$2.62 on March 3, 2011, as reported on the NASDAQ Capital Market.

DIVIDEND POLICY

Our present policy is to retain any earnings to finance future growth. We have never declared or paid any cash dividends on our capital stock and have no present intention of paying any cash dividends for the foreseeable future.

S-15

DILUTION

Our net tangible book value as of December 31, 2010 was approximately \$17.8 million, or \$1.27 per share of common stock. Net tangible book value per share is equal to our total tangible assets minus total liabilities, all divided by the number of shares of common stock outstanding as of December 31, 2010. Dilution is determined by subtracting net tangible book value per share from the public offering price per share.

Without taking into account any changes in net tangible book value after December 31, 2010, other than giving effect to the sale of the 2,250,000 units we are offering at the offering price of \$2.00 per unit (and assuming a value per share of common stock offered in each unit of \$2.00 per share and attributing no value to the Warrants included in each unit), and after deducting the placement agent fees and our estimated offering expenses, but assuming no exercise of warrants sold in this offering, our as-adjusted net tangible book value would have been approximately \$21.7 million, or approximately \$1.33 per share of common stock. This represents an immediate increase in net tangible book value of approximately \$0.06 per share to existing stockholders and an immediate dilution of approximately \$0.67 per share to new investors. The following table illustrates this dilution on a per share basis:

Offering price per unit		\$2.00
Net tangible book value per share as of December 31, 2010	\$1.27	
Increase in net tangible book value per share attributable to the offering	\$0.06	
As adjusted net tangible book value per share as of December 31, 2010 after giving effect to this offering		\$1.33
Dilution per share to new investors		\$0.67

The number of shares of common stock outstanding used for existing stockholders in the table and calculations above is based on 14,096,366 shares outstanding as of December 31, 2010 and excludes as of March 3, 2011:

1,579,331 shares of our common stock subject to outstanding options with a weighted average exercise price of approximately \$3.81 per share;

561,907 shares of our common stock available for future equity awards under our 2006 Equity Incentive Plan;

806,000 shares of our common stock that may be issued to Nanshan Memorial Medical Institute upon the completion of certain milestones pursuant to that certain International Distributor Agreement between us and Nanshan Memorial Medical Institute, effective November 3, 2010; and

up to 1,125,000 shares of our common stock issuable upon the exercise of the Warrants offered hereby.

Investors purchasing common stock upon the exercise of the Warrants underlying the units being offered hereby may experience dilution depending on our net tangible book value at the time of exercise.

The exercise of outstanding options having an exercise price less than the public offering price will increase dilution to new investors.

DESCRIPTION OF SECURITIES

In this offering, we are offering a maximum of 2,250,000 units, consisting of 2,250,000 shares of our common stock and Warrants to purchase up to 1,125,000 shares of our common stock. Each unit consists of one share of common stock and the equivalent of a warrant to purchase one-half share of our common stock. This prospectus supplement also relates to the offering of 1,125,000 shares of our common stock issuable upon exercise, if any, of the Warrants.

Common Stock

A description of the common stock we are offering pursuant to this prospectus supplement is set forth under the heading Description of Capital Stock, starting on page 5 of the accompanying prospectus. As of March 3, 2011, we had 14,096,366 shares of common stock outstanding.

Warrants

The Warrants offered in this offering will be issued in certificated form pursuant to a subscription agreement between each of the purchasers and us. You should review a copy of the form of subscription agreement, and the form of Warrant, which have been filed as exhibits to a Current Report on Form 8-K filed with the SEC in connection with this offering, for a complete description of the terms and conditions applicable to the Warrants. The following is a brief summary of the Warrants and is subject in all respects to the provisions contained in the Warrants.

Exercisability

Holder may exercise the Warrants beginning on the date that is six months after the date of original issuance and at any time up to the date that is five years after such date of issuance. The Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise, except in the case of a cashless exercise as discussed below.

Exercise Price

The exercise price per share of common stock purchasable upon exercise of the Warrants is \$2.64 per share of common stock being purchased. The exercise price is subject to appropriate adjustment in the event of stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock.

Cashless Exercise

If at any time during the Warrant exercisability period the holder is not permitted to sell shares of common stock issuable upon exercise of the Warrant pursuant to the registration statement, or pursuant to an exemption from registration, and the fair market value of our common stock exceeds the exercise price of the Warrants, the holder may elect to effect a cashless exercise of the Warrants, in whole or in part, by surrendering the Warrants to us together with delivery to us of a duly executed exercise notice, by canceling a portion of the Warrant in payment of the purchase price payable in respect of the number of shares of our common stock purchased upon such exercise.

Transferability

Subject to applicable laws and the restriction on transfer set forth in the subscription agreements, the Warrants may be transferred at the option of the holders upon surrender of the Warrants to us together with the appropriate instruments of transfer.

Exchange Listing

We do not plan on making an application to list the Warrants on the NASDAQ Capital Market or on any other national securities exchange or nationally recognized trading system.

Fundamental Transactions

If the company issues any purchase rights for securities or other property, as defined in the warrant, then warrant holder will be entitled to acquire the amount of such purchase rights that that it would have received has the warrant been exercised immediately prior to the fundamental transaction. The Company shall not enter into a fundamental transaction, as described in the Warrants, unless any successor entity to the Company shall be obligated to exchange the warrant for a security substantially similar in form and substance to the warrant, including an adjustment in exercise price. The successor entity in a fundamental transaction is required to succeed to and assume the rights and obligations of the Company under the warrant. Additionally, prior to any fundamental transaction in which our common stock is entitled to receive securities or other assets, the holder shall have the right to receive such securities or assets that it would have received has the warrant been exercised immediately prior to the fundamental transaction. In addition, in the event of a change of control, then we or any successor entity shall pay at the holder's option, exercisable at any time concurrently with or prior to ninety (90) days after the consummation of the fundamental transaction, an amount of cash equal to the value of the Warrant as determined in accordance with the Black Scholes option pricing model.

Rights as a Stockholder

Except as otherwise provided in the Warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their Warrants.

Waivers and Amendments

The provisions of each Warrant may be amended and we may take any action prohibited by the Warrant, or omit to perform any act required to be performed pursuant to the Warrant, only with the written consent of the holder of that Warrant.

Other Provisions

Absent a waiver by the holder, except upon at least sixty-one (61) days' prior notice from the holder to us, the holder will not have the right to exercise any portion of the Warrant if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Warrants. In the event a holder waives the foregoing restrictions, it cannot increase the beneficial ownership limitation to a percentage greater than 9.99%. No fractional shares will be issued upon exercise of the Warrants.

PLAN OF DISTRIBUTION

We have entered into a placement agent agreement with Houlihan Lokey Capital, Inc. pursuant to which such party is acting as our exclusive placement agent and has agreed to use commercially reasonable efforts to arrange for the sale to selected institutional and other qualified purchasers of up to 2,250,000 units we are offering by this prospectus supplement. The placement agent has no obligation to buy any of our securities from us, nor is the placement agent required to arrange the purchase or sale of any specific number or dollar amount of our securities.

We have entered into subscription agreements directly with each of the purchasers in connection with this offering. Under the terms of the placement agent agreement and the subscription agreement, we make certain representations, warranties and covenants, including representations, warranties and covenants relating to the absence of a stop order suspending the effectiveness of the registration statement of which this prospectus supplement and the accompanying base prospectus are a part, the absence of any material adverse change in our business, compliance with state securities laws and the receipt of customary opinions, comfort letters and certificates from our independent registered public accounting firm and us. Our obligation to issue and sell units to investors is subject to the conditions set forth in the subscription agreements, which may be waived by us in our discretion. An investor's obligation to purchase units is subject to conditions set forth in the subscription agreements.

We currently anticipate that the closing of the sale of the units will occur on or about March 9, 2011. On such closing date, the following will occur:

we will receive funds in the amount of the aggregate purchase price of the securities being sold by us on such closing date;

we will deliver shares of common stock being sold on such closing date in book-entry form (unless the investor requests a physical stock certificate);

we will deliver certificates representing the Warrants being sold in the offering; and

we will pay Houlihan Lokey Capital, Inc. a placement agent fee in accordance with the terms of the placement agent agreement.

We have agreed to pay the placement agent a cash fee equal to 8.0% of the gross proceeds of the offering. As a result, assuming all of the securities offered pursuant to this prospectus supplement are issued and sold by us, we will pay the placement agent a cash fee equal to \$360,000. In no event will the maximum commission or discount to be received by any Financial Industry Regulatory Authority, Inc. (FINRA) member or independent broker-dealer exceed 8% for the sale of the securities registered herein. We estimate the total offering expenses of this offering that will be payable by us, excluding the placement agency fees, will be approximately \$260,000, which include legal and printing costs, and various other fees incurred by us.

	Per unit	Total offering
Houlihan Lokey Capital, Inc.	\$0.16	\$360,000

There is no minimum unit or dollar offering amount required as a condition to closing in this offering and there can be no assurance that any or all of the units being offered hereby will be sold. Accordingly, we may sell substantially fewer than 2,250,000 units, in which case our net proceeds would be substantially reduced and the total fee payable to the placement agent may be substantially less than the maximum total set forth above.

We have agreed to indemnify the placement agent against certain liabilities, including liabilities under the Securities Act, arising from the placement agent's engagement as exclusive placement agent in connection with this offering and to contribute to payments that the placement agent may be required to make in respect of those liabilities. We have also agreed to indemnify the purchasers in the offering against certain losses resulting from our breach of any of our representations, warranties, or covenants under the subscription agreements.

The placement agent has informed us that it will not engage in over-allotment, stabilizing transactions or syndicate covering transactions in connection with this offering.

The placement agent, and its affiliates, have and may, from time to time, engage in transactions with and perform services for us in the ordinary course of their business.

All of our directors and executive officers have signed lock-up agreements, pursuant to which they have agreed to not, directly or indirectly, sell, agree to sell or otherwise transfer or dispose of any shares of our common stock, or any securities convertible into or exchangeable for shares of our common stock, without the prior consent of Houlihan Lokey Capital, Inc., for a period of 90 days after the date of execution of the placement agent agreement.

Our common stock currently is traded on the NASDAQ Capital Market under the symbol KOOL. Computershare Investor Services, LLC, 350 Indiana Street, Ste. 750, Golden, CO 80401 is the transfer agent for our common stock.

The foregoing does not purport to be a complete statement of the terms and conditions of the placement agent agreement and the subscription agreements. Copies of the placement agent agreement and the form of subscription agreement will be included as exhibits to our Current Report on Form 8-K that will be filed with the SEC and incorporated by reference into the registration statement on Form S-3 (SEC File No. 333-171563) of which this prospectus supplement forms a part. See [Where You Can Find More Information](#) on page S-23.

S-20

LEGAL MATTERS

The validity of the common stock offered pursuant to this prospectus supplement was passed upon by Weintraub Genshlea Chediak Law Corporation, Sacramento, California, counsel to ThermoGenesis Corp. Certain legal matters in connection with this offering will be passed upon for the placement agent by Paul, Hastings, Janofsky & Walker LLP, Palo Alto, California.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements and schedule included in our annual report on Form 10-K for the year ended June 30, 2010, which is incorporated by reference in the prospectus and elsewhere in the registration statement. Our consolidated financial statements and schedule are incorporated by reference in reliance on the Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

S-21

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus supplement, 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 the registration statement, and any filings made after the date of this prospectus supplement until we sell all of the securities under this prospectus supplement, 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, 2010, filed with the SEC on September 14, 2010;

The portions of our definitive Proxy Statement on Schedule 14A for our 2010 Annual Meeting of Stockholders, filed with the SEC on October 26, 2010, that are incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended June 30, 2010;

Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2010, filed with the SEC on November 4, 2010, and for the quarter ended December 31, 2010, filed with the SEC on February 11, 2011;

Our Current Reports on Form 8-K filed with the SEC on August 11, 2010, August 26, 2010, September 14, 2010 (2), October 19, 2010, November 4, 2010, November 5, 2010, December 14, 2010 and February 10, 2011.

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 the date of this prospectus supplement and prior to the termination or completion of this offering, shall be deemed to be incorporated by reference in this prospectus supplement 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 supplement.

We hereby undertake to provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus supplement 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 supplement, 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.

S-22

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 (SEC File No. 333-171563) with the SEC under the Securities Act. This prospectus supplement and the accompanying prospectus is part of the registration statement but the registration statement includes and incorporates by reference additional information and exhibits.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement and any document we file with the SEC at the public reference room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site that contains reports, proxy and information statements and other information regarding companies, such as ours, that file documents electronically with the SEC. The address of that site on the world wide web is <http://www.sec.gov>. The information on the SEC's web site is not part of this prospectus supplement, and any references to this web site or any other web site are inactive textual references only.

Our internet address is www.thermogenesis.com. We make available, free of charge, through our internet website copies of our annual report on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports, if any, filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the SEC.

We have filed this prospectus supplement and a registration statement on Form S-3 (SEC File No. 333-171563) regarding this offering with the SEC under the Securities Act. This prospectus supplement, which constitutes a part of the registration statement, does not contain all the information contained in the registration statement, certain items of which are contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. You should refer to the registration statement and its exhibits to read that information. Statements made in this prospectus supplement as to the content of any contract, agreement or other document are not necessarily complete and you should refer to the contracts, agreements and other documents attached as exhibits to the registration statement for a more complete description of such agreements, contracts or other documents.

S-23

PROSPECTUS

**ThermoGenesis Corp.
\$20,000,000
Common Stock
Warrants
Units**

From time to time, we may offer up to \$20,000,000 of our common stock, warrants to purchase common stock and units consisting of common stock or warrants 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 trades on NASDAQ 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. As of January 3, 2011 the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$53,276,493 based on 14,096,366 shares of outstanding common stock, of which 149,640 shares are held by affiliates, and a price of \$3.82 per share, which was the last reported sale price of our common stock as quoted on NASDAQ on January 3, 2011. 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 January 6, 2011.

TABLE OF CONTENTS

Prospectus

Cautionary Note Regarding Forward-Looking Statements	1
About this Prospectus	1
About ThermoGenesis Corp.	3
Where You Can Find Additional Information	3
Incorporation of Information by Reference	4
Risk Factors	4
Description of Securities We May Offer	4
Use of Proceeds	12
Plan of Distribution	13
Legal Matters	15
Experts	15

PART I: INFORMATION REQUIRED IN PROSPECTUS

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, es predict, propose, 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, 2010, 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, various series of warrants to purchase common stock, either individually or in units, in one or more offerings, in amounts we will determine from time to time, up to a total dollar amount of \$20,000,000.

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.

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 *ThermoGenesis* or the *Company*, refer to ThermoGenesis Corp.

ABOUT THERMOGENESIS CORP.

ThermoGenesis' mission is to design, develop and commercialize medical products that enable the collection, processing and cryopreservation of stem cells and other cellular tissues used in the practice of regenerative medicine. Regenerative medicine is an emerging field which, among other things, aims to repair or restore lost or damaged tissue and cell function using cell-based therapies. Our current products automate the volume reduction and cryopreservation process of adult stem cell concentrates from cord blood and bone marrow for use in laboratory and point of care settings. Our growth strategy is to expand our offerings in regenerative medicine and partner with other pioneers in the stem cell arena to accelerate our worldwide penetration in this potentially explosive market. We plan to have a product line that encompasses all sources of stem cells, including cord blood, bone marrow, adipose, among others and to leverage our technological investments into profitable adjacent markets, such as platelet rich plasma (PRP).

Our business model is based on the sale of medical devices and the recurring revenues generated from the companion single-use, sterile disposable products. We currently sell our products in 37 countries throughout the world to customers that include private and public cord blood banks, surgeons, hospitals and research institutions. Our worldwide commercialization strategy relies primarily on the utilization of distributors.

Based upon early clinical results, there is accumulating evidence that many of the stem cell therapy trials and clinical trials underway may result in approved therapies in disease states and tissue regeneration procedures affecting significant patient populations, leading to a revolution in therapeutics involving stem cells. Although understanding the full potential of cell therapies and their ultimate impact on the practice of medicine remains a longer term prospect, we believe there are significant commercial opportunities in the market today for technologies supporting stem cell research and cell-based treatments.

The Company 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.thermogenesis.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.thermogenesis.com>. You may access our Annual Reports 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, 2010, filed with the SEC on September 14, 2010;

The portions of our definitive Proxy Statement on Schedule 14A for our 2010 Annual Meeting of Stockholders, filed with the SEC on October 26, 2010, that are incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended June 30, 2010;

Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2010, filed with the SEC on November 4, 2010;

Our Current Reports on Form 8-K filed with the SEC on August 11, 2010, August 26, 2010, September 14, 2010 (2), October 19, 2010, November 4, 2010, November 5, 2010 and December 14, 2010.

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, warrants to purchase common stock, either individually or in units, in amounts we will determine from time to time, 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, 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.

DESCRIPTION OF CAPITAL STOCK

The description below of our capital stock and provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation and the amended 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

Our board of directors is authorized, subject to any limitations prescribed by law, without stockholder approval, to issue up to an aggregate of 2,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions granted to or imposed upon the preferred stock, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences. The rights of the holders of common stock will be subject to, and may be adversely affected by, the rights of holders of any preferred stock that may be issued in the future. Issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could have the effect of delaying, deferring or preventing a change in control of us.

Warrants

We may issue warrants for the purchase of common stock. We may issue warrants independently or together with other securities. The exercise price and/or the number of shares of common stock issuable upon exercise of the warrants may be adjusted in certain circumstances, including certain issuances of securities at a price equal to or less than the then current exercise price, subdivisions and stock splits, stock dividends, combinations, reorganizations, reclassifications, consolidations, mergers or sales of properties and assets and upon the issuance of certain assets or securities to holders of our common stock, as applicable.

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 ten percent (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.

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.

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 trades 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, Ste. 750, Golden, CO 80401.

DESCRIPTION OF WARRANTS

General

We may issue warrants to purchase common 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;

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 Agreements

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 will not have any rights of holders of common stock purchasable upon such exercise and will not be entitled to dividend payments, if any, or voting rights of the common 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.

DESCRIPTION OF UNITS

We may issue units composed of any combination of our common stock and warrants. 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.

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 and 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;

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.

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 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 Genshlea Chediak Law Corporation will pass upon legal matters in connection with the validity of the shares of common stock offered hereby for us.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements and schedule included in our Annual Report on Form 10-K for the year ended June 30, 2010, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our consolidated financial statements and schedule are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

2,250,000 Units
Comprised of
2,250,000 Shares of Common Stock
Warrants to purchase up to
1,125,000 Shares of Common Stock
Houlihan Lokey Capital, Inc.
Prospectus Supplement
March 7, 2011

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference in this prospectus supplement. We have not authorized anyone to provide you with information that is different. We are offering our common stock only in jurisdictions where such offers are permitted. The information contained in this prospectus supplement and the accompanying prospectus is accurate only as of their respective dates, regardless of the time of delivery of this prospectus supplement, or of any sale of our units.

TABLE OF CONTENTS

	Page
Prospectus Supplement	
About This Prospectus Supplement	S-1
Prospectus Supplement Summary	S-2
Risk Factors	S-4
Forward-Looking Statements	S-12
Use of Proceeds	S-13
Capitalization	S-14
Determination of Offering Price	S-15
Dividend Policy	S-15
Dilution	S-16
Description of Securities	S-17
Plan of Distribution	S-19
Legal Matters	S-21
Experts	S-21
Incorporation of Certain Information By Reference	S-22
Where You Can Find More Information	S-23
 Prospectus	
Cautionary Note Regarding Forward-Looking Statements	1
About this Prospectus	1
About ThermoGenesis Corp.	3
Where You Can Find Additional Information	3
Incorporation of Information by Reference	4
Risk Factors	4
Description of Securities We May Offer	4
Use of Proceeds	12
Plan of Distribution	13
Legal Matters	15
Experts	15