#### **BOYLE FRANCIS C JR**

Form 4

December 13, 2004

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF

**OMB APPROVAL** OMB

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**SECURITIES** Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, obligations Section 17(a) of the Public Utility Holding Company Act of 1935 or Section may continue.

30(h) of the Investment Company Act of 1940 See Instruction

1(b).

(Print or Type Responses)

1. Name and Address of Reporting Person \* 5. Relationship of Reporting Person(s) to 2. Issuer Name and Ticker or Trading **BOYLE FRANCIS C JR** Issuer Symbol BARNES GROUP INC [B] (Check all applicable) (Last) (First) (Middle) 3. Date of Earliest Transaction (Month/Day/Year) Director 10% Owner Other (specify X\_ Officer (give title **BARNES GROUP INC., 123 MAIN** 12/10/2004 below) STREET Vice President, Controller (Street) 4. If Amendment, Date Original 6. Individual or Joint/Group Filing(Check Filed(Month/Day/Year) Applicable Line) \_X\_ Form filed by One Reporting Person Form filed by More than One Reporting BRISTOL, CT 06011-0489 Person

(City)	(State) (	Zip) Table	e I - Non-D	Derivative Securities A	cquired, Disposed	l of, or Benefic	ially Owned
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities onAcquired (A) or Disposed of (D) (Instr. 3, 4 and 5)  (A) or Amount (D) Price	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
Common Stock					29,490 (1)	D	
Common Stock					509.835	I	By Company's 401(k) Plan

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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# Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of orDerivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exer Expiration D (Month/Day)	ate	7. Title and A Underlying S (Instr. 3 and	Securities
				Code V	(A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Dividend Equivalent (Right to Receive)	(2)	12/10/2004		A	32.7406	<u>(3)</u>	<u>(3)</u>	Common Stock	32.7406

## **Reporting Owners**

Reporting Owner Name / Address	Relationships

Director 10% Owner Officer Other

BOYLE FRANCIS C JR BARNES GROUP INC. 123 MAIN STREET BRISTOL, CT 06011-0489

Vice President, Controller

## **Signatures**

Nancy M. Clark, pursuant to a Power of Atty

12/13/2004

Date

\*\*Signature of Reporting Person

## **Explanation of Responses:**

- \* If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Includes 7,000 Restricted Stock Units granted 2/12/03 and 4,000 granted 4/14/04 that are subject to forfeiture if certain events occur.
- (2) 1 for 1
- (3) The Rights become exercisable for shares of common stock proportionally with incentive stock units to which they relate. The actual receipt of the shares is based on conditions being met.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number. based on vendor specific objective evidence or third party evidence of fair value as appropriate. If an undelivered element exists, the Company will determine the fair value of the undelivered element and subtract the fair value of the undelivered element from the total consideration under the arrangement. The residual amount is the Company's estimate of the fair value of the delivered element. Costs associated with inconsequential or perfunctory elements in multiple element arrangements are accrued at the time of revenue recognition. The Company accounts for training and installation as a separate element of a multiple element arrangement. The Company therefore recognizes the fair value of training and installation services upon their completion. For licensing agreements pursuant to which the Company receives up-front licensing fees for products or technologies that will be provided by the

Reporting Owners 2

Company over the term of the arrangements, the Company defers the up-front fees and recognizes the fees as revenue on a straight-line basis over the term of the respective license. 8 ThermoGenesis Corp. Notes to Condensed Financial Statements (Unaudited) (Continued) Summary of Significant Accounting Policies (Continued) ------ Revenue (Continued) Revenues from the sale of the Company's products are recognized upon transfer of title. The Company generally ships products F.O.B. shipping point. There is no conditional evaluation on any product sold and recognized as revenue. All foreign sales are denominated in U.S. dollars. The Company's foreign sales are generally through distributors. There is no right of return provided for distributors. For sales of products made to distributors, the Company considers a number of factors in determining whether revenue is recognized upon transfer of title to the distributor, or when the distributor places the product with an end-user. These factors include, but are not limited to, whether the payment terms offered to the distributor are considered to be non-standard, the distributor history of adhering to the terms of its contractual arrangements with the Company, the level of inventories maintained by the distributor, whether the Company has a pattern of granting concessions for the benefit of the distributor, or whether there are other conditions that may indicate that the sale to the distributor is not substantive. The Company currently recognizes revenue on the sell-in method with its distributors. Shipping and handling fees billed to customers are included in product and other revenues, while the related costs are included in cost of product and other revenues. Service revenue which is included in net revenues, generated from contracts for providing maintenance of equipment is amortized over the life of the agreement. All other service revenue is recognized at the time the service is completed. Amounts billed in excess of revenue recognized are recorded as deferred revenue on the balance sheet. Inventories Inventories consisted of the following at: (in thousands) September 30, 2005 June 30, 2005 ------ Raw materials \$1,439 \$1,433 Work in process 1,678 1,723 Finished goods 662 756 Reserve (644) (632) -------\$3,135 \$3,280 September 30, 2005 and June 30, 2005 was \$448,000 and \$431,000, respectively, related to CryoSeal(R) FS System inventory products which is based on inventory levels in excess of current demand for the product. The remainder of the reserve relates to the BioArchive(R) System and ThermoLine(TM) inventory which have been identified as slow-moving or potentially obsolete. Warranty The Company offers a one-year warranty for all of its products. The Company estimates the costs that may be incurred under its basic limited warranty and records a liability in the amount of such costs at the time product revenue is recognized. Factors that affect the Company's warranty liability include the number of installed units, historical and anticipated rates of warranty claims, and cost per claim. The Company periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts as necessary. 9 ThermoGenesis Corp. Notes to Condensed Financial Statements (Unaudited) (Continued) Summary of Significant Accounting Policies (Continued) ------ Warranty (Continued) Changes in the Company's product liability during the period are as follows: (in thousands) July 1, 2005 balance \$103 Warranties issued during the period 20 Settlements made during the period (7) Changes in liability for pre-existing warranties Stock-Based Compensation Stock Plans ----- The 2002 Independent Directors Equity Incentive Plan ("2002 Plan") permits the grant of stock or options to independent directors. A total of 350,000 shares were approved by the stockholders for issuance under the 2002 Plan. Options are granted at prices which are equal to 100% of the fair market value on the date of grant, and expire over a term not to exceed ten years. Options generally vest immediately, unless otherwise determined by the Board of Directors, The Amended 1994 Stock Option Plan ("1994 Plan") permits the grant of stock or options to employees, directors and consultants. A total of 1,450,000 shares were approved by the stockholders for issuance under the 1994 Plan. Options are granted at prices that are equal to 100% of the fair market value on the date of grant, and expire over a term not to exceed ten years. Options generally vest ratably over a five-year period, unless otherwise determined by the Board of Directors. The 1994 Plan, but not the options granted, expired in October 2004. The Amended 1998 Stock Option Plan ("1998 Plan") permits the grant of stock or options to employees, directors and consultants. A total of 3,798,000 shares were approved by the stockholders for issuance under the 1998 Plan. Options are granted at prices that are equal to 100% of the fair market value on the date of grant, and expire over a term not to exceed ten years. Options generally vest ratably over three to five years, unless otherwise determined by the Board of Directors. 10 ThermoGenesis Corp. Notes to Condensed Financial Statements (Unaudited) (Continued) Stock-Based Compensation (Continued) Adoption of FAS 123(R) ------ Prior to July 1, 2005, the Company accounted for those plans under the recognition and measurement provisions of

Accounting Principals Board ("APB") Opinion No. 25, Accounting for Stock Issued to Employees, and related Interpretations, as permitted by Financial Accounting Standards Board ("FASB") Statement No. 123, Accounting for Stock-Based Compensation. No stock-based employee compensation cost was recognized for options granted in the Statement of Operations for the three months ended September 30, 2004, as all options granted under those plans had an exercise price equal to the market value of the underlying common stock on the date of grant. Effective July 1, 2005, the Company adopted the fair value recognition provisions of FASB Statement No. 123(R), Share-Based Payment, using the modified-prospective-transition method. Under that transition method, compensation cost recognized in fiscal year 2006 includes: (a) compensation cost for all share-based payments granted prior to, but not yet vested as of July 1, 2005, based on the grant date fair value estimated in accordance with the original provisions of Statement 123, and (b) compensation cost for all share-based payments granted subsequent to July 1, 2005, based on the grant-date fair value estimated in accordance with the provisions of Statement 123(R); However, no share-based awards were granted during the first quarter of fiscal year 2006. Results for prior periods have not been restated. As a result of adopting Statement 123(R) on July 1, 2005, the Company's net loss for the three months ended September 30, 2005, was \$195,000 lower than if it had continued to account for share-based compensation under Opinion 25. Basic and diluted loss per share for the three months ended September 30, 2005 had the Company not adopted Statement 123(R) remained unchanged as compared to reported basic and diluted loss per share of \$0.04. Determining Fair Value ----- Valuation and amortization method - The Company estimates the fair value of stock options granted using the Black-Scholes-Merton option-pricing formula. This fair value is then amortized on a straight-line basis over the requisite service periods of the awards, which is generally the vesting period. Expected Term - The Company's expected term represents the period that the Company's stock-based awards are expected to be outstanding and was determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior as influenced by changes to the terms of its stock-based awards. Expected Volatility - The Company uses the trading history if its common stock in determining an estimated volatility factor when using the Black-Scholes-Merton option-pricing formula to determine the fair value of options granted. Expected Dividend - The Company has not declared dividends. Therefore, the Company uses a zero value for the expected dividend value factor when using the Black-Scholes-Merton option-pricing formula to determine the fair value of options granted. Risk-Free Interest Rate - The Company bases the risk-free interest rate used in the Black-Scholes-Merton valuation method on the implied yield currently available on U.S. Treasury zero-coupon issues with the same or substantially equivalent remaining term. 11 ThermoGenesis Corp. Notes to Condensed Financial Statements (Unaudited) (Continued) Stock-Based Compensation (Continued) Determining Fair Value (Continued) ------ Estimated Forfeitures - When estimating forfeitures, the Company considers voluntary and involuntary termination behavior as well as analysis of actual option forfeitures. Pro Forma ----- The following table illustrates the effect on net loss per share if the Company had applied the fair value recognition provisions of Statement 123 to options granted under the Company's stock option plans. For purposes of this pro forma disclosure, the value of the options is estimated using a Black-Scholes-Merton option-pricing formula and amortized to expense over the options' vesting periods. Three Months Ended (in thousands) September 30, 2004 ------ Net loss, as reported (\$1,879) Add: stock-based employee compensation expense included in reported net loss, net of related tax effects 70 Deduct: total stock-based employee compensation expense determined under fair value method for all awards, net of related tax effects (387) ----- Pro forma net loss (\$2,196) =========================== Basic and diluted net loss per share As reported (\$0.04) Pro Forma (\$0.05) Fair Value - The Company did not grant stock options to employees for the three months ended September 30, 2005. The fair value of the Company's stock options granted to employees for the three months ended September 30, 2004, was estimated using the following weighted-average assumptions: 2004 ----- Expected Term (in years) 6.3 Risk-free interest rate 3.8% Volatility .85 Weighted-Average Fair Value \$2.78 Dividend yield 0% 12 ThermoGenesis Corp. Notes to Condensed Financial Statements (Unaudited) (Continued) Stock-Based Compensation (Continued) Stock Compensation Expense ------ As required by SFAS 123(R), management made an estimate of expected forfeitures and is recognizing compensation costs only for those equity awards expected to vest. At September 30, 2005, the total compensation cost related to unvested stock-based awards granted to employees under the Company's stock option plans but not yet recognized was \$1,534,000 net of estimated forfeitures of \$104,000. This cost will be amortized on a straight-line basis over a weighted-average period of approximately two years and will be adjusted for subsequent changes in estimated forfeitures. The Company issues

new shares of common stock upon exercise of stock options. The following is a summary of option activity for the Company's stock option plans: Weighted- Average Weighted- Remaining Aggregate Number of Average Contractual Intrinsic (in thousands, except share price and term) Shares Exercise Price Life Value ---------- Outstanding at June 30, 2005 2,344 \$2.56 Granted -- -- Expired -- -- Forfeitures and Cancellations (63) \$4.75 Exercised (12) \$3.53 ------ Outstanding at September 30, 2005 2,269 \$2.49 3.9 \$6,382 ------ Vested and Expected to Vest at September 30, 2005 2,214 \$2.48 3.9 \$6,246 ------ Exercisable at September 30, 2005 1,414 \$2.22 3.4 \$4,372 ------ 13 ThermoGenesis Corp. Notes to Condensed Financial Statements (Unaudited) (Continued) Stock-Based Compensation (Continued) Stock Compensation Expense (Continued) ------ The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the quoted price of the Company's common stock for the 2,250,000 options that were in-the-money at September 30, 2005. During the three months ended September 30, 2005 and 2004, the aggregate intrinsic value of options exercised under the Company's stock option plans were \$21,000 and \$81,000, respectively, determined as of the date of option exercise. Common Stock Restricted Awards ----- On August 9, 2004, the Company's Compensation Committee approved the grant of 50,914 shares of restricted common stock to selected members of management and key employees, excluding its executive officers, which had a fair market value of \$3.58 per share on the date of grant. These common stock restricted awards vest in three equal installments, on the date of grant and the first and second anniversary of the grant date. The Company recorded deferred stock compensation of \$182,000 based on the closing market price of the Company's common stock on the date of grant. One third vested immediately on the grant date and the remaining value will be amortized on a straight-line basis over the remaining two year service period. In accordance with FAS 123(R), on July 1, 2005 the Company reversed the deferred stock compensation balance of \$57,000 against additional paid-in-capital. The following is a summary of restricted stock activity during the first quarter of fiscal 2006: (in thousands) Number of Grant Date Shares Fair Value ----- Outstanding at June 30, 2005 29 \$104 Granted -- -- Vested (14) (\$50) Forfeited (1) (\$4) ------ Outstanding at September 30, 2005 14 \$50 ========== ======= Warrants ------ During the quarter ended September 30, 2005, the Company received \$128,000 in cash from the exercise of warrants to purchase 43,200 shares of common stock. Recent Accounting Pronouncements ----- In November 2004, the FASB issued Statement of Financial Accounting Standards ("SFAS") No. 151 ("SFAS 151"), "Inventory Costs, an amendment of Accounting Research Bulletin ("ARB") No. 43, Chapter 4." SFAS 151 amends the guidance in ARB No. 43, Chapter 4, "Inventory Pricing," to clarify that abnormal amounts of idle facility expense, freight, handling costs, and wasted material should be recognized as current period charges and requires the allocation of fixed production overheads to inventory based on the normal capacity of the production facilities. SFAS 151 was adopted as of July 1, 2005 and did not have a material impact on the Company's financial statements. 14 ThermoGenesis Corp. Notes to Condensed Financial Statements (Unaudited) (Continued) Net Loss per Share ------ Net loss per share is computed by dividing the net loss to common stockholders by the weighted average number of common shares outstanding. The calculation of the basic and diluted earnings per share is the same for all periods presented, as the effect of the potential common stock equivalents is antidilutive due to the Company's net loss position for all periods presented. Antidilutive securities, which consist of stock options, warrants, common stock restricted awards and the Series A convertible preferred stock, that were not included in diluted net loss per common share were 2,883,816 and 3,717,181 as of September 30, 2005 and 2004. Subsequent Events ----- On October 13, 2005, the Company entered into an International Distribution Agreement (the "GEHC Agreement") with Amersham Biosciences AB, a GE Healthcare company headquartered in Sweden ("GEHC"). Under the Agreement, GEHC becomes the exclusive worldwide distributor of and service provider for the Company's Auto Xpress(TM) System (AXP(TM)) and BioArchive System. The Company will receive from GEHC fees for rights granted under the Agreement. GEHC will purchase products from the Company to distribute and service. In addition, GEHC and the Company agreed to collaborate on certain future improvements to these product lines. The Agreement has an initial expiration date of December 31, 2010, but will be automatically renewed for additional two year periods unless terminated by one of the parties 12 months prior to the end of the then current term. On October 28, 2005, the stockholders approved an amendment to and restatement of the Company's Certificate of Incorporation to increase the number of authorized shares of common stock from 50,000,000 to 60,000,000. On November 7, 2005, the Company entered into an OEM Supply Agreement (the "Agreement") with

Medtronic, Inc. ("MDT"). Under the terms of the Agreement, the Company will modify its Thrombin Processing Device ("TPD") to work with MDT's Magellan Product (the "OEM Product") and sell and supply the OEM Product to MDT for use and sale in conjunction with the MDT Magellan Product throughout the world. The Agreement has a term of five years. MDT's Magellan Product is used for the production of platelet gel. MDT previously used bovine thrombin in conjunction with the Magellan device. 15 ThermoGenesis Corp. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three Months Ended September 30, 2005 and 2004 Item 2. Management's Discussion and Analysis of Financial Condition and Results

----- of Operations ----- Forward-Looking Statements ----- This report contains forward-looking statements which are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from the forward-looking statements. When used in this report, the words "anticipate," "believe," "estimate," "expect" and similar expressions as they relate to the Company or its management are intended to identify such forward-looking statements. The Company's actual results, performance or achievements could differ materially from the results expressed in, or implied by these forward-looking statements. The Company wishes to caution readers of the important factors, among others, that in some cases have affected, and in the future could affect the Company's actual results and could cause actual results for fiscal year 2006, and beyond, to differ materially from those expressed in any forward-looking statements made by, or on behalf of, the Company. These factors include without limitation, the ability to obtain capital and other financing in the amounts and at the times needed to complete clinical trials and product marketing for new products, market acceptance of new products, regulatory approval and time frames for such approval of new products and new claims for existing products, realization of forecasted income and expenses, initiatives by competitors, price pressures, and the risk factors listed from time to time in the Company's Securities and Exchange Commission ("SEC") reports, including, in particular, the factors and discussion in the Company's Form 10-K for its last fiscal year. Introduction ----- The Company designs and manufactures medical devices and disposables for the distributed manufacturing of "personalized" cell and tissue therapy (CTT) products such as fibrin sealant, thrombin, and units of umbilical cord blood stem cells. These products typically originate from the blood or tissue of the patient or a single typed and pathogen screened placenta or living donor. CTT is a broad rapidly growing field of medicine that involves the collection, purification, manipulation and administration of somatic stem cells and/or their progeny, proteins and growth factors for the focused treatment of disease, tailored to individual patients. This methodology of personalized disease treatment is considerably different than that demonstrated by conventional pharmaceutical drugs, such as statins, analgesics or antibiotics. These generic pharmaceutical drugs are produced in large quantities, are similarly effective on most patients with similar underlying medical conditions. Additionally, these drugs typically consist of inert materials that can be stored in medicine cabinets at room temperature. In contrast, "personalized" CTT products are manufactured one at a time, are intended for a single patient, and require low temperature for preserving the cells, blood proteins or growth factors, sometimes cryogenic (-196(degree)C) storage conditions. The Company's products can address a broad range of CTT. We have developed a concentrated expertise in the CTT area of somatic stem cells. Until the middle of the 1990s, researchers were familiar with two major types of stem cells, embryonic stem cells and adult stem cells. However, recent years have seen the emergence of a category of stem cells, called somatic stem cells that are found in umbilical cord blood or the bone marrow and other tissues of the body. These somatic stem cells are both enabling for, and a subset of, CTT. Somatic stem cells are capable of a wide range of differentiation into several highly diverse cell types such as nerve cells, muscle cells and hematopoietic cells. Somatic stem cells have come into focus as fundamental units of development and maintenance of the adult organism as well as an attractive tool for tissue regeneration. 16 ThermoGenesis Corp. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three Months Ended September 30, 2005 and 2004 (Continued) Introduction (Continued) ----- The ability to obtain large quantities of somatic stem cells able to produce mature muscle, nerve or pancreatic cells is useful in the development of clinical treatments for genetic diseases. This clinical practice is "personalized" medicine which utilizes either an individual's own somatic stem cells, thus circumventing problems of rejection associated with implantation of allogeneic organ grafts or utilizes somatic stem cells sourced from an immunologically matched person or placental blood. CTT can be characterized by (1) the source of the somatic stem cells (e.g., neonatal, adult, or perhaps, in the future, embryonic) (2) the source of blood proteins or growth factors (e.g., from the patient or a matched single donor), (3) the cell progeny in the final product (e.g.,

hematopoietic, mesenchymal, dendritic cells, chondrocytes, etc.), (4) the disease targeted (e.g., bone marrow rescue, diabetes, myocardial infarction, Parkinson), and (5) the type of manipulation (e.g., cell isolation, capture, expansion, gene modification, cryoprecipitation or fractionation). Critical factors in providing acceptable "personalized" CTT products are that they be precisely identified and tracked from their source to the receiving patient and that every manufacturing step, such as harvesting, processing, freezing, transporting, matching, and administering, preserves the potency of the product. The Company's BioArchive and AXP products and intellectual property are designed to ensure that the living cells in the CTT products are fully functional at time of transplant - which may be months or years after production. We believe that the Company's products, that arise from its intellectual property, contain substantial advantages over other products and practices in enabling the precision manufacturing of CTT products in a safe sterile environment which will reduce the loss of cells and loss of cell viability at each step of the process from collection to administration. The Company's legacy is in its ThermoLine(TM) products for ultra rapid freezing and thawing of blood components, which the Company distributes to blood banks and hospitals. Beginning in late 1993, and with accelerated research and development efforts from 1996 to present, the Company completed development of the BioArchive, AutoXpress and CryoSeal technology platforms. The BioArchive System has initially been configured to automate the cryopreservation and archiving in liquid nitrogen, units of hematopoietic stem cells sourced from umbilical cord blood. The BioArchive System, introduced in 1999 has been purchased by the major cord blood stem cell banks in 26 countries. These cord blood stem cell units have been used to treat leukemias, lymphomas, diverse inherited anemias, such as sickle cell anemia and thalassemia, and other genetic diseases. The CryoSeal System produces a second-generation surgical sealant which prepares the two interactive liquid components of a fibrin sealant: (1) the wound healing proteins of fibringen, fibronectin, Factor VIII, von Willebrands Factor and Factor XIII and (2) the activating enzyme, thrombin. When combined at the bleeding wound site, the two components form an adhesive gel that stops bleeding and bonds tissue. This more advanced surgical sealant, sourced from either the patient's own blood or that of a single typed donor may be manufactured in either hospitals or blood centers and competes with conventional fibrin sealants, sourced from "pools" of plasma purchased from up to ten thousand individuals. The Company expanded its technical human capacity to achieve completion of these research projects, pursue regulatory clearance for the developed products, add experienced marketing talent to launch the products, and apply for patent and other intellectual property protection. 17 ThermoGenesis Corp. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three Months Ended September 30, 2005 and 2004 (Continued) Introduction (Continued) ------ To date, our BioArchive System and related products are purchased predominantly by specialized cord blood stem cell banks and stem cell research facilities. The sales of BioArchive devices have been dependent on start-up and ongoing funding costs associated with new stem cell banks as the science evolved. In more recent periods governmental funding of cord blood banks, as well as more recognized therapeutic benefits from this stem cell treatment appear to be increasing demand for cord blood stem cell transplants. Consistent with the perception that governmental backing and funding will accelerate the demand for the products, the Company has incurred expenses to promote federal financing to increase the inventory of high quality cord blood units manufactured by a network of FDA-approved cord blood banks. Legislation appropriating \$19.4 million has passed Congress and been signed into law and Health Resources and Services Administration ("HRSA") is expected to award these funds following Requests for Proposals ("RFPs") to "qualified" cord blood banks in the near future. In addition, legislation authorizing the federal financing of the production of 150,000 cord blood stem cell units has passed the House of Representatives by a vote of 431 in favor and 1 against. However, there is no certainty that the authorizing legislation will ultimately pass or that if it passes, it will result in a corresponding increase in our revenues due to cord blood banks who receive the funds deciding to purchase our BioArchive System. Our CryoSeal System has completed its U.S. clinical trials and sales in the U.S. are pending the required FDA approval following our PMA submission. In October 2005, the outcome data was completed for the 150 patient blinded, randomized multi-center clinical trial. The study reached its primary end point, which was to demonstrate equivalency (i.e. that results obtained using the CryoSeal FS System were "non-inferior" to results achieved with the control). The data in fact demonstrated that patients treated with CryoSeal FS showed "superiority" (statistically significant quicker time to hemostasis) versus the control group. The Company has received CE Mark approval for the system enabling its sale and use in Europe, although sales into individual countries under cost reimbursement structures often requires the existence of supporting clinical usage within that country. We have, through our distribution partners in Europe, undertaken several clinical studies and, upon completion, will initiate more aggressive marketing. In Japan, our distributor, Asahi

Medical Co. Ltd., has completed enrollment in their pivotal clinical trial and filed their PMA equivalent in March 2005. In Canada, field trials are underway to provide a cost justification for federal reimbursement to hospitals that use the product. In Brazil, field trials have begun to establish training and demonstration with selected customers. Several similar field trials are at various stages throughout Europe. The Company recently completed development of the AutoXpress and has initiated a Master file of the product with the FDA. The AXP is an innovative product which semi-automates the isolation and concentration of hematopoietic stem cells from cord blood into a fixed 20 ml volume in a closed sterile environment. It includes a compact battery powered device and a proprietary disposable bag set. The AXP replaces the current clinical process which is an 18-step manual method with 3-step collection of stem cells. This manual process introduces sedimentation agents or density gradient media and requires a clean room along with trained technicians. The AXP completes this process with a higher yield rate in a sterilized bag set. Included in the set is a 25 ml freezing bag which can be archived in the BioArchive System. The TPD, a product line extension of the CryoSeal platform, is a small stand alone disposable that isolates and captures activated autologous thrombin from approximately 11 ml of patient blood plasma. Thrombin is used as a topical hemostatic agent for minor bleeding sites, to treat pseudoaneurysms and to release growth factors from platelets. 18 ThermoGenesis Corp. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three Months Ended September 30, 2005 and 2004 (Continued) Introduction (Continued) ------ In our early history, our revenue was derived principally from the sale of our blood plasma freezers and thawers. With the launch of our BioArchive System in 1999, we realized revenue increases due to the sale of that equipment. The installed base of our medical devices is designed to drive increases in revenue due to the recurring sale of disposables. We anticipate similar revenue increases from disposable sales related to the CryoSeal System, AXP and TPD when the installed base of units increases, however there is no assurance that this will occur. The Company has announced a number of important agreements, summarized as follows: In March of 2005, the Company entered into a Supply Agreement with Cell Factors Technologies, Inc., an Indiana corporation and an affiliate of Biomet, Inc. ("CFT"). Under the agreement, the Company will manufacture a thrombin disposable and reagent for the Clotalyst System. Clotalyst is CFT's autologous clotting factor device and blood processing disposables. The Company assumes the role of manufacturer for CFT of the Clotalyst device and blood processing disposals for a term of five years. The agreement requires CFT, upon FDA clearance, to purchase a minimum quantity of 20,000 devices per year. CFT has paid a one time advance fee for engineering and development of the product. In March of 2005, the Company entered into a five-year Distribution and License Agreement with Asahi Kasei Medical Co., Ltd. ("Asahi"). Under the agreement, the Company granted Asahi exclusive rights to sell the CryoSeal System in Japan. This agreement replaces the parties' prior Distribution and Manufacturing License Agreement for the CryoSeal System. The agreement also granted Asahi the right to manufacture the processing disposables and thrombin reagent for production of thrombin in Japan. Asahi paid a non-refundable fee upon signing the agreement. Asahi will have the non-exclusive right to manufacture and sell the Thrombin Activation Device ("TAD") Stand Alone and the later version, the TPD, in Japan. In July 2005, the Company entered into a non-exclusive, five-year distribution agreement with CFT to supply CFT with the Company's existing CE marked TPD for sale in Europe and Canada in order in allow them to immediately begin marketing their platelet gel product. Previously, Biomet had been selling bovine thrombin with their platelet gel product. On October 13, 2005, the Company entered into a five-year agreement with Amersham Biosciences AB, General Electric Healthcare Company, which outlined the terms of a new strategic relationship between the Company and GE Healthcare, Pursuant to this agreement, (i) GE Healthcare becomes the exclusive worldwide distributor and service provider for the Company's BioArchive and AXP products, (ii) GE Healthcare agreed to provide the Company with certain funds upon execution of the agreement and over the next 15 months and (iii) GE Healthcare and the Company agreed to collaborate on certain future improvements to these product lines. In November 2005, the Company entered into a non-exclusive, five-year distribution and product modification agreement with Medtronic to supply the CE marked TPD for sale with Medtronic's Magellan Platelet Separation Device. This agreement intends to allow the sale of an all autologous platelet gel. Initially, Medtronic will sell the TPD-enabled Magellan product in Europe and Canada. Previously, Medtronic had been selling bovine thrombin with their platelet gel products. 19 ThermoGenesis Corp. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three Months Ended September 30, 2005 and 2004 (Continued) Introduction (Continued) ------ The following is Management's discussion and analysis of certain significant factors which have affected the Company's financial condition and results of operations during the period included in the accompanying financial statements. Critical

Accounting Policies ------ The Company's discussion and analysis of its financial condition and results of operations are based upon the Company's financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. On an on-going basis, the Company evaluates its estimates, including those related to bad debts, inventories, warranties, contingencies and litigation. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. The Company believes the following critical accounting policies affect its more significant judgments and estimates used in the preparation of its financial statements. Stock-Based Compensation: The Company accounts for stock-based employee compensation arrangements in accordance with the provisions of Statement of Financial Accounting Standards No. 123(R), Shared-Based Payments (FAS 123(R)). Under FAS 123(R), compensation cost is calculated on the date of the grant using the Black Scholes-Merton option-pricing formula. The compensation expense is then amortized over the vesting period. The Company uses the Black-Scholes-Merton option-pricing formula in determining the fair value of the Company's options at the grant date and applies judgment in estimating the key assumptions that are critical to the model such as the expected term, volatility and forfeiture rate of an option. The Company's estimate of these key assumptions is based on historical information and judgment regarding market factors and trends. If actual results are not consistent with the Company's assumptions and judgments used in estimating the key assumptions, the Company may be required to record additional compensation or income tax expense, which could have a material impact on the Company's financial position and results of operations. 20 ThermoGenesis Corp. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three Months Ended September 30, 2005 and 2004 (Continued) Critical Accounting Policies (Continued) ------ Revenue Recognition: The Company recognizes revenue in accordance with the provisions of SAB No. 104 and EITF 00-21. For licensing arrangements pursuant to which the Company receives up-front licensing fees for products or technologies that will be provided by the Company over the term of the arrangements, the Company defers the upfront fees and recognizes the fees as revenue on a straight-line method over the term of the respective contracts. For sales of products made to distributors, the Company considers a number of factors in determining whether revenue is recognized upon transfer of title to the distributor, or when the distributor places the product with an end-user. These factors include, but are not limited to, whether the payment terms offered to the distributor are considered to be non-standard, the distributor's history of adhering to the terms of its contractual arrangements with the Company, the level of inventories maintained by the distributor, whether the Company has a pattern of granting concessions for the benefit of the distributor, or whether there are other conditions that may indicate that the sale to the distributor is not substantive. The Company currently recognizes revenue on the sell-in method with its distributors, Allowance for Doubtful Accounts: The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required, which would be charged against earnings. Warranty: The Company provides for the estimated cost of product warranties at the time revenue is recognized. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers, the Company's warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from the Company's estimates, revisions to the estimated warranty liability would be required. Inventory Reserve: The Company plans inventory procurement and production based on orders received, forecasted demand and supplier requirements. The Company writes down its inventories for estimated obsolescence or unmarketable inventories equal to the difference between the cost of inventories and its net realizable value based upon estimates about future demand from our customers and distributors and market conditions. Because some of the Company's products are highly dependent on government and third-party funding, current customer use and validation, and completion of regulatory and field trials, there is a risk that we will forecast incorrectly and purchase or produce excess inventory. As a result, actual demand may differ from forecasts, and such a difference may have a material adverse effect on future results of operations due to required write-offs of excess or obsolete inventory. This

inventory risk may be further compounded for the CryoSeal family of products because they are at initial market introduction and market acceptance will depend upon the customer accepting the products as clinically useful, reliable, accurate and cost effective compared to existing and future products and completion of required clinical or field acceptance trials. 21 ThermoGenesis Corp. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three Months Ended September 30, 2005 and 2004 (Continued) Results of Operations ----- Results of Operations for the Three Months Ended September 30, 2005 as Compared to the Three Months Ended September 30, 2004 Net Revenues: Revenues for the three months ended September 30, 2005 were \$2,116,000, compared to \$2,397,000 for the three months ended September 30, 2004, a decrease of \$281,000. Revenues generated by the BioArchive product line were \$1,454,000 for the three months ended September 30, 2005, compared to \$1,678,000 for the corresponding fiscal 2005 period, a decrease of \$224,000. There were three BioArchive devices shipped in the first quarter of fiscal 2006 versus four in the first quarter of fiscal 2005. Included in the BioArchive product line revenues noted above was \$674,000 generated from the sales of disposables for the first quarter of fiscal 2006, compared to \$713,000 for the first quarter of fiscal 2005 due to lower sales of canisters, an accessory of the BioArchive System. Revenues generated by the ThermoLine product line were \$512,000 for the three months ended September 30, 2005, compared to \$577,000 for the same period in the prior year. The loss in revenue is primarily due to the loss of a ThermoLine service contract with ZLB, formerly Aventis. The following represents the Company's cumulative BioArchive devices sold into the following geographies through the dates indicated: September 30 2005 2004 ------ United States 24 19 Asia 46 40 Europe 26 24 Rest of World 21 14 ----- 117 97 ======== Cost of Revenues: Cost of revenues as a percent of revenues was 72% for the three months ended September 30, 2005, as compared to 67% for the corresponding fiscal 2005 period. The cost of revenues percentage is higher primarily due to the loss of ThermoLine service revenues, which had a higher margin than the overall product mix for the three months ended September, 30, 2005. Also contributing to the increase in cost of revenues was a lower percentage of BioArchive device and canister sales, which carry a higher margin than overall product mix for the first fiscal quarter of 2006. Selling, General and Administrative Expenses: Selling, general and administrative expenses were \$1,584,000 for the three months ended September 30, 2005, compared to \$1,434,000 for the fiscal 2005 period, an increase of \$150,000 or 10%. The increase is primarily attributable to the Company's adoption of Statement 123(R) as of July 1, 2005, which resulted in \$155,000 of stock based compensation expense for the quarter ended September 30, 2005. 22 ThermoGenesis Corp. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three Months Ended September 30, 2005 and 2004 (Continued) Results of Operations (Continued) ------- Research and Development Expenses: Included in this line item are Engineering, Regulatory Affairs, Scientific and Clinical Affairs. Research and development expenses for the three months ended September 30, 2005, were \$1,073,000 compared to \$1,269,000 for the corresponding fiscal 2005 period, a decrease of \$196,000 or 15%. The decrease is primarily due to a reimbursement of \$115,000 in product development costs associated with the TPD product extension, the Clotalyst, and a reduction of \$125,000 in the costs associated with design and development services for the AXP System as it is nearing completion. Certain costs for development of the Clotalyst product are being reimbursed by our strategic partner, BioMet. The costs associated with the CryoSeal FS human clinical trials were \$304,000, for the quarter ended September 30, 2005 versus \$283,000 for the same period in fiscal 2005. Liquidity and Capital Resources ----- At September 30, 2005, the Company had a cash balance of \$8,121,000, and working capital of \$11,507,000. This compares to a cash balance of \$9,568,000 and working capital of \$13,085,000 at June 30, 2005. The cash was used to fund operations and other cash needs of the Company. This was offset by the exercise of stock options and warrants of \$171,000. In addition to product revenues, we have primarily financed our operations through the private placement of equity securities. Since its inception, the Company has raised approximately \$73 million, net of expenses, through common and preferred stock financings and option and warrant exercises. As of September 30, 2005, the Company has no off-balance sheet arrangements. Net cash used in operating activities for the three months ended September 30, 2005 was \$1,542,000, primarily due to the net loss of \$2,016,000. Accounts receivable generated \$692,000 of cash due to collections of outstanding customer balances. Inventories generated \$186,000 of cash as a result of decreasing our inventory procurement. Other current assets generated \$102,000 of cash due to utilizing a prepayment for invoices from a Clinical Research Organization ("CRO") for services with respect to the Company's CryoSeal FS human clinical trials. The reduction in accounts payable during the quarter resulted in a use of cash of \$624,000. Backlog ----- The Company's cancelable backlog at September 30, 2005 was \$70,000. Item

3. Quantitative and Qualitative Disclosures about Market Risk -----All sales, domestic and foreign, are made in U.S. dollars and therefore material fluctuations are believed to have no impact on the Company's net revenues. The Company has no long-term debt or investments, other than a note payable and a capital lease, and therefore is not subject to interest rate risk. Management does not believe that inflation has had or will have a significant impact on the Company's results of operations. The Company is not exposed to any market risk involving activities in derivative commodity instruments. 23 ThermoGenesis Corp. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three Months Ended September 30, 2005 and 2004 (Continued) Item 4. Controls and Procedures ------ The Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer along with the Company's Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined by Exchange Act Rule 13a-15(e)) as of the end of our fiscal quarter pursuant to Exchange Act Rule 13a-15. Based upon that evaluation, the Company's Chief Executive Officer along with the Company's Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective in ensuring that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. There were no changes in the Company's internal controls over financial reporting that occurred during the three months ended September 30, 2005 that have materially affected, or are reasonably likely to materially affect, its internal controls over financial reporting. The Company believes that a control system, no matter how well designed and operated, cannot provide absolute assurance that the objectives of the control system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within any company have been detected. 24 PART II - OTHER INFORMATION Item 1. Legal. In the normal course of operations, the Company may have disagreements or disputes with vendors or employees. These disputes are seen by the Company's management as a normal part of business, and there are no pending actions currently or no threatened actions that management believes would have a significant material impact on the Company's financial position, results of operations or cash flows. Item 2. Unregistered Sales of Equity Securities and Use of Proceeds. None. Item 3. Defaults upon Senior Securities. None. Item 4. Submission of Matters to a vote of Security Holders, None. Item 5. Other Information. None. Item 6. Exhibits: 3.1 (a) Amended and Restated Certificate of Incorporation(1) (b) Revised Bylaws(2) 4.1 Warrant (form)(3) 31.1 Certification by the Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. 31.2 Certification by the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. 32 Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes Oxley Act of 2002. Footnotes to Exhibit Index (1) Previously filed as an Exhibit to the Company's Proxy Statement filed September 12, 2005 (2) Incorporated by reference to Form 10-KSB for the year ended June 30, 1994 (3) Incorporated by reference to Form 8-K dated April 5, 2002 25 ThermoGenesis Corp. Signatures Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized. ThermoGenesis Corp. (Registrant) Dated: December 13, 2005 /s/ Philip H. Coelho ----- Philip H. Coelho Chief Executive Officer (Principal Executive Officer) /s/ Matthew T. Playan ----- Matthew T. Playan Chief Financial Officer (Principal Financial and Accounting Officer) 26