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PROSPECTUS SUPPLEMENT
(To Prospectus dated June 13, 2011)

$20,600,000

NeoStem, Inc.

Common Stock

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering up to $20,600,000 of our common stock, par value $0.001 per share ("Common Stock"), to Aspire Capital Fund, LLC under a Common Stock Purchase Agreement entered into on September 28, 2011.

The shares offered include (i) 990,099 shares of Common Stock to be issued to Aspire Capital Fund, LLC in consideration for entering into the Common Stock Purchase Agreement and (ii) additional shares of Common Stock with an aggregate offering price of up to $20,000,000 which may be sold from time to time to Aspire Capital Fund, LLC until September 30, 2013. The purchase price for the additional shares of stock will be based upon one of two formulas set forth in the Common Stock Purchase Agreement depending on the type of purchase notice we submit to Aspire Capital from time to time.

Our Common Stock is listed on NYSE Amex under the symbol "NBS." The last reported sale price for our Common Stock on NYSE Amex on September 28, 2011, was $0.70 per share.

Investing in our Common Stock involves significant risks. See the section entitled "Risk Factors" beginning on page S-10 of this prospectus supplement and the risk factors contained in our filings with the Securities and Exchange Commission which have been incorporated herein.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of 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 supplement is September 30, 2011.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and certain other matters and may add, update or change information in the accompanying prospectus. The second part is the accompanying prospectus dated June 13, 2011, which provides you with general information about securities we may offer from time to time, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. 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, on the other hand, you should rely on the information in this prospectus supplement. These documents contain important information you should consider when making your investment decision. You should rely only on the information provided in this prospectus supplement and the accompanying prospectus as well as the information incorporated by reference in this prospectus supplement or the accompanying prospectus. We have not authorized anyone to provide you with any other information.

This prospectus supplement and the accompanying prospectus do not constitute an offer to sell or a solicitation of an offer to buy the shares offered hereby in any jurisdiction where, or to any person to whom, it is unlawful to make such offer or solicitation.

The information contained in this prospectus supplement and the accompanying prospectus is accurate only as of the date of the prospectus supplement and the accompanying prospectus, regardless of the time of delivery of this prospectus supplement or of any sale of the shares. We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus supplement and the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless we have indicated otherwise, or the context otherwise requires, references in this prospectus supplement and the accompanying prospectus to “NeoStem,” the “Company,” “we,” “us” and “our” refer to NeoStem, Inc. and its subsidiaries.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary may not contain all the information that you should consider before investing in our common stock. You should read the entire prospectus supplement and the accompanying prospectus carefully, including "Risk Factors" contained in this prospectus supplement and the documents incorporated by reference in the accompanying prospectus, before making an investment decision. This prospectus supplement may add to, update or change information in the accompanying prospectus.

Our Company

Overview

NeoStem, Inc. ("we," "NeoStem" or the "Company") continues to develop its core capabilities in cell therapy to capitalize on the paradigm shift that we see occurring in medicine. Our acquisition of Progenitor Cell Therapy, LLC ("PCT") provides the foundation to achieve our mission to become a premier cell therapy company. While our origins are in adult stem cell research, collection and storage, we came to understand that the catalyst for storage is therapy. People want to see that there are and will be uses for their cells should they need them in the future. NeoStem today has deployed significant resources to meet the basic research, manufacturing, regulatory, clinical and logistical demands of an integrated cell therapeutics company.

Currently, we operate our business in three reportable segments: (i) Cell Therapy — United States; (ii) Regenerative Medicine — China; and (iii) Pharmaceutical Manufacturing — China.

Cell Therapy — United States

PCT Merger

On January 19, 2011 we completed our acquisition of PCT (the "PCT Merger") As a result of the consummation of the PCT Merger, PCT is now a wholly-owned subsidiary of our Company.

Founded by Dr. Andrew L. Pecora and Robert A. Preti, Ph.D., PCT became an internationally recognized cell therapy services and development company. It sought to create a business for "as needed" development and manufacturing services for the emerging cell therapy industry and to prepare for eventual commercialization. With its cell therapy manufacturing facilities and team of professionals, PCT offers a platform that can facilitate the preclinical and clinical development and commercialization of cellular therapies for clients throughout the world. Dr. Preti now serves as PCT's President and Chief Scientific Officer and Dr. Pecora as its part-time Chief Medical Officer (and effective August 17, 2011, Dr. Pecora also serves as Chief Medical Officer of NeoStem).

PCT is engaged in a broad range of services in the cell therapy market for the treatment of human disease, PCT offers current Good Manufacturing Practices (cGMP)-compliant cell transportation, manufacturing, storage, and distribution services and supporting clinical trial design, product process development, logistics, regulatory and quality systems development services. In addition, through its network of contacts throughout the cell therapy industry, PCT is able to identify early stage development opportunities in the cell therapy field and opportunistically develop these cell therapies through proof of concept where they can be further developed and ultimately commercialized through NeoStem's developing commercial structure. PCT's expertise in the cell therapy arena includes therapeutic vaccines (oncology), various related cell therapeutics, cell diagnostics, and regenerative medicine. From this platform, we hope to develop product based therapeutics. Our goal is to develop internally, or through partnerships, allogeneic (cells from a third-party donor) or autologous (cells from oneself) therapeutic technologies that, in the aggregate, comprise the Cell Therapy — United States reportable segment of our business.

Cell Collection, Processing and Storage Business

In the United States, we are a provider of family banking offering adult stem cell collection, processing and storage services for newborns as well as adults. This enables healthy individuals to donate and store their stem cells for personal therapeutic use in the future, if needed. Similar to the banking of cord blood, pre-donating cells at a younger age helps to ensure a supply of one's own stem cells should they be needed for future medical treatment. We have established a network of adult stem cell collection centers in the U.S. With our acquisition of PCT, we acquired the expertise of cGMP cord blood banking. NeoStem Family Storage (formerly DomaniCell, LLC), a wholly owned subsidiary of PCT, assists hospitals by providing umbilical cord blood unit collection and long-term storage services to patients for potential future therapeutic use.

In July 2010, we were named "Best Stem Cell Company, 2010," in the New Economy's Biotech Awards.

Stem Cell Research

NeoStem conducts research and development activities in its own laboratory facilities In addition, through collaborations, we pursue therapeutic and potentially diagnostic applications for adult stem cells, including applications using our own VSEL™ Technology (very small embryonic-like stem cells). VSEL™ Technology, licensed from the University of Louisville, represents NeoStem's proprietary pre-clinical platform. We believe VSEL stem cells hold significant potential for the Company, affording entry into the regenerative medicine arena with a cell product that may open up new areas in regenerative medicine. In April 2009, we entered into a License Agreement with Vincent Falanga, M.D., pursuant to which we acquired a world-wide, exclusive license to certain innovative stem cell technologies and applications for wound healing. In conjunction with that license we entered into a multi-year sponsored research agreement with the Roger Williams Medical Center in Providence, Rhode Island and Dr. Falanga's laboratory, funded by the Department of Defense, to study the use of mesenchymal cells and VSEL stem cellsfor the treatment of chronic wounds. We have also in-licensed more mature technologies that use stem cells for regenerative applications, including rebuilding cartilage, repairing fractures and rejuvenating aging skin. Some of these products or treatments have recently launched commercially in Asia.

Regenerative Medicine — China

We are presently applying our cellular therapies in the People's Republic of China ("China" or "PRC"). In 2009, we began several China-based, adult stem cell initiatives including: (i) creating a separate China-based stem cell operation, (ii) constructing a stem cell research and development laboratory and processing and manufacturing facility in Beijing, (iii) establishing relationships with hospitals to provide stem cell-based therapies, and (iv) obtaining product licenses covering several adult stem cell therapeutics focused on regenerative medicine. In 2010, we began offering our adult stem cell storage and anti-aging and cosmetic applications in Taiwan through an agreement with Enhance Biomedical Holdings. In June 2010 we launched a collaboration with Shandong Wendeng Orthopaedic Hospital, or Wendeng Hospital, which was the first hospital in the network we are establishing to offer orthopaedic treatments in China. In December 2010, we entered into the second hospital cooperation agreement with Shijiazhuang Third Hospital in the provincial capital of Hebei Province. We entered into a third hospital collaboration agreement in mid-2011. In the third quarter of 2010, Weihai Municipal Price Bureau, the local authority in charge of pricing for public medical services in Wendeng, approved the pricing for single side and bilateral arthroscopic orthopedic autologous adult stem cell based treatment licensed by us which is being administered at Wendeng Hospital. Importantly, the Weihai Municipal Labor Bureau Medical Insurance Office approved Wendeng Hospital's application for reimbursement whereby patients are eligible to receive reimbursement for up to 80% of the cost of the orthopedic procedure under the new technology category.

Pharmaceutical Manufacturing — China

We acquired a 51% ownership interest in Suzhou Erye Pharmaceutical Company Ltd. ("Erye") in October 2009. Erye was founded more than 50 years ago and represents an established, vertically-integrated pharmaceutical business. Historically, Erye has concentrated its efforts on manufacturing and distributing of generic antibiotic products. It has received more than 160 production certificates from the State Food and Drug Administration of China, or SFDA, covering both antibiotic prescription drugs and active pharmaceutical intermediates (APIs). Our current senior executive management team at Erye, Mr. Shi, Chairman, and Madame Zhang, General Manager, joined Erye in 1998, and in conjunction with others bought it from the PRC government in 2003. A majority of the drugs that Eyre manufactures are on China's "essential drug" list, and Erye's new facility under construction will enable greater production.

As part of our plan to focus our business on cell therapy manufacturing, development and other related activities, we are pursuing strategic alternatives with respect to Erye. In June 2011 we engaged a financial advisor to lead the effort to pursue the possible divestiture of our 51% interest in Erye, though we have not yet determined to sell our interest in Erye.

Recent NeoStem Developments — Amorcyte Merger Agreement

On July 13, 2011, we entered into an Agreement and Plan of Merger (the "Amorcyte Merger Agreement") with Amorcyte, Inc. ("Amorcyte"), pursuant to which Amo Acquisition Company I Inc., our newly-formed wholly-owned subsidiary ("Subco"), will merge (the "Amorcyte Merger") with and into Amorcyte, with Amorcyte as the surviving entity and our wholly-owned subsidiary. Thereafter, Amorcyte will be merged with and into Amo Acquisition Company II, LLC, another newly-formed wholly-owned subsidiary of ours.

The Amorcyte Merger Agreement provides that all of the shares of Amorcyte common stock ("Amorcyte Common Stock") and Amorcyte Series A Preferred Stock ("Amorcyte Series A Preferred Stock"), all options and warrants to acquire equity of Amorcyte, and all debt obligations issued by Amorcyte that are convertible into Amorcyte Series A Preferred Stock (to the extent not already converted, being treated as if it were actually converted), in each case, issued and outstanding immediately prior to the effective time of the Amorcyte Merger (the "Effective Time"), will be converted by virtue of the Amorcyte Merger into the right to receive, in the aggregate, (i) 6,821,283 shares of our common stock, par value $0.001 per share, subject to downward adjustment under certain circumstances (the "Base Stock Consideration"); (ii) up to an additional 4,092,768 shares of our common stock (the "Contingent Shares", and together with the Base Stock Consideration, the "Stock Consideration"), which Contingent Shares will only be issued if certain specified business milestones are accomplished; (iii) seven year warrants to purchase an aggregate of 1,881,008 shares of our common stock at an exercise price of $1.466 per share (the terms of such warrants to provide that the transfer of any shares of our common stock issued upon exercise thereof will be restricted until one year after the closing date of the Amorcyte Merger); and (iv) earn out payments equal to 10% of the net sales of Amorcyte's lead product candidate AMR-001 (in the event of and following the date of first commercial sale of AMR-001), provided that in the event NeoStem sublicenses AMR-001, the applicable earn out payment will be equal to 30% of any sublicensing fees, and provided further that NeoStem will be entitled to recover direct out-of-pocket clinical development costs not previously paid or reimbursed and any costs, expenses, liabilities and settlement amounts arising out of claims of patent infringement or otherwise challenging Amorcyte's right to use intellectual property, by reducing any earn out payments due by 50% until such costs have been recouped in full. The Contingent Shares will be issued only if the following business milestones are achieved, as follows:

- One-third of the Contingent Shares will be issued upon (a) the completion of Phase 2 clinical trial for Amorcyte's product candidate AMR-001 and (b) issuance of a statistically significant analysis demonstrating satisfaction of the primary clinical end points from the Phase 2 clinical trial, which primary clinical endpoints are described in the Phase 2 clinical trial protocol submitted by Amorcyte to the FDA on July 5, 2011, and which may only be changed by a writing consented to by NeoStem and the Amorcyte Representative.

- One-third of the Contingent Shares will be issued following a Type B End of Phase 2/Pre-Phase 3 meeting with the FDA wherein AMR-001 is acknowledged in writing by the FDA to be ready for Phase 3.
- The remaining one-third of the Contingent Shares will be issued upon the first dosing of the first patient in the pivotal Phase 3 clinical study for AMR-001.

The consummation of the Amorcyte Merger is subject to various conditions, including the approval by Amorcyte's stockholders of the Amorcyte Merger and the Agreement and Plan of Merger; approval by NeoStem's stockholders of the issuance of NeoStem securities in connection with the Amorcyte Merger; Amorcyte having terminated (with no liability to NeoStem) its Amended and Restated License, as amended to date, from Baxter Healthcare Corporation; receipt by NeoStem of evidence reasonably satisfactory to it that Amorcyte has entered into an agreement with a supplier for cell sorting on terms and conditions reasonably acceptable to NeoStem; the full payment and satisfaction by Amorcyte of all payables due to NeoStem's subsidiary PCT through the closing date; the absence of any order or legal proceeding preventing consummation of the Amorcyte Merger; and other legal and regulatory requirements. Additionally, it is a condition to NeoStem's and Subco's obligations to close that (A) (i) holders of Amorcyte Common Stock and holders of Amorcyte Series A Preferred Stock entitled to 1% or more of the aggregate Stock Consideration shall not have voted against the adoption of the Agreement and Plan of Merger or withheld their consent thereto in writing or otherwise remain eligible to perfect appraisal rights in accordance with the General Corporation Law of the State of Delaware (the "DGCL"), and (ii) holders who represent more than 5% of the issued and outstanding Amorcyte Common Stock shall not have voted against the adoption of the Agreement and Plan of Merger or withheld their consent thereto in writing or otherwise remain eligible to perfect appraisal rights in accordance with the DGCL, and that (B) no holders of the issued and outstanding Amorcyte Series A Preferred Stock shall have had any of their shares redeemed nor shall any holder of the Amorcyte Series A Preferred Stock have requested that Amorcyte redeem any shares of Amorcyte Series A Preferred Stock. Either NeoStem or Amorcyte may terminate the Agreement and Plan of Merger and the transactions contemplated thereby at any time prior to the Effective Time, if the closing does not occur on or prior to January 31, 2012; provided that the party seeking to terminate is not at such time in material breach of any material representation or warranty contained in the Agreement and Plan of Merger.

Amorcyte Business Overview

Amorcyte is a clinical stage therapeutics company pursuing cell-based therapies for cardiovascular diseases. Its therapeutic strategy focuses on developing product candidates designed to prevent subsequent major adverse cardiac events following a significant AMI by preserving heart muscle tissue. Amorcyte's most advanced product candidate is AMR-001, a chemotactic hematopoietic stem cell product comprising autologous bone marrow-derived, CD34+/CXCR-4+ stem cells selected to treat damaged heart muscle following acute myocardial infarction ("AMI"). AMR-001 works by increasing microvascular blood flow in the myocardium (heart muscle) via neoangiogenesis (development and formation of new blood vessels), thereby reversing post-heart attack induced ischemia (restriction of blood supply) and rescuing tissue from hibernation and preventing eventual cell death (apoptosis). Amorcyte is developing a therapeutic to prevent the post-AMI deterioration of cardiac function by injecting a potent dose of autologous bone marrow ("BM") derived CD34+/CXCR-4+ cells 7 – 11 days post AMI (the repair phase) into the peri-infarct zone (that is, the living tissue on the periphery of the dead tissue), which restores perfusion (or blood flow) surrounding the site of the heart attack.

Amorcyte successfully completed a Phase 1 trial of AMR-001 for the treatment of damaged heart muscle following AMI, and is preparing to move into Phase 2 testing. Amorcyte believes that its Phase 1 study is the first stem cell trial to show dose-related, statistically significant, improvement in perfusion following AMI, which remains a significant cause of morbidity and mortality in the United States and world-wide. Current interventions or medications have limited ability to prevent progressive myocardial cell apoptosis leading to cardiac functional deterioration and downstream major adverse cardiac events ("MACE"). Amorcyte also believes that there are applications for AMR-001 in congestive heart failure.

PCT, a cGMP cell manufacturer accredited by the Foundation for the Accreditation of Cell Therapies ("FACT"), did the manufacturing of cells for Amorcyte's Phase 1 trial and will continue to offer its expertise in cell therapy and core process development to provide a cost advantage for AMR-001 manufacturing for Phase 2 through commercialization.

Anticipated Phase 2 Trial of AMR-001

By no later than the end of first quarter of 2012, Amorcyte expects to commence a 160 patient Phase 2 multicenter, blinded, prospective, randomized, controlled U.S. clinical trial to evaluate the efficacy and safety of a single intra-coronary infusion of 10 million cells of AMR-001 post AMI in subjects with ejection fractions of 48% or less. The objective of the Phase 2 study will be to determine the effect of a 10 million cell infusion of CD34+/CXCR4+ enriched cells on cardiac function and outcomes of patients after significant AMI. The primary assessment for the effect of AMR-001 on cardiac function will be improvement in cardiac perfusion. Amorcyte also intends to evaluate the impact of AMR-001 on cardiac function and adverse events post-myocardial infarction as defined by reduction in cumulative MACE at 6, 12, 18 and 24 months, premature death, recurrent heart attack, congestive heart failure, significant arrhythmias, and acute coronary syndrome.

In order to accelerate Amorcyte's ability to commence the Phase 2 clinical trial of AMR-001, NeoStem has agreed to provide loans to Amorcyte prior to the closing to be used in connection with the Phase 2 trial. Pursuant to a Loan Agreement entered into on September 9, 2011, Amorcyte may from time to time request loans from NeoStem up to an aggregate principal amount of $350,000. The borrowings will accrue interest at a rate of 6% per annum through December 31, 2011 and at a rate of 9% per annum thereafter. Amounts repaid by Amorcyte may not be reborrowed. Monthly interest payments commence in January 2012, with the entire unpaid principal balance of the loans (together with accrued but unpaid interest) becoming due on August 31, 2012. Amorcyte gave NeoStem a Convertible Promissory Note to evidence the loans, which affords NeoStem the right at any time after January 1, 2012 to convert unpaid Loan Agreement obligations into Amorcyte Common Stock and Amorcyte Series A Preferred Stock.

Plans for Future Development

If successful in Phase 2, Amorcyte plans to proceed with a later stage trial(s) to demonstrate meaningful clinical benefit and seek approval to commercialize AMR-001 to prevent the adverse consequences of a large AMI.

Amorcyte Corporate Information

Amorcyte's headquarters are located at 4 Pearl Court, Suite C, Allendale, NJ 07401 and its telephone number is (201) 883-1406.

NeoStem Corporate Information

Our principal executive offices are located at 420 Lexington Avenue, Suite 450, New York, New York 10170, and our telephone number is (212) 584-4180. Our Common Stock is currently traded on the NYSE Amex under the symbol "NBS." We maintain a corporate website at *www.neostem.com*. The contents of our website are not incorporated by reference into this prospectus and should not be considered to be a part of this prospectus or relied upon in connection herewith.

NeoStem, Inc. was incorporated under the laws of the State of Delaware in September 1980 under the name Fidelity Medical Services, Inc. and commenced operations in the adult stem cell collection, processing and storage services business in January 2006. Unless otherwise stated, all references to "us," "our," "NeoStem," "we," the "Company" and similar designations refer to NeoStem, Inc.

This prospectus supplement, the accompanying prospectus and the information incorporated by reference includes trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus supplement or the accompanying prospectus are the property of their respective owners.

THE OFFERING

On September 28, 2011, we entered into a Common Stock Purchase Agreement (the "Purchase Agreement") with Aspire Capital Fund, LLC, an Illinois limited liability company ("Aspire Capital"), which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of $20.0 million of our shares of Common Stock (the "Purchase Shares") from time to time over the term of the Purchase Agreement. As consideration for entering into the Purchase Agreement, we agreed to issue 990,099 shares of our Common Stock to Aspire Capital (the "Commitment Shares").

We are filing this prospectus supplement with regard to the offering of $20.6 million of our Common Stock, which consists of (i) the Commitment Shares and (ii) additional shares of our Common Stock having an aggregate offering price of up to $20.0 million that we may sell to Aspire Capital pursuant to the Purchase Agreement.

On any business day on which the closing sale price of our Common Stock equals or exceeds the Formula Price (as defined below) over the 24-month term of the Purchase Agreement, we have the right, in our sole discretion, to present Aspire Capital with a purchase notice (each, a "Purchase Notice") directing Aspire Capital to purchase up to 100,000 Purchase Shares per business day; however, no sale pursuant to such a Purchase Notice may exceed five hundred thousand dollars ($500,000) per business day, unless we and Aspire Capital mutually agree. We and Aspire Capital also may mutually agree to increase the number of shares that may be sold per business day to as much as an additional 1,000,000 shares per business day. The purchase price per Purchase Share (the "Purchase Price") is the lower of:

- the lowest sale price for the Common Stock on the date of sale; or
- the arithmetic average of the three lowest closing sale prices for the Common Stock during the 12 consecutive business days ending on the business day immediately preceding the purchase date of such Purchase Shares.

In addition, on any date on which we submit a Purchase Notice to Aspire Capital for at least 100,000 Purchase Shares, we also have the right, in our sole discretion, to present Aspire Capital with a volume-weighted average price purchase notice (each, a "VWAP Purchase Notice") directing Aspire Capital to purchase an amount of stock equal to up to 30% of the aggregate shares of the Company's Common Stock traded on the NYSE Amex on the next business day (the "VWAP Purchase Date"), subject to a maximum number of shares determined by the Company (the "VWAP Purchase Share Volume Maximum") set forth in the VWAP Purchase Notice. The purchase price per Purchase Share pursuant to such VWAP Purchase Notice (the "VWAP Purchase Price") shall be 95% of the volume-weighted average price for our Common Stock traded on the NYSE Amex for the VWAP Purchase Date. However, if the aggregate number of our shares traded on such date exceeds the quotient obtained by dividing (x) the maximum number of shares Aspire Capital will be required to purchase by (y) our requested purchase percentage, each as specified in the VWAP Purchase Notice (such quotient, the "VWAP Purchase Share Volume Maximum"), the purchase price per share will be 95% of the volume weighted average for the portion of such day until such time as the VWAP Purchase Share Volume Maximum is reached. Further, such purchase shall automatically be deemed completed at such time on the VWAP Purchase Date that the sale price of the Common Stock falls below the greater of (i) 90% of the closing price on of our Common Stock on the business day immediately preceding the VWAP Purchase Date or (ii) such higher price as set forth by us the VWAP Purchase Notice (the "VWAP Minimum Price Threshold"). In that event, the VWAP Purchase Amount will be determined using the percentage set forth in the VWAP Purchase Notice of the aggregate shares traded for such portion of the VWAP Purchase Date prior to the time that the sale price of our Common Stock fell below the VWAP Minimum Price Threshold and the VWAP Purchase Price for such shares will be 95% of the volume weighted average price of our Common Stock sold during such portion of the VWAP Purchase Date prior to the time that the sale price of our Common Stock fell below the VWAP Minimum Price Threshold.

The number of Purchase Shares covered by and timing of each Purchase Notice or VWAP Purchase Notice are determined by the Company, at our sole discretion. We may deliver Purchase Notices and VWAP Purchase Notices to Aspire Capital from time to time during the term of the Purchase Agreement, so long as the most recent purchase has been completed; provided, however, that no sales may be effected under the

Purchase Agreement on any date where the closing sale price of our Common Stock is less than 75% of the closing sale price of our Common Stock (rounded down to the nearest penny) on the business day immediately preceding the date the Purchase Agreement was executed (the "Formula Price"). The aggregate number of shares that the Company can sell to Aspire Capital under the Purchase Agreement may in no case exceed 18,747,906 shares of our Common Stock (which is equal to approximately 19.9% of the Common Stock outstanding on the closing date of the Purchase Agreement, less the Commitment Shares) (the "Exchange Cap"), unless shareholder approval is obtained to issue more than such 19.9%, in which case the Exchange Cap will not apply. We will control the timing and amount of any sales of our Common Stock to Aspire Capital. Aspire Capital has no right to require any sales by us, but is obligated to make purchases from us as we direct in accordance with the Purchase Agreement. There are no limitations on use of proceeds, financial or business covenants, restrictions on future fundings, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement. We did not pay any additional amounts to reimburse or otherwise compensate Aspire Capital in connection with the transaction. The Purchase Agreement may be terminated by us at any time, at our discretion, without any penalty or cost to us.

As of September 28, 2011, there were approximately 99,185,956 shares of our Common Stock outstanding (66,538,030 shares held by non-affiliates) excluding the shares offered to Aspire Capital pursuant to this prospectus supplement. Assuming a per share purchase price of $0.70 for all Purchase Shares (the most recent practicable closing price of our Common Stock), and assuming, for purposes of this calculation, the applicability of the Exchange Cap limitation, if all Common Stock offered hereby (including the Commitment Shares) were issued and outstanding as of the date hereof, 19,738,005 shares of our Common Stock (including the Commitment Shares) would be issued under the Purchase Agreement, which would result in gross proceeds of approximately $13.1 million with respect to the Purchase Shares and would represent approximately 16.6% of the total Common Stock outstanding or 22.9% of the non-affiliate shares of Common Stock outstanding. The number of shares of our Common Stock ultimately offered for sale to Aspire Capital is dependent upon the number of shares we elect to sell to Aspire Capital under the Purchase Agreement.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein or therein contain 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"), which are subject to a number of risks and uncertainties. All statements, other than statements of historical facts, that we include in this prospectus, any prospectus supplement, and in the documents we incorporate by reference in this prospectus, may be deemed forward-looking statements for purposes of the Securities Act and the Exchange Act. We use the words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "project," "will," "would" and similar expressions to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We cannot guarantee that we actually will achieve the plans, intentions or expectations disclosed in our forward-looking statements and, accordingly, you should not place undue reliance on our forward-looking statements. There are a number of important factors that could cause actual results or events to differ materially from the forward-looking statements that we make, including the factors included in the documents we incorporate by reference in this prospectus. You should read these factors and the other cautionary statements made in the documents we incorporate by reference as being applicable to all related forward-looking statements wherever they appear in this prospectus, any prospectus supplement, and any document incorporated by reference. We caution you that we do not undertake any obligation to update forward-looking statements made by us.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should consider the following risk factors and the risk factors contained in the accompanying prospectus, as well as other information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering, before making an investment decision. If any of these risks occur, our business, financial condition, results of operations and future prospects would likely be materially and adversely affected. In these circumstances, the market price of our common stock would likely decline and you may lose all or part of your investment. Share information set forth in these risk factors is as of the dates set forth herein and unless otherwise indicated, does not give effect to the issuance of the securities in connection with this offering.

RISKS RELATED TO THIS OFFERING AND OUR SECURITIES

The sale of our Common Stock to Aspire Capital may cause substantial dilution to our existing stockholders and the sale of the shares of Common Stock acquired by Aspire Capital could cause the price of our Common Stock to decline.

This prospectus supplement relates to $20.6 million of our Common Stock that we may issuance and sell to Aspire Capital. It is anticipated that shares offered to Aspire Capital in this offering will be sold over a period of up to 24 months from the date of this prospectus supplement. The number of shares ultimately offered for sale to Aspire Capital under this prospectus supplement is dependent upon the number of shares we elect to sell to Aspire Capital under the Purchase Agreement. Depending upon market liquidity at the time, sales of shares of our Common Stock under the Purchase Agreement may cause the trading price of our Common Stock to decline.

Aspire Capital may ultimately purchase all, some or none of the $20.0 million of Common Stock that, together with the 990,099 shares of Common Stock we refer to as the Commitment Shares, is the subject of this prospectus supplement. After Aspire Capital has acquired shares under the Purchase Agreement, it may sell all, some or none of those shares. Sales to Aspire Capital by us pursuant to the Purchase Agreement under this prospectus supplement may result in substantial dilution to the interests of other holders of our Common Stock. The sale of a substantial number of shares of our Common Stock to Aspire Capital in this offering, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales. However, we have the right to control the timing and amount of any sales of our shares to Aspire Capital and the Purchase Agreement may be terminated by us at any time at our discretion without any cost to us.

Although we raised approximately $14.6 million in net proceeds in our July 2011 underwritten offering, we anticipate that we will need substantial additional financing in the future to continue our operations and, assuming the Amorcyte Merger is consummated, to continue the operations of the combined company. If we are unable to raise additional capital as needed, the combined company may be forced to delay, reduce or eliminate one or more of its product development programs, cell therapy initiatives or commercialization efforts.

We anticipate that (even after taking into account our recent July 2011 underwritten offering) we will require additional capital to fund our current operating plan, including our existing U.S.-based cell therapy operations (such as development of our VSEL™ technology and a T-cell therapeutic, our stem cell collection and storage business, and our cell manufacturing and processing operations) and our China-based initiatives.

In addition, the Amorcyte business to be acquired by us will require significant additional financing. Amorcyte is a development stage company with no commercial products. Amorcyte's product candidate, AMR-001, is being developed and will require significant investment before it can be commercialized. Amorcyte anticipates that AMR-001 will not be commercially available for several years, if ever.

The combined company's research and development expenses will increase with the addition of the ongoing activities of the Amorcyte business, particularly as the Phase 2 clinical trial commences with respect to AMR-001. Even if we raise additional capital in the event that Amorcyte's Phase 2 clinical trial of AMR-001 produces positive results, it is anticipated it will be necessary to enter into one or more

collaboration agreements with one or more third parties to conduct and fund additional clinical trials, including larger, potentially pivotal Phase 3 clinical trials. If we are not able to enter into collaboration agreements on terms that are acceptable to us, we will need to raise additional capital to fund these trials or otherwise delay or abandon the trials. In addition, subject to obtaining regulatory approval of any present or future Amorcyte product candidate, the combined company expects to incur significant commercialization expenses for product sales and marketing.

The future capital requirements of the combined company will depend on many factors, including:

- The scope, progress and results of NeoStem's historic cell therapy research, development, processing and manufacturing programs (including any revenues generated by NeoStem's subsidiary PCT) and its adult and cord blood stem cell collection and storage business;
- the scope, progress and results of development programs being conducted by Amorcyte;
- the scope, progress, results, costs, timing and outcomes of the clinical trials of AMR-001 and any other product candidates;
- the timing of entering into, and the terms of, any collaboration agreements with one or more third parties for one or more product candidates;
- the timing of and the costs involved in obtaining regulatory approvals for the combined company's product candidates, a process which could be particularly lengthy or complex given the FDA's limited experience with marketing approval for cell therapy products;
- the costs of operating, expanding and enhancing the combined company's manufacturing facilities and capabilities to support the combined company's clinical activities and, if any product candidates are approved, the combined company's commercialization activities;
- the costs of maintaining, expanding and protecting the combined company's intellectual property portfolio, including potential litigation costs and liabilities;
- revenues received from sales of the combined company's product candidates, if approved by the FDA;
- if and when there is a divestiture of Erye; and
- The progress of the Company's regenerative medicine initiatives in China.

We would likely seek such funding through public or private financings or some combination of the two. The combined company may also seek funding through collaborative arrangements if we determine them to be necessary or appropriate. Additional funding may not be available to us on acceptable terms, or at all. If we obtain capital through collaborative arrangements, these arrangements could require us to relinquish rights to the combined company's technology or product candidates and could result in our receiving only a portion of the revenues associated with the partnered product. If we raise capital through the sale of equity, or securities convertible into equity, it would result in dilution to our then existing stockholders. Issuances of our securities in connection with this offering will, and any future capital raise may, additionally cause antidilution adjustments to our outstanding Series E 7% Senior Convertible Preferred Stock and to the warrants issued in connection therewith. If we raise additional capital through the incurrence of indebtedness, the documents governing the terms of such debt would likely contain terms restricting our business activities, and holders of debt instruments would have rights and privileges senior to those of our equity investors. In addition, servicing the interest and principal repayment obligations under debt facilities could divert funds that would otherwise be available to support research and development, clinical or commercialization activities.

Cash requirements of the combined company may vary materially from those now planned because of expenses relating to marketing, advertising, sales, distribution, research and development and regulatory affairs (including the expenses related to clinical trials), as well as the costs of maintaining, expanding and protecting our intellectual property portfolio, including potential litigation costs and liabilities. Additional financing may not be available when needed or may not be available on terms acceptable to us. The combined company's inability to obtain necessary capital or financing to fund these needs could adversely affect the combined company's business, results of operations and financial condition.

We have a right to sell up to a maximum of 100,000 shares per day under our Purchase Agreement with Aspire Capital, which total may be increased by mutual agreement up to an additional 1,000,000 shares per day. In addition, under certain circumstances we also have the right to sell to Aspire Capital an amount of stock equal to up to 30% of the aggregate shares of the Company's Common Stock traded on the NYSE Amex on the next business day, subject to a maximum number of shares determined by the Company. However, we may only effect sales of shares of our Common Stock to Aspire Capital pursuant to the Purchase Agreement (up to a maximum of $20 million in the aggregate) on a business day on which the closing sale price of our Common Stock equals or exceeds 75% of the closing sale price of our Common Stock (rounded down to the nearest penny) on the business day immediately preceding the date the Purchase Agreement was executed (the "Formula Price"). The extent to which we rely on Aspire Capital as a source of funding will depend on a number of factors, including the prevailing market price of our Common Stock and the extent to which we are able to secure working capital from other sources. The aggregate number of shares that we can sell to Aspire Capital under the Purchase Agreement may in no case exceed 18,747,906 shares of our Common Stock (which is equal to approximately 19.9% of the Common Stock outstanding on the closing date of the Purchase Agreement, less the 990,099 Commitment Shares) (the "Exchange Cap"), unless shareholder approval is obtained to issue more than such 19.9%, in which case the Exchange Cap will not apply.

The market price and trading volume of our Common Stock has been and may continue to be volatile and issuances of large amounts of shares of our Common Stock could cause the market price of our Common Stock to decline.

As of August 17, 2011, 98,232,590 shares of our Common Stock were outstanding. From January 1, 2011 through August 17, 2011, our Common Stock traded as low as $0.60 and as high as $2.10. In 2010, our Common Stock traded as low as $1.10 and as high as $3.50, and in 2009 traded as low as $0.43 and as high as $2.72. In addition to our low stock trading volume, some of the other factors contributing to our stock's price volatility include the issuance of a significant number of shares of our Common Stock or securities convertible into Common Stock in a short period of time, announcements of government regulation, new products or services introduced by us or by our competition, healthcare legislation, trends in health insurance, litigation, fluctuations in operating results, our success in commercializing our business, market conditions for healthcare stocks in general as well as economic recession. We cannot assure you that the market price of our shares of Common Stock will not fluctuate or decline significantly in the future. Some of the factors that could negatively affect our share price or result in fluctuations in the price or trading volume of our shares of common stock include those set forth under "Risk Factors" and "Special Note Regarding Forward-Looking Statements" and in the information incorporated and deemed to be incorporated by reference herein.

Management will have broad discretion as to the use of the proceeds from our recent underwritten offering and this offering, and we may not use the proceeds effectively.

Our management will have broad discretion in the application of the net proceeds from our recent July 2011 underwritten offering of Common Stock and warrants, and in the application of proceeds from sales of Common Stock to Aspire Capital offered by this prospectus supplement, and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our Common Stock. Our failure to apply these funds effectively could have a material adverse effect on our business, delay the development of our product candidates and cause the price of our Common Stock to decline.

Holders of our Common Stock will experience dilution upon the issuance of Common Stock upon the conversion or in connection with redemption or dividend payments under our Series E Preferred Shares, if we issue additional equity securities in future fundraising transactions, if the Amorcyte Merger is consummated and if shares of our Common Stock underlying our significant number of outstanding warrants are purchased by the holders thereof.

The issuance of Common Stock as mandatory redemption payments, dividend payments or upon conversion of some or all of our Series E 7% Senior Convertible Preferred Stock (the "Series E Preferred Stock" or the "Series E Preferred Shares") (as of August 17, 2011 convertible into an aggregate of 5,132,370 shares of our Common Stock) issued in November 2010 will dilute the ownership interests of our existing holders of our shares of Common Stock. We have, and expect to continue to make almost all of the mandatory redemption payments under the terms of the Series E Preferred Shares in shares of our Common Stock. Although the dollar amount of such redemption payments are known, the number of shares to be issued in connection with such redemption payments will fluctuate based on our stock price. Any sales or perceived sales in the public market of our shares of Common Stock issuable upon such mandatory redemption payments or upon conversion could adversely affect prevailing market prices of our shares of Common Stock. The issuance of Common Stock upon conversion of the Series E Preferred Shares or upon such redemption payments may also have the effect of reducing our net income per share. In addition, the existence of the Series E Preferred Shares may encourage short selling by market participants because the conversion of the Series E Preferred Shares or the existence of the redemption payments could depress the market price of our shares of Common Stock. The number of shares issuable upon conversion of the Series E Preferred Shares will be subject to weighted average antidilution adjustment. Additionally, pursuant to the Amorcyte Merger we may issue up to 12,795,059 shares of Common Stock (including up to 4,092,768 Contingent Shares and warrants to purchase up to 1,881,008 shares of Common Stock).

If in the future we issue additional Common Stock, or securities convertible into or exchangeable or exercisable for Common Stock, our stockholders, including investors who purchase shares offered by the Selling Stockholders under this prospectus, will experience additional dilution, and any such issuances may result in downward pressure on the price of our Common Stock.

In addition, we have a significant number of outstanding securities convertible into, or allowing the purchase of our Common Stock.

Investors will be subject to increased dilution upon conversion of our outstanding Series B preferred stock and upon the exercise of outstanding stock options and warrants. There were 98,232,590 shares of our Common Stock outstanding as of August 17, 2011. As of that date, Series B preferred stock outstanding could be converted into 10,000 shares of our Common Stock and stock options and warrants outstanding represented an additional 54,470,909 shares of our Common Stock that could be issued in the future. The number of shares issuable upon exercise of warrants issued with the Series E Preferred Stock are subject to weighted average antidilution adjustment. Most of the outstanding shares of our Common Stock, as well as the vast majority of the shares of our Common Stock that may be issued under our outstanding options and warrants, are not restricted from trading or have the contractual right to be registered. Also, the issuance of additional shares as a result of such conversion or purchase, or their subsequent sale, could adversely affect the price of our Common Stock.

Any significant increase in the number of shares offered for sale could cause the supply of our Common Stock available for purchase in the market to exceed the purchase demand for our Common Stock. Such supply in excess of demand could cause the market price of our Common Stock to decline.

Future sales of a significant number of our shares of Common Stock in the public markets, or the perception that such sales could occur, could depress the market price of our shares of Common Stock.

Sales of a substantial number of our shares of Common Stock in the public markets, or the perception that such sales could occur, could depress the market price of our shares of Common Stock and impair our ability to raise capital through the sale of additional equity securities. It is anticipated that the purchasers of the Series E Preferred Shares will be selling shares of Common Stock issued to them as mandatory redemption shares on each mandatory redemption date. A substantial number of shares of Common Stock are being offered by this prospectus supplement, and we cannot predict if and when Aspire Capital may sell such

shares in the public markets. A substantial number of shares of Common Stock will also be offered by the Selling Stockholders under our Registration Statement on Form S-3 (File No. 173853) and we cannot predict if and when the Selling Stockholders may sell such shares of Common Stock in the public markets. Additionally, a substantial number of shares of Common Stock are issuable in connection with the Amorcyte Merger and we cannot predict if and when the recipients of the merger consideration may sell such shares of Common Stock in the public markets. We cannot predict the number of these shares that might be sold nor the effect that future sales of our shares of Common Stock would have on the market price of our shares of Common Stock.

We have never paid dividends on our Common Stock and we do not anticipate paying any cash dividends on our Common Stock in the foreseeable future.

We have never declared or paid cash dividends on our Common Stock. We do not anticipate paying any cash dividends on our Common Stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our Common Stock will be our stockholders' sole source of gain for the foreseeable future.

Failure to maintain effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on our business and stock price.

We had concluded that we did not have effective internal control over financial reporting as of December 31, 2010 as a result of a material weakness in our accounting for share-based payment arrangements, which our Company concluded was fully remediated as of March 31, 2011. However, if we fail to maintain the adequacy of internal control over our financial reporting, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act, as such standards are modified, supplemented or amended from time to time.

As a private company, PCT was not (and Amorcyte is not) subject to the requirements of Section 404 of the Sarbanes-Oxley Act. Now that the PCT Merger has been consummated (and upon consummation of the proposed Amorcyte Merger), we expect to devote management time and other resources to ensure that the combined company complies with the requirements of Section 404. During the course of testing our disclosure controls and procedures and internal control over financial reporting, we may identify and disclose material weaknesses or significant deficiencies in internal control over financial reporting (which may or may not be related to PCT or Amorcyte) that will have to be remedied. Implementing any appropriate changes to our internal control may require specific compliance training of our directors, officers and employees, entail substantial costs in order to modify our existing accounting systems, and take a significant period of time to complete. Such changes may not, however, be effective in maintaining the adequacy of our internal control over financial reporting, and any failure to maintain that adequacy or inability to produce accurate financial statements on a timely basis could result in our financial statements being unreliable, increase our operating costs and materially impair our ability to operate our business.

Failure to achieve and maintain effective internal control over financial reporting could result in a loss of investor confidence in our financial reports and could have a material adverse effect on our stock price. Additionally, failure to maintain effective internal control over our financial reporting could result in government investigation or sanctions by regulatory authorities.

Actual and beneficial ownership of large quantities of our Common Stock by our executive officers and directors may substantially reduce the influence of other stockholders.

As of August 17, 2011, our executive officers and directors collectively owned 32,622,363 shares of our Common Stock, representing approximately 33.2% of our outstanding Common Stock. As of such date, our executive officers and directors collectively beneficially owned 44,114,830 shares of our Common Stock. These beneficial holdings represent approximately 40.2% of our Common Stock. As a result, such persons may have the ability to exercise enhanced control over the approval process for actions that require stockholder approval, including: the election of our directors and the approval of mergers, sales of assets or

other significant corporate transactions or other matters submitted for stockholder approval. Because of the beneficial ownership position of these persons, other stockholders may have less influence over matters submitted for stockholder approval. Furthermore, at certain times the interests of our substantial stockholders may conflict with the interests of our other stockholders.

Some of our directors and officers have positions of responsibility with other entities, and therefore have loyalties and fiduciary obligations to both our company and such other entities. These dual positions subject such persons to conflicts of interest in related party transactions which may cause such related party transactions to have consequences to our company that are less favorable than those which we could have attained in comparable transactions with unaffiliated entities.

Eric H.C. Wei, a member of our Board of Directors, is also the Managing Partner of RimAsia Capital Partners, L.P., or RimAsia. RimAsia, a substantial stockholder of our company, beneficially owns approximately 25.9% of our Common Stock as of August 17, 2011. Mr. Shi Mingsheng (the Chairman of the Board of Erye, and who became a director of our company in March 2010) and Madam Zhang Jian (our Vice President of Pharmaceutical Operations and the General Manager of Erye), together with certain other persons, have shared voting and dispositive power over the shares of our Common Stock held by Fullbright Finance Limited, or Fullbright. Fullbright is a substantial stockholder of our company, and together with Mr. Shi, and Madam Zhang, beneficially owns approximately 5.2% of our Common Stock as of August 17, 2011. These relationships create, or, at a minimum, appear to create potential conflicts of interest when members of our company's senior management are faced with decisions that could have different implications for our company and the other entities with which our directors or officers are associated.

Although our company has established procedures designed to ensure that material related party transactions are fair to the company, no assurance can be given as to how potentially conflicted board members or officers will evaluate their fiduciary duties to our company and to other entities that they may owe fiduciary duties, respectively, or how such individuals will act in such circumstances. Furthermore, the appearance of conflicts, even if such conflicts ultimately do not harm our company, might adversely affect the public's perception of our business, as well as its relationship with its existing customers, licensors, licensees and service providers and its ability to enter into new relationships in the future.

We may not have the cash necessary to redeem the Series E Preferred Shares.

We have the obligation to make monthly redemption payments on the Series E Preferred Shares, which mandatory redemption payments may be made at our option in cash or in shares of our Common Stock at a discounted formula price, except that our right to make payment in shares of Common Stock is dependent upon our satisfying certain Equity Conditions (defined in the certificate of designations for the Series E Preferred Stock) and is also subject to certain Dollar Volume Limitations (as defined). If we cannot satisfy the Equity Conditions, or if our trading prices and volume are such that we do not meet the Dollar Volume Limitations necessary for us to be able to make our monthly mandatory redemption payments in stock, we may be forced to make such monthly payments in cash. We may not have sufficient cash resources at the applicable time to make those cash payments, or to make such cash payments in full. Further, any failure to pay any amounts due to the holders of the Series E Preferred Shares, as well as certain other Trigger Events (as defined in the certificate of designations), including without limitation certain change in control transactions, our failure to timely deliver shares, our suspension of trading, and breaches of certain representations, warranties and covenants that are not timely cured, where a cure period is permitted, would permit the holders of our Preferred Shares to compel repurchase of such Series E Preferred Shares at a price per share equal to the sum of the liquidation preference plus accrued dividends plus the then applicable prepayment premium (15%, or 10% if the repurchase occurs more than 12 months after the initial issuance date). If we are required to repurchase the Series E Preferred Shares in cash prior to maturity, no assurance can be given that we would have the cash or financial resources available to us to make such a payment, and such an acceleration could have a material adverse effect on our business and financial condition and may impair our ability to continue in business as a going concern.

The Series E Preferred Shares are senior obligations of ours, and rank prior to our Common Stock with respect to dividends, distributions and payments upon liquidation.

The rights of the holders of the Series E Preferred Shares rank senior to the obligations to holders of our Common Stock. Upon our liquidation, the holders of Series E Preferred Shares are entitled to receive a liquidation preference of $1.00 per share, plus all accrued but unpaid dividends at the rate of 7% per annum prior and in preference to any distribution to the holders of any other class of our equity securities. Further, no dividends can be paid without the consent of the holders of a majority of the outstanding Series E Preferred Shares, and the holders of Series E Preferred Shares, as well as the holders of the warrants being issued to the purchasers of Series E Preferred Shares, have the right to participate in any payment of dividends or other distributions made to the holders of our Common Stock to the same extent as if they had converted the Series E Preferred Shares or exercised the warrants. The existence of such a senior security could have an adverse effect on the value of our Common Stock.

Holders of the Series E Preferred Shares have rights that may restrict our ability to operate our business.

Under the securities purchase agreement pursuant to which the Series E Preferred Shares were sold, we are subject to certain covenants that limit our ability to create new series of preferred stock, other than series junior to the Series E Preferred Shares. We are also limited, with certain exceptions, in our ability and the ability of our subsidiaries (other than Erye) to incur debt and to pledge our assets. Such restrictions may have an adverse effect on our ability to operate our business while the Series E Preferred Shares are outstanding.

The repurchase right in the Series E Preferred Shares triggered by a change in control could discourage a potential acquiror.

The repurchase rights in the Series E Preferred Shares triggered by certain change in control transactions could discourage a potential acquiror. The interests of the holders of the Series E Preferred Shares in deciding to exercise their repurchase right may not align with your interests as a holder of our Common Stock in potential change of control transactions. The holders of Series E Preferred Shares may exercise their repurchase right which may discourage potential acquirors even in situations where the Common Stock holders may have the opportunity to realize a premium in connection with such change in control transaction.

RISKS RELATED TO OUR BUSINESS AND FINANCIAL CONDITION

Risks Related to Our Financial Condition

We are a company with a limited operating history and have incurred substantial losses and negative cash flow from operations in the past, and expect to continue to incur losses and negative cash flow for the near term.

We are a company with a limited operating history, limited capital, and limited sources of revenue. Since our inception in 1980, we have incurred net losses of approximately $116.5 million through June 30, 2011. We incurred net losses attributable to common shareholders of approximately $21.1 million for the six months ended June 30, 2011, approximately $23.5 million for the year ended December 31, 2010, approximately $31.8 million for the year ended December 31, 2009 and approximately $9.2 million for the year ended December 31, 2008, and we expect to incur additional operating losses and negative cash flow in the future. The revenues from our United States Cell Therapy segment are not sufficient to cover costs attributable to that business. We expect to incur losses and negative cash flow for the foreseeable future as a result of development activities associated with our VSEL™ Technology, a T-cell therapeutic and other research and development efforts to advance cell therapeutics, including those associated with AMR-001. We also expect to continue to incur significant expenses related to sales, marketing, general and administrative and product research and development in connection with the development of our business.

Although Erye, a Chinese pharmaceutical company in which we acquired a 51% interest, had revenues of approximately $34.3 million for the six months ended June 30, 2011, approximately $69.6 million for the year ended December 31, 2010 and $11.4 million in revenues for the year ended December 31, 2009 (this reflects Erye's operations for the two months ended December 31, 2009 since the acquisition was effective October 30, 2009), it has only a limited history of earnings. Moreover, Erye is expected to incur significant expenses in the near term due to: (1) costs related to stabilizing and streamlining its operations; (2) costs related to the relocation of its production operations to a new facility; (3) research and development costs related to new drug projects; (4) costs related to expanding its existing sales network for new drug distribution; and (5) increased tax costs. Pursuant to the current joint venture agreement that governs the ownership and management of Erye, or the Joint Venture Agreement, for the three-year period commencing on the first day of the first fiscal quarter after the Joint Venture Agreement became effective distributions are made as follows: (i) 49% of undistributed profits, after tax, will be distributed to Suzhou Erye Economy and Trading Co. Ltd., or EET, which owns the remaining 49% of Erye, and loaned back to Erye for use in connection with its construction of and relocation to the new Erye facility; (ii) 45% of the net profit after tax due to the Company will be provided to Erye as part of the new facility construction fund, which will be characterized as paid-in capital for our 51% interest in Erye; and (iii) only 6% of the net profit will be distributed to us directly for our operating expenses. Further, Erye has not yet distributed the 6% to us for 2010. As a result, we will not be able to supplement our cash flow fully from the income expected to be generated by Erye.

PCT became a wholly-owned subsidiary of NeoStem on January 19, 2011, upon the closing of the PCT Merger. PCT has not generated any significant amount of revenue nor been profitable in any quarter since inception.

We cannot provide any assurance that we will generate a profit from our operations in the near future to fund our growth.

Erye may require additional lines of credit and bank loans.

Due to a number of factors including tightening of monetary policy in China, government-imposed pricing constraints on certain of its products, the additional expenses described above, and constraints on certain bank accounts arising from the *Welman* litigation described in our joint proxy statement/prospectus filed with the SEC on September 16, 2011 under the caption "Legal Proceedings", Erye has experienced cash flow constraints and is seeking additional lines of credit. No assurances can be given that it will be able to secure additional credit on satisfactory terms, or at all.

If we are unable to manage the growth of our business, our prospects may be limited and the results of our operations and ability to continue as a going concern may be materially and adversely affected.

We intend to expand our sales and marketing programs, manufacturing capacity, and portfolios of innovative stem cell-based therapies and pharmaceutical products to meet future demand in the U.S. and China. Any significant expansion may strain our managerial, financial and other resources. If we are unable to manage our growth, our business, operating results and financial condition could be materially adversely affected. We will need to continually improve our operations, financial and other internal systems to manage our growth effectively, and any failure to do so may result in slower growth, diminished operating results and a failure to achieve profitability, which would materially and adversely affect our ability to continue as a going concern.

The first mortgage on the Allendale facility of our PCT subsidiary contains various covenants that limit PCT's ability to take certain actions and PCT's failure to comply with any of the covenants could have a material adverse effect on our business and financial condition.

The first of the two mortgages on PCT's Allendale facility contains debt coverage and total debt to tangible net worth financial covenants which limit PCT's ability to incur additional debt and make capital expenditures. Historically, PCT has not been able to meet one or both covenants and PCT did not meet them at June 30, 2011. While the bank has been willing to waive compliance in the past, no assurance can be given that the bank will continue to waive such compliance in the future. Additionally, the second mortgage also contains certain financial covenants which will need to be met in the future. Further, the Allendale subsidiary is restricted from taking certain actions without bank consent, including certain asset transfers.

Acquisitions intended to grow our business may expose us to additional risks.

We will continue to review acquisition prospects and other reorganizing activities that could complement or streamline our current business, increase the size and geographic scope of our operations or otherwise offer revenue generating or other growth opportunities. Any increase in debt in connection with an acquisition could result in increased interest expense. Additionally, acquisitions may dilute the interests of our stockholders, place additional constraints on our available cash and entail other risks, including: difficulties in assimilating acquired operations, technologies or products; the loss of key employees from acquired businesses; diversion of management's attention from our core business; risks of successor liability for unknown claims; and risks of entering markets, including international markets, in which we have limited or no prior experience.

A significant portion of our PCT subsidiary's current revenues are derived from a small number of customers.

PCT's billings for the six months ended June 30, 2011 and for the years ended December 31, 2010 and 2009 are concentrated with three customers. These three customers make up 21.1%, 18% and 15.4% of billings (a total of 54.5% for all three) for the six months ended June 30, 2011 and 18%, 15% and 12% of billings (a total of 45% for all three) for the year ended December 31, 2010 and 18%, 15% and 12% of billings (a total of 45% for all three) for the year ended December 31, 2009. One of these customers is Amorcyte. Following the Amorcyte Merger, revenues of PCT attributable to Amorcyte will be eliminated as a result of the consolidation of Amorcyte in NeoStem's financial statements. The loss of one or more of these customers or material changes to the contracts with or payment terms of these customers may result in significant business downturn through reduced revenues, reduced cash flows, and delays in revenues or cash flows, and such delays or reductions could have a material impact on our future revenue growth and profitability.

Risks Related to Cell Therapy — United States

Cell therapy is still a developing field and a significant global market for our services has yet to emerge.

Cell therapy is still a developing area of research, with few cell therapy products approved for clinical use. At the PCT level, the current market and current contracts principally consist of providing manufacturing of cell and tissue-based therapeutic products in clinical trial and processing of stem cell products for transplantation programs. We also provide services related to the collection and storage of umbilical cord blood units and adult stem cells. There currently is no significant global market for stem cell processing or their collection and storage, nor is there any guarantee that such markets will develop in the near future or at all. Major medical institutions currently do not recommend private storage generally, and we believe that the medical community is supportive of the public cord blood collective system. Patients can donate their cord blood to the system without charge. The market for cell and tissue-based therapies is early-stage, substantially research oriented, and financially speculative. Very few companies have been successful in their efforts to develop and commercialize a stem cell product. Stem cell products in general may be susceptible to various risks, including undesirable and unintended side effects, unintended immune system responses, inadequate therapeutic efficacy, or other characteristics that may prevent or limit their approval or commercial use. The demand for stem cell processing and the number of people who may use cell or tissue-based therapies is difficult to forecast. As there are no real experts who can forecast this market with accuracy, there is limited data from which the future use of our services may be forecasted. Our success is dependent on the establishment of a large global market for our products and services and our ability to capture a share of this market.

The University of Louisville has the ability to exercise significant influence over the future development of our VSEL™ Technology.

The terms of our exclusive license of the VSEL™ Technology from the University of Louisville provide for a collaborative approach on development decisions. For example, should we seek to collaborate with a third party on the VSEL™ Technology programs, prior approval of the University of Louisville would be required for any sublicensing agreement. There can be no assurance they would grant approval for decisions requiring their consent. In addition, we entered into a sponsored research agreement with the University of Louisville, pursuant to which they perform certain research activities for us. Accordingly, although we engage in our own independent research and development activities with respect to the VSEL™ Technology and have entered into additional sponsored research agreements, we are highly dependent on the University's cooperation and performance in developing the VSEL™ Technology. Further, the VSEL™ Technology license agreement requires the payment of certain license fees, royalties and milestone payments, payments for patent filings and applications and the use of due diligence in developing and commercializing the VSEL™ Technology. The sponsored research agreement requires other periodic payments. Our failure to meet our financial or other obligations under the license or sponsored research agreement in a timely manner could result in the loss of some or all of our rights to proprietary technology, such as the loss of exclusive rights or even termination of the agreements, and/or we could lose our right to have the University of Louisville conduct research and development efforts on our behalf.

We have a very limited history of conducting our own research and development activities.

To support our own research and development activities for our VSEL™ Technology and other stem cell technologies, in September 2009 we signed a lease for approximately 8,000 square feet of office and laboratory space in Cambridge, Massachusetts that has served as our research and development headquarters. The Company is assessing its need for the Cambridge facility going forward given the acquisition of PCT with its Allendale, NJ and Mountain View, CA facilities. In May 2011 we sublet a portion of our Cambridge facility to another life science company. To pursue our current business strategy, we must have in place appropriate research capabilities, either on our own or through relationships with third parties. There can be no assurance that we will be successful in these efforts. Our additional research and development capacity also will require adequate sources of funding. There can be no assurance that any of these development efforts will produce a successful product or technology. Our failure to develop new products would have a material adverse effect on our business, operating results and financial condition.

Even if we are successful in developing a therapeutic application using our VSEL™ Technology or other potential stem cell technologies, we still may be unsuccessful in creating a commercially viable and profitable business.

The commercial viability of our VSEL™ Technology and other stem cell technologies may depend upon our ability to successfully isolate and expand the number of stem cells collected through adult stem cell collection processes in order to achieve a therapeutically-viable dose. Today, the number of very small embryonic-like stem cells that can be isolated from the peripheral blood of an adult donor is relatively small and this volume of cells may not be sufficient for therapeutic applications. A critical component of our adult stem cell collection, processing and storage services relating to the VSEL™ Technology and other potential stem cell technologies could therefore be the utilization of stem cell expansion processes. There are many biotechnology laboratories attempting to develop stem cell expansion technology, but to date stem cell expansion techniques remain very inefficient. There can be no assurance that such technology will be effective or available at all. The failure of cost effective and reliable expansion technologies to become available could severely limit the commercial opportunities of our VSEL™ Technology programs and other potential stem cell technologies and limit our business prospects, which could have a material adverse effect on our business, operating results and financial condition.

Moreover, stem cell collection techniques are rapidly developing and could undergo significant change in the future. Such rapid technological development could result in our technologies becoming obsolete. Successful biotechnology development in general is highly uncertain and is dependent on numerous factors, many of which are beyond our control. While our VSEL™ Technology and other stem cell technologies appear promising, such technologies may fail to be successfully commercialized for numerous reasons, including, but not limited to, competing technologies for the same indication. There can be no assurance that we will be able to develop a commercially successful therapeutic application for this technology or other potential stem cell technologies.

Our research and development activities using adult stem cells in therapeutic indications present additional risks.

Our research and development activities relating to our VSEL™ Technology and other populations of adult stem cells are subject to many of the same risks as our stem cell collection, processing and storage business, and additional risks related to requirements for preclinical and clinical testing by regulatory authorities including the United States Food and Drug Administration, or FDA, to demonstrate the safety and efficacy of the underlying therapy. The development of new drugs and therapies is often a long, expensive and difficult process and most attempts fail. Our VSEL™ Technology is in the very early stages of development and will require many steps, tests and processes before we will be able to commence clinical testing in humans. There can be no assurance that a biologics license application, or BLA, with the FDA will not be required for our VSEL™ Technology or our other stem cell technologies. The approval process for a BLA can take years, require human clinical trials and cost several million dollars. There also can be no assurance that we independently, or through collaborations, will successfully develop, commercialize or market our VSEL™ Technology or other stem cells for any therapeutic indication. Should we fail to develop our VSEL™ Technology or other adult stem cell technologies pursued by us, our business prospects, operating results and financial condition will be materially and adversely affected.

Technological and medical developments or improvements in conventional therapies could render the use of stem cells and our services and planned products obsolete.

Advances in other treatment methods or in disease prevention techniques could significantly reduce or entirely eliminate the need for our stem cell services, planned products and therapeutic efforts. Additionally, technological or medical developments may materially alter the commercial viability of our technology or services, and require us to incur significant costs to replace or modify equipment in which we have a substantial investment. In either event, we may experience a material adverse effect on our business, operating results and financial condition.

If safety problems are encountered by us or others developing new stem cell-based therapies, our stem cell initiatives could be materially and adversely affected.

The use of stem cells for therapeutic indications is still in the very early stages of development. If an adverse event occurs during clinical trials related to one of our product candidates or those of others, the FDA and other regulatory authorities may halt our clinical trials or require additional studies. The occurrence of any of these events would delay, and increase the cost of, our product development and may render the commercialization of our product candidates impractical or impossible.

Future therapies using adult stem cells may not develop, and demand for adult stem cell collection, processing and storage may never develop.

The value of our stem cell collection, processing and storage business and our development programs could be significantly impaired, and our ability to become profitable and continue our business could be materially and adversely affected, if cell therapies under development by us or by others to treat disease are not proven effective, demonstrate unacceptable risks or side effects or, where required, fail to receive regulatory approval. The therapeutic application of stem cells to treat serious diseases is currently being explored using adult stem cells like those that are the focus of our business, as well as embryonic stem cells. Cells collected and used for the same individual are referred to as autologous cells and those collected from an individual who is not the user of the cells are referred to as allogeneic cells. To our knowledge, the only allowed therapeutic uses of stem cells in the U.S., other than in connection with clinical trials, involves hematopoietic stem cell transplants to treat certain types of blood-based cancers (hematopoietic stem cells are the stem cells from which all blood cells are made) and adult autologous cultured cartilage cells for implantation for the repair of symptomatic cartilage defects of the femoral condyle (the distal end of the femur). No other stem cell therapeutic products have received regulatory approval for sale in the U.S. While stem cell-based therapy has been reported to be susceptible to various risks, including some undesirable side effects and immune system responses, these problems have been primarily associated with allogeneic use. Inadequate therapeutic efficacy also is a risk that may prevent or limit approval or commercial use of adult stem cells, whether for autologous use or allogeneic use. In addition, the time and cost necessary to complete the clinical development and to obtain regulatory approval of new therapies using stems cells are expected to be significant.

The demand for PCT's services depends in part on our customers' research and development and marketing efforts. Our business, financial condition and results of operations may be harmed if our customers spend less on, or are less successful in, these activities.

Many of PCT's customers are engaged in research, development, production and marketing. The amount of customer spending on research, development, production and marketing has a large impact on our revenues and profitability, particularly the amount customers choose to spend on outsourcing. Customers determine the amounts that they will spend based upon, among other things, available resources and their need to develop new products, which, in turn, is dependent upon a number of factors, including their competitors' research, development and production initiatives, and the anticipated reimbursement scenarios for specific products and therapeutic areas. In addition, consolidation in the industries in which our customers operate may have an impact on such spending as customers integrate acquired operations, including research and development departments and their budgets. Our customers finance their research and development spending from private and public sources. A reduction in spending by our customers could have a material adverse effect on our business, financial condition and results of operations. If our customers are not successful in attaining or retaining product sales due to market conditions, reimbursement issues or other factors, our results of operations may be materially impacted.

The nature and duration of PCT's contracts can yield varying revenues and profits.

PCT's contracts with customers may be subject to repeated renegotiation and amendments which change the objectives of our work and the milestones which determine when revenues are received by us. Due to the fact that our customers are engaged in businesses that are in many instances experimental, the objectives of such customer relationships with us are subject to change as customer research and development and business models develop. Additionally, most of these customers are subject to regulatory controls and approval

processes over their businesses and products. If such customers fail to comply with such processes or do not receive necessary approvals, we may be required to alter or halt the activities for which such customers have contracted with us. Each of these factors may have an adverse effect on our revenues.

Side effects or limitations of our stem cell collection process or a failure in the performance of the cryopreservation storage facility or systems of our service providers could harm our reputation and business.

Customers may experience adverse outcomes from our adult stem cell collection and storage process. These include: (i) the possibility of an infection acquired from the apheresis process, which is the process of extracting stem cells from a patient's whole blood and it is an integral part of our collection process; (ii) collection of insufficient quantities of stem cells for therapeutic applications; (iii) failure of the equipment supporting our cryopreservation storage service to function properly and thus maintain a supply of usable adult stem cells; and (iv) specimen damage, including contamination or loss in transit to us. Should any of these events occur, our reputation could be harmed, our operations could be adversely affected and litigation could be filed against us. Our systems and operations are vulnerable to damage or interruption from fire, flood, equipment failure, break-ins, tornadoes and similar events for which we do not have redundant systems or a formal disaster recovery plan. Any claim of adverse side effects or limitations or material disruption in our ability to maintain continued uninterrupted storage systems could have a material adverse effect on our business, operating results and financial condition.

Our adult stem cell collection, processing and storage business was not contemplated by many existing laws and regulations, and our ongoing compliance, therefore, is subject to interpretation and risk.

Our adult stem cell collection, processing and storage service is not a medical treatment, although it involves medical procedures. Our stem cell-related business is relatively new and is not addressed by many of the regulations applicable to our field. As a result, there is often considerable uncertainty as to the applicability of regulatory requirements. Although we have devoted significant resources to ensuring compliance with those laws that we believe to be applicable, it is possible that regulators may disagree with our interpretations, prompting additional compliance requirements or even enforcement actions.

We believe that the adult stem cells collected, processed and stored through our collection services are properly classified under the FDA's human cells, tissues and cellular- and tissue-based products, or HCT/P, regulatory paradigm and should not be classified as a medical device, biologic or drug. There can be no assurance that the FDA will not reclassify the adult stem cells collected, processed and stored through our collection services. Any such reclassification could have adverse consequences for us and make it more difficult or expensive for us to conduct our business by requiring regulatory clearance, approval and/or compliance with additional regulatory requirements.

The costs of compliance with such additional requirements or such enforcement may have a material adverse effect on our operations or may require restructuring of our operations or impair our ability to operate profitably.

We operate in a highly regulated environment and may be unable to comply with applicable federal and state regulations, registrations and approvals or the standards of private accrediting entities. Failure to comply with applicable licensure, registration, certification, and accreditation standards may result in loss of licensure, certification or accreditation or other government enforcement actions.

Since January of 2004, registration with the FDA is required by facilities engaged in the recovery, processing, storage, labeling, packaging or distribution of any HCT/Ps, or the screening or testing of a donor. Any third party retained by us to process our samples must be similarly registered with the FDA and comply with HCT/P regulations. If we, or any third-party processors, fail to register or update registration information in a timely way, we will be out of compliance with FDA regulations which could adversely affect our business. The FDA also adopted rules in May 2005 that regulate current Good Tissues Practices, or cGTP. Adverse events in the field of stem cell therapy that may occur could result in greater governmental regulation of our business, creating increased expenses and potential delays relating to the approval or licensing of any or all of the processes and facilities involved in our stem cell collection and storage services.

Though not implicated for our adult stem cell collection services, our manufacture of certain cellular therapy products for ourselves or on behalf of our customers may trigger additional FDA requirements applicable to HCT/Ps, or products comprised of HCT/Ps, which are regulated as a drug, biological product, or medical device. FDA current Good Manufacturing Practices, or cGMP, requirements, set forth in Title 21, Parts 210 and 211, of the Code of Federal Regulations (21 C.F.R. Pts. 210 and 211) are federal regulations that govern the manufacture, processing, packaging and holding of drug and cell therapy products. We must comply with cGMP requirements demanded by customers and enforced by the FDA through its facilities inspection program. These requirements include quality control, quality assurance and the maintenance of records and documentation. We may be unable to comply with these cGMP requirements and with other FDA, state and foreign regulatory requirements. These requirements may change over time and we or third-party manufacturers may be unable to comply with the revised requirements.

We also are subject to state and federal laws regulating the proper disposal of biohazardous materials. Although we believe we are currently in compliance with all such applicable laws, a violation of such laws, or the future enactment of more stringent laws or regulations, could subject us to liability for noncompliance and may require us to incur significant costs.

Some states impose additional regulation and oversight of clinical laboratories and stem cell laboratories operating within their borders and impose regulatory compliance obligations on out-of-state laboratories providing services to their residents. Many of the states in which we, our strategic partners or members of our collection network, engage in collection, processing or storage activities have licensing requirements with which we must comply. Additionally, there may be state regulations affecting the use of HCT/Ps that would affect our business. Certain licensing requirements require employment of medical directors and others with certain training and technical backgrounds and there can be no assurance that such individuals can be retained or will remain retained or that the cost of retaining such individuals will not materially and adversely affect our ability to market or perform our services or our ability to do so profitably. There can be no assurance that we, our strategic partners or members of our collection center network, will be able to obtain or maintain any necessary licenses required to conduct business in any states or that the cost of compliance will not materially and adversely affect our ability to market or perform our services or our ability to do so profitably.

Currently, PCT is licensed as a blood bank with respect to its activities in New Jersey, as a tissue bank with respect to its activities in New York and as a drug manufacturer with respect to its facility in California. We believe that PCT and NeoStem Family Storage, LLC are in material compliance with current federal, state, and local stem cell laboratory licensure requirements. However, the licensing requirements in the states where we are currently licensed may change, and PCT and/or NeoStem Family Storage, LLC may become subject to the additional licensing, registration and/or compliance requirements of other states, local governments and/or the federal government as PCT and/or NeoStem Family Storage, LLC expands its network and as new regulations are implemented. If we fail to comply with the various licensure requirements, certification and accreditation standards to which we are subject, we may be subject to a loss of licensure, certification, or accreditation that could adversely affect them.

Additionally, certain private entities have promulgated standards for certification, accreditation and licensing of cord blood businesses that may apply to our operations. These organizations include, but may not be limited to, AABB, formerly the American Association of Blood Banks, the Foundation for the Accreditation of Cellular Therapy (FACT), and the American Association of Tissue Banks (AATB). While our compliance with the standards of these organizations currently are voluntary, in some cases compliance with such standards may be necessary for a cord blood business to be accepted and competitive in the marketplace. Compliance with these standards and obtaining the applicable accreditation, certification, or license from such private organizations can be costly and time-consuming. These accreditation, certification, or license requirements may also change and new standards may be developed. If we fail to comply with applicable standards, or fail to obtain or maintain applicable accreditations, certifications, or licenses, our business may be adversely affected.

There can be no assurance that we will be able, or will have the resources, to continue to comply with regulations that govern our operations currently, or that we will be able to comply with new regulations that govern our operations, or that the cost of compliance will not materially and adversely affect our ability to market or perform our services or our ability to do so profitably. A failure to comply with these requirements may result in fines and civil or criminal penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any materials supplied by third parties is compromised due to their failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for, or successfully commercialize, product candidates that we may develop.

The Health Insurance Portability and Accountability Act of 1996, or HIPAA, requires that our business comply with state and federal privacy laws which increase the cost and administrative burden of providing stem cell banking services.

We are subject to state and federal privacy laws related to the protection of our customers' personal health information and state and federal laws related to the security of such personal health information and other personal data to which we would have access through the provision of our services. Currently, we are obligated to comply with privacy and security standards adopted under HIPAA. Certain of these regulatory obligations will be changing over the next year as a result of amendments to HIPAA under the American Recovery and Reinvestment Act of 2009. Consequently, our compliance burden will increase, and we will be subject to audit and enforcement by the federal government and, in some cases, enforcement by state authorities. We will also be obligated to publicly disclose wrongful disclosures or losses of personal health information. We may be required to spend substantial amounts of time and money to comply with these requirements, any regulations and licensing requirements, as well as any future legislative and regulatory initiatives. Failure by us or our business partners to comply with these or other applicable regulatory requirements or any delay in compliance may result in, among other things, injunctions, operating restrictions, and civil fines and criminal prosecution and have a material adverse effect on the marketing and sales of our services and our ability to operate profitably or at all.

We have limited manufacturing capabilities.

We believe that we can provide services and produce materials for clinical trials and for human use at our existing facilities, which we believe are compliant with FDA requirements for cGMP and cGTP. We also believe that we have sufficient capacity to meet expected near term demand. However, we may need to, depending on demand, expand our manufacturing capabilities for cell therapy services and products in the future. In 2007, PCT acquired an additional facility in Allendale, New Jersey, which became a cGMP compliant facility in 2010. The demand for our services and products could, at times, exceed existing manufacturing capacity. If we do not meet rising demand for products and services on a timely basis or are not able to maintain cGMP compliance standards, then our clients and potential clients may elect to obtain the products and services from competitors, which could materially and adversely affect our revenues.

If our processing and storage facilities are damaged or destroyed, our business, programs, and prospects could be negatively affected and could adversely affect our value.

We process and store adult autologous stem cells from our network of U.S. adult stem cell collection centers and the umbilical cord blood of customers of NeoStem Family Storage, LLC at PCT's facility in Allendale, New Jersey, and may do so at PCT's Mountain View, California, facility in the future. We also process and store cellular therapy products for clinical trials at PCT's facility in Allendale, New Jersey, and may do so at PCT's Mountain View, California, facility. If these facilities or the equipment in these facilities was to be significantly damaged or destroyed, we could suffer a loss of some or all of the stored adult autologous stem cells, cord blood units, and cellular therapy products. Depending on the extent of loss, such an event could reduce the ability of us, NeoStem Family Storage, LLC, and PCT to provide stem cells when requested, could expose us, NeoStem Family Storage, LLC, and PCT to significant liability from our customers, and could affect the ability to continue to provide adult autologous stem cells and umbilical cord blood preservation services and manufacturing of cellular therapy services and products. While we believe that we have insured against losses from damage to or destruction of our facilities consistent with typical industry

practices, if we have underestimated our insurance needs, we may not have sufficient insurance to cover losses beyond the limits on its policies. Such events could have a material adverse effect on our value.

We and our customers conduct business in a heavily regulated industry. If we or one or more of our customers fail to comply with applicable current and future laws and government regulations, our business and financial results could be adversely affected.

The healthcare industry is one of the most highly regulated industries in the United States. The federal government, individual state and local governments and private accreditation organizations all oversee and monitor the activities of individuals and businesses engaged in the delivery of health care products and services. Current laws, rules and regulations that could directly or indirectly affect our ability and the ability of our strategic partners and customers to operate each of their businesses could include, without limitation, the following:

- State and local licensure, registration and regulation of laboratories, the collection, processing and storage of human cells and tissue and cord blood, and the development and manufacture of pharmaceuticals and biologics;
- The federal Clinical Laboratory Improvement Act and amendments of 1988;
- Laws and regulations administered by the FDA, including the Federal Food Drug and Cosmetic Act and related laws and regulations;
- The Public Health Service Act and related laws and regulations;
- Laws and regulations administered by the United States Department of Health and Human Services, including the Office for Human Research Protections;
- State laws and regulations governing human subject research;
- Occupational Safety and Health requirements;
- State and local laws and regulations dealing with the handling and disposal of medical waste;
- The federal Medicare and Medicaid Anti-Kickback Law and similar state laws and regulations;
- Federal and state coverage and reimbursement laws and regulations, including laws and regulations administered by the Centers for Medicare & Medicaid Services;
- The federal Health Insurance Portability and Accountability Act of 1996 (“HIPAA”), including the amendments included in the American Recovery and Reinvestment Act of 2009, commonly known as the HITECH Act, and regulations promulgated thereunder;
- The federal physician self-referral prohibition, commonly known as the Stark Law, and state equivalents of the Stark Law;
- State funding decisions on stem cell research and the development of cellular therapies; and
- The Intermediate Sanctions rules of the IRS providing for potential financial sanctions with respect to “Excess Benefit Transactions” with HUMC or other tax-exempt organizations.

In addition, as we expand into other parts of the world (in addition to China), we will need to comply with the applicable laws and regulations in such foreign jurisdictions. We have not yet thoroughly explored the requirements or feasibility of such compliance. It is possible that we may not be permitted to expand our business into one or more foreign jurisdictions.

Although we intend to conduct our business in compliance with applicable laws and regulations and believe that we are in material compliance with applicable governmental healthcare laws and regulations, the laws and regulations affecting our business and relationships are complex, and many aspects of such relationships have not been the subject of judicial or regulatory interpretation. Furthermore, the cell therapy industry is the topic of significant government interest, and thus the laws and regulations applicable to us and our strategic partners and customers and to their business are subject to frequent change and/or reinterpretation and there can be no assurance that the laws and regulations applicable to us and our strategic partners and

customers will not be amended or interpreted in a manner that adversely affects our business, financial condition, or operating results. For example, the federal government could issue tighter restrictions on private cord blood banking that prevents NeoStem Family Storage, LLC from collecting cord blood for private banking. While we are not aware of any such developments or that any court or federal or state government is reviewing our operations, it is possible that such a review could result in a determination that would have a material adverse effect on our business, financial condition and operating results. Thus, there can be no assurance that we and our strategic partners and customers will be able to maintain compliance with all such healthcare laws and regulations. Failure to comply with such healthcare laws and regulations, as well as the costs associated with such compliance or with enforcement of such healthcare laws and regulations, may have a material adverse effect on our operations or may require restructuring of our operations or impair our ability to operate profitably.

It is uncertain to what extent the government, private health insurers and third-party payors will approve coverage or provide reimbursement for the therapies and products to which our services relate. Availability for such reimbursement may be further limited by an increasing uninsured population and reductions in Medicare and Medicaid funding in the United States.

To the extent that the health care provider customers cannot obtain coverage or reimbursement for our therapies and products, they may elect not to provide such therapies and products to their patients and, thus, may not need our services. Further, as cost containment pressures are increasing in the health care industry, government and private payors adopt strategies designed to limit the amount of reimbursement paid to health care providers. Such cost containment measures may include:

- Reducing reimbursement rates;
- Challenging the prices charged for medical products and services;
- Limiting services covered;
- Decreasing utilization of services;
- Negotiating prospective or discounted contract pricing;
- Adopting capitation strategies; and
- Seeking competitive bids.

Similarly, the trend toward managed health care and bundled pricing for health care services in the United States, which may accelerate under the health reform legislation approved by Congress on March 23, 2010 and thereafter signed into law (“Health Reform”), could significantly influence the purchase of healthcare services and products, resulting in lower prices and reduced demand for cancer therapies.

We currently receive a small portion of our revenues from services rendered to patients enrolled in federal health care programs, such as Medicare, and we may also directly or indirectly receive revenues from federal health care programs. Federal health care programs are subject to changes in coverage and reimbursement rules and procedures, including retroactive rate adjustments. These contingencies could materially decrease the range of services covered by such programs or the reimbursement rates paid directly or indirectly for our products and services. To the extent that any health care reform favors the reimbursement of other cancer therapies over stem cell therapies, such reform could affect our ability to sell our services, which may have a material adverse effect on our revenues.

The limitation on reimbursement available from private and government payors may reduce the demand for, or the price of, our services, which would have a material adverse effect on our revenues. Additional legislation or regulation relating to the health care industry or third-party coverage and reimbursement may be enacted in the future which could adversely affect the revenues generated from the sale of our products and services.

Furthermore, there has been a trend in recent years towards reductions in overall funding for Medicare and Medicaid. There has also been an increase in the number of people who do not have any form of health care coverage in recent years and who are not eligible for or enrolled in Medicare, Medicaid or other governmental programs. The extent to which the reforms brought about under Health Reform may be

successful in reducing the number of such uninsured is unclear, and the reduced funding of governmental programs and increase in uninsured populations could have a negative impact on the demand for our services to the extent they relate to products and services which are reimbursed by government and private payors.

Health care companies have been the subjects of federal and state investigations, and we could become subject to investigations in the future.

Both federal and state government agencies have heightened civil and criminal enforcement efforts. There are numerous ongoing investigations of health care companies, as well as their executives and managers. In addition, amendments to the Federal False Claims Act, including under Health Reform, have made it easier for private parties to bring "*qui tam*" (whistleblower) lawsuits against companies under which the whistleblower may be entitled to receive a percentage of any money paid to the government. The Federal False Claims Act provides, in part, that an action can be brought against any person or entity that has knowingly presented, or caused to be presented, a false or fraudulent request for payment from the federal government, or who has made a false statement or used a false record to get a claim approved. The government has taken the position that claims presented in violation of the federal anti-kickback law, Stark Law or other healthcare-related laws, including laws enforced by the FDA, may be considered a violation of the Federal False Claims Act. Penalties include substantial fines for each false claim, plus three times the amount of damages that the federal government sustained because of the act of that person or entity and/or exclusion from the Medicare program. In addition, a majority of states have adopted similar state whistleblower and false claims provisions.

We are not aware of any government investigations involving any of our facilities or management. While management believes that we are in material compliance with applicable governmental healthcare laws and regulations, any future investigations of our business or executives could cause us to incur substantial costs, and result in significant liabilities or penalties, as well as damage to our reputation.

Unintended consequences of recently adopted health reform legislation in the U.S. may adversely affect our business.

The healthcare industry is undergoing fundamental changes resulting from political, economic and regulatory influences. In the U.S., comprehensive programs are under consideration that seek to, among other things, increase access to healthcare for the uninsured and control the escalation of healthcare expenditures within the economy. On March 23, 2010, health reform legislation was approved by Congress and has been signed into law. While we do not believe this legislation will have a direct impact on our business, the legislation has only recently been enacted and requires the adoption of implementing regulations, which may have unintended consequences or indirectly impact our business. For instance, the scope and implications of the recent amendments pursuant to the Fraud Enforcement and Recovery Act of 2009 ("FERA"), have yet to be fully determined or adjudicated and as a result it is difficult to predict how future enforcement initiatives may impact our business. Also, in some instances our clients may be health insurers that will be subject to limitations on their administrative expenses and new federal review of "unreasonable" rate increases which could impact the prices they pay for our services. If the legislation causes such unintended consequences or indirect impact, it could have a material adverse effect on our business, financial condition and results of operations.

Recent legislation regarding the establishment and funding of public cord blood collection and storage may adversely affect the business of NeoStem Family Storage, LLC.

The Stem Cell Therapeutic and Research Act of 2005 established requirements for a national donor bank of cord blood and for a national network for matching cord blood to patients. The federal government has entered into contracts with the National Marrow Donor Program (NMDP) to carry out the provisions of this legislation. Under these contracts, the NMDP acts as the nation's Cord Blood Coordinating Center and actively recruits parents for cord blood donations. The NMDP also administers the National Cord Blood Inventory (NCBI), which has a goal of collecting 150,000 cord blood units that may be used for patients throughout the United States. The legislation also authorized federal funding to support its goals and requirements. Parents may opt to donate their newborn's cord blood to the public registry and to use the public registry if stem cells from cord blood are needed for treatment purposes. In this regard, an important

advantage of the national, public cord blood collection system is that it costs nothing for patients to donate their cord blood. This national, public cord blood registry has also been widely accepted and supported by the medical community, so physicians and others in the health care community may be less willing to use or recommend a private cord blood facility when public collection is available. Additionally, major medical organizations, including the American Academy of Pediatrics (AAP), the American Medical Association (AMA), the American College of Obstetricians and Gynecologists (ACOG), and the American Society of Blood and Marrow Transplantation (ASBMT) do not recommend private storage, except in very limited instances. Further, we believe that the medical community is currently supportive of public cord blood donation and the national cord blood registry that is administered by the National Marrow Donor Program. For these reasons, a significant number of patients may choose to use to donate their cord blood to the national, public cord registry instead of privately banking cord blood. The medical community could also issue stronger recommendations and opinions that favor the use of the national registry. Therefore, the existence and proliferation of the national registry may adversely affect our business.

The market for services related to the preservation and expansion of stem cells has become increasingly competitive. Our competitors may have greater resources or capabilities or better technologies than do we, or may succeed in developing better service than do we and we may not be successful in competing with them.

The biotechnology and life science industries are highly competitive. They include multinational biotechnology and life science, pharmaceutical and chemical companies, academic and scientific institutions, governmental agencies, and public and private research organizations. Many of these companies or entities have significantly greater financial and technical resources and production and marketing capabilities than do we. The biotechnology and life science industries are characterized by extensive research and development, and rapid technological progress. Competitors may successfully develop services or products superior or less expensive than cell therapy services or products, rendering our services less valuable or marketable.

Historically, in the U.S. we have faced competition from other established operators of stem cell preservation businesses and providers of stem cell storage services. Today, there is an established and growing market for cord blood stem cell banking. We are also aware of another company with established stem cell banking services that processes and stores stem cells collected from adipose, or fat, tissue. This type of stem cell banking requires harvesting fat by a liposuction procedure. Embryonic stem cells represent yet another alternative to pre-donated and stored adult stem cells. As techniques for expanding stem cells improve, thereby allowing therapeutic doses, the use of embryonic stem cells and other collection techniques of adult stem cells could increase and compete with our services. Finally, we are aware that other technologies are being developed to turn skin cells into cells that behave like embryonic stem cells or to harvest stem cells from the pulp of baby teeth. While these and other approaches remain in early stages of development, they may one day be competitive.

In addition, cord blood banks such as ViaCord, a Perkin Elmer company, or LifebankUSA, a Celgene company, easily could enter the field of adult stem cell collection because of their processing labs, storage facilities and customer lists. We estimate that, combined, there are approximately 75 cord blood banks in the U.S., approximately 36 of which are private autologous banks, meaning that the donor and recipient are the same, and approximately 39 of which are public allogeneic banks, meaning that the donor and recipient are not the same. Hospitals that have transplant centers to serve cancer patients may elect to provide some or all of the services that we provide. According to the National Marrow Donor Program, there are approximately 52 hospitals in the U.S. with stem cell transplant centers. These competitors may have better experience and access to greater financial resources than do we. In addition, other established companies may enter our markets and compete with us. There can be no assurance that we will be able to compete successfully.

The private umbilical cord banking business is a relatively new, highly competitive, and evolving field. NeoStem Family Storage, LLC competes with companies such as ViaCell, Inc., a subsidiary of the Perkin-Elmer Corporation, CBR Systems, Cryo-Cell International, Inc., CorCell, Inc., a subsidiary of Cord Blood America Inc., and LifeBank USA, a division of Celgene Cellular Therapeutics, a wholly owned subsidiary of Celgene Corporation. Any of these companies may choose to invest more in sales, marketing, and research and product development than NeoStem Family Storage, LLC.

NeoStem Family Storage, LLC will also have to compete with the national, public cord blood banking program, which has the support of the medical community and which receives federal funding. In this regard, NeoStem Family Storage, LLC also competes with public cord blood banks such as the New York Blood Center (National Cord Blood Program), University of Colorado Cord Blood Bank, Milan Cord Blood Bank, Dusseldorf Cord Blood Bank, and other public cord blood banks around the world. Public cord blood banks provide families with the option of donating their cord blood for public use at no cost. The Stem Cell Therapeutic Act provides financing for a national system of public cord blood banks in the United States to encourage cord blood donations from an ethnically diverse population. In addition, many states are evaluating the feasibility of establishing cord blood repositories for transplantation purposes. An increase in the number and diversity of publicly available cord blood units from public banks would increase the probability of finding suitably matched cells for a family member, which may result in a decrease in the demand for private cord blood banking. If the science of human leukocyte antigens, or HLA, typing advances, then unrelated cord blood transplantation may become safer and more efficacious, similarly reducing the clinical advantage of related cord blood transplantation. Such events could negatively affect our business and revenues.

Ethical and other concerns surrounding the use of stem cell therapy may negatively impact the public perception of our stem cell services, thereby suppressing demand for our services.

Although our stem cell business pertains to adult stem cells only, and does not involve the more controversial use of embryonic stem cells, the use of adult human stem cells for therapy could give rise to similar ethical, legal and social issues as those associated with embryonic stem cells, which could adversely affect its acceptance by consumers and medical practitioners. Additionally, it is possible that our business could be negatively impacted by any stigma associated with the use of embryonic stem cells if the public fails to appreciate the distinction between adult and embryonic stem cells. Delays in achieving public acceptance may materially and adversely affect the results of our operations and profitability.

Building market acceptance of our U.S. autologous adult stem cell collection, processing and storage services, may be more costly and take longer than we expect.

The success of our U.S. autologous adult stem cell business depends on continuing and growing market acceptance of our collection, processing and storage services as well as stem cell therapy generally. Increasing the awareness and demand for our services requires expenditures for marketing and education of consumers and medical practitioners who, under present law, must order stem cell collection and treatment on behalf of a potential customer. The time and expense required to educate and to build awareness of our services and their potential benefits, and about stem cell therapy in general, could significantly delay market acceptance and our ultimate profitability. The successful commercialization of our services will also require that we satisfactorily address the concerns of medical practitioners in order to avoid resistance to recommendations for our services and ultimately reach our potential consumers. No assurances can be given that our business plan and marketing efforts will be successful, that we will be able to commercialize our services, or that there will be market or clinical acceptance of our services by potential customers or physicians, respectively, sufficient to generate any material revenues for us. To date, only a minimal number of collections have been performed at the collection centers in our network.

Technologies for the treatment of cancer and other diseases and processes used by us are subject to rapid change, and the development of treatment strategies that are more effective than our products and services could render our services obsolete. Given our focus on the field of cell therapy, such obsolescence could jeopardize our success or future results.

Our activities involve treatment modalities and protocols influenced by advancements in technology. Various methods for treating cancer and other diseases, of which cell therapy is but only one, currently are, and in the future may be expected to be, the subject of extensive research and development. There is no assurance that cell therapies will achieve the degree of success envisioned by us in the treatment of cancer and other diseases. Nor is there any assurance that new technological improvements and techniques will not render processes currently used by us obsolete. In addition, the successful development and acceptance of any one or more alternative forms of treatment could render the need for our services obsolete. We are focused on cell therapy, and if this field is substantially unsuccessful, this could jeopardize our success or future results.

There is a scarcity of experienced professionals in the field of cell therapy and we may not be able to retain key officers or employees or hire new key officers or employees needed to implement our business strategy and develop our products and businesses. If we are unable to retain or hire key officers or employees, we may be unable to continue to grow this business or to implement our business strategy, and our business may be materially and adversely affected.

Given the specialized nature of cell therapy and the fact that it is a young field, there is an inherent scarcity of experienced personnel in the field. The Company is substantially dependent on the skills and efforts of current senior management for their management and operations, as well as for the implementation of their business strategy. As a result of the difficulty in locating qualified new management, the loss or incapacity of existing members of management or unavailability of qualified management or as replacements for management who resign or are terminated could adversely affect the Company's operations. The future success of the Company also depends upon our ability to attract and retain additional qualified personnel (including medical, scientific, technical, commercial, business and administrative personnel) necessary to support our anticipated growth, develop our business, perform contractual obligations under our University of Louisville and other license agreements and maintain appropriate licensure, on acceptable terms. There can be no assurance that we will be successful in attracting or retaining personnel required by us to continue and grow our operations. The loss of a key employee, the failure of a key employee to perform in his or her current position or our inability to attract and retain skilled employees, as needed, could result in our inability of to continue to grow our business or to implement our business strategy, or may have a material adverse effect on our business, financial condition and operating results.

Current cell therapy products have a limited biologic shelf life as a result of which there are constraints on transit times between the time stem cells are extracted from a patient and the time that a processed product leaves our facility and arrives for re-infusion in the patient. Thus, our current business model has to assume that, in order to effectively provide many of our services in a market, we need to have a suitable facility that can provide timely service in such market. This could add significantly to our capital requirements and be a limiting factor on our future growth and profitability.

Current cell therapy products have a limited shelf life, in certain instances limited to less than 12 hours. Thus, there are constraints on transit times between the time the cell product is extracted from a patient and the product arrives at one of our facilities for processing, as well as constraints on the time that a processed product leaves our facility and arrives for re-infusion in the patient. Therefore, cell therapy facilities need to be located in major population centers in which patients of the cell therapy products are likely to be located and within close proximity of major airports from which they can be timely delivered. Building new facilities requires significant commitments of time and capital, which we may not have available in a timely manner. Even if such new facilities are established, there may be challenges to ensuring that they are compliant with cGMP, other FDA requirements, and/or applicable state or local regulatory requirements. We cannot be certain that we would be able to recoup the costs of establishing a facility and attaining regulatory compliances in a given market. Thus, the limited biologic shelf life of cell therapy products is a hindrance on the rate at which we can expand our cell processing and manufacturing services into new geographic markets and requires significant capital risk by us, which we may or may not be able to recover.

Commercially available transportation systems are not set up for shipment of biological or other perishable goods and will not be able to meet the demands of the emerging cell therapy market. To succeed, the large-scale commercialization of cell therapy products will need to overcome the present weaknesses of the major air carriers.

Weaknesses in our existing transportation carriers include the lack of a true point-to-point chain of control, non-controlled X-ray and inspection, no guarantee of package orientation, handling or storage conditions and in many cases no standard, documented and tracked operating procedures. While reliable ground carriers with experience in the transport of blood products already exist in major metropolitan areas of the country, air carriers meeting such needs are limited. We evaluated the major domestic express carriers, and concluded that even their highest-level services are inadequate to meet the sector's needs. However, we identified and validated only one specialty air carrier as a transportation partner, which specializes in shipping medical products, including whole blood and blood products, tissue for transplantation, and diagnostic

specimens. There are presently few alternative sources for the safe transportation of cell therapy products. If this carrier should cease its medical shipping operations or otherwise be unable to properly meet our transportation needs, the lack of access to safe and effective transportation options could adversely affect our business.

Failure of the PCT Merger to achieve potential benefits could harm the business and operating results of the Company.

We expect that the combination of the respective businesses of PCT and NeoStem will result in potential benefits for our Company. Achieving these potential benefits will depend on a number of factors, some of which include:

- retention of key management, marketing and technical personnel;
- the ability of the Company to increase its customer base and to increase the sales of products and services; and
- competitive conditions in the industry surrounding the collection, processing, and storage of stem cells.

The failure to achieve anticipated benefits could harm the business, financial condition and operating results of the Company.

We may experience difficulties in integrating PCT's business and could fail to realize the potential benefits of the PCT Merger.

Achieving the anticipated benefits of the PCT Merger will depend in part upon whether we are able to integrate PCT's business in an efficient and effective manner. We may not be able to accomplish this integration process smoothly or successfully. The difficulties of combining the two companies' businesses could include, among other things:

- the fact that the two companies are geographically separate organizations, with possible differences in corporate cultures and management philosophies;
- the significant demands that will be placed on management resources, which may distract management's attention from day-to-day business operations;
- differences in the disclosure systems, accounting systems, and accounting controls and procedures of the two companies, which may interfere with our ability to make timely and accurate public disclosure; and
- the demand of managing new locations and new lines of business acquired in the PCT Merger.

Any inability to realize the potential benefits of the PCT Merger, as well as any delay in successfully integrating the two companies, could have an adverse effect upon the Company's revenues, level of expenses and operating results, which could adversely affect the value of our Common Stock.

If the market for the Company's products and/or technology does not experience significant growth or if the Company's products and/or technology do not achieve broad acceptance, the Company's operations will suffer.

We cannot accurately predict the future growth rate or the size of the market for the Company's products and technology. The expansion of this market depends on a number of factors, such as:

- the cost, performance and reliability of the Company's products/technologies, and the products/technologies offered by competitors;
- customers' perceptions regarding the benefits of the Company's products and technologies;
- public perceptions regarding the use of the Company's products and technologies;
- customers' satisfaction with the products and technologies; and
- marketing efforts and publicity regarding the products and technologies.

Our success in developing future therapeutics will depend in part on establishing and maintaining effective strategic partnerships and collaborations, which may impose restrictions on our business and subject us to additional regulation.

A key aspect of our business strategy is to establish strategic relationships in order to gain access to critical supplies, to expand or complement our research and development or commercialization capabilities, and to reduce the cost of research and development. There can be no assurance that we will enter into such relationships, that the arrangements will be on favorable terms or that such relationships will be successful. If any of our research partners terminate their relationship with us or fail to perform their obligations in a timely manner, our research and development activities or commercialization of our services may be substantially impaired or delayed.

Relationships with licensed professionals such as physicians may be subject to state and federal laws restricting the referral of business, prohibiting certain payments to physicians, or otherwise limiting such collaborations. If our services become approved for reimbursement by government or private insurers, we could be subject to additional regulation and perhaps additional limitations on our ability to structure relationships with physicians. Additionally, state regulators may impose restrictions on the business activities and relationships of licensed physicians or other licensed professionals. For example, many states restrict or prohibit the employment of licensed physicians by for-profit corporations, or the “corporate practice of medicine.” If we fail to structure our relationships with physicians in accordance with applicable laws or other regulatory requirements, it could have a material adverse effect on our business. Even if we do enter into these arrangements, we may not be able to maintain these relationships or establish new ones in the future on acceptable terms.

We have a limited marketing staff and budget.

The degree of market acceptance of our products and services depends upon a number of factors, including the strength of our sales and marketing support. If our marketing is not effective, our ability to generate revenues could be significantly impaired. Due to capital constraints, our marketing and sales activities have been somewhat limited and thus we may not be able to make our services known to a sufficient number of potential customers and partners. Limitations in our marketing and sales activities, and the failure to attract enough customers, will affect our ability to operate profitably.

There is significant uncertainty about the validity and permissible scope of patents in the biotechnological industry and we may not be able to obtain patent protection.

We own or hold exclusive rights to 30 issued patents and over 80 pending patent applications. Given the nature of our therapeutic programs, our patents and patent applications cover certain methods of isolating, storing and using stem cells, including very small embryonic stem cells, as well as compositions and methods relating to T regulatory cells. There can be no assurance that the patent applications to which we hold rights will result in the issuance of patents, or that any patents issued or licensed to us will not be challenged and held to be invalid or of a scope of coverage that is different from what we believe the patent’s scope to be. Our success will depend, in part, on whether we can: obtain patents to protect our own products and technologies; obtain licenses to use the technologies of third parties if necessary, which may be protected by patents; and protect our trade secrets and know-how. Our inability to obtain and rely upon patents essential to our business may have a material adverse effect on our business, operating results and financial condition.

We may be unable to protect our intellectual property from infringement by third parties.

Despite our efforts to protect our intellectual property, third parties may infringe or misappropriate our intellectual property. Our competitors may also independently develop similar technology, duplicate our processes or services or design around our intellectual property rights. We may have to litigate to enforce and protect our intellectual property rights to determine their scope, validity or enforceability. Intellectual property litigation is costly, time-consuming, diverts the attention of management and technical personnel and could result in substantial uncertainty regarding our future viability. The loss of intellectual property protection or the inability to secure or enforce intellectual property protection would limit our ability to develop or market our services in the future. This would also likely have an adverse effect on the revenues generated by any sale

or license of such intellectual property. Furthermore, any public announcements related to such litigation or regulatory proceedings could adversely affect the price of our Common Stock.

Third parties may claim that we infringe on their intellectual property.

We may be subject to costly litigation in the event our technology is claimed to infringe upon the proprietary rights of others. Third parties may have, or may eventually be issued, patents that would be infringed by our technology. Any of these third parties could make a claim of infringement against us with respect to our technology. We may also be subject to claims by third parties for breach of copyright, trademark or license usage rights. Litigation and patent interference proceedings could result in substantial expense to us and significant diversion of efforts by our technical and management personnel. An adverse determination in any such proceeding or in patent litigation could subject us to significant liabilities to third parties or require us to seek licenses from third parties. Such licenses may not be available on acceptable terms or at all. Adverse determinations in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent us from commercializing our products, which would have a material adverse affect on our business, operating results and financial condition.

We may be unable to maintain our licenses, patents or other intellectual property and could lose important protections that are material to continuing our operations and growth and our ability to achieve profitability.

Our license agreement with the University of Louisville and other license agreements require us to pay license fees, royalties and milestone payments and fees for patent filings and applications. Obtaining and maintaining patent protection and licensing rights also depends, in part, on our ability to pay the applicable filing and maintenance fees. Our failure to meet financial obligations under our license agreements in a timely manner or our non-payment or delay in payment of our patent fees, could result in the loss of some or all of our rights to proprietary technology or the inability to secure or enforce intellectual property protection. Additionally, our license agreements require us to meet certain diligence obligations in the development of the licensed products. Our failure to meet these diligence obligations under our license agreements could result in the loss of some or all of our rights under the license agreements. The loss of any or all of our intellectual property rights could materially limit our ability to develop and/or market our services, which would materially and adversely affect our business, operating results and financial condition.

Our inability to obtain reimbursement for our therapies from private or governmental insurers, could negatively impact demand for our services.

Successful sales of health care services and products generally depends, in part, upon the availability and amounts of reimbursement from third party healthcare payor organizations, including government agencies, private healthcare insurers and other healthcare payors, such as health maintenance organizations and self-insured employee plans. Uncertainty exists as to the availability of reimbursement for new therapies such as stem cell-based therapies. There can be no assurance that such reimbursement will be available in the future at all or without substantial delay or, if such reimbursement is provided, that the approved reimbursement amounts will be sufficient to support demand for our services at a level that will be profitable.

We may be subject to significant product liability claims and litigation.

Our business exposes us to potential product liability risks inherent in the testing, processing and marketing of cell therapy products. Such liability claims may be expensive to defend and result in large judgments against us. We presently have product liability insurance limited to $10 million per incident and $10 million in annual aggregate. We also maintain errors and omissions, directors and officers, workers' compensation and other insurance appropriate to our business activities. If we were to be subject to a claim in excess of this coverage or to a claim not covered by our insurance and the claim succeeded, we would be required to pay the claim from our own limited resources, which could have a material adverse effect on our financial condition, results of operations and business. Additionally, liability or alleged liability could harm our business by diverting the attention and resources of our management and damaging our reputation and that of our subsidiaries.

Risks Related to Doing Business in China

Our operations are subject to risks associated with emerging markets.

The Chinese economy is not well established and is only recently emerging and growing as a significant market for consumer goods and services. Accordingly, there is no assurance that the market will continue to grow. Perceived risks associated with investing in China, or a general disruption in the development of China's markets could materially and adversely affect the business, operating results and financial condition of Erye and us.

A significant portion of our assets is located in the PRC, and investors may not be able to enforce federal securities laws or their other legal rights.

A substantial portion of our assets is located in the PRC. As a result, it may be difficult for investors in the U.S. to enforce their legal rights, to effect service of process upon certain of our directors or officers or to enforce judgments of U.S. courts predicated upon civil liabilities and criminal penalties against our directors and officers located outside of the U.S.

The PRC government has the ability to exercise significant influence and control over our operations in China.

In recent years, the PRC government has implemented measures for economic reform, the reduction of state ownership of productive assets and the establishment of corporate governance practices in business enterprises. However, many productive assets in China are still owned by the PRC government. In addition, the government continues to play a significant role in regulating industrial development by imposing business regulations. It also exercises significant control over the country's economic growth through the allocation of resources, controlling payment of foreign currency-denominated obligations, setting monetary policy and providing preferential treatment to particular industries or companies.

There can be no assurance that China's economic, political or legal systems will not develop in a way that becomes detrimental to our business, results of operations and financial condition. Our activities may be materially and adversely affected by changes in China's economic and social conditions and by changes in the policies of the government, such as measures to control inflation, changes in the rates or method of taxation and the imposition of additional restrictions on currency conversion.

Additional factors that we may experience in connection with having operations in China that may adversely affect our business and results of operations include:

- our inability to enforce or obtain a remedy under any material agreements;
- PRC restrictions on foreign investment that could impair our ability to conduct our business or acquire or contract with other entities in the future;
- restrictions on currency exchange that may limit our ability to use cash flow most effectively or to repatriate our investment;
- fluctuations in currency values;
- cultural, language and managerial differences that may reduce our overall performance; and
- political instability in China.

Cultural, language and managerial differences may adversely affect our overall performance.

We have experienced difficulties in assimilating cultural, language and managerial differences with our subsidiaries in China. Personnel issues have developed in consolidating management teams from different cultural backgrounds. In addition, language translation issues from time to time have caused miscommunications. These factors make the management of our operations in China more difficult. Difficulties in coordinating the efforts of our U.S.-based management team with our China-based management team may cause our business, operating results and financial condition to be materially and adversely affected.

We may not be able to enforce our rights in China.

China's legal and judicial system may negatively impact foreign investors. The legal system in China is evolving rapidly, and enforcement of laws is inconsistent. It may be impossible to obtain swift and equitable enforcement of laws or enforcement of the judgment of one court by a court of another jurisdiction. China's legal system is based on civil law or written statutes and a decision by one judge does not set a legal precedent that must be followed by judges in other cases. In addition, the interpretation of Chinese laws may vary to reflect domestic political changes.

There are substantial uncertainties regarding the interpretation and application to our business of PRC laws and regulations, since many of the rules and regulations that companies face in China are not made public. The effectiveness of newly enacted laws, regulations or amendments may be delayed, resulting in detrimental reliance by foreign investors. New laws and regulations that apply to future businesses may be applied retroactively to existing businesses. We cannot predict what effect the interpretation of existing or new PRC laws or regulations may have on our business.

The laws of China are likely to govern many of our material agreements, including, without limitation the Joint Venture Agreement. We cannot assure you that we will be able to enforce our interests or our material agreements or that expected remedies will be available. The inability to enforce or obtain a remedy under any of our future agreements may have a material adverse impact on our operations.

Our businesses in China are subject to government regulation that limit or prohibit direct foreign investment, limiting our ability to control these businesses, as well as our ability to pursue new ventures and expand further into the Chinese market.

The PRC government has imposed regulations in various industries, including medical research and the stem cell business, that limit foreign investors' equity ownership or prohibit foreign investments altogether in companies that operate in such industries. As a result, our ability to control our existing China-based businesses as well as pursue new ventures and expand further into the Chinese market may be limited.

If new laws or regulations or policies forbid foreign investment in industries in which we want to expand or complete a business combination, they could severely impair our ability to grow our business. Additionally, if the relevant Chinese authorities find us or such business combination to be in violation of any laws or regulations, they would have broad discretion in dealing with such violation, including, without limitation: (i) levying fines; (ii) revoking our business and other licenses; (iii) requiring that we restructure our ownership or operations; and (iv) requiring that we discontinue any portion or all of our business. Accordingly, any of these regulations or violations could have a material adverse effect on our business, operating results and financial condition.

The import into China or export from China of technology relating to stem cell therapy may be prohibited or restricted.

The Chinese Ministry of Commerce, or MOFCOM, and Ministry of Science and Technology of China, or MOST, jointly publish the Catalogue of Technologies the Export of which from China is Prohibited or Restricted, and the Catalogue of Technologies the Import of which into China Prohibited or Restricted. Stem cell-related technologies are not listed in the current versions of these catalogues, and therefore their import or export should not be forbidden or require the approval of MOFCOM and MOST. However, these catalogues are subject to revision and, as the PRC authorities develop policies concerning stem cell technologies, it is possible that the categories would be amended or updated should the PRC government want to regulate the export or import of stem cell related technologies to protect material state interests or for other reasons. Should the catalogues be updated so as to bring any activities of the planned stem cell processing, storage and manufacturing operation in Beijing and related research and development activities under their purview, any such limitations or restrictions imposed on the operations and related activities could materially and adversely affect our business, financial condition and results of operations.

The PRC government does not permit direct foreign investment in stem cell research and development businesses. Accordingly, we operate these businesses through local companies with which we have contractual relationships but in which we do not have controlling equity ownership.

PRC regulations prevent foreign companies from directly engaging in stem cell-related research, development and commercial applications in China. Therefore, to perform these activities, we operate our current stem cell-related business in China through two domestic variable interest entities, or VIEs: Tianjin Niou Bio-Technology Ltd., or Tianjin Neo Bio-Technology, and Beijing Ruijieao Bio-Technology Ltd., or Beijing Ruijieao, each a Chinese domestic company controlled by the Chinese employees of NeoStem (China), Inc., our wholly foreign-owned entity, or the WFOE, through various business agreements, referred to, collectively, as the VIE documents. Tianjin Neo-Biotechnology conducts operations formerly conducted by another Company VIE, Qingdao Neo Biotechnology. We control these companies and operate these businesses through contractual arrangements with the companies and their individual owners, but we have no direct equity ownership or control over these companies. Our contractual arrangements may not be as effective in providing control over these entities as direct ownership. For example, the VIEs could fail to take actions required for our business or fail to conduct business in the manner we desire despite their contractual obligation to do so. These companies are able to transact business with parties not affiliated with us. If these companies fail to perform under their agreements with us, we may have to rely on legal remedies under PRC law, which may not be effective. In addition, we cannot be certain that the individual equity owners of the VIEs would always act in our best interests, especially if they have no other relationship with us.

Although other foreign companies have used WFOEs and VIE structures similar to ours and such arrangements are not uncommon in connection with business operations of foreign companies in China in industry sectors in which foreign direct investments are limited or prohibited, recently there has been greater scrutiny by the business community of the VIE structure and, additionally, the application of a VIE structure to control companies in a sector in which foreign direct investment is specifically prohibited carries increased risks.

For example, if our structure is deemed in violation of PRC law, the PRC government could revoke the business license of the WFOE, require us to discontinue or restrict our operations, restrict our right to collect revenues, require us to restructure our business, corporate structure or operations, impose additional conditions or requirements with which we may not be able to comply, impose restrictions on our business operations or on our customers, or take other regulatory or enforcement actions against us. We may also encounter difficulties in enforcing related contracts. Any of these events could materially and adversely affect our business, operating results and financial condition.

Due to the relationship between the WFOE and the VIEs, the PRC tax authorities may challenge our VIE structure, including the transfer prices used for related party transactions among our entities in China.

Substantially all profits generated from the VIEs will be paid to the WFOE in China through related party transactions under contractual agreements. We believe that the terms of these contractual agreements are in compliance with the laws in China. However, the tax authorities in China have not examined these contractual agreements. Due to the uncertainties surrounding the interpretation of the transfer pricing rules relating to related party transactions in China, it is possible that the tax authorities in China could challenge the transfer prices that we will use for related party transactions among our entities in China and this could increase our tax liabilities and diminish the profitability of our business in China, which would materially and adversely affect our operating results and financial condition.

We expect to rely, in part, on dividends paid by our WFOE and/or Erye to supply cash flow for our U.S. business, and statutory or contractual restrictions may limit their ability to pay dividends to us.

We expect to rely partly on dividends paid to us by the WFOE under the contracts with the VIEs, and under the Joint Venture Agreement, attributable to our 51% ownership interest in Erye, to meet our future cash needs. However, there can be no assurance that the WFOE in China will receive payments uninterrupted or at all as arranged under the contracts with the VIEs. In addition, pursuant to the Joint Venture Agreement that governs the ownership and management of Erye, for the three-year period commencing on the first day of the first fiscal quarter after the Joint Venture Agreement became effective distributions are made as follows:

(i) 49% of undistributed profits (after tax) will be distributed to EET and loaned back to Erye for use in connection with its construction of the new Erye facility; (ii) 45% of the net profit after tax will be provided to Erye as part of the new facility construction fund, which will be characterized as paid-in capital for our 51% interest in Erye; and (iii) only 6% of the net profit will be distributed to us directly for our operating expenses.

The payment of dividends by entities organized under PRC law to non-PRC entities is subject to limitations. Regulations in the PRC currently permit payment of dividends by our WFOE and Erye only out of accumulated distributable earnings, if any, as determined in accordance with accounting standards and regulations in China. Moreover, our WFOE and Erye are required to appropriate from PRC GAAP profit after tax to other non-distributable reserve funds. These reserve funds include one or more of the following: (i) a general reserve, (ii) an enterprise expansion fund and (iii) a staff bonus and welfare fund. Subject to certain cumulative limits (i.e., 50% of the registered capital of relevant company), the general reserve fund requires annual appropriation at 10% of after tax profit (as determined under accounting principles generally accepted in the PRC at each year-end); the appropriation to the other funds are at the discretion of WFOE and Erye. In addition, if Erye incurs additional debt on its own behalf to finance the building of the new facility in the future, the instruments governing the debt may restrict Erye's or the joint venture's ability to pay dividends or make other distributions to us. This may diminish the cash flow we receive from Erye's operations, which would have a material adverse effect on our business, operating results and financial condition.

Restrictions on currency exchange may limit our ability to utilize our cash flow effectively.

Our interests in China will be subject to China's rules and regulations on currency conversion. In particular, the initial capitalization and operating expenses of the VIEs are funded by our WFOE. In China, the State Administration for Foreign Exchange, or the SAFE, regulates the conversion of the Chinese Renminbi into foreign currencies and the conversion of foreign currencies into Chinese Renminbi. Currently, foreign investment enterprises are required to apply to the SAFE for Foreign Exchange Registration Certificates, or IC Cards of Enterprises with Foreign Investment. Foreign investment enterprises holding such registration certificates, which must be renewed annually, are allowed to open foreign currency accounts including a "basic account" and "capital account." Currency translation within the scope of the "basic account," such as remittance of foreign currencies for payment of dividends, can be effected without requiring the approval of the SAFE. However, conversion of currency in the "capital account," including capital items such as direct investments, loans, and securities, require approval of the SAFE. According to the *Notice of the General Affairs Department of the State Administration of Foreign Exchange on the Relevant Operating Issues Concerning the Improvement of the Administration of Payment and Settlement of Foreign Currency Capital of Foreign-invested Enterprises* promulgated on August 29, 2008, or the SAFE Notice 142, to apply to a bank for settlement of foreign currency capital, a foreign invested enterprise shall submit the documents certifying the uses of the RMB funds from the settlement of foreign currency capital and a detailed checklist on use of the RMB funds from the last settlement of foreign currency capital. It is stipulated that only if the funds for the settlement of foreign currency capital are of an amount not more than US$50,000 and are to be used for enterprise reserve, the above documents may be exempted by the bank. This SAFE Notice 142, along with the recent practice of Chinese banks of restricting foreign currency conversion for fear of "hot money" going into China, limits and may continue to limit our ability to channel funds to the VIE entities for their operation. There can be no assurance that the PRC regulatory authorities will not impose further restrictions on the convertibility of the Chinese currency. Future restrictions on currency exchanges may limit our ability to use our cash flow for the distribution of dividends to our stockholders or to fund operations we may have outside of China, which could materially adversely affect our business and operating results.

Fluctuations in the value of the Renminbi relative to the U.S. dollar could affect our operating results.

We prepare our financial statements in U.S. dollars, while our underlying businesses operate in two currencies, U.S. dollars and Chinese Renminbi. It is anticipated that our Chinese operations will conduct their operations primarily in Renminbi and our U.S. operations will conduct their operations in dollars. At the present time, we do not expect to have significant cross currency transactions that will be at risk to foreign currency exchange rates. Nevertheless, the conversion of financial information using a functional currency of Renminbi will be subject to risks related to foreign currency exchange rate fluctuations. The value of

Renminbi against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in China's political and economic conditions and supply and demand in local markets. As we have significant operations in China, and will rely principally on revenues earned in China, any significant revaluation of the Renminbi could materially and adversely affect our financial results. For example, to the extent that we need to convert U.S. dollars we receive from an offering of our securities into Renminbi for our operations, appreciation of the Renminbi against the U.S. dollar could have a material adverse effect on our business, financial condition and results of operations.

Beginning in July of 2005, the PRC government changed its policy of pegging the value of Renminbi to the U.S. dollar. Under the new policy, the value of the Renminbi has fluctuated within a narrow and managed band against a basket of certain foreign currencies. However, the Chinese government has come under increasing U.S. and international pressure to revalue the Renminbi or to permit it to trade in a wider band, which many observers believe would lead to substantial appreciation of the Renminbi against the U.S. dollar and other major currencies. There can be no assurance that Renminbi will be stable against the U.S. dollar. On June 19, 2010 the central bank of China announced that it will gradually modify its monetary policy and make the Renminbi's exchange rate more flexible and allow the Renminbi to appreciate in value in line with its economic strength.

If China imposes economic restrictions to reduce inflation, future economic growth in China could be severely curtailed, reducing the profitability of our operations in China.

Rapid economic growth can lead to growth in the supply of money and rising inflation. If prices for any products or services in China are unable, for any reason, to increase at a rate that is sufficient to compensate for any increase in the costs of supplies, materials or labor, it may have an adverse effect on the profitability of Erye and our stem cell activities in China would be adversely affected. In order to control inflation in the past, China has imposed controls on bank credits, limits on loans for fixed assets and restrictions on state bank lending and could adopt additional measures to further combat inflation. Such measures could harm the economy generally and hurt our business by (i) limiting the income of our customers available to spend on our products and services, (ii) forcing us to lower our profit margins, and (iii) limiting our ability to obtain credit or other financing to pursue our expansion plans or maintain our business. We cannot predict with any certainty the degree to which our business will be adversely affected by slower economic growth in China.

Erye's manufacturing operations in China may be adversely affected by changes in PRC government policies regarding ownership of assets and allocation of resources to various industries and companies.

While the PRC government has implemented economic and market reforms, a substantial portion of productive assets in China are still owned by the PRC government. The PRC government also exercises significant control over China's economic growth through the allocation of resources, controlling payment of foreign currency and providing preferential treatment to particular industries or companies. Should the PRC government change its policies regarding economic growth and private ownership of manufacturing and other assets of Erye, we may be unable to execute our business plan, we may lose rights to certain business assets and our business, operating results and financial condition may be materially harmed.

If there are any adverse public health developments in China, our business and operations may be disrupted and medical tourism in China may decline, which could delay the launch of our stem cell therapies in China.

Any prolonged occurrence of avian flu, severe acute respiratory syndrome, or SARS, or other adverse public health developments in China or other regions where we operate could disrupt our business and have a material adverse effect on our business and operating results. These could include the ability of our personnel to travel or to promote our services within China or in other regions where we operate, as well as temporary closure of our facilities.

Any closures or travel or other operational restrictions would severely disrupt our business operations and adversely affect our results of operations.

If the anticipated growth of medical tourism in China does not occur, or if fewer people travel abroad for the purpose of cosmetic or medical therapies for any reason, including limitations imposed by governmental authorities, we may not achieve our revenue and profit expectations.

One part of our business plan involves launching innovative, safe, and effective cell therapies in China that have not yet been approved in the U.S., to generate sales revenues in advance of obtaining U.S. regulatory approvals. Different countries have different regulatory requirements and pathways resulting in the availability of therapeutics in one market prior to another. This phenomenon has led to the growth of an industry called "medical tourism" where patients travel to foreign locations and receive treatments that have not yet been approved in their home countries.

If the anticipated growth of medical tourism in China does not occur, or if fewer people travel abroad for the purpose of cosmetic or medical therapies for any reason, including limitations imposed by governmental authorities, we may not achieve our revenue and profit expectations. Any setbacks to the implementation of our business plan could materially and adversely affect our business, operating results and financial condition.

China is a developing nation governed by a one-party communist government and susceptible to political, economic, and social upheaval that could disrupt the economy.

China is a developing country governed by a one-party government. China is also a country with an extremely large population, wide income gaps between rich and poor and between urban and rural residents, minority ethnic and religious populations, and growing access to information about the different social, economic, and political systems found in other countries. China has also experienced extremely rapid economic growth over the last decade, and its legal and regulatory systems have had to change rapidly to accommodate this growth. If China experiences political or economic upheaval, labor disruptions or other organized protests, nationalization of private businesses, civil strife, strikes, acts of war and insurrections, this may disrupt China's economy and could materially and adversely affect our financial performance.

If political relations between China and the U.S. deteriorate, our business in China may be materially and adversely affected.

The relationship between China and the U.S. is subject to periodic tension. Relations may also be compromised if the U.S. becomes a more active advocate of Taiwan or if either government pressures the other regarding its monetary, economic or social policies. Changes in political conditions in China and changes in the state of Sino-U.S. relations are difficult to predict and could adversely affect our operations or financial condition. In addition, because of our involvement in the Chinese market, any deterioration in political relations might cause a public perception in the U.S. or elsewhere that might cause the goods or services we may offer to become less attractive. If any of these events were to occur, it could materially and adversely affect our business, operating results and financial condition.

China's State Food and Drug Administration's regulations may limit our ability to develop, license, manufacture and market our products and services.

Some or all of our operations in China will be subject to oversight and regulation by the PRC's State Food and Drug Administration ("SFDA"). Government regulations, among other things, cover the inspection of and controls over testing, manufacturing, safety and environmental considerations, efficacy, labeling, advertising, promotion, record keeping and sale and distribution of pharmaceutical products. Such government regulations may increase our costs and prevent or delay the licensing, manufacturing and marketing of any of our products or services. In the event we seek to license, manufacture, sell or distribute new products or services, we likely will need approvals from certain government agencies such as the SFDA. The future growth and profitability of any operations in China would be contingent on obtaining the requisite approvals. There can be no assurance that we will obtain such approvals.

In 2004, the SFDA implemented new guidelines for the licensing of pharmaceutical products. All existing manufacturers with licenses were required to apply for the Good Manufacturing Practices, or cGMP, certifications. Erye has received the requisite certifications. However, should Erye fail to maintain its cGMP certifications or fail to obtain cGMP and other certifications for its new production facilities, this would have a material adverse effect on Erye's and our business, results of operations and financial condition.

In addition, delays, product recalls or failures to receive approval may be encountered based upon additional government regulation, legislative changes, administrative action or changes in governmental policy and interpretation applicable to the Chinese pharmaceutical industry. Our pharmaceutical activities also may subject us to government regulations with respect to product prices and other marketing and promotional related activities. Government regulations may substantially increase our costs for developing, licensing, manufacturing and marketing any products or services, which could have a material adverse effect on our business, operating results and financial condition.

The SFDA and other regulatory authorities in China have implemented a series of new punitive and stringent measures regarding the pharmaceuticals industry to redress certain past misconducts in the industry and certain deficiencies in public health reform policies. Given the nature and extent of such new enforcement measures, the aggressive manner in which such enforcement is being conducted and the fact that newly-constituted local level branches are encouraged to issue such punishments and fines, there is the possibility of large scale and significant penalties being levied on manufacturers. These new measures may include fines, restriction and suspension of operations and marketing and other unspecified penalties. This new regulatory environment has added significantly to the risks of our businesses in China and may have a material adverse effect on our business, operating results and financial condition.

Changes to PRC policies regarding drug pricing may have a material adverse effect on Erye's and our results of operations and financial condition.

Erye's financial performance is heavily dependent on government pricing policies and procedures, which are subject to change. The *Rules on Introduction of Suzhou's Local Enterprises Produced Drugs into Suzhou's Local Medical Insurance Drugs Catalogue*, which was promulgated in 2006, may soon cease to be effective. The cancellation of such Rules would reduce Erye's sales and profits by an estimated $2 million and $1 million, respectively, calculated based on Erye's sales and profits for 2010. On March 2, 2011, the National Development and Reform Commission issued price cuts for drugs covered by national medical insurance which greatly influences two of Erye's drugs. It is anticipated that the price of Piperacillin Sodium Sulbactum Sodium will decrease by 50% and the price of Ligustrazine Phosphate will be cut by 75%. In 2010 Piperacillin Sodium Sulbactum Sodium accounted for approximately 3% of sales and Ligustrazine Phosphate accounted for approximately 2.5% of sales.

Erye's production will be concentrated in two production lines and Erye will be operating in a new facility.

Erye began transferring its operations to its new manufacturing facility in January 2010. The relocation is continuing as the new production lines are completed and receive cGMP certification through 2011. In January 2010, Suzhou Erye received notification that the SFDA has approved Suzhou Erye's application for cGMP certification to manufacture solvent crystallization sterile penicillin and freeze dried raw sterile penicillin at the new facility, which provides 50% and 100% greater manufacturing capacity, respectively, than its original facility. In June 2010, Suzhou Erye passed the government inspection by the SFDA to manufacture penicillin and cephalosporin powder for injection at the new facility. In May 2011, Suzhou Erye received cGMP production certification for freeze dried powder for injection issued by SFDA at the new facility. The facility is fully operational with respect to these lines. The combined production lines now certified by the SFDA were responsible for approximately 99% of Erye's 2010 revenues with two of them responsible for over 90% of Erye's 2010 revenues. Any interruptions in production with respect to those lines at the new facility will have a material adverse effect on Erye's business and ours. There are inherent problems in commencing operations at any new production facility. If Erye encounters operational difficulties in commencing production at its new facility, it could have a material adverse effect on Erye's business and ours.

As a result of Erye's relocation to a new manufacturing facility, Erye may experience certain delays and disruptions in its manufacturing operations which could adversely affect our business.

Erye has built a new production facility for purposes of manufacturing its products and relocated substantially all of its manufacturing operations from its existing facility to the new facility. The new facility is expected to be fully operational in 2011. As a result of this relocation, Erye has and may continue to experience certain delays and disruptions in its manufacturing operations which may adversely impact our business.

In China, we may conduct research and development activities related to cell therapy in cooperation with a domestic Chinese company. If these activities are regarded by PRC government authorities as "human genetic resources research and development activities," additional approvals by PRC government authorities will be required.

Our research and development activities in cell therapy in China may be conducted in cooperation with Beijing Ruijieao Biotechnology Ltd. Pursuant to the Interim Measures for the Administration of Human Genetic Resources, or the Measures, that took effect on June 10, 1998, China maintains a reporting and registration system on important pedigrees and genetic resources in specified regions. All entities and individuals involved in sampling, collecting, researching, developing, trading or exporting human genetic resources or taking such resources outside China must abide by the Measures. "Human genetic resources" refers to genetic materials such as human organs, tissues, cells, blood specimens, preparations or any type of recombinant DNA constructs, which contain human genome, genes or gene products as well as to the information related to such genetic materials.

It is possible that our research and development activities conducted by the Lab in cooperation with us in China may be regarded by PRC government authorities as human genetic resources research and development activities, and thus will be subject to approval by PRC government authorities. The sharing of patents or other corresponding intellectual property rights derived from such research and development operations is also subject to various restrictions and approval requirements established under the Measures.

With regard to the ownership of intellectual property rights derived from human genetic resources research and development, the Measures provide that the China-based research and development institution shall have priority access to information about the human genetic resources within China, particularly the important pedigrees and genetic resources in the specified regions and the relevant data, information and specimens and any transfer of such human genetic resources to other institutions shall be prohibited without obtaining corresponding approval from the Human Genetic Resource Administration Office of China, among other governmental authorities or agencies. No foreign collaborating institution or individual that has access to the above-mentioned information may publicize, publish, apply for patent rights or disclose it by any other means without obtaining government approval. In a collaborative research and development project involving human genetic resources of China between any Chinese and foreign institutions, intellectual property rights shall be allocated according to the following principles: (i) patent rights shall be jointly applied for by both parties and the resulting patent rights shall be owned by both parties if an achievement resulting from the collaboration is patentable; (ii) either party has the right to exploit such patent separately or jointly in its own country, subject to the terms of the collaboration; however, the transfer of such patent to any third party or authorizing any third party to implement such patent shall be carried out upon agreement of both parties, and the benefits obtained thereof shall be shared in accordance with their respective contributions; and (iii) the right of utilizing, transferring and sharing any other scientific achievement resulted from the collaboration shall be specified in the collaborative contract or agreement signed by both parties. Both parties are equally entitled to make use of the achievement which is not specified in the collaborative contract or agreement; however, the transfer of such achievement to any third party shall be carried out upon agreement of both parties, and the benefits obtained thereof shall be shared in accordance with their respective contributions.

If the research and development operations conducted by the Lab in cooperation with us in China are regarded by PRC government authorities as human genetic resources research and development activities, we may be required to obtain approval from PRC governmental authorities to continue such operations and the Measures may adversely affect our rights to intellectual property developed from such operations. Our inability to access intellectual property, or our inability to obtain required approvals on a timely basis, or at all, could materially and adversely affect our operations in China, and our operating results and financial condition.

Erye has lost certain preferential tax concessions, which will cause its tax liabilities to increase and profitability to decline.

The National People's Congress of China enacted a new PRC Enterprise Income Tax Law, or the EIT Law, that went into effect on January 1, 2008. Domestic-invested enterprises and foreign-invested entities now are subject to enterprise income tax at a uniform rate of 25% unless they qualify for limited exceptions. During the transition period for enterprises established before March 16, 2007, the tax rate is subject to a gradual increase which started in 2008 and will be equal to the new tax rate in 2011 or 2012. As a result, Erye has lost its preferential tax rates.

Because of the EIT Law, the tax liabilities of Erye have increased. Any future increase in the enterprise income tax rate applicable to Erye or other adverse tax treatments could increase Erye's tax liabilities and reduce its net income, which could have a material adverse effect on Erye's and our results of operations and financial condition.

Foreign-invested enterprises in China will be subject to city maintenance and construction tax and education expenses surtax starting from December 1, 2010.

According to relevant tax rules in China, foreign-invested enterprises (e.g., WFOE) were not subject to city maintenance and construction tax and education expenses surtax in the past; however, the State Council of PRC issued the *Notice regarding Unifying Rules of City Maintenance and Construction Tax and Education Expenses Surtax Applicable to Foreign-invested Enterprises and Domestic Enterprises and Individuals* (Guo Fa (2010) 35) on October 18, 2010, or the State Council Notice No. 35. According to the State Council Notice No. 35, starting from December 1, 2010, the *Interim Measures on City Maintenance and Construction Tax* promulgated by the State Council in the year of 1985 and the *Interim Rules on Levying Education Expenses Surtax* promulgated by the State Council in the year of 1986, and relevant rules, measures promulgated thereafter shall also apply to foreign-invested enterprises, foreign enterprises and foreign individuals. Accordingly, foreign-invested enterprises will be subject to city maintenance and construction tax and education expenses surtax starting from December 1, 2010 (Erye was already subject to such taxes). Both city maintenance and construction tax and education expense surtax are levied based on the value-added tax, consumer tax and business tax actually paid by the tax payer, depending on location of the tax payer, the tax rate of city maintenance and construction tax applicable could be 7%, 5% or 1%, and the tax rate of education expense surtax applicable is currently 3%.

Because of the State Council Notice No. 35, we expect that the tax liabilities of WFOE will increase, which could have a material adverse effect on our results of operations and financial condition.

Some of the laws and regulations governing our business in China are vague and subject to risks of interpretation.

Some of the PRC laws and regulations governing our business operations in China are vague and their official interpretation and enforcement may involve substantial uncertainty. These include, but are not limited to, laws and regulations governing our business and the enforcement and performance of our contractual arrangements in the event of the imposition of statutory liens, death, bankruptcy and criminal proceedings. Despite their uncertainty, we will be required to comply.

New laws and regulations that affect existing and proposed businesses may be applied retroactively. Accordingly, the effectiveness of newly enacted laws, regulations or amendments may not be clear. We cannot predict what effect the interpretation of existing or new PRC laws or regulations may have on our business.

In addition, pursuant to China's Administrative Measures on the Foreign Investment in Commercial Sector, foreign enterprises are permitted to establish or invest in wholly foreign-owned enterprises or joint ventures that engage in wholesale or retail sales of pharmaceuticals in China subject to the implementation of relevant regulations. However, no specific regulations in this regard have been promulgated to date, which creates uncertainty. If specific regulations are not promulgated, or if any promulgated regulations contain clauses that cause an adverse impact to our operations in China, then our business, operating results and financial condition could be materially and adversely affected.

The laws and regulations governing the therapeutic use of stem cells in China are evolving. New PRC laws and regulations may impose conditions or requirements with which could materially and adversely affect our business.

As the stem cell therapy industry is at an early stage of development in China, new laws and regulations may be adopted in the future to address new issues that arise from time to time. As a result, substantial uncertainties exist regarding the interpretation and implementation of current and any future PRC laws and regulations applicable to the stem cell therapy industry. There is no way to predict the content or scope of future Chinese stem cell regulation. There can be no assurance that the PRC government authorities will not issue new laws or regulations that impose conditions or requirements with which we cannot comply. Noncompliance could materially and adversely affect our business, results of operations and financial condition.

We may be subject to fines and legal sanctions imposed by the SAFE or other PRC government authorities if we or our PRC employees fail to comply with recent PRC regulations relating to employee stock options granted by offshore listed companies to PRC citizens.

On April 6, 2007, the SAFE issued the "*Operating Procedures for Administration of Domestic Individuals Participating in the Employee Stock Ownership Plan or Stock Option Plan of An Overseas Listed Company*," referred to as Circular 78. It is not clear whether Circular 78 covers all forms of equity compensation plans or only those which provide for the granting of stock options. For any plans which are so covered and are adopted by a non-PRC listed company after April 6, 2007, Circular 78 requires all participants who are PRC citizens to register with and obtain approvals from the SAFE prior to their participation in the plan. In addition, Circular 78 also requires PRC citizens to register with the SAFE and make the necessary applications and filings if they participated in an overseas listed company's covered equity compensation plan prior to April 6, 2007. The 2009 Non-U.S. Plan authorizes the grant of certain equity awards to our officers, directors and employees, some of whom are PRC citizens. Circular 78 may require our officers, directors and employees who receive option grants and are PRC citizens to register with the SAFE. We believe that the registration and approval requirements contemplated in Circular 78 will be burdensome and time consuming. If it is determined that any of our equity compensation plans are subject to Circular 78, failure to comply with such provisions may subject us and participants of our equity incentive plan who are PRC citizens to fines and legal sanctions and prevent us from being able to grant equity compensation to our PRC employees. In that case, our ability to compensate our officers, directors and employees through equity compensation would be hindered and our business operations may be adversely affected.

Failure to comply with the U.S. Foreign Corrupt Practices Act could subject us to penalties and other adverse consequences.

We are subject to the U.S. Foreign Corrupt Practices Act, which generally prohibits U.S. companies from engaging in bribery or other prohibited payments to foreign officials for the purpose of obtaining or retaining business. Foreign companies, including some that may compete with us, are not subject to these prohibitions. Corruption, extortion, bribery, pay-offs, theft and other fraudulent practices occur from time-to-time in the PRC. There can be no assurance, however, that our employees or other agents will not engage in such conduct for which we might be held responsible. If our employees or other agents are found to have engaged in such practices, we could suffer severe penalties and other consequences that may have a material adverse effect on our business, financial condition and results of operations.

RISKS RELATED TO THE AMORCYTE MERGER

The consummation of the transactions contemplated by the Amorcyte Merger Agreement is dependent upon NeoStem and Amorcyte obtaining all relevant and necessary consents and approvals.

A condition to consummation of the Amorcyte Merger is that NeoStem or Amorcyte obtains certain consents or approvals from third parties. In addition, the stockholders of NeoStem must approve the issuance of NeoStem securities pursuant to the Amorcyte Merger Agreement. The stockholders of Amorcyte must adopt the Amorcyte Merger Agreement and approve the Amorcyte Merger to be consummated pursuant thereto (and Amorcyte's governing documents afford class voting rights to the holders of Amorcyte Series A Preferred Stock), but a Voting Agreement has been entered into pursuant to which holders of a sufficient number of shares of Amorcyte Common Stock and Amorcyte Series A Preferred Stock have agreed to vote such shares in favor of the transactions. There can be no assurance that NeoStem or Amorcyte will be able to obtain all such relevant consents and approvals on a timely basis or at all. NeoStem has incurred, and expects to continue to incur, significant costs and expenses in connection with the proposed Amorcyte Merger. Any failure to obtain, or delay in obtaining, the necessary consents or approvals would prevent NeoStem from being able to consummate, or delay the consummation of, the transactions contemplated by the Amorcyte Merger Agreement, which could materially adversely affect the business, financial condition and results of operations of NeoStem. There is no guarantee that such approvals will be obtained or that such conditions will be satisfied.

Failure to satisfy closing conditions and complete the Amorcyte Merger could cause NeoStem's stock price to decline and could harm NeoStem's business and operating results.

The Amorcyte Merger Agreement contains conditions which NeoStem or Amorcyte, respectively, must meet in order to consummate the transactions. No assurance can be given that every closing condition will be satisfied or waived. In addition, the Amorcyte Merger Agreement may be terminated by either NeoStem or Amorcyte under certain circumstances.

If the Amorcyte Merger is not completed for any reason, NeoStem may be subject to a number of risks, including the following:

- the market price of NeoStem Common Stock may decline to the extent that the relevant current market price previously reflected a market assumption that the Amorcyte Merger will be completed;
- many costs related to the Amorcyte Merger, such as legal, accounting and financial printing fees, must be paid regardless of whether the transactions completed; and
- there may be substantial disruption to the business of NeoStem and distraction of its workforce and management team.

Any acquisition exposes a company to additional risks.

Acquisitions may entail numerous risks for NeoStem, including:

- competing claims for capital resources;
- difficulties in assimilating acquired operations, technologies or products;
- diversion of management's attention from NeoStem's core business;
- risks of undertaking activities or entering markets in which NeoStem has limited or no prior experience; and
- NeoStem's management team has limited experience in purchasing and integrating new businesses.

NeoStem's failure to successfully complete the integration of Amorcyte could have a material adverse effect on NeoStem's business, financial condition and operating results.

Failure of the Amorcyte Merger to achieve potential benefits could harm the business and operating results of the combined company.

NeoStem and Amorcyte expect that the combination of their businesses will result in potential benefits for the combined company. Achieving these potential benefits will depend on a number of factors, some of which include:

- The success of the AMR-001 Phase 2 trial;
- retention of key management, marketing and technical personnel after the transactions;
- the ability of the combined company to increase the sales of products and services; and
- competitive conditions in the cell therapy industry.

The failure to achieve anticipated benefits could harm the business, financial condition and operating results of the combined company.

NeoStem's outstanding warrants may negatively affect NeoStem's ability to raise additional capital.

As part of the Amorcyte Merger, NeoStem will be issuing warrants to purchase up to an additional 1,881,008 shares of NeoStem Common Stock. NeoStem already had, at August 17, 2011, approximately 54,470,909 stock options and warrants outstanding. Holders of NeoStem's outstanding warrants are given the opportunity to profit from a rise in the market price of NeoStem Common Stock. As long as these warrants are outstanding, the terms on which NeoStem could obtain additional capital may be adversely affected. The holders of these warrants might be expected to exercise them at a time when NeoStem would, in all likelihood, be able to obtain any needed capital by a new offering of securities on terms more favorable than those provided by these warrants.

If the market for the combined company's products and/or technology (including AMR-001 and any other product candidates) does not experience significant growth or if the combined company's products and/or technology do not achieve broad acceptance, the combined company's operations will suffer.

NeoStem and Amorcyte cannot accurately predict the future growth rate or the size of the market for the combined company's products and technology. The expansion of this market depends on a number of factors, such as:

- the results of clinical trials;
- the cost, performance and reliability of the combined company's products/technologies, and the products/technologies offered by competitors;
- customers' perceptions regarding the benefits of the combined company's products and technologies;
- public perceptions regarding the use of the combined company's products and technologies;
- customers' satisfaction with the products and technologies; and
- marketing efforts and publicity regarding the products and technologies.

While the acquisition of Amorcyte will further NeoStem's strategy of focusing its business on cell therapies, the development and marketing of cell therapies is a new business direction for NeoStem.

Beginning with its January 2011 acquisition of PCT, NeoStem began to shift its business plan to focus on capturing the paradigm shift to cell therapies. It is anticipated that NeoStem's acquisition of Amorcyte will help to further NeoStem's expansion into the cell therapy field. However, NeoStem has limited experience in the areas of cell therapy development and marketing of cell therapy products, and the related regulatory issues and processes. While the current officers of PCT, including Dr. Andrew Pecora, Amorcyte's Chief Scientific Officer, will continue to provide services to Amorcyte following the acquisition, and while Amorcyte will continue to rely on the expertise of PCT and its other current consultants and service providers, NeoStem can provide no assurances that its management will successfully oversee Amorcyte's clinical development activities and integrate Amorcyte into the NeoStem business.

NeoStem is contemplating a possible significant change in the nature of its business.

As part of our plan to focus its business on capturing the paradigm shift to cell therapies following its January 2011 acquisition of PCT, NeoStem is pursuing strategic alternatives with respect to its 51% interest in Erye. NeoStem is planning to devote its resources and management efforts to cell therapy manufacturing and development, and other related activities, including adult stem cell collection and storage, and in further developing the Company's regenerative medicine business in China. NeoStem believes that the proposed acquisition of Amorcyte is in keeping with NeoStem's strategic mission. NeoStem also believes that if the Company could monetize Erye, NeoStem would have additional capital needed to pursue the development of multiple cell therapies. To that end, in June 2011, NeoStem engaged a financial advisor to lead the effort to pursue the possible divesture of its 51% interest in Erye. Marketing efforts have commenced; however, in addition to the factors set forth below, it is too early to determine whether such efforts will lead to a proposal to purchase at a price and on terms that NeoStem would consider acceptable or whether, in the event a proposal or proposals on prices and terms acceptable to NeoStem are received, whether a transaction would be completed.

Any sale of NeoStem's interest would also be subject to a right of first refusal held by Suzhou Erye Economy & Co. Ltd. ("EET") pursuant to the terms of the Joint Venture Agreement between a subsidiary of NeoStem and EET. EET owns the remaining 49% interest in Erye. A number of issues have arisen between EET and NeoStem with respect to the operation and financing of Erye. For instance, while EET is required to lend back to Erye dividends received by it to finance Erye's move to its new facilities, Erye has recently reported to NeoStem that such arrangement is no longer tax efficient in light of the ratio of Erye's shareholder loans to its registered capital. In connection with exploring ways to remedy the additional tax burden caused by the level of shareholder loans and in preparing for a sale process, other issues have also surfaced, including the issue of NeoStem and Erye needing to obtain all Chinese regulatory approvals (and associated registrations) required to reflect the legal title of NeoStem's 51% interest in Erye as being held by the proper entity within NeoStem's group which is its current beneficial owner as that term is used under U.S. law. NeoStem and Erye are determining what government approvals (and associated registrations) will need to be issued by the Suzhou Municipal Bureau of Foreign Investment and Commerce and the Suzhou Administration for Industry and Commerce to remediate these deficiencies. NeoStem's management believes these regulatory deficiencies can be remediated within a reasonable period of time and should not delay a sale of NeoStem's interest in Erye. However, no assurance can be given that any unremediated regulatory deficiencies would not have an adverse effect on the operating results and liquidity of Erye and NeoStem and will not impede or delay efforts to divest NeoStem's interest in Erye. In addition, the remediation process is expected to trigger certain tax liabilities and penalties.

NeoStem has not yet determined to sell its interest in Erye, and will not do so until it can assess the level of interest generated, the potential price and transaction terms it might be offered and any regulatory impediments to a transaction. A sale of NeoStem's interest in Erye, if a sale can be consummated, would have a material effect on the business, results of operations and balance sheet of NeoStem. Factors that may impede a sale may include, but not be limited to, EET's right of first refusal and the significant time and money that exercise of such right could cause a potential purchaser, the need for any purchaser to negotiate a new Joint Venture Agreement and a shareholder loan repayment schedule with EET if EET does not wish to either sell its interest or exercise its right of first refusal, recent regulatory changes in China which reduce prices that may be charged for certain of Erye's products and limit use of antibiotics, tax or regulatory issues affecting Erye, including those described above and other tax increases described in our filings which will adversely affect Erye going forward, availability of financing for a potential purchaser, and other factors typical of any sale process.

If the combined company is unable to manage growth in its business, its prospects may be limited and its future results of operations may be adversely affected.

The combined company intends to expand its processing and manufacturing activities, its research and development platform to provide innovative therapies, its sales and marketing programs and other activities as needed to meet future demand. Any significant expansion may strain the combined company's managerial, financial and other resources. If the combined company is unable to manage its growth, its business, operating results and financial condition could be adversely affected. The combined company will need to improve continually its operations, financial and other internal systems to manage its growth effectively, and any failure to do so may lead to inefficiencies and redundancies, and result in reduced growth prospects and diminished operational results.

Certain current officers and directors of Amorcyte beneficially own large quantities of Amorcyte capital stock. Additionally, the Amorcyte Merger presents conflicts of interest that may cause the transactions contemplated by the Amorcyte Merger Agreement to have consequences to NeoStem that are less favorable than might be attained in comparable transactions where such potential conflicts are absent.

The transactions contemplated by the Amorcyte Merger Agreement present potential conflicts of interest, or, at a minimum, the appearance of conflicts of interest. For example, Paul Schmitt, currently a director and the CEO of Amorcyte, is also a managing director to the advisor of Novitas Capital III, L.P., which fund holds 3,693.7 shares of Amorcyte's Series A Preferred Stock, representing 35.3% of the outstanding shares of such class. Darren Blanton, currently a director of Amorcyte, is also the founder and managing partner of Colt Ventures, Ltd. This entity's ownership of 939.7 shares of Amorcyte's Series A Preferred Stock, together with beneficial ownership of an additional 500.8 shares of Series A through two family trusts, results in Mr. Blanton having beneficial ownership of approximately 13.8% of Amorcyte's outstanding Series A Preferred shares. Michael Starcher, an Amorcyte director, is the president of the general partner of CCP-AMOR, L.P., which fund owns 1,252.1 Series A shares of Amorcyte, resulting in Mr. Starcher's beneficial ownership of approximately 11.8% of such class. Dr. Andrew L. Pecora, who is currently the Chief Scientific Officer of Amorcyte, the Chief Medical Officer of NeoStem, and the Chief Medical Officer of NeoStem's subsidiary PCT, and who it is expected will be appointed in 2011 to NeoStem's board of directors pursuant to the agreement governing NeoStem's acquisition of PCT, beneficially owns 58.8 Amorcyte Series A shares (0.6% of the class), 1,219.7 of Amorcyte's common shares (15.6% of the class), and 2,370,672 shares of NeoStem Common Stock (2.4% of the outstanding NeoStem Common Stock) including 78,125 shares of NeoStem Common Stock purchased in a March 2011 private placement. In June and July of 2011, respectively, Novitas Capital III, L.P. and Darren Blanton, each a substantial beneficial owner of Amorcyte Series A Preferred Stock, invested $1,000,000 and $350,000, respectively, in private placements of NeoStem Common Stock.

Amorcyte was initially formed as a wholly-owned subsidiary of PCT, and was spun off to PCT's members in 2005. In January 2011, NeoStem acquired PCT. Certain current officers of NeoStem's subsidiary PCT (including Dr. Pecora and Mr. Goldberger) provide services to Amorcyte pursuant to agreements with PCT. Dr. Pecora had also entered into an oral consulting arrangement with Amorcyte providing for compensation of $50,000 per year for serving as Amorcyte's Chief Scientific Officer. By written agreement with Amorcyte, Dr. Pecora has relinquished all rights he had with respect to such compensation, while continuing to serve as Amorcyte's Chief Scientific Officer. NeoStem's subsidiary PCT is Amorcyte's exclusive provider of cell processing services, which are performed entirely at PCT's facilities. PCT is the holder of 62.6 shares of Amorcyte Series A Preferred Stock.

These relationships create, or, at a minimum, appear to create potential conflicts of interest with respect to the Amorcyte Merger Agreement and the transactions contemplated thereby, as the persons involved have been faced with (or will face, on a going-forward basis, as applicable) decisions that could have different implications for Amorcyte, NeoStem, and any other entities with which such persons are associated.

Although NeoStem and Amorcyte have both established procedures designed to ensure that material related party transactions are fair to the respective company, no assurance can be given as to how potentially conflicted board members or officers of either company will evaluate the fiduciary duties owed by them to NeoStem, Amorcyte, and other entities to which they may owe fiduciary duties, respectively, or how such individuals will act in such circumstances.

Furthermore, the appearance of conflicts, even if such conflicts ultimately do not harm the combined company, might adversely affect the public's perception of the combined company's business, as well as its relationships with existing customers, licensors, licensees, and service providers and its ability to enter into new relationships in the future.

The Amorcyte Merger will result in dilution of the ownership interests of current NeoStem stockholders.

As a result of the Amorcyte Merger, the former equity holders of Amorcyte will have the right to receive approximately 6.5% of the outstanding NeoStem Common Stock immediately following the consummation of the transactions based on the number of shares outstanding as of August 17, 2011 (exclusive of the 1,881,008 shares of NeoStem common stock underlying the warrants to be issued to the Amorcyte equity holders and the maximum of 4,092,768 "Contingent Shares" that may be issued to Amorcyte equity holders in the event certain milestones specified in the Amorcyte Merger Agreement are achieved). This represents dilution of the ownership interests and voting power of the current NeoStem stockholders.

Future sales of the combined company's common stock may depress its stock price.

The shares of NeoStem Common Stock constituting the Base Stock Consideration issued at the closing of the Amorcyte Merger for the benefit of Amorcyte's former equity holders will be freely tradable in the public market once released from escrow (approximately 20% to be released six months after closing; with additional shares to be released one year after closing such that $1.25 million in shares (852,660 shares in accordance with the escrow valuation mechanism) shall remain in the escrow if no indemnification claims have been asserted by NeoStem, provided that in the event NeoStem has asserted any indemnification claims within one year following the closing, in such case an amount of shares representing $2.5 million (1,705,320 shares in accordance with the escrow valuation mechanism) plus the amount of pending claims shall remain in escrow remaining in escrow; and the remainder of shares to be released two years after closing). The market price of NeoStem Common Stock could fall in response to sales of a large number of shares of NeoStem Common Stock in the market after the release of the shares or in response to the perception that sales of a large number of shares could occur. In addition, these sales could create the perception by the public of difficulties or problems with NeoStem's products and services. As a result, these sales also might make it more difficult for NeoStem to sell equity or equity-related securities in the future at a time and price that its board of directors deems appropriate.

Any adverse development relating to any of the combined company's product candidates, such as a significant clinical trial failure, could substantially depress NeoStem's stock price and prevent NeoStem from raising additional capital.

The combined company's ability to progress as a company will be significantly dependent on its product candidates, and on clinical trials. Any clinical, regulatory or other development that significantly delays or prevents the combined company from completing any of its trials, any material safety issue or adverse side effect to any study participant in any of these trials, or the failure of these trials to show the results expected would likely depress NeoStem's stock price significantly and could prevent NeoStem from raising the substantial additional capital the combined company will need to further develop its product candidates and technologies. Moreover, any material adverse occurrence in early-phase clinical trials could substantially impair the combined company's ability to initiate additional clinical trials to test its product candidates, whether for new indications or otherwise. This, in turn, could adversely impact NeoStem's ability to raise additional capital and pursue the planned research and development efforts of the combined company.

The nature of Amorcyte's business which is being acquired by NeoStem could subject the trading prices of NeoStem Common Stock to additional volatility.

The market price of NeoStem Common Stock has been historically volatile. The stock market in general and the market for biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. The clinical trials and other development activities intended to be undertaken by the combined company may contribute to additional volatility of the market price of NeoStem Common Stock, as investors react to the results of the combined company's clinical trials of product candidates and those of NeoStem's competitors. In addition to the foregoing, factors that could contribute to enhanced volatility of the combined company's stock price include:

- regulatory or legal developments in the United States and foreign countries;
- variations in the combined company's financial results or those of companies that are perceived to be similar to NeoStem;
- changes in the structure of healthcare payment systems;
- announcements by the combined company of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- market conditions in the pharmaceutical and biotechnology sectors and issuance of securities analysts' reports or recommendations;
- sales of substantial amounts of NeoStem Common Stock by current stockholders;
- sales of NeoStem securities by insiders and large stockholders;
- general economic, industry and market conditions;
- additions or departures of key personnel;
- intellectual property, product liability or other litigation against the combined company;
- expiration or termination of the combined company's potential relationships with collaborators; and
- the other factors described in this "Risk Factors" section.

In addition, in the past stockholders have initiated class action lawsuits against biotechnology and pharmaceutical companies following periods of volatility in the market prices of these companies' stock. Such litigation, if instituted against the combined company, could cause NeoStem to incur substantial costs and divert management's attention and resources.

RISKS RELATED TO AMORCYTE'S BUSINESS

If the Amorcyte Merger is consummated, the business of Amorcyte will be highly speculative and subject to a high degree of risk. The risks and uncertainties described below are not the only ones that could affect Amorcyte. Additional risks and uncertainties of which Amorcyte is unaware, or currently believes are immaterial, may become important factors affecting Amorcyte's business. If any of the following risks occur, Amorcyte's business, financial condition and/or operating results could be materially harmed, or differ materially from those expressed in any forward-looking statements.

Risks Related to Amorcyte's Clinical Development Activities

If clinical trials of Amorcyte's product candidate AMR-001 or any future product candidates fail to demonstrate safety and efficacy to the satisfaction of the FDA or do not otherwise produce positive results, Amorcyte may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of its product candidates.

Before obtaining regulatory approval for the sale of AMR-001 or any other product candidate, Amorcyte must conduct, at its own expense, extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials conducted by or on behalf of Amorcyte can occur at any stage of testing. Amorcyte may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent its ability to receive regulatory approval or commercialize its product candidates, including the following:

- regulators or institutional review boards may not authorize Amorcyte or its investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- clinical trials of product candidates may produce negative or inconclusive results, and Amorcyte may decide, or regulators may require it, to conduct additional clinical trials or abandon product development programs that it expects to be pursuing;
- the number of patients required for clinical trials of product candidates may be larger than Amorcyte anticipates, enrollment in these clinical trials may be slower than Amorcyte anticipates, or participants may drop out of these clinical trials at a higher rate than Amorcyte anticipates;
- third party contractors may fail to comply with regulatory requirements or meet their contractual obligations to Amorcyte in a timely manner or at all;
- Amorcyte might have to suspend or terminate clinical trials of its product candidates for various reasons, including a finding that the participants are being exposed to unacceptable health risks;
- regulators or institutional review boards may require that Amorcyte or its investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements;
- the cost of clinical trials of Amorcyte's product candidates may be greater than anticipated;
- Amorcyte may be subject to a more complex regulatory process, since stem cell-based therapies are relatively new and regulatory agencies have less experience with them than with traditional pharmaceutical products;
- the supply or quality of Amorcyte's product candidates or other materials necessary to conduct clinical trials of these product candidates may be insufficient or inadequate; and
- Amorcyte's product candidates may have undesirable side effects or other unexpected characteristics, causing Amorcyte or its investigators to halt or terminate the trials.

After completion of Amorcyte's Phase 1 trials of AMR-001, the FDA issued a clinical hold notice on August 31, 2010 effective until Amorcyte submits information acceptable to the FDA on its plans to manufacture AMR-001 with an appropriate cell separation device, disposables and reagent kit and the FDA lifts the clinical hold. Amorcyte is negotiating an alternative supply agreement for the needed kits and disposables for the Phase 2 trials. A response to the clinical hold was submitted to the FDA on July 5 and 6,

2011. On August 5, 2011, Amorcyte received a letter from the FDA advising it that all clinical hold issued had been satisfactorily addressed, the clinical hold was removed and Amorcyte could proceed with its study.

During Amorcyte's Phase 1 trial of AMR-001, serious adverse events in the treatment group were not significantly different in number compared to the placebo group. However, serious adverse events during the Phase 1 trial that occurred included one treatment group subject death from ventricular fibrillation soon after cell infusion that was attributed to recurrent myocardial infarction from stent thrombosis preceding cell infusion. This subject's death resulted in a clinical hold during the Phase 1 trial; the hold letter was dated August 31, 2007. The hold was removed upon FDA's review of the complete documentation on the patient and changes to enrollment procedures for additional subjects that was submitted by Amorcyte. Another treatment group subject was withdrawn because of acute stent thrombosis before cell infusion. One control subject and two additional treatment subjects experienced in-stent restenosis. One treatment subject experienced worsening of congestive heart failure.

There can be no assurance that similar or other events will not occur in future clinical trials of Amorcyte's product candidates that could give rise to safety concerns, particularly in light of the impaired heart function of patients who will be the target subject population of Amorcyte's future planned clinical trials.

If Amorcyte is required to conduct additional clinical trials or other testing of AMR-001 beyond those that Amorcyte currently contemplates, or if Amorcyte is required to conduct additional trials or testing of future product candidates more than Amorcyte expects, or if Amorcyte is unable to successfully complete clinical trials of its product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive, or if there are safety concerns, Amorcyte may:

- be delayed in obtaining marketing approval for AMR-001 (or any future product candidate);
- not be able to obtain marketing approval;
- obtain approval for indications that are not as broad as intended;
- have the product removed from the market after obtaining marketing approval;
- be subject to additional post-marketing testing requirements; or
- be subject to restrictions on how the product is distributed or used.

Amorcyte's product development costs will also increase if Amorcyte experiences delays in testing or approvals. Amorcyte cannot predict whether any clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant clinical trial delays also could shorten any periods during which Amorcyte may have the exclusive right to commercialize product candidates or allow its competitors to bring products to market before Amorcyte does and impair Amorcyte's ability to commercialize its product candidates and may harm Amorcyte's business and results of operations.

The initiation of a pivotal Phase 3 clinical trial for AMR-001 will require the validation and establishment of manufacturing controls that may delay product development.

Amorcyte currently expects to initiate a Phase 2 clinical trial of AMR-001 by no later than the end of the first quarter of 2012. If the results of the Phase 2 clinical trial are positive and support Phase 3 development, Amorcyte intends to initiate and complete one or more pivotal Phase 3 clinical trials before seeking regulatory approval to commercialize AMR-001. Amorcyte is required to have certain validated and established manufacturing controls with respect to AMR-001 related to its safety, purity and potency when administered to patients. Manufacturing control issues will need to be addressed and resolved with the FDA if Amorcyte seeks to initiate a Phase 3 clinical trial of AMR-001. Specifically, Amorcyte must develop a potency assay for AMR-001 and lot release specifications that correlate with AMR-001 activity or clinical response. Amorcyte may not be successful in its efforts to address these chemistry, manufacturing and controls ("CMC") issues for AMR-001 in a manner satisfactory to the FDA. If Amorcyte cannot initiate, or if it is delayed in initiating, a pivotal Phase 3 clinical program of AMR-001, as a result of its failure to satisfy the FDA's CMC concerns or otherwise, the timing of Amorcyte's regulatory submission for commercialization of AMR-001 could be delayed, or Amorcyte may not be able to seek regulatory approval to commercialize AMR-001 at all.

Development of Amorcyte's AMR-001 and potential future product candidates is subject to uncertainty because the CD34$^+$ cells are derived from human bone marrow, a source material that is inherently variable.

The number of CD34$^+$/CXCR-4$^+$cells and the composition of the CD34$^+$ cell population from bone marrow vary from patient to patient. These cells are the basis of Amorcyte's product candidate AMR-001, and may also be used in future product candidates. Such variability in composition could adversely affect the ability of Amorcyte to manufacture its product candidates derived from a patient's bone marrow or to establish and meet acceptable specifications for release of the product candidate for treatment of a particular patient. As a consequence, the development and regulatory approval process for these product candidates could be delayed or may never be completed.

The results of preclinical studies may not correlate with the results of human clinical trials. In addition, early stage clinical trial results do not ensure success in later stage clinical trials, and interim trial results are not necessarily predictive of final trial results.

To date, Amorcyte has not completed the development of any products through regulatory approval. While Amorcyte and others have analyzed the potential of AMR-001 in preclinical studies with animals, the potential efficacy of AMR-001 in humans has only been evaluated in a Phase 1 clinical trial. The results of preclinical studies evaluating AMR-001 in animals may not be predictive of results in a clinical trial involving a small number of human subjects. Likewise, the outcomes of early clinical trials may not be predictive of the success of later clinical trials. The safety and efficacy data from Amorcyte's anticipated Phase 2 clinical trials of AMR-001 may be less favorable than the data observed in the Phase 1 clinical trial of this product candidate, which was based on smaller numbers of patients. There can be no assurances that the clinical trials of any product candidate of Amorcyte will ultimately be successful. New information regarding the safety and efficacy of such product candidate may be less favorable than the data observed to date.

Amorcyte may experience delays in enrolling patients in its clinical trials, which could delay or prevent the receipt of necessary regulatory approvals.

Amorcyte may not be able to initiate or continue clinical trials of AMR-001 (or any future product candidate) if Amorcyte is unable to locate and enroll a sufficient number of eligible patients to participate in the clinical trials required by the FDA or other regulatory authorities. Amorcyte may also be unable to engage a sufficient number of clinical trial sites to conduct its trials. The challenge of enrolling patients will become more difficult if Amorcyte is required by the FDA or a similar regulatory agency outside the United States to conduct a trial on a larger population than it currently anticipates. In that event, Amorcyte might be required to seek patients to participate in its trials from Europe or other foreign jurisdictions, which could raise regulatory uncertainties and increase clinical trial costs. Moreover, because PCT does not currently have FDA registered manufacturing facilities outside of the United States, Amorcyte's ability to conduct trials outside of the U.S. may be constrained by the capability of transporting trial materials to foreign destinations within the expiry period of such materials.

Amorcyte and its investigators may also face challenges in enrolling patients to participate in Amorcyte's clinical trials due to the novelty of its stem cell-based therapies. Some patients may have concerns regarding stem cells that may negatively affect their perception of therapies under development and their decision to enroll in the trials. Furthermore, patients suffering from diseases within target indications may enroll in competing clinical trials, which could negatively affect Amorcyte's ability to complete enrollment of its trials.

Additional factors that may affect the ability of Amorcyte to enroll patients in clinical trials include:

- the size of the patient population;
- patients' willingness to receive a placebo or other inactive control on the control arm of a clinical study;
- the distance between patients and clinical test sites; and
- the eligibility criteria for the trial.

Enrollment delays in clinical trials may result in increased development costs for product candidates, and inability to enroll a sufficient number of patients for any current or future clinical trials would result in significant delays or may require one or more clinical trials to be abandoned altogether.

The cell sorting system Amorcyte intends to use in the Phase 2 clinical trial is owned by an unaffiliated third party.

Amorcyte intends to obtain from a third party the essential cell sorting system that it expects to use in its Phase 2 clinical trial of AMR-001. Amorcyte currently does not have any agreement in place permitting it to use this system although negotiations are underway. Moreover, Amorcyte will need to provide the FDA with certain information regarding the design, use and operation of a device. The unavailability of the system, for any reason, would have a material adverse effect on Amorcyte's AMR-001 product development and commercialization efforts. Although there are other available systems in the marketplace, Amorcyte has not evaluated their costs or safety and effectiveness, or whether AMR-001 would be compatible with such systems. Moreover, if the system becomes unavailable during or after Phase 2, Amorcyte would need to demonstrate that the Phase 2 data obtained with this system are still relevant to future trials with other systems.

Amorcyte has relied in the past, and expects to continue to rely, on research institutions, treatment centers, and contracted resources to conduct and oversee clinical trials of AMR-001, and in some case, to maintain regulatory files for the product candidate. If Amorcyte is not able to secure and maintain agreements with suitable research institutions, treatment centers, or contracted resources on acceptable terms to conduct and/or oversee its clinical trials, if these institutions do not perform as required, or if these institutions fail to timely transfer files/data held by them to Amorcyte, then Amorcyte may not be able to obtain regulatory approval for, or commercialize, its product candidates.

With respect to its planned Phase 2 clinical trial of AMR-001, Amorcyte holds the IND and will rely on additional entities to conduct the clinical trial. Amorcyte expects to enroll patients in its clinical trials of AMR-001 at numerous trial sites across the United States. The reliance of Amorcyte upon research institutions, hospitals and clinics provides Amorcyte with less control over the timing and cost of clinical trials and the ability to recruit subjects. If Amorcyte is unable to enter into and maintain agreements with these entities on acceptable terms, or if any engagement is terminated, Amorcyte may be unable to enroll patients on a timely basis or otherwise conduct its clinical trials in the manner it anticipates.

In addition, there is no guarantee that these entities or any other third parties, including contracted entities for clinical monitoring and operations, imaging support, data management and biostatistics, upon which Amorcyte relies for administration and conduct of clinical trials, will devote adequate time and resources to the clinical trials or perform as required by contract or in accordance with regulatory requirements. If these third parties fail to meet expected deadlines, fail to adhere to the clinical protocols or fail to act in accordance with regulatory requirements, or if they otherwise perform in a substandard manner, clinical trials of Amorcyte product candidates may be extended, delayed or terminated, and as a result Amorcyte may not be able to commercialize AMR-001 or other future product candidates.

If the potential of product candidates to address the indications that Amorcyte is pursuing is not realized, or if Amorcyte is unable to demonstrate in clinical trials that AMR-001 is safe and effective for the indications pursued, the value of Amorcyte's technology and its development programs could be significantly reduced.

Amorcyte is currently exploring the potential of AMR-001 to address certain targeted cardiovascular indications, and Amorcyte may in the future study the safety and efficacy of other product candidates, which may also be based on CD34+ cell technology.

AMR-001 and the underlying CD34+/CXCR-4^{+} cell technology is still in early stages of discovery and development, and Amorcyte has not proven in clinical trials that its product candidate will be safe and effective for the indications for which Amorcyte intends to seek approval. AMR-001 (and potential future Amorcyte product candidates) are susceptible to various risks, including undesirable and unintended side effects, inadequate therapeutic efficacy or other characteristics that may prevent or limit their marketing approval or commercial use. Amorcyte has not treated a sufficient number of patients to allow Amorcyte to evaluate the most frequent or most serious adverse events that could occur with

AMR-001. Any undesirable side effects that might be caused by AMR-001 (or future product candidates) could interrupt, delay or halt clinical trials and could result in the denial of regulatory approval by the FDA or other regulatory authorities for any or all targeted indications. Amorcyte could also be required to change the manner in which a product candidate is administered, which could require that additional clinical trials be conducted. If the potential of AMR-001 and the CD34+/CXCR-4^{+} technology is not realized, whether as a result of unintended consequences or otherwise, the value of Amorcyte's technology and development programs could be significantly reduced.

Risks Related to the Commercialization of Amorcyte's Product Candidate

Amorcyte's product candidate is based on novel stem cell technologies that are inherently risky and may not be understood or accepted by the marketplace.

Amorcyte is subject to the risks of failure inherent in the development and commercialization of therapeutic products based on new technologies. The novel nature of Amorcyte's therapeutics based on adult stem cells creates significant challenges with regards to product development and optimization, manufacturing, government regulation, third-party reimbursement and market acceptance. For example, the FDA has relatively limited experience regulating therapies based on adult stem cells, and there are few approved treatments utilizing stem cells.

Even if Amorcyte successfully develops and obtains regulatory approval for AMR-001 or any future product candidate, the market may not understand or accept them, which could adversely affect future sales. The degree of market acceptance of any such product candidates will depend on a number of factors, including:

- the clinical safety and effectiveness of the product candidates, the availability of alternative treatments and the perceived advantages of the particular Amorcyte product candidates over alternative treatments;
- the relative convenience and ease of administration of the product candidates;
- the ability of Amorcyte to separate the product candidates, which are based on adult stem cells, from the ethical and political controversies associated with stem cell product candidates derived from human embryonic or fetal tissue;
- ethical concerns that may arise regarding our commercial use of stem cells, including adult stem cells, in the manufacture of the product candidates;
- the frequency and severity of adverse events or other undesirable side effects involving the product candidates or the products or product candidates of others that are stem cell-based; and
- the cost of the products, the reimbursement policies of government and third-party payors and the ability of Amorcyte to obtain sufficient third-party coverage or reimbursement.

Amorcyte faces substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than they do.

The cell therapy industry is subject to rapid and intense technological change. Amorcyte faces, and will continue to face, intense competition from pharmaceutical, biopharmaceutical and biotechnology companies, as well as numerous academic and research institutions and governmental agencies engaged in drug discovery activities or funding, both in the United States and abroad. Some of these competitors are pursuing the development of drugs and other therapies that target the same diseases and conditions that Amorcyte is targeting with its product candidate AMR-001.

Amorcyte's product candidates generally target patients without other revascularization options. Therefore, Amorcyte does not believe that its product candidates will compete directly with pharmaceutical therapies being developed to treat less severe stages of Amorcyte's target indications. However, to the extent that therapies are developed that reverse the progression of the ischemic damage or improve blood flow, they could have the effect of reducing demand for Amorcyte's product candidates. In addition, because Amorcyte's product candidates require the removal of bone marrow from the patient, potential competing products that

do not require this invasive procedure may have a competitive advantage against Amorcyte products. New pharmaceutical agents or devices that improve the repair of cardiac injury after a heart attack, with the result that fewer patients develop ischemic heart failure, would also represent a competitive threat for AMR-001. Furthermore, cell-based therapies, such as skeletal myoblasts, bone marrow-derived stem cells and adipose cells are being pursued by companies such as Aastrom Biosciences, Inc., Angioblast Systems, Inc., Athersys, Inc., Pluristem Therapeutics, Inc., ReNeuron Group, Stemedica Cell Technologies Inc. and Bioheart, Inc. Some other companies, such as Cytori and Miltenyi, are developing devices to facilitate the production of therapeutic cell populations by clinicians for the treatment of Amorcyte's target indications. Such devices may be approved by the FDA under a less rigorous regulatory process, and less extensive clinical testing and manufacturing controls than Amorcyte is required to pursue for AMR-001. Development and approval of such a device on the basis of this more limited dataset may take less time than development of AMR-001 and substantially affect Amorcyte's ability to market its product candidate if approved.

Amorcyte may also face competition in the future from other companies that are researching and developing stem cell therapies. Amorcyte is aware of many companies working in this area. Many of the companies competing against Amorcyte have financial and other resources substantially greater than Amorcyte's. In addition, many of these competitors have significantly greater experience in testing pharmaceutical and other therapeutic products, obtaining FDA and other regulatory approvals of products, and marketing and selling those products. If Amorcyte obtains necessary regulatory approval and commences significant commercial sales of any products, Amorcyte will also be competing with respect to manufacturing efficiency and marketing capabilities, areas in which Amorcyte has limited or no commercial-scale experience. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated by Amorcyte's competitors. Competition may increase further as a result of advances made in the commercial applicability of Amorcyte technologies and greater availability of capital for investment in these fields.

As a result, competitors of Amorcyte may:

- develop products that are safer or more effective than Amorcyte's;
- obtain FDA and other regulatory approvals or reach the market with their products more rapidly than Amorcyte can, reducing the potential sales of Amorcyte product candidates;
- develop new or improved technologies and scientific advances;
- obtain patent protection that could impact the ability of Amorcyte to market its product candidates;
- devote greater resources to market or sell their products;
- initiate or withstand substantial price competition more successfully than Amorcyte can;
- recruit skilled scientific workers from the limited pool of available talent; and
- take advantage of acquisition or other opportunities more readily than Amorcyte can.

The successful commercialization of AMR-001 (and any future Amorcyte product candidates), if any, will depend on obtaining reimbursement from third-party payors.

If it successfully obtains the necessary regulatory approvals, Amorcyte intends to sell AMR-001 initially in the United States. In the United States, the market for any pharmaceutical or biologic product is affected by the availability of reimbursement from third-party payors, such as government health administration authorities, private health insurers, health maintenance organizations and pharmacy benefit management companies. Amorcyte anticipates that AMR-001 and any future products, if approved, will be expensive. If Amorcyte cannot demonstrate a favorable cost-benefit relationship, it may have difficulty obtaining adequate reimbursement for Amorcyte products from these payors. Third-party payors may also deny coverage or offer inadequate levels of reimbursement for any potential product if they determine that the product is experimental, unnecessary or inappropriate.

Should Amorcyte seek to expand its commercialization internationally, it would be subject to the regulations of the European Union and other countries, where the pricing of prescription pharmaceutical products and services and the level of government reimbursement may be subject to governmental control. In these countries, pricing negotiations with governmental authorities can take six to twelve months or longer after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, Amorcyte may be required to conduct one or more clinical trials that compares the cost effectiveness of the respective product candidate or product to other available therapies. Conducting one or more of these clinical trials would be expensive and result in delays in commercialization of the products.

Managing and reducing healthcare costs has become a major priority of federal and state governments in the United States. As a result of healthcare reform efforts, Amorcyte might become subject to future regulations or other cost-control initiatives that materially restrict the price that Amorcyte can receive for its products. Third-party payors may also limit access and reimbursement for newly approved healthcare products generally or limit the indications for which they will reimburse patients who use any products that Amorcyte may develop. Cost control initiatives could decrease the price for products that Amorcyte may develop, which would result in lower product revenues to Amorcyte.

In the event of regulatory approval, Amorcyte may not be able to manufacture AMR-001 at commercial scale (or any other product that may be approved) in compliance with evolving regulatory standards or in quantities sufficient for commercial sale.

Components of therapeutic products approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with current good manufacturing practices, or cGMP, as required by the FDA. Manufacturers of cell-based product candidates such as AMR-001 also must comply with the FDA's current good tissue practices, or cGTP. In addition, Amorcyte may be required to modify its manufacturing process from time to time for its product candidates in response to FDA requests. Manufacture of live cellular-based products is complex and subjects Amorcyte to significant regulatory burdens that may change over time. Amorcyte may encounter difficulties in the production of its product candidates due to its limited manufacturing experience. Although Amorcyte has negotiated an Amended and Restated Cell Processing Agreement with PCT, whereby PCT is engaged as Amorcyte's exclusive provider of all cell processing services, Amorcyte (through PCT) may not have sufficient manufacturing capacity to meet any commercial demand that might develop should AMR-001 demonstrate efficacy, receive necessary approvals and be cleared for commercialization. These difficulties could reduce sales of Amorcyte products, if any are approved for marketing, increase costs or cause production delays, any of which could damage the reputation and hurt the profitability of Amorcyte.

Amorcyte expects that it would need to significantly expand its manufacturing capabilities to meet potential demand for any products that might attain regulatory approval. Such expansion would require additional regulatory approvals. Amorcyte may also encounter difficulties in the commercial-scale manufacture that may be required following any regulatory approval. Amorcyte and PCT are currently developing new processes and are in discussions with other companies to develop new instruments to improve manufacturing efficiency. Improving the speed and efficiency of Amorcyte's manufacturing process (through PCT) and the cell sorters and other instruments PCT uses in connection with Amorcyte production is a key element of Amorcyte' business plan. Neither Amorcyte nor PCT can provide assurances that it will be able to develop process enhancements that are acceptable to the FDA, on a timely basis, on commercially reasonable terms, or at all. If they fail to develop these improvements, Amorcyte could face significantly higher capital expenditures than it anticipates, increased facility and personnel costs and other increased operating expenses. Amorcyte may need to demonstrate that product candidates manufactured using new processes or instruments are comparable to the product candidates used in clinical trials. Depending on the type and degree of differences, Amorcyte may be required to conduct additional studies or clinical trials to demonstrate comparability.

In addition, some changes in Amorcyte's manufacturing processes or procedures, including a change in the location where a product candidate is manufactured, generally require FDA or foreign regulatory authority review and approval prior to implementation. Amorcyte may need to conduct additional preclinical studies and clinical trials to support approval of any such changes. Furthermore, this review process could be costly and time-consuming and could delay or prevent the commercialization of product candidates.

If PCT's Allendale, New Jersey or Mountain View, California manufacturing facilities are damaged or destroyed, Amorcyte's business and prospects would be negatively affected.

AMR-001 for Amorcyte's clinical trials is produced by PCT at PCT's facilities, pursuant to an Amended and Restated Cell Processing Agreement between Amorcyte and PCT. Because PCT serves as Amorcyte's exclusive provider of all cell processing services (including production of AMR-001 for clinical trials), Amorcyte relies on PCT's Allendale or Mountain View facilities and on the continuing suitability of PCT's facility to provide necessary services. If PCT's Allendale or Mountain View facilities (or the equipment therein) are significantly damaged or destroyed, Amorcyte will likely experience significant disruptions to the manufacturing capacity for AMR-001, which capacity might not be quickly or inexpensively replaced. In such a situation, Amorcyte may be required to negotiate new agreements for cell processing services, and Amorcyte may not be able to obtain terms as favorable as it obtains from PCT. In the event of a temporary or protracted loss of PCT's facility or equipment, Amorcyte might not be able to transfer manufacturing to a third party. Even if Amorcyte could transfer manufacturing to a third party, the shift would likely be expensive and time-consuming, particularly since the new facility would need to comply with the necessary regulatory requirements and Amorcyte would need FDA approval before selling any products manufactured at that facility. Such an event could delay clinical trials or, if any Amorcyte product candidates are approved by the FDA, reduce sales of such products.

Following the Amorcyte Merger, NeoStem intends to institute coverage totaling $5,000,000 to cover business interruption and research and development restoration expenses prior to the initiation of Phase 2 trials. For its Allendale location, PCT maintains insurance coverage totaling $3,000,000 with respect to improvements and $600,000 for office and laboratory contents and equipment. If Amorcyte (or PCT, Amorcyte's provider of cell processing services) has underestimated its respective insurance needs or fails to get such insurance in connection with interruption to clinical manufacturing of Amorcyte product candidates, there may not be adequate coverage for losses.

Amorcyte may use third-party collaborators to help it develop or commercialize AMR-001 or future product candidates, and Amorcyte's ability to commercialize such candidates may be impaired or delayed if collaborations are unsuccessful.

Amorcyte may in the future selectively pursue strategic collaborations for the development and commercialization of AMR-001 or other product candidates and for the international development and commercialization of such product candidates. For example, Amorcyte anticipates that it would need to enter into a collaboration agreement with a third party to conduct and fund one or more pivotal Phase 3 clinical trials of AMR-001. In addition, Amorcyte may not be able to commercialize AMR-001 successfully without entering into an arrangement with a third party to provide an approved method of administration.

There can be no assurance that Amorcyte will be able to identify suitable collaborators or negotiate collaboration agreements on terms that are acceptable to Amorcyte, or at all. In any future third-party collaboration, Amorcyte would be dependent upon the success of the collaborators in performing their responsibilities and their continued cooperation. Such collaborators may not cooperate or perform their obligations under their agreements with Amorcyte. Amorcyte cannot control the amount and timing of its collaborators' resources that will be devoted to performing their responsibilities under their agreements with them. Collaborators may choose to pursue alternative technologies in preference to those being developed in collaboration with Amorcyte. The development and commercialization of product candidates will be delayed if collaborators fail to conduct their responsibilities in a timely manner or in accordance with applicable regulatory requirements or if they breach or terminate their collaboration agreements. Disputes with collaborators could also result in product development delays, decreased revenues and litigation expenses.

If AMR-001 or a future Amorcyte product candidate receives marketing approval from the FDA, we would need either to hire a sales force with expertise in biologic products or to contract with a third party to provide a sales force to meet its needs.

Amorcyte does not currently have a sales or marketing organization, and Amorcyte has no experience in the selling, marketing or distribution of biologic products, nor does NeoStem. To achieve commercial success for any product that might be approved in the future for marketing, we would be required either to develop a sales and marketing organization or to outsource these functions to third parties.

Amorcyte (and post merger, NeoStem) may be unable to establish marketing, sales and distribution capabilities necessary to commercialize and gain market acceptance for any of its product candidates and to be competitive. In addition, co-promotion or other marketing arrangements with third parties to commercialize product candidates could significantly limit the revenues derived by Amorcyte from such product candidates, and these third parties may fail to commercialize the product candidates successfully.

Ethical and other concerns surrounding the use of stem cell-based therapy may negatively affect public perception of Amorcyte and/or its product candidates, thereby reducing potential demand for Amorcyte products.

The commercial success of Amorcyte's product candidates, which are based on adult stem cells, will depend in part on general public acceptance of the use of stem cell-based therapy for the prevention or treatment of human diseases. The use of embryonic stem cells and fetal tissue for research and stem cell therapy has been the subject of substantial national and international debate regarding related ethical, legal and social issues. Although Amorcyte does not use embryonic stem cells or fetal tissue in any product candidate, the public may not be able to, or may fail to, differentiate Amorcyte's use of adult stem cells from the use by others of embryonic stem cells or fetal tissue. This could result in a negative perception of Amorcyte's product candidates.

The use of Amorcyte's product candidates in human subjects may expose Amorcyte to product liability claims, for which Amorcyte may not be able to obtain adequate insurance.

Amorcyte faces an inherent risk of product liability exposure related to the testing of its product candidates in human clinical trials and will face an even greater risk if Amorcyte commercially sells any products that it may develop following requisite approvals therefor. No Amorcyte product candidate (including AMR-001) has been widely used over an extended period of time, and therefore safety data is limited. Amorcyte derives the raw materials for manufacturing of its product candidates from human cell sources, and therefore the manufacturing process and handling requirements are extensive, which increases the risk of quality failures and subsequent product liability claims.

Amorcyte intends to obtain product liability insurance upon initiation of the Phase 2 clinical trial with an aggregate limit of $5.0 million for its product candidates that are in clinical testing. Amorcyte will need to increase its insurance coverage when it begins commercializing its product candidates, if ever. Amorcyte may not be able to obtain or maintain product liability insurance on acceptable terms with adequate coverage or at all. If Amorcyte is unable to obtain and maintain adequate insurance, or if claims against Amorcyte substantially exceed its coverage, then Amorcyte's financial position could be significantly impaired.

Whether or not Amorcyte is ultimately successful in any product liability litigation, such litigation could consume substantial amounts of Amorcyte's financial and managerial resources and could result in:

- decreased demand for any products or product candidates it may develop;
- significant awards against it;
- substantial litigation costs;
- injury to its reputation; and
- withdrawal of clinical trial participants.

Risks Related to Amorcyte's Intellectual Property

If Amorcyte's patent position does not adequately protect its product candidates or any future products, others could compete against Amorcyte more directly, which would harm Amorcyte's businesses.

The success of Amorcyte depends, in large part, on its ability to obtain and maintain patent protection for its product candidates. Issued patents may be challenged by third parties, resulting in patents being deemed invalid, unenforceable or narrowed in scope, or a third party may circumvent any such issued patents. The patent position of biotechnology companies is generally highly uncertain, involves complex legal and factual questions and has been the subject of much litigation and recent court decisions introduce uncertainty in the

strength of patents owned by biotechnology companies. The legal systems of some foreign countries do not favor the aggressive enforcement of patents, and the laws of foreign countries may not protect Amorcyte's rights to the same extent as the laws of the United States. Therefore, any patents that Amorcyte owns or licenses may not provide sufficient protection against competitors.

The claims of the issued patents, and the claims of any patents which may issue in the future and be owned by or licensed to Amorcyte, may not confer on Amorcyte significant commercial protection against competing products. Also, any pending patent applications may not issue, and Amorcyte may not receive any additional patents. The patents might not contain claims that are sufficiently broad to prevent others from utilizing the covered technologies. For instance, patents relating to Amorcyte's AMR-001 product candidate are limited to isolation of a nonexpanded population of autologous mononuclear cells enriched for CD34+ cells, which further contains a subpopulation of potent CD34+/CXCR-4+ cells that have CXCR-4-mediated chemotactic activity. Consequently, Amorcyte's competitors may independently develop competing products that do not infringe Amorcyte's patents or other intellectual property. To the extent a competitor can develop similar products using a different chemistry, these patents will not prevent others from directly competing with Amorcyte.

Because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any Amorcyte product candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization of such product candidates, thereby reducing any advantages of the patent. For instance, one of Amorcyte's patents relating to its technology will expire in 2028, subject to extension of the patent term for regulatory delay for any approved product for which Amorcyte is eligible. To the extent Amorcyte's product candidates based on that technology are not commercialized significantly ahead of this date, or to the extent Amorcyte has no other patent protection on such product candidates, those product candidates would not be protected by patents beyond 2028 and Amorcyte would then rely solely on other forms of exclusivity, such as regulatory exclusivity provided by the Federal Food, Drug and Cosmetic Act, which may provide less protection of Amorcyte's competitive position.

Similar considerations apply in any other country where Amorcyte is prosecuting patents, has been issued patents, or has licensed patents or patent applications relating to its technology. The laws of foreign countries may not protect intellectual property rights to the same extent as do laws of the United States.

If Amorcyte is unable to protect the confidentiality of its proprietary information and know-how, Amorcyte's competitive position would be impaired.

A significant amount of Amorcyte's technology, especially regarding manufacturing processes, is unpatented and is maintained as trade secrets. The background technologies used in the development of Amorcyte's product candidates are known in the scientific community, and it is possible to duplicate the methods that Amorcyte uses to create its product candidates. In an effort to protect these trade secrets, Amorcyte requires its employees, consultants and contractors to execute confidentiality agreements. These agreements require that all confidential information developed by the individual or made known to the individual by the disclosing company during the course of the individual's relationship with such company be kept confidential and not disclosed to third parties. These agreements, however, may not provide Amorcyte with adequate protection against improper use or disclosure of confidential information, and these agreements may be breached. Adequate remedies may not exist in the event of unauthorized use or disclosure of confidential information. A breach of confidentiality could affect Amorcyte's competitive position. In addition, in some situations, these agreements may conflict with, or be subject to, the rights of third parties with whom employees, consultants, collaborators or advisors have previous employment or consulting relationships. Also, others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to Amorcyte's trade secrets. The disclosure of Amorcyte's trade secrets would impair Amorcyte's competitive position.

If Amorcyte infringes or is alleged to infringe intellectual property rights of third parties, Amorcyte's business may be adversely affected.

The research, development and commercialization activities of Amorcyte, including any product candidates resulting from these activities, may infringe or be claimed to infringe patents or other proprietary rights owned by third parties and to which Amorcyte does not hold licenses or other rights. There may be applications that have been filed but not published that, when issued, could be asserted against Amorcyte. These third parties could bring claims against Amorcyte that would cause Amorcyte to incur substantial expenses and, if successful, could cause Amorcyte to pay substantial damages. Further, if a patent infringement suit were brought against Amorcyte, Amorcyte could be forced to stop or delay research, development, manufacturing or sales of the product or product candidate that is the subject of the suit.

Amorcyte has not conducted an exhaustive search or analysis of third-party patent rights to determine whether its research, development or commercialization activities, including any product candidates resulting from these activities, may infringe or be alleged to infringe any third-party patent rights.

As a result of intellectual property infringement claims, or in order to avoid potential claims, Amorcyte may choose, or be required, to seek a license from the third party. These licenses may not be available on acceptable terms, or at all. Even if Amorcyte is able to obtain a license, the license would likely obligate the licensee to pay license fees or royalties or both, and the rights granted to the licensee might be nonexclusive, which could result in competitors gaining access to the same intellectual property. Ultimately, Amorcyte could be prevented from commercializing a product, or be forced to cease some aspect of its business operations, if, as a result of actual or threatened patent infringement claims, Amorcyte is unable to enter into licenses on acceptable terms. All of the issues described above could also affect potential collaborators to the extent Amorcyte has any collaborations then in place, which would also affect the success of the collaboration and therefore the success of Amorcyte.

There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the pharmaceutical and biotechnology industries. In addition to infringement claims, Amorcyte may become a party to other patent litigation and other proceedings, including interference or reexamination proceedings declared by the U. S. Patent and Trademark Office and opposition proceedings in the European Patent Office, regarding intellectual property rights with respect to its product candidates and technology. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on the ability of Amorcyte to compete in the marketplace.

Amorcyte may become involved in lawsuits to protect or enforce patents (including the patents of potential collaborators or licensors), which could be expensive and time consuming.

Competitors may infringe patents held by, or the patents of the respective potential collaborators or licensors of, Amorcyte. As a result, Amorcyte may be required to file infringement claims to counter infringement or unauthorized use. The cost of any patent litigation or other proceeding, even if resolved in Amorcyte's favor, could be substantial. Some of Amorcyte's competitors may be able to sustain the costs of such litigation or proceedings more effectively than Amorcyte can because of their substantially greater financial resources. Patent litigation and other proceedings may also absorb significant management time. In addition, in an infringement proceeding, a court may decide that a patent is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that patents used by Amorcyte do not cover Amorcyte's technology. An adverse determination of any litigation or defense proceedings could put one or more of such patents at risk of being invalidated or interpreted narrowly and could put patent applications at risk of not issuing. Amorcyte is aware of several companies that are employing stem cell sorting technology in their research and product development efforts. If these companies commercialize products that use cell sorting technology similar to that of Amorcyte, there can be no assurance that Amorcyte would have a basis for initiating patent infringement proceedings or that if initiated they would prevail in such proceedings.

Interference proceedings conducted within the U.S. Patent and Trademark Office may be necessary to determine the priority of inventions with respect to our patent applications or those of Amorcyte's potential collaborators or licensors. Litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distraction to Amorcyte's management. Amorcyte may not be able, alone or with its potential collaborators and licensors, to prevent misappropriation of its proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of Amorcyte's confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments.

Amorcyte relies on its ability to stop others from competing by enforcing its patents; however, some jurisdictions may require patent holders to grant licenses to third parties. Such compulsory licenses could be extended to include Amorcyte's product candidates including AMR-001, which may limit potential revenue opportunities of Amorcyte.

Many countries, including some countries in Europe, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, most countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may be limited to monetary relief and may be unable to enjoin infringement, which could materially diminish the value of the patent. Compulsory licensing of life-saving products is also becoming increasingly popular in developing countries, either through direct legislation or international initiatives. Such compulsory licenses could be extended to include Amorcyte's respective product candidates, which may limit Amorcyte's potential revenue opportunities, including with respect to any future revenues which may result from AMR-001.

Risks Related to Regulatory Approval and Other Government Regulations

Amorcyte's business and product candidates are subject to extensive regulatory scrutiny. If Amorcyte is not able to obtain the necessary regulatory approvals for AMR-001 or future product candidates, Amorcyte may not be able to continue its business operations.

Amorcyte's product candidates, and the activities associated with their development and commercialization, including their testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in states and in other countries. The failure of Amorcyte to obtain regulatory approval for a product candidate will prevent Amorcyte from commercializing the product candidate. Amorcyte has not received regulatory approval to market AMR-001 or any other product candidate in any jurisdiction. Securing FDA approval typically requires the submission of extensive preclinical and clinical data and supporting information to the FDA for each therapeutic indication to establish the product candidate's safety and efficacy. Securing FDA approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the FDA. AMR-001 and Amorcyte's future products may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude the obtaining of regulatory approval or may prevent or limit commercial use.

The process of obtaining FDA and other regulatory approvals is expensive, often takes many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved and challenges by competitors. In Amorcyte's case, because all of its product candidates are based on its $CD34^+$ stem cell technology, any adverse events in Amorcyte's clinical trials of one of its product candidates could negatively affect the clinical trials and approval process for Amorcyte's other product candidates. Changes in regulatory approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application or may make it easier for Amorcyte's competitors to gain regulatory approval to enter the marketplace. The FDA has substantial discretion in the approval process and may refuse to accept any application or may

decide that Amorcyte's data are insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying agency interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate. Any regulatory approval Amorcyte ultimately obtains may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

Any of the following factors, among others, may cause regulatory approval for Amorcyte's product candidates to be delayed, limited or denied:

- Amorcyte's product candidates require significant clinical testing to demonstrate safety and effectiveness before applications for marketing approval can be filed with the FDA;
- data obtained from preclinical and nonclinical animal testing and clinical trials can be interpreted in different ways, and the FDA may not agree with Amorcyte's respective interpretations or may require it to conduct additional testing;
- it may take many years to complete the testing of product candidates, and failure can occur at any stage of the process;
- negative or inconclusive results or the occurrence of serious or unexpected adverse events during a clinical trial could cause Amorcyte to delay or terminate development efforts for a product candidate; and
- commercialization may be delayed if the FDA requires any expansion of the size and scope of the clinical trials.

Any difficulties that Amorcyte encounters in obtaining regulatory approval could have a substantial adverse impact on Amorcyte's ability to generate product sales, and could make any search for a collaborative partner more difficult.

If Amorcyte or any of its investigators are not able to conduct the clinical trials of its product candidates in accordance with regulations and accepted standards, and on schedule, regulatory approval by the FDA and other regulatory authorities may be delayed or denied.

To obtain marketing approvals for its product candidates in the United States, Amorcyte must, among other requirements, complete adequate and well-controlled clinical trials sufficient to demonstrate to the FDA that the product candidate is safe and effective, for each indication for which approval is sought. Several factors could prevent completion or cause significant delay of these trials, including an inability to enroll the required number of patients or failure to demonstrate adequately that Amorcyte's product candidates are safe and effective for use in humans. Negative or inconclusive results from, or serious adverse events during, a clinical trial could cause the clinical trial to be repeated or a development program to be terminated, even if other studies or trials relating to the program are successful. A serious adverse event is an event that results in significant medical consequences, such as hospitalization, disability or death, and must be reported to the FDA. Amorcyte cannot predict whether safety concerns regarding its product candidates will or will not develop. The FDA can place a clinical trial on hold if, among other reasons, it finds that patients enrolled in the trial are or would be exposed to an unreasonable and significant risk of illness or injury. If safety concerns develop, Amorcyte may, or the FDA or an institutional review board may require Amorcyte to, stop the affected trials before completion.

One treatment group subject in the AMR-001 Phase 1 study died soon after cell infusion from ventricular fibrillation that was attributed to recurrent myocardial infarction from stent thrombosis preceding cell infusion. This subject's death resulted in a clinical hold during the Phase 1 trial; the hold letter was dated August 31, 2007. The hold was removed upon FDA's review of the complete documentation on the patient and changes to the enrollment process that were submitted by Amorcyte.

The completion of Amorcyte's clinical trials may be delayed or terminated for many reasons, including if:

- the FDA or other regulatory authority does not grant permission to proceed and places the trial on clinical hold;

- subjects do not enroll in our clinical trials at the rate expected;
- subjects experience an unacceptable rate or severity of adverse side effects;
- third-party clinical investigators do not perform the clinical trials on the anticipated schedule or consistent with the clinical trial protocol, good clinical practices required by the FDA and other regulatory requirements, or other third parties do not perform data collection and analysis in a timely or accurate manner;
- inspections of clinical trial sites by the FDA or by institutional review boards of research institutions participating in the clinical trials, reveal regulatory violations that require the sponsor of the trial to undertake corrective action, suspend or terminate one or more sites, or prohibit use of some or all of the data in support of marketing applications; or
- the FDA or one or more institutional review boards suspends or terminates the trial at an investigational site, precludes enrollment of additional subjects or withdraws its approval of the trial.

Amorcyte's development costs will increase if there are material delays in its clinical trials, or if Amorcyte is required to modify, suspend, terminate or repeat a clinical trial. If Amorcyte is unable to conduct its clinical trials properly and on schedule, marketing approval may be delayed or denied by the FDA.

Any product for which Amorcyte obtains marketing approval will be subject to extensive ongoing regulatory requirements, and Amorcyte may be subject to penalties if it fails to comply with regulatory requirements or if it experiences unanticipated problems with its products, when and if any of them are approved.

Any product for which Amorcyte obtains marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for such product, will be subject to continual requirements of and review by, the FDA and comparable regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration requirements, cGMP and cGTP requirements relating to quality control, quality assurance and corresponding maintenance of records and documents, requirements relating to product labeling, advertising and promotion, and recordkeeping. Even if regulatory approval of a product is granted, the approval may be subject to additional limitations on the indicated uses for which the product may be marketed or to other conditions of approval. In addition, approval may contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product. Discovery after approval of previously unknown problems with any such products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in actions such as:

- restrictions on such products' manufacturing processes;
- restrictions on the marketing of a product;
- restrictions on product distribution;
- requirements to conduct post-marketing clinical trials;
- warning letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that Amorcyte submits;
- recall of products;
- fines, restitution or disgorgement of profits or revenue;
- suspension or withdrawal of regulatory approvals;
- refusal to permit the import or export of Amorcyte's products;
- product seizure;

- injunctions; or
- imposition of civil or criminal penalties.

Failure to obtain regulatory approval in international jurisdictions would prevent Amorcyte from marketing products abroad.

Amorcyte may in the future seek to market AMR-001 or other product candidates outside the United States. In order to market such product candidates in the European Union and many other jurisdictions, Amorcyte must submit clinical data concerning its product candidates and obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval from foreign regulators may be longer than the time required to obtain FDA approval. The regulatory approval process outside the United States may include all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, it is required that the product candidate be approved for reimbursement before it can be approved for sale in that country. In some cases this may include approval of the intended price to be charged for the product, if approved. Amorcyte may not obtain approvals from regulatory authorities outside the United States on a timely basis, or at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA, but a failure or delay in obtaining regulatory approval in one country may negatively affect the regulatory process in other countries. Amorcyte may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize any products in any market and therefore may not be able to generate sufficient revenues to support its business.

Amorcyte's business involves the use of hazardous materials that could expose the company to environmental and other liability.

The PCT facility located in Allendale, New Jersey at which Amorcyte's cell processing functions are conducted, is subject to various local, state and federal laws and regulations relating to safe working conditions, laboratory and manufacturing practices and the use and disposal of hazardous or potentially hazardous substances, including chemicals, micro-organisms and various radioactive compounds used in connection with Amorcyte's research and development activities. In the United States, these laws include the Occupational Safety and Health Act, the Toxic Test Substances Control Act and the Resource Conservation and Recovery Act. No assurances can be given that accidental contamination or injury to employees, service providers and third parties from hazardous materials will not occur. Amorcyte does not have insurance to cover claims arising from our use and disposal of these hazardous substances.

Any regulatory exclusivity that Amorcyte may obtain upon approval of AMR-001 or any other product candidates may not adequately protect Amorcyte's future products; accordingly, others could compete against Amorcyte more directly.

The success of Amorcyte will depend in large part on Amorcyte's ability to obtain and maintain the regulatory exclusivity provided by the Public Health Service Act upon approval by the FDA of a biologics license application, or BLA, for its product candidates. This regulatory exclusivity is new, involves complex legal and factual questions and will likely be the subject of much litigation, and court decisions may introduce uncertainty in the enforceability or scope of regulatory exclusivity provided to an approved biologic product. Therefore, enforceability or scope of any regulatory exclusivity for an approved biologic product in the United States cannot be predicted with certainty, and may not provide sufficient protection against competitors.

Risks Related to Amorcyte's Financial Condition

Amorcyte has experienced a history of significant recurring losses since inception. Amorcyte has limited resources to fund clinical operation and expects to continue to incur such losses for the foreseeable future and may never achieve or maintain profitability.

Amorcyte has incurred losses in each year since its inception and expects to continue to experience losses over the next several years. Amorcyte's net losses were approximately $870,800 for the six months ended June 30, 2011, $1,103,300 for the year ended December 31, 2010 and $1,452,700 for the year ended

December 31, 2009. As of June 30, 2011, Amorcyte had accumulated a deficit of approximately $9,670,900 during the development stage (i.e., since its inception on June 29, 2004).

To date, Amorcyte has financed its operations primarily through privately placed convertible stock sales. Additionally, Amorcyte received a grant of $298,200 for the funded period 2006 – 2007 from the State of New Jersey's Commission on Science and Technology, and an award of $244,479 during 2010 under the federal government's Qualifying Therapeutic Discovery Program (QTDP) initiative. Amorcyte's losses have resulted principally from costs incurred in its research and development programs and from general and administrative expenses. Amorcyte has devoted substantially all of its time, money and efforts to the research and development of its product candidates. Amorcyte has no product revenue and to date has not received regulatory approval to commercialize any of its products under development. Amorcyte has not completed development of any of its product candidates. Because of the numerous risks associated with drug and biologics development, Amorcyte is unable to predict whether its development efforts will be successful. Amorcyte's history of recurring losses from operations, its limited capital resources to fund clinical operations, and a provision in its certificate of incorporation requiring Amorcyte to redeem its Series A Preferred Stock over a three year period if requested by a majority of the preferred stockholders, raise substantial doubt about Amorcyte's ability to continue as a going concern.

Amorcyte expects to continue to incur significant operating expenses and anticipates that its expenses and losses will increase in the foreseeable future as Amorcyte seeks to:

- initiate Phase 2 clinical trials of AMR-001;
- continue to support investigator-sponsored clinical studies exploring the mechanism of action, route of administration and safety of $CD34^+$ cells and evaluate additional clinical trials if warranted by the results and by other business considerations;
- gain regulatory approvals for any product candidates that successfully complete clinical trials;
- expand its manufacturing capabilities and capacity;
- maintain, expand and protect its intellectual property portfolio;
- commercialize selected products for which it may obtain regulatory approval;
- hire additional clinical, quality control, scientific and management personnel; and
- add operational, financial, accounting, facilities engineering and information systems personnel, consistent with expanding Amorcyte's operations.

To become and remain profitable, Amorcyte must succeed in developing and eventually commercializing products with significant market potential. This will require Amorcyte to be successful in a range of challenging activities, including successfully completing clinical trials of AMR-001 and future product candidates, obtaining regulatory approval for product candidates and manufacturing, marketing and selling any products for which such regulatory approval may be obtained. Amorcyte is only in the preliminary stages of many of these activities. Amorcyte may never succeed in these activities and may never generate revenues that are significant or large enough to achieve profitability. Even if Amorcyte does achieve profitability, it may not be able to sustain or increase profitability on a quarterly or annual basis. The failure of Amorcyte to become and remain profitable would depress the value of its business and could impair its ability to raise capital, expand its business or continue its operations.

USE OF PROCEEDS

We currently intend to use the net proceeds of this offering for working capital, including research and development of cell therapeutic product candidates, expansion of business units and other general corporate purposes. As of the date of this prospectus supplement and except as explicitly set forth herein, we cannot specify with certainty all of the particular uses of the proceeds from this offering. Accordingly, we will retain broad discretion over the use of such proceeds. Pending use of the net proceeds of this offering received from time to time in connection with purchases under the Purchase Agreement described above, we intend to invest such net proceeds in short-term interest-bearing investment grade instruments.

THE ASPIRE TRANSACTION

General

On September 28, 2011, we entered into the Purchase Agreement, pursuant to which we may issue and sell shares of our Common Stock having an aggregate offering price of up to $20.6 million from time to time to Aspire Capital. In accordance with the terms of the Purchase Agreement, we agreed to issue the Commitment Shares to Aspire Capital in consideration for entering into the Purchase Agreement, and sell up to an additional $20.0 million of shares of Common Stock to Aspire Capital over a 24-month period.

As of September 28, 2011, there were approximately 99,185,956 shares of our Common Stock outstanding (66,538,030 shares held by non-affiliates) excluding the shares offered to Aspire Capital pursuant to this prospectus, but including the 1,402,155 shares outstanding beneficially owned by Aspire Capital prior to this transaction. Assuming a per share purchase price at a recent price of $0.70 for all Purchase Shares, if all shares of Common Stock offered hereby (up to the Exchange Cap) were issued and outstanding on the date hereof, 19,738,005 shares would be issued under the Purchase Agreement, and as of the date hereof, Aspire Capital's current holdings would represent approximately 17.8% of the total Common Stock outstanding and 24.5% of the non-affiliate shares of Common Stock outstanding. The number of shares of our Common Stock ultimately offered for sale to Aspire Capital is dependent upon the number of shares we elect to sell to Aspire Capital under the Purchase Agreement.

Pursuant to the Purchase Agreement, we are filing this prospectus supplement with regard to the offering of $20.6 million of our Common Stock to Aspire Capital, which consists of (i) the Commitment Shares and (ii) additional shares of our Common Stock having an aggregate offering price of up to $20.0 million that we may sell to Aspire Capital pursuant to the Purchase Agreement.

On any business day on which the closing sale price of our Common Stock equals or exceeds the Formula Price (as defined below) over the 24-month term of the Purchase Agreement, we have the right, in our sole discretion, to present Aspire Capital with a Purchase Notice, directing Aspire Capital (as principal) to purchase up to 100,000 shares of our Common Stock per business day at the applicable Purchase Price; however, no sale pursuant to such a Purchase Notice may exceed five hundred thousand dollars ($500,000) per business day, unless we and Aspire Capital mutually agree. We also may mutually agree with Aspire Capital to increase the number of Purchase Shares that may be sold per business day to as much as an additional 1,000,000 shares per business day. In addition, on any date on which we submit a Purchase Notice to Aspire Capital, we also have the right, in our sole discretion, to present Aspire Capital with a VWAP Purchase Notice directing Aspire Capital to purchase an amount of Common Stock equal to up to 30% of the aggregate shares of our Common Stock traded on the NYSE Amex on the VWAP Purchase Date, subject to the VWAP Purchase Share Volume Maximum and the VWAP Minimum Price Threshold.

The aggregate number of shares that the Company can sell to Aspire Capital under the Purchase Agreement may in no case exceed 18,747,906 shares of our Common Stock (which is equal to approximately 19.9% of the Common Stock outstanding on the closing date of the Purchase Agreement, less the Commitment Shares) (the "Exchange Cap"), unless shareholder approval is obtained to issue more than such 19.9%, in which case the Exchange Cap will not apply. We will control the timing and amount of any sales of our Common Stock to Aspire Capital. Aspire Capital has no right to require any sales by us, but is obligated to make purchases from us as we direct in accordance with the Purchase Agreement. There are no limitations on use of proceeds, financial or business covenants, restrictions on future fundings, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement. We did not pay any additional

amounts to reimburse or otherwise compensate Aspire Capital or any placement agent fees in connection with the transaction. The Purchase Agreement may be terminated by us at any time, at our discretion, without any penalty or cost to us.

Purchase Of Shares Under The Purchase Agreement

Under the Purchase Agreement, on any business day on which the closing sale price of our Common Stock equals or exceeds the Formula Price over the 24-month term of the Purchase Agreement, we have the right, in our sole discretion, to present Aspire Capital with a Purchase Notice directing Aspire Capital to purchase up to 100,000 Purchase Shares per business day; however, no sale pursuant to such a Purchase Notice may exceed five hundred thousand dollars ($500,000) per business day, unless we and Aspire Capital mutually agree. We also may mutually agree with Aspire Capital to increase the number of shares that may be sold per business day to as much as an additional 1,000,000 shares per business day. The Purchase Price per Purchase Share is equal to the lesser of:

- the lowest sale price of our Common Stock on the date of sale; or
- the arithmetic average of the three lowest closing sale prices for our Common Stock during the 12 consecutive business days ending on the business day immediately preceding the purchase date of such Purchase Shares.

In addition, on any date on which we submit a Purchase Notice to Aspire Capital for a minimum of 100,000 Purchase Shares, we also have the right, in our sole discretion, to present Aspire Capital with a VWAP Purchase Notice directing Aspire Capital to purchase an amount of Common Stock equal to up to 30% of the aggregate shares of our Common Stock traded on the NYSE Amex on the VWAP Purchase Date, subject to the VWAP Purchase Share Volume Maximum and the VWAP Minimum Price Threshold. The purchase price per Purchase Share pursuant to such VWAP Purchase Notice (the "VWAP Purchase Price") shall be 95% of the volume-weighted average price for our Common Stock traded on the NYSE Amex for the VWAP Purchase Date. However, if the aggregate number of our shares traded on such date exceeds the quotient obtained by dividing (x) the maximum number of shares Aspire Capital will be required to purchase by (y) our requested purchase percentage, each as specified in the VWAP Purchase Notice (such quotient, the "VWAP Purchase Share Volume Maximum"), the purchase price per share will be 95% of the volume weighted average for the portion of such day until such time as the VWAP Purchase Share Volume Maximum is reached. Further, such purchase shall automatically be deemed completed at such time on the VWAP Purchase Date that the sale price of the Common Stock falls below the greater of (i) 90% of the closing price on of our Common Stock on the business day immediately preceding the VWAP Purchase Date or (ii) such higher price as set forth by us the VWAP Purchase Notice (the "VWAP Minimum Price Threshold"). In that event, the VWAP Purchase Amount will be determined using the percentage set forth in the VWAP Purchase Notice of the aggregate shares traded for such portion of the VWAP Purchase Date prior to the time that the sale price of our Common Stock fell below the VWAP Minimum Price Threshold and the VWAP Purchase Price for such shares will be 95% of the volume weighted average price of our Common Stock sold during such portion of the VWAP Purchase Date prior to the time that the sale price of our Common Stock fell below the VWAP Minimum Price Threshold.

The Purchase Price will be adjusted for any reorganization, recapitalization, non-cash dividend, stock split, or other similar transaction occurring during the trading day(s) used to compute the Purchase Price. We may deliver multiple Purchase Notices to Aspire Capital from time to time during the term of the Purchase Agreement, so long as the most recent purchase has been completed.

Formula Price

We may only effect sales of shares of our Common Stock to Aspire Capital pursuant to the Purchase Agreement on a business day on which the closing sale price of our Common Stock equals or exceeds 75% of the closing sale price of our Common Stock (rounded down to the nearest penny) on the business day immediately preceding the date the Purchase Agreement was executed (the "Formula Price").

Compliance with NYSE Amex Market Rules

The aggregate number of shares that the Company can sell to Aspire Capital under the Purchase Agreement may in no case exceed 18,747,906 shares of our Common Stock (which is equal to approximately

19.9% of the Common Stock outstanding on the closing date of the Purchase Agreement, less the Commitment Shares) (the "Exchange Cap"), unless shareholder approval is obtained to issue more than such 19.9%, in which case the Exchange Cap will not apply.

Events of Default

Aspire Capital may terminate the Purchase Agreement upon the occurrence of any of the following events of default:

- the effectiveness of any registration statement that is required to be maintained effective pursuant to the terms of the registration rights agreement between us and Aspire Capital lapses for any reason (including, without limitation, the issuance of a stop order) or is unavailable for sale of our shares of Common Stock in accordance with the terms of the registration rights agreement, and such lapse or unavailability continues for a period of ten consecutive business days or for more than an aggregate of thirty business days in any 365-day period;
- the suspension from trading or failure of our Common Stock to be listed on our principal market for a period of three consecutive business days;
- the delisting of our Common Stock from our principal market, provided our Common Stock is not immediately thereafter trading on the New York Stock Exchange, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or the OTC Bulletin Board;
- our transfer agent's failure to issue to Aspire Capital shares of our Common Stock which Aspire Capital is entitled to receive under the Purchase Agreement within five business days after an applicable purchase date;
- any breach by us of the representations or warranties or covenants contained in the Purchase Agreement or any related agreements which could have a material adverse effect on us subject to a cure period of five business days;
- if we become insolvent or are generally unable to pay our debts as they become due; or
- any participation or threatened participation in insolvency or bankruptcy proceedings by or against us.

Our Termination Rights

We may terminate the Purchase Agreement at any time, in our discretion, without any cost or penalty.

No Short-Selling or Hedging by Aspire Capital

Aspire Capital has agreed that neither it nor any of its agents, representatives and affiliates shall engage in any direct or indirect short-selling or hedging of our Common Stock during any time prior to the termination of the Purchase Agreement.

Effect of Performance of the Purchase Agreement on Our Stockholders

The Purchase Agreement does not limit the ability of Aspire Capital to sell any or all of the shares it currently owns or receives in this offering. It is anticipated that shares sold to Aspire Capital in this offering will be sold to Aspire Capital over a period of up to approximately 24 months from the date of this prospectus supplement, or until September 30, 2013. The subsequent resale by Aspire Capital of a significant amount of shares sold to Aspire Capital in this offering at any given time could cause the market price of our Common Stock to decline or to be highly volatile. Aspire Capital may ultimately purchase all, some or none of the additional $20.0 million of Common Stock offered, together with the Commitment Shares, under this prospectus supplement. Aspire Capital may resell all, some or none of the Commitment Shares and any Purchase Shares it acquires. Therefore, sales to Aspire Capital by us pursuant to the Purchase Agreement and this prospectus supplement also may result in substantial dilution to the interests of other holders of our Common Stock. However, we have the right to control the timing and amount of any sales of our shares to Aspire Capital and the Purchase Agreement may be terminated by us at any time at our discretion without any cost to us.

Amount of Potential Proceeds to be Received under the Purchase Agreement

Under the Purchase Agreement, we may sell Purchase Shares having an aggregate offering price of up to $20.0 million to Aspire from time to time. The number of shares ultimately offered for sale to Aspire Capital in this offering is dependent upon the number of shares we elect to sell to Aspire Capital under the Purchase Agreement. The following table sets forth the amount of proceeds we would receive from Aspire Capital from the sale of shares at varying purchase prices:

Assumed Average Purchase Price	Number of Shares to be Sold if Full Purchase[1]	Percentage of Outstanding Shares After Giving Effect to the Sale to Aspire Capital[2]	Proceeds from the Sale of Shares to Aspire Capital Under the Purchase Agreement
$0.50	18,747,906	15.8%	$ 9,390,868
$1.00	18,747,906	15.8%	$ 18,781,736
$1.50	13,333,333	11.7%	$ 20,000,000
$2.00	10,000,000	9.1%	$ 20,000,000
$2.50	8,000,000	7.4%	$ 20,000,000
$3.00	6,666,666	6.2%	$ 20,000,000
$5.00	4,000,000	3.8%	$ 20,000,000

(1) Excludes the 990,099 shares to be issued as Commitment Shares, and assumes the purchase by Aspire Capital of the full $20 million of Common Stock, subject to the Exchange Cap. The Exchange Cap will not apply in the event shareholder approval is obtained to issue Common Stock to Aspire Capital in an amount exceeding 19.9% of the Company's currently outstanding Common Stock.

(2) The denominator is based on 99,185,956 shares outstanding as of September 28, 2011, adjusted to include the 990,099 shares to be issued as Commitment Shares, and the number of shares set forth in the adjacent column which we would have sold to Aspire Capital. The numerator is based on the number of shares which we would have sold under the Purchase Agreement at the corresponding assumed purchase price set forth in the adjacent column.

Information With Respect to Aspire Capital

Aspire Capital has been a NeoStem shareholder since 2010 and, including the Commitment Shares being issued to Aspire Capital in consideration for entering into the Purchase Agreement, Aspire Capital beneficially owns approximately 3 million shares of our Common Stock. Steven G. Martin, Erik J. Brown and Christos Komissopoulos, the principals of Aspire Capital, are deemed to be beneficial owners of all of the shares of Common Stock owned by Aspire Capital. Messrs. Martin, Brown and Komissopoulos will have shared voting and investment power over any shares purchased by Aspire Capital under the prospectus supplement filed with the SEC in connection with the transactions contemplated under the Purchase Agreement. Aspire Capital is not a licensed broker-dealer or an affiliate of a licensed broker-dealer.

DILUTION

Our net tangible book value as of June 30, 2011 was approximately $27.6 million, or $0.34 per share of Common Stock. Net tangible book value per share of common stock is calculated by subtracting our total liabilities from our total tangible assets, which is total assets less intangible assets, and dividing this amount by the number of shares of Common Stock outstanding. After giving effect to (i) the issuance of the 990,099 Commitment Shares and (ii) the sale of 18,747,906 shares of Common Stock in the aggregate amount of $13.1 million at an assumed offering price of $0.70 per share (which assumes, for purposes of this calculation, the applicability of the 19.9% Exchange Cap limitation), and after deducting estimated offering expenses payable by us, our net tangible book value as of June 30, 2011 would have been approximately $40.7 million, or $0.40 per share of Common Stock. This represents an immediate increase in net tangible book value of $0.06 per share to our existing stockholders and an immediate dilution in net tangible book value of $0.30 per share to investors participating in this offering. The following table illustrates this per share dilution:

Assumed public offering price per share[(1)]		$ 0.70
Historical net tangible book value per share as of June 30, 2011	$ 0.34	
Increase in net tangible book value per share attributable to this offering	$ 0.06	
As adjusted net tangible book value per share after this offering		$ 0.40
Net dilution per share to investors participating in this offering		$ 0.30

(1) Solely for purposes of the calculations in this table, based on the most recent practicable closing price of our Common Stock.

The shares sold in this offering in addition to the Commitment Shares, if any, will be sold from time to time at various prices. An increase of $0.50 per share in the price at which the shares are sold from the assumed offering price at a recent price of $0.70 per share shown in the table above, assuming all of our Common Stock in the aggregate amount of $20.0 million is sold at that price, would increase our adjusted net tangible book value per share after the offering to $0.48 per share and would increase the dilution in net tangible book value per share to new investors in this offering to $0.72 per share, after deducting estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only.

The calculations above are based on 82,247,287 shares of Common Stock outstanding as of June 30, 2011. This number excludes the following:

- options representing the right to purchase a total of 19,086,328 shares of Common Stock at a weighted average exercise price of $1.79 per share;
- 6,480,167 shares of Common Stock which were reserved for future equity awards that may be granted in the future under our equity incentive plans;
- Class A warrants representing the right to purchase a total of 635,000 shares of Common Stock at an exercise price of $6.00 per share;
- Class D warrants representing the right to purchase a total of 12,932,512 shares of Common Stock at an exercise price of $2.50 per share;
- Warrants issued with our Series E Preferred Stock representing the right to purchase a total of 1,353,214 shares of Common Stock at the then current adjusted exercise price of $2.04 per share;
- three series of warrants (issued in connection with the PCT Merger) to purchase up to 1,000,000 shares of our Common Stock per series (3,000,000 shares in the aggregate), at exercise prices of $3.00, $5.00 and $7.00, respectively, per share;
- other warrants representing the right to purchase a total of 6,992,003 shares of Common Stock at a weighted average exercise price of $2.41 per share, plus warrants to purchase 95,250 shares of Common Stock at an exercise price of $6.50 per share;

- 10,000 shares of Common Stock issuable upon conversion of our outstanding Series B Convertible Redeemable Preferred Stock;
- any shares of Common Stock issued on conversion or redemption of our outstanding Series E 7% Senior Convertible Preferred Stock, and any shares of Common Stock issued in connection with dividend payments in respect of such preferred stock;
- an aggregate of (i) 13,750,000 shares of Common Stock and (ii) warrants to purchase 10,312,500 shares of Common Stock at an exercise price of $1.45 per share, issued in our July 2011 underwritten offering; and
- up to 12,795,059 shares of Common Stock issuable upon consummation of the Amorcyte Merger (inclusive of shares of Common Stock underlying up to 1,881,008 warrants which may be issued in the Amorcyte Merger, and inclusive of up to 4,092,768 Contingent Shares which may be issued upon achievement of specified business milestones).

CAPITALIZATION

The following table sets forth our capitalization as of June 30, 2011:

- on an actual basis, without giving effect to this offering and the use of net proceeds as discussed in "Use of Proceeds";
- on an as adjusted basis to reflect the (i) the issuance of the 990,099 Commitment Shares and (ii) the sale of 18,747,906 shares of Common Stock in the aggregate amount of $13.1 million at an assumed offering price of $0.70* per share (which assumes, for purposes of this calculation, the applicability of the 19.9% Exchange Cap limitation), and after deducting estimated offering expenses payable by us.

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* Solely for purposes of the calculations in the table below, based on the most recent practicable closing price of our Common Stock.

This capitalization table should be read in conjunction with management's discussion and analysis of results of operations and our consolidated financial statements and related notes included in our annual report on Form 10-K for the year ended December 31, 2010, as amended, our quarterly reports on Form 10-Q for the quarters ended March 31, 2011 and June 30, 2011 and the other financial information included and incorporated by reference in this prospectus supplement.

	(thousands) As of June 30, 2011	
	Actual	Pro Forma, As Adjusted
Cash and Cash Equivalents	$ 4,850.4	$ 17,933.9
Debt:		
Amounts due related party	20,009.6	20,009.6
Redeemable convertible Series E 7% preferred stock 9,014,306 shares issued and outstanding actual and pro forma, as adjusted	5,901.8	5,901.8
Shareholders' equity:		
Preferred stock, par value $0.01, 20,000,000 shares authorized, 10,000 shares of Series B convertible redeemable preferred stock issued and outstanding actual and pro forma, as adjusted	0.1	0.1
Common stock, par value $0.001, 500,000,000 shares authorized, 82,247,287 shares issued and outstanding, actual and 101,985,292 shares issued and outstanding, pro forma, as adjusted[(1)]	82.2	101.9
Additional paid in capital	174,599.3	187,663.1
Accumulated other comprehensive income	4,289.6	4,289.6
Accumulated deficit	(116,456.8)	(116,456.8)
Total shareholders' equity	62,514.4	75,597.9
Total capitalization	$ 88,425.8	$ 101,509.3

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(1) Outstanding shares of common stock as of June 30, 2011 does not include the following:

- options representing the right to purchase a total of 19,086,328 shares of Common Stock at a weighted average exercise price of $1.79 per share;
- 6,480,167 shares of Common Stock which were reserved for future equity awards that may be granted in the future under our equity incentive plans;
- Class A warrants representing the right to purchase a total of 635,000 shares of Common Stock at an exercise price of $6.00 per share;
- Class D warrants representing the right to purchase a total of 12,932,512 shares of Common Stock at an exercise price of $2.50 per share;

- Warrants issued with our Series E Preferred Stock representing the right to purchase a total of 1,353,214 shares of Common Stock at the then current adjusted exercise price of $2.04 per share;
- three series of warrants (issued in connection with the PCT Merger) to purchase up to 1,000,000 shares of our Common Stock per series (3,000,000 shares in the aggregate), at exercise prices of $3.00, $5.00 and $7.00, respectively, per share;
- other warrants representing the right to purchase a total of 6,992,003 shares of Common Stock at a weighted average exercise price of $2.41 per share, plus warrants to purchase 95,250 shares of Common Stock at an exercise price of $6.50 per share;
- 10,000 shares of Common Stock issuable upon conversion of our outstanding Series B Convertible Redeemable Preferred Stock;
- any shares of Common Stock issued on conversion or redemption of our outstanding Series E 7% Senior Convertible Preferred Stock, and any shares of Common Stock issued in connection with dividend payments in respect of such preferred stock;
- an aggregate of (i) 13,750,000 shares of Common Stock and (ii) warrants to purchase 10,312,500 shares of Common Stock at an exercise price of $1.45 per share, issued in our July 2011 underwritten offering; and
- up to 12,795,059 shares of Common Stock issuable upon consummation of the Amorcyte Merger (inclusive of shares of Common Stock underlying up to 1,881,008 warrants which may be issued in the Amorcyte Merger, and inclusive of up to 4,092,768 Contingent Shares which may be issued upon achievement of specified business milestones).

PLAN OF DISTRIBUTION

We entered into the Purchase Agreement with Aspire Capital on September 28, 2011. In consideration for entering into the Purchase Agreement, we will issue 990,099 shares of Common Stock to Aspire Capital. The Purchase Agreement provides that, upon the terms and subject to the conditions set forth therein, Aspire Capital is irrevocably committed to purchase up to an aggregate of $20 million of shares of our Common Stock over the approximately 24-month term of the Purchase Agreement.

The Purchase Agreement provides that from time to time over the term of the Purchase Agreement, on any business day on which the closing sale price of our Common Stock equals or exceeds the Formula Price and at our sole discretion, we may present Aspire Capital with a Purchase Notice directing Aspire Capital to purchase up to 100,000 Purchase Shares per business day at the Purchase Price on that day. We may mutually agree with Aspire Capital to increase the number of shares that may be sold per business day to as much as an additional 1,000,000 shares per business day.

In addition, on any date on which we submit a Purchase Notice to Aspire Capital, we also have the right, in our sole discretion, to present Aspire Capital with a VWAP Purchase Notice directing Aspire Capital to purchase an amount of Common Stock equal to up to 30% of the aggregate shares of our common stock traded on the NYSE Amex on the VWAP Purchase Date, subject to the VWAP Purchase Share Volume Maximum.

Aspire Capital may be an “underwriter” within the meaning of the Securities Act.

Neither we nor Aspire Capital can presently estimate the amount of compensation that any agent will receive. We know of no existing arrangements between Aspire Capital, any other shareholder, broker, dealer, underwriter, or agent relating to the sale or distribution of the shares offered by this prospectus supplement. At the time a particular offer of shares is made, a prospectus supplement, if required, will be distributed that will set forth the names of any agents, underwriters, or dealers and any other required information.

We will pay all of the expenses incident to the registration, offering, and sale of the shares to Aspire Capital. We have agreed to indemnify Aspire Capital and certain other persons against certain liabilities in connection with the offering of shares of common stock offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Aspire Capital has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by Aspire Capital specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities.

Aspire Capital and its affiliates have agreed not to engage in any direct or indirect short selling or hedging of our common stock during the term of the Purchase Agreement.

We have advised Aspire Capital that it is required to comply with Regulation M promulgated under the Securities Exchange Act of 1934, as amended. With certain exceptions, Regulation M precludes the selling shareholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the shares offered hereby this prospectus.

We may suspend the sale of shares to Aspire Capital pursuant to this prospectus for certain periods of time for certain reasons, including if the prospectus is required to be supplemented or amended to include additional material information.

This offering will terminate on the date that all shares offered by this prospectus have been sold to Aspire Capital.

LEGAL MATTERS

The validity of the issuance of the shares of Common Stock offered by this prospectus supplement and the accompanying prospectus will be passed upon for us by Lowenstein Sandler PC, Roseland, New Jersey.

EXPERTS

The consolidated financial statements as of and for the year ended December 31, 2010, incorporated in this prospectus supplement and elsewhere in the registration statement of which this prospectus supplement forms a part, by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2010, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

The consolidated balance sheet as of December 31, 2009 and the consolidated statements of operations, shareholders' equity/(deficit) and cash flows for the years ended December 31, 2009 and 2008, incorporated in this prospectus supplement and elsewhere in the registration statement of which this prospectus supplement forms a part, by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2010, have been audited by Holtz Rubenstein Reminick LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

EisnerAmper LLP, independent registered public accounting firm, has audited the consolidated financial statements of Amorcyte, Inc. as of and for the year ended December 31, 2010, included in our Current Reports on Form 8-K filed on July 14, 2011 and September 16, 2011, as set forth in their report, which is incorporated by reference in this prospectus supplement and elsewhere in the registration statement of which this prospectus supplement forms a part. The financial statements of Amorcyte, Inc. are incorporated by reference in reliance on EisnerAmper LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement is part of a registration statement on Form S-3 that we filed with the SEC. The registration statement that contains this prospectus supplement, including the exhibits to the registration statement, contains additional information about us and the common stock offered by this prospectus supplement.

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E. Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our public filings, including reports, proxy and information statements, are also available on the SEC's web site at *http://www.sec.gov*.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" the information contained in documents that we file with them, which means that we can disclose important information to you by referring to those documents. The information incorporated by reference is considered to be part of this prospectus supplement. Information in this prospectus supplement modifies or supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus supplement, and information that we file later with the SEC also will automatically update and supersede this information.

We incorporate by reference the documents listed below and any documents that we file in the future with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of this prospectus supplement and before the completion of the offering:

- Our Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on April 6, 2011;
- Amendment No. 1 on Form 10-K/A to our Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on May 2, 2011;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2011 and June 30, 2011, filed with the SEC on May 17, 2011 and August 12, 2011, respectively;
- Our definitive proxy statement for our 2011 Annual Meeting of Stockholders, included in our joint proxy statement/prospectus filed with the SEC on September 16, 2011;
- Our Current Reports on Form 8-K and amendments thereto dated January 4, 2011 (filed January 10, 2011), January 18, 2011 (filed January 24, 2011), March 4, 2011 (filed March 8, 2011), June 23, 2011 (filed June 29, 2011, as amended June 30, 2011), June 29, 2011 (filed June 30, 2011), July 11, 2011 (filed July 14, 2011), July 19, 2011 (filed July 20, 2011), July 22, 2011 (filed July 22, 2011), August 12, 2011 (filed August 18, 2011), August 23, 2011 (filed August 24, 2011); September 16, 2011 (filed September 16, 2011); and September 28, 2011 (filed September 30, 2011) (excluding any information deemed furnished pursuant to Item 2.02 or Item 7.01 of any such Current Report on Form 8-K); and
- The description of our common stock set forth in the Registration Statement on Form 8-A, declared effective on August 8, 2007 (including any amendment or report filed with the SEC for the purpose of updating such description).

To the extent that any statement in this prospectus supplement is inconsistent with any statement that is incorporated by reference and that was made on or before the date of this prospectus supplement, the statement in this prospectus supplement shall supersede such incorporated statement. The incorporated statement shall not be deemed, except as modified or superseded, to constitute a part of this prospectus supplement, the accompanying prospectus or the registration statement. Statements contained in this prospectus supplement as to the contents of any contract or other document are not necessarily complete and, in each instance, we refer you to the copy of each contract or document filed as an exhibit to the registration statement.

We will furnish without charge to you, upon written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to:

NeoStem, Inc.
420 Lexington Avenue, Suite 450
New York, New York 10170
(212) 584-4180
Attention: Catherine M. Vaczy, Esq., Vice President and General Counsel

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this document.

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PROSPECTUS

$75,000,000

NEOSTEM, INC.

Common Stock
Preferred Stock
Debt Securities
Warrants
Units

We may from time to time offer and sell common stock, preferred stock, debt securities, warrants and units, having an aggregate offering price of up to $75,000,000. We may offer and sell these securities separately or together in any combination. We may offer and sell these securities to or through underwriters, directly to investors or through agents. We will specify the terms of the securities, and the names of any underwriters or agents and their respective compensation, in supplements to this prospectus.

Our common stock is listed on the on the NYSE Amex and traded under the symbol “NBS.” The closing bid price of our common stock on the NYSE Amex on June 13, 2011 was $1.48 per share.

Investing in our securities involves risks. See “Risk Factors” at page 5 of this prospectus.

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

This prospectus may not be used to consummate sales of securities unless it is accompanied by a prospectus supplement.

The date of this prospectus is June 13, 2011.

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No dealer, salesperson or other person has been authorized to give any information or to make any representations other than those contained or incorporated by reference in this prospectus or any accompanying prospectus supplement in connection with the offer made by this prospectus or any accompanying prospectus supplement and, if given or made, such information or representations must not be relied upon as having been authorized by NeoStem, Inc. or any such person. Neither the delivery of this prospectus or any accompanying prospectus supplement nor any sale made hereunder and thereunder shall under any circumstances create an implication that there has been no change in the affairs of NeoStem, Inc. since the date hereof. This prospectus or any accompanying prospectus supplement does not constitute an offer or solicitation by anyone in any state in which such offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, using a "shelf" registration process. Under this shelf process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of $75,000,000. We have provided to you in this prospectus a general description of the securities we may offer. Each time we sell securities under this shelf registration process, we will provide a prospectus supplement that will contain specific information about the terms of the offering. We may also add, update or change in the prospectus supplement or any "free writing prospectus" we may authorize to be delivered to you any of the information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement or any free writing prospectus we may authorize to be delivered to you, you should rely on the information in the prospectus supplement or free writing prospectus, as the case may be, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in this prospectus or any prospectus supplement — the statement in the document having the later date modifies or supersedes the earlier statement. This prospectus, together with the applicable prospectus supplements and any free writing prospectus we may authorize to be delivered to you, includes all material information relating to this offering.

An investment in our securities involves certain risks that should be carefully considered by prospective investors. See "Risk Factors."

You should read this prospectus and any prospectus supplement as well as additional information described under "Incorporation of Certain Documents by Reference" and "Where You Can Find More Information" on pages 43 and 44, respectively.

NEOSTEM, INC.

NeoStem, Inc. (“we”, “NeoStem” or the “Company”) continues to develop as a company in the cell therapy arena with the January 2011 completion of the Progenitor Cell Therapy, LLC (“PCT”) acquisition. We view this acquisition as a foundation in achieving our strategic mission of capturing the paradigm shift to cell therapy. While NeoStem’s origins began in the adult stem cell research, collection and storage service business, the PCT acquisition begins a new dimension in the Company’s business model. NeoStem today, with approximately 85 U.S. based employees, brings to bear significant resources to meet the basic research, manufacturing, regulatory, clinical and logistical demands of an integrated cell therapeutics company. NeoStem is now ideally positioned in the year ahead to transition from its origin as a service provider to a therapeutics company leveraging the intellectual capital of the Company’s core assets to attract world renowned clients. We perceive the advancement of cell therapeutics in Asia as another key part of our emerging strategy given the more favorable research and regulatory environment in Asia versus Western countries. As such, we intend to continue to build key relationships at clinical sites in China where these therapies are now being commercialized. We see our pharmaceutical business (Suzhou Erye Pharmaceutical Company Ltd.) and stem cell service business as engines of growth to support these initiatives.

We operate our business in three reportable segments: (i) Cell Therapy — United States; (ii) Regenerative Medicine — China; and (iii) Pharmaceutical Manufacturing — China.

Cell Therapy — United States

PCT Merger

The cornerstone of our Cell Therapy business is Progenitor Cell Therapy, LLC. On January 19, 2011 we completed our acquisition of PCT (the “PCT Merger”) pursuant to the terms of an Agreement and Plan of Merger, dated September 23, 2010 (the “PCT Merger Agreement”). As a result of the consummation of the PCT Merger, we acquired all of the membership interests of PCT, and PCT is now a wholly-owned subsidiary of our Company.

All of the membership interests of PCT outstanding immediately prior to the effective time of the PCT Merger were converted into the right to receive, in the aggregate, (i) 10,600,000 shares of our Common Stock and (ii) 3 series of seven year warrants to purchase up to 1,000,000 shares of our Common Stock per series (3,000,000 shares in the aggregate), at exercise prices of $3.00, $5.00 and $7.00, respectively, per share (the “PCT Warrants”). The PCT Warrants are redeemable in certain circumstances. Transfer of the shares issuable upon exercise of the PCT Warrants is restricted until the one year anniversary of the closing of the PCT Merger.

In accordance with the PCT Merger Agreement, we have deposited into an escrow account 10,600,000 shares of our Common Stock for eventual distribution to the former members of PCT (subject to downward adjustment to satisfy any indemnification claims of NeoStem, all as described in the PCT Merger Agreement). For so long as any of the 10,600,000 shares are held in escrow, such shares shall be voted by the escrow agent as directed by our Board of Directors.

Founded by Dr. Andrew L. Pecora and Robert A. Preti, Ph.D., PCT became an internationally recognized cell therapy services and development company. They sought to create a business for “as needed” development and manufacturing services for the emerging cell therapy industry and to prepare for eventual commercialization. With its cell therapy manufacturing facilities and team of professionals, PCT offers a platform that can facilitate the preclinical and clinical development and commercialization of cellular therapies for clients throughout the world. PCT offers current Good Manufacturing Practices (cGMP)-compliant cell transportation, manufacturing, storage, and distribution services and supporting clinical trial design, product process development, logistics, regulatory and quality systems development services. In addition, through its network of contacts throughout the cell therapy industry, PCT is able to identify early stage development opportunities in the cell therapy field and opportunistically develop these cell therapies through proof of concept where they can be further developed and ultimately commercialized through NeoStem’s developing commercial structure. Dr. Preti now serves as PCT’s President and Dr. Pecora as part-time Chief Medical Officer of PCT. Dr. Pecora will also serve on the board of directors of NeoStem.

PCT is engaged in a broad range of services in the cell therapy market for the treatment of human disease, including but not limited to contract manufacturing, product and process development, product and regulatory consulting, and product characterization and comparability. PCT's expertise in the cell therapy space, which includes therapeutic vaccines (oncology), various related cell therapeutics, cell diagnostics, and regenerative medicine, creates a platform upon which we intend to build a therapeutics strategy. Our goal is to develop internally, or through partnerships, allogeneic (cells from a third-party donor) or autologous (cells from oneself) cell therapeutics technologies that, in the aggregate, will comprise the Cell Therapy — United States reportable segment.

In addition, PCT will assume NeoStem's adult stem cell business based on PCT's strategic advantages in meeting cGMP regulatory requirements in an industry that is widely dispersed with a range of quality issues. We believe that PCT, as a quality leader, is ideally positioned to become a leader in cell collection, processing and storage (cell banking) which is synergistic with NeoStem's roots in this business. In addition, PCT's leadership in the transportation and distribution of cell therapy products is complementary to NeoStem's strategic vision of working with the industry leader as the partner of choice. These efforts are being bundled together into a new service with PCT's cord blood banking business into a multigenerational stem cell collection and storage plan that the Company will call the "Family Plan".

Cell Collection, Processing and Storage Business

In the United States, we are a provider of adult stem cell collection, processing and storage services enabling healthy adult individuals to donate and store their stem cells for personal therapeutic use. Similar to the banking of cord blood, pre-donating cells at a younger age helps to ensure a supply of one's own stem cells should they be needed for future medical treatment. We have established a network of adult stem cell collection centers to include ten centers throughout the country. With our acquisition of PCT, we acquired the expertise of cGMP cord blood banking. PCT has been processing and providing storage services for a number of third-party company clients, including Viacord and Cord Blood of America, as well as for DomaniCell, LLC, its own cord blood business. DomaniCell, a wholly owned subsidiary of PCT, assists hospitals by providing umbilical cord blood unit collection and long-term storage services to patients for potential future therapeutic use. DomaniCell has been providing the front-end interface and support services to hospitals and in turn employs PCT's cell therapy manufacturing facilities network for the processing and long-term storage of umbilical cord blood units. With the acquisition of PCT, we are bundling together NeoStem's adult stem cell collection and PCT's cord blood collection offerings as a multi-generational collection and storage service called the "Family Plan." Dr. Manny Alvarez, an esteemed Obstetrician and Gynecologist and recognized television and online healthcare professional is serving exclusively as the Company's spokesperson and public representative under a three year agreement, with an option to extend, under which he will promote NeoStem's consumer services through endorsements, print and online marketing, and more. This offers NeoStem's stem cell banking products the validation of a highly respected health news personality.

In July 2010, we were named "Best Stem Cell Company, 2010," in the New Economy's Biotech Awards.

Stem Cell Research

NeoStem is conducting research and development activities in its own laboratory facility. Through collaborations, we are pursuing therapeutic and potentially diagnostic applications of adult stem cells, including applications using our own VSEL^{TM} Technology (very small embryonic-like stem cells). VSEL^{TM} Technology, licensed from the University of Louisville, represents NeoStem's proprietary platform. We believe VSEL^{TM} Technology holds significant potential for the Company, affording us entry into the regenerative medicine arena with a unique cell product that may, in turn, open up new areas in regenerative medicine. This research is also conducted though funded academic research collaborations. In April 2009, we entered into a License Agreement with Vincent Falanga, M.D., pursuant to which we acquired a world-wide, exclusive license to certain innovative stem cell technology and applications for wound healing. In conjunction with that license we entered into a multi-year sponsored research agreement with the Roger Williams Medical Center in Providence, Rhode Island and Dr. Falanga's laboratory, funded by the Department of Defense, to study the use of VSELs and mesenchymal cells for the treatment of chronic wounds. We have in-licensed more mature technologies that use stem cells for regenerative applications, including rebuilding cartilage, repairing fractures and rejuvenating aging skin. Some of these products or treatments are commercialized in Asia.

Regenerative Medicine — China

We are also seeking to apply our cellular therapies in the People's Republic of China ("China" or "PRC"). In 2009, we began several China-based, adult stem cell initiatives including: (i) creating a separate China-based stem cell operation, (ii) constructing a stem cell research and development laboratory and processing and manufacturing facility in Beijing, (iii) establishing relationships with hospitals to provide stem cell-based therapies, and (iv) obtaining product licenses covering several adult stem cell therapeutics focused on regenerative medicine. In 2010, we began offering stem cell banking services and certain stem cell therapies to patients in Asia, as well as to foreigners traveling to Asia seeking medical treatments that are either unavailable or cost prohibitive in their home countries.

In June 2010 we launched a collaboration with Shandong Wendeng Orthopaedic Hospital, or Wendeng Hospital, which was the first hospital in the network we are establishing to offer orthopaedic treatments in China. In December 2010, we entered into the second hospital cooperation agreement with Shijiazhuang Third Hospital in the provincial capital of Hebei Province. We expect to enter into a third hospital collaboration agreement in mid-2011. In the third quarter of 2010, Weihai Municipal Price Bureau, the local authority in charge of pricing for public medical services in China, approved the pricing for single side and bilateral arthroscopic orthopedic autologous adult stem cell based treatment licensed by us which is being administered at Wendeng Hospital. Importantly, the Weihai Municipal Labor Bureau Medical Insurance Office approved Wendeng Hospital's application for reimbursement whereby patients are eligible to receive reimbursement for up to 80% of the cost of the orthopedic procedure under the new technology category.

Strategically, we view our efforts in China as pioneering new pathways towards both commercialization of therapies to the largest patient populations in the world, and creating a unique regulatory pathway for advanced proof of concept studies which may prove invaluable to the Company's research efforts We intend to develop a distribution platform for cell therapy that can be used to expedite commercialization of new therapies in China for PCT clients and to commercialize our own proprietary technologies as they emerge.

Pharmaceutical Manufacturing — China

We acquired a 51% ownership interest in Suzhou Erye Pharmaceutical Company Ltd. ("Erye") in October 2009. Erye was founded more than 50 years ago and represents an established, vertically-integrated pharmaceutical business. Historically, Erye has concentrated its efforts on manufacturing and distributing of generic antibiotic products. It has received more than 160 production certificates from the State Food and Drug Administration of China, or SFDA, covering both antibiotic prescription drugs and active pharmaceutical intermediates (APIs). Our current senior executive management team at Erye, Mr. Shi, Chairman, and Madame Zhang, General Manager, joined Erye in 1998, and in conjunction with others bought it from the PRC government in 2003. A majority of the drugs that Eyre manufactures are on China's "essential drug" list, and Erye's new facility under construction will enable greater production.

Corporate Information

Our principal executive offices are located at 420 Lexington Avenue, Suite 450, New York, New York 10170, and our telephone number is (212) 584-4180. Our Common Stock is currently traded on the NYSE Amex under the symbol "NBS." We maintain a corporate website at *www.neostem.com*. The contents of our website are not incorporated by reference into this prospectus and should not be considered to be a part of this prospectus or relied upon in connection herewith.

NeoStem, Inc. was incorporated under the laws of the State of Delaware in September 1980 under the name Fidelity Medical Services, Inc. and commenced operations in the adult stem cell collection, processing and storage services business in January 2006. Unless otherwise stated, all references to "us," "our," "NeoStem," "we," the "Company" and similar designations refer to NeoStem, Inc.

RISK FACTORS

Investing in our securities involves risk. Please see the risk factors under the heading “Risk Factors” beginning on page 32 of our Annual Report on Form 10-K for the year ended December 31, 2010, on file with the Securities and Exchange Commission. Before making an investment decision, you should carefully consider these risks as well as other information we include or incorporate by reference in this prospectus and any prospectus supplement. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus, any prospectus supplement and the documents we incorporate by reference in this prospectus contain 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”). All statements, other than statements of historical facts, that we include in this prospectus, any prospectus supplement, and in the documents we incorporate by reference in this prospectus, may be deemed forward-looking statements for purposes of the Securities Act and the Exchange Act. We use the words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “project,” “will,” “would” and similar expressions to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We cannot guarantee that we actually will achieve the plans, intentions or expectations disclosed in our forward-looking statements and, accordingly, you should not place undue reliance on our forward-looking statements. There are a number of important factors that could cause actual results or events to differ materially from the forward-looking statements that we make, including the factors included in the documents we incorporate by reference in this prospectus. You should read these factors and the other cautionary statements made in the documents we incorporate by reference as being applicable to all related forward-looking statements wherever they appear in this prospectus, any prospectus supplement, and any document incorporated by reference. We caution you that we do not undertake any obligation to update forward-looking statements made by us.

USE OF PROCEEDS

Unless otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities under this prospectus for general corporate purposes, including working capital and general corporate purposes. Although we have no present plans or intentions, we may use a portion of the net proceeds to acquire or invest in complementary businesses. We will set forth in the prospectus supplement our intended use for the net proceeds received from the sale of any securities. Pending the use of the net proceeds, we may use the net proceeds to invest in investment-grade, interest-bearing securities.

THE SECURITIES WE MAY OFFER

The descriptions of the securities contained in this prospectus, together with the applicable prospectus supplements, summarize all the material terms and provisions of the various types of securities that we may offer. We will describe in the applicable prospectus supplement relating to any securities the particular terms of the securities offered by that prospectus supplement. If we indicate in the applicable prospectus supplement, the terms of the securities may differ from the terms we have summarized below. We will also include in the prospectus supplement information, where applicable, about material United States federal income tax considerations relating to the securities, and the securities exchange, if any, on which the securities will be listed.

We may sell from time to time, in one or more offerings:

- common stock;
- preferred stock;
- debt securities;
- warrants to purchase any of the securities listed above; and
- units consisting of any combination of the securities listed above.

In this prospectus, we refer to the common stock, preferred stock, debt securities, warrants and units collectively as “securities.” The total dollar amount of all securities that we may sell will not exceed $75,000,000.

If we issue debt securities at a discount from their original stated principal amount, then, for purposes of calculating the total dollar amount of all securities issued under this prospectus, we will treat the initial offering price of the debt securities as the total original principal amount of the debt securities.

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

DESCRIPTION OF CAPITAL STOCK

The following is a summary of all material characteristics of our capital stock as set forth in our certificate of incorporation and bylaws, and our outstanding warrants. The summary does not purport to be complete and is qualified in its entirety by reference to our certificate of incorporation and bylaws and the Class A warrants, the Class D warrants, the warrants issued in our November 2010 Common Stock Offering and in our November 2010 Preferred Stock Offering, the warrants issued in connection with the PCT Merger, and the Certificate of Designations relating to our Series E 7% Senior Convertible Preferred Stock themselves, all of which are incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and to the provisions of the General Corporation Law of the State of Delaware, as amended.

Common Stock

We are authorized to issue 500,000,000 shares of common stock, par value $0.001 per share ("Common Stock"). Holders of our Common Stock are entitled to one vote per share in the election of directors and on all other matter on which stockholders are entitled or permitted to vote. Holders of our Common Stock are not entitled to cumulative voting rights. Therefore, holders of a majority of the shares voting for the election of directors can elect all of the directors. Subject to the terms of any outstanding series of preferred stock, the holders of our Common Stock are entitled to dividends in the amounts and at times as may be declared by the Board of Directors out of funds legally available. Upon liquidation or dissolution, holders of our Common Stock are entitled to share ratably in all net assets available for distribution to stockholders after payment of any liquidation preferences to holders of our preferred stock. Holders of our Common Stock have no redemption, conversion or preemptive rights.

As of April 11, 2011, we had 80,024,412 shares of Common Stock issued and outstanding, exclusive of existing options and warrants and the shares to be issued in this offering.

Preferred Stock

We are authorized to issue up to 20,000,000 shares of preferred stock, par value $0.01 per share, with such designations, rights, and preferences as may be determined from time to time by our Board of Directors. Accordingly, our Board of Directors is empowered, without stockholder approval, to issue preferred stock with dividend, liquidation, conversion, voting, or other rights that could adversely affect the voting power or other rights of the holders of our Common Stock. The issuance of preferred stock could have the effect of restricting dividends on our Common Stock, diluting the voting power of our Common Stock, impairing the liquidation rights of our Common Stock, or delaying or preventing a change in control of our company, all without further action by our stockholders.

As of April 11, 2011, there were:

- 10,000 shares of our Series B Convertible Redeemable Preferred Stock, $0.01 par value per share ("Series B Preferred Stock"), authorized and outstanding; and
- 10,582,011 shares of our Series E 7% Senior Convertible Preferred Stock, $0.01 par value per share (the "Series E Preferred Stock," or the "Series E Preferred Shares"), authorized and outstanding.

Series B Preferred Stock

The Series B Preferred Stock ranks pari passu with our Common Stock with respect to the payment of dividends and to the distribution of assets upon liquidation, dissolution or winding up.

So long as any shares of the Series B Preferred Stock are outstanding, no dividend shall be declared or paid or set aside for payment or other distribution declared or made upon our Common Stock or upon any other stock ranking junior to, or on a parity with, the Series B Preferred Stock as to dividends or upon liquidation, dissolution or winding up, unless, in the case of our preferred stock, the same dividend is declared, paid or set aside for payment on all outstanding shares of the Series B Preferred Stock or in the case of our Common Stock, ten times such dividend per share is declared, paid or set aside for payment on each outstanding share of the Series B Preferred Stock.

Except as otherwise provided by law, each share of the Series B Preferred Stock has the same voting rights as ten shares of our Common Stock and the holders of the Series B Preferred Stock and the Common Stock shall vote together as one class on all matters.

The holder of any share of Series B Preferred Stock has the right, at such holder's option, to convert such share into one fully paid and non-assessable share of our Common Stock, subject to adjustment.

In the event of any voluntary or involuntary dissolution, liquidation or winding up of our Company, after any distribution of assets is made to the holders of any other class or series of stock that ranks prior to the Series B Preferred Stock in respect of distributions upon the liquidation of our company, the holder of each share of Series B Preferred Stock then outstanding shall be entitled to be paid out of our assets available for distribution to our stockholders, an amount on a pari passu basis equal to ten times the amount per share distributed to the holders of our Common Stock. After payment of the full amount of the distribution to which they are entitled, the holders of shares of the Series B Preferred Stock will not be entitled to any further participation in any distribution of assets by the corporation.

Shares of Series B Preferred Stock issued and reacquired by us shall have the status of authorized and unissued shares of preferred stock, undesignated as to series, subject to later issuance.

Holders of shares of Series B Preferred Stock are not entitled to any preemptive or subscription rights in respect of any securities of the corporation.

Series E 7% Senior Convertible Preferred Stock

General. We are authorized to issue up to 20,000,000 shares of preferred stock, par value $0.01 per share, with such designations, rights and preferences as may be determined from time to time by our Board of Directors, without further stockholder approval. Accordingly, our Board of Directors has created out of the authorized and unissued shares of our preferred stock a series of preferred stock designated as the Series E 7% Senior Convertible Preferred Stock. As of April 11, 2011, there were 10,582,011 shares of Series E 7% Senior Convertible Preferred Stock, par value $0.01 per share (the "Series E Preferred Stock," or the "Series E Preferred Shares") issued and outstanding.

The following is a brief description of the terms of our Series E Preferred Stock. The description of the Series E Preferred Stock contained herein does not purport to be complete and is qualified in its entirety by reference to the Certificate of Designations for the Series E Preferred Stock.

Stockholder Approval. We were required to hold a special meeting of our stockholders as soon as practicable after the closing of our senior convertible preferred stock offering (which closed on November 19, 2010) for the purpose of approving the issuance in full of all "conversion shares" and "redemption shares," as such terms are defined in the certificate of designations pertaining to the Series E Preferred Shares, and all shares of our Common Stock issuable pursuant to the warrants sold in such senior convertible preferred stock offering. The purchasers of the Series E Preferred Shares had acknowledged that they could not convert their preferred stock to Common Stock or exercise their warrants for more than 19.9% of the outstanding shares of Common Stock, minus the shares of Common Stock issued in connection with our offering of the Series E Preferred Stock, or exercise any voting rights, until after stockholder approval of such issuance was obtained. Such stockholder approval was obtained at the special meeting of our stockholders held on January 18, 2011.

Dividends. Holders of Series E Preferred Stock shall be entitled to receive dividends payable in cash (or, at our option, in shares of our Common Stock if the Equity Conditions are satisfied) on the Liquidation Preference (as defined below) of such Series E Preferred Share at the per share rate of seven percent (7%) per annum, which shall be cumulative. Dividends on the Series E Preferred Shares shall commence accruing on the Initial Issuance Date and shall be computed on the basis of a 360-day year of twelve 30-day months. Dividends shall be payable in arrears on each Mandatory Redemption Date. "Mandatory Redemption Date" is defined in the certificate of designations as March 19, 2011, and the 19th day of each calendar month thereafter (or the next trading day thereafter) and ending on and including May 20, 2013 (the "Maturity Date"). The Maturity Date will be deemed to be a Mandatory Redemption Date.

Liquidation Preference. In the event of any liquidation, dissolution or winding up of our company, either voluntary or involuntary (a "Liquidation Event"), the holders of the Series E Preferred Shares shall be

entitled to receive, out of our assets available for distribution to stockholders ("Liquidation Funds"), prior and in preference to any distribution of any of our assets to the holders of any other class or series of equity securities, the amount of one dollar ($1.00) per share plus all accrued but unpaid dividends (the "Liquidation Preference"). After payment of the full amount of the Liquidation Preference, in the case of a Liquidation Event, the holders will not be entitled to any further participation in any distribution of our assets; provided that the foregoing shall not affect any rights which holders may have with respect to any requirement that our company repurchase the Series E Preferred Shares or for any right to monetary damages. All the preferential amounts to be paid to the holders of the Series E Preferred Shares shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any Liquidation Funds of our company to the holders of shares of other classes or series of our preferred stock junior in rank to the Series E Preferred Shares in connection with a Liquidation Event.

Mandatory Monthly Redemption.

The certificate of designations provides that "Mandatory Redemption Shares" means, with respect to (a) any Mandatory Redemption Date (other than the Maturity Date) an amount equal to $1/27^{th}$ of the Series E Preferred Shares initially issued pursuant to the stock purchase agreement (regardless of whether any holder has converted any Series E Preferred Shares or we have optionally redeemed any Series E Preferred Shares) and (b) the Maturity Date, all outstanding Series E Preferred Shares. On each applicable Mandatory Redemption Date, we shall redeem the Mandatory Redemption Shares at an aggregate redemption price equal to the sum of (x) the product of (A) the Liquidation Preference and (B) the number of Mandatory Redemption Shares required to be redeemed on such Mandatory Redemption Date plus (y) any and all accrued but unpaid dividends on all of the outstanding Series E Preferred Shares (the "Mandatory Redemption Price"). The Mandatory Redemption Price shall be payable, at our option, in cash or shares of our Common Stock or any combination of cash and shares of our Common Stock, provided, however, that no portion of the Mandatory Redemption Price may be paid in shares of our Common Stock unless the Equity Conditions are satisfied or waived by the holders of a majority of the Series E Preferred Shares (the "Required Holders") in writing prior to delivery of the applicable Mandatory Redemption Notice (as defined below); provided, further, however, that the portion of the applicable Mandatory Redemption Price that we elect to pay in shares of our Common Stock (if any) shall not exceed the Dollar Volume Limitation (unless waived by the Required Holders in writing).

On a date not less than twenty-two (22) trading days, but in no event more than twenty-five (25) trading days, prior to each Mandatory Redemption Date (the "Mandatory Redemption Notice Date"), we shall deliver a written notice (a "Mandatory Redemption Notice") to the holders, which shall either: (i) confirm that the entire applicable Mandatory Redemption Price shall be paid in cash; or (ii) (A) state that we elect to pay all or a portion of the Mandatory Redemption Price in shares of our Common Stock, (B) specify the portion that we elect to pay in cash (expressed in dollars) (such amount, the "Cash Payment Amount") and the portion that we elect to pay in shares of our Common Stock (expressed in dollars) (such portion a "Stock Payment Amount"), which amounts when added together must equal the applicable Mandatory Redemption Price, (C) certify that the Equity Conditions (as defined below) are then satisfied (or waived by the Required Holders), (D) state the Dollar Volume Limitation (expressed in dollars) and certify that the Stock Payment Amount does not exceed such Dollar Volume Limitation and (E) certify that the Maximum Share Amount (as defined below) has not been exceeded. If (x) we do not timely deliver a Mandatory Redemption Notice or (y) the Equity Conditions are not satisfied (unless waived by the Required Holders), then we shall be deemed to have delivered, a Mandatory Redemption Notice electing to pay the entire Mandatory Redemption Price in cash. The certificate of designations provides that "Dollar Volume Limitation" means fifteen percent (15%) of the aggregate dollar trading volume of our Common Stock on the NYSE Amex Equities (or other applicable trading market) over the twenty-two (22) consecutive trading day period ending on the trading day immediately preceding the date of the Mandatory Redemption Notice or Optional Redemption Notice, as applicable. The term "dollar trading volume" for any trading day shall be determined by multiplying the Daily VWAP by the volume as reported on Bloomberg for such trading day.

The term "Equity Conditions" means each of the following: (i) on each day during the Equity Conditions Measuring Period, all shares of our Common Stock to be issued on the applicable Mandatory Redemption Date (or such other date on or event for which the Equity Conditions are required to be satisfied) shall be

eligible for resale by the holder without restriction and without need for additional registration under any applicable federal or state securities laws, and we shall have no knowledge of any fact that would cause any shares of Common Stock not to be so eligible for resale by the holder without restriction and without need for additional registration under any applicable federal or state securities laws; (ii) on each day during the Equity Conditions Measuring Period, the shares of Common Stock are designated for listing on a trading market and shall not have been suspended from trading on such trading market nor shall delisting or suspension by such exchange or market have been threatened or pending in writing by such exchange nor shall there be any Securities and Exchange Commission or judicial stop trade order or trading suspension stop order; (iii) any shares of our Common Stock to be issued in connection with the applicable Mandatory Redemption Date (or such other date on or event for which the Equity Conditions are required to be satisfied) may be issued in full without violating the rules or regulations of the trading market or any applicable laws; (iv) on each day during the Equity Conditions Measuring Period, there shall not have occurred and be continuing, unless waived by the holder, either (A) a Trigger Event (as defined below) or (B) an event that with the passage of time or giving of notice would constitute a Trigger Event; (v) on each day during the Equity Conditions Measuring Period, we have not provided any holder with any non-public information; (vi) on each day during the Equity Conditions Measuring Period, neither the registration statement of which the prospectus supplement pertaining to our senior convertible preferred stock offering is a part nor the prospectus nor such prospectus supplement contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading and such registration statement, prospectus and such prospectus supplement comply with all applicable securities laws as to form and substance (unless the issuable shares of Common Stock may be sold without restriction); (vii) our transfer agent for the shares of our Common Stock is participating in the Depository Trust Company ("DTC") Fast Automated Securities Transfer Program; and (viii) all shares of our Common Stock to be issued in connection with the applicable Mandatory Redemption Date (or such other date on or event for which the Equity Conditions are required to be satisfied) are duly authorized and will be validly issued, fully paid and non-assessable upon issuance, free and clear of all liens, claims or encumbrances, and the issuance thereof will not require any further approvals of our board of directors or stockholders. "Equity Conditions Measuring Period" means the period beginning twenty (20) trading days prior to the applicable Mandatory Redemption Date (or such other date on or event for which the Equity Conditions are required to be satisfied) and ending on and including such Mandatory Redemption Date.

To the extent that we elect (or are required) to pay all or any portion of the applicable Mandatory Redemption Price in shares of our Common Stock, the applicable Stock Payment Amount will be paid as follows:

(A) twenty-one (21) trading days prior to the applicable Mandatory Redemption Date (the "First Advance Date"), we shall deliver to the holders a number of shares of our Common Stock determined by dividing (x) the Stock Payment Amount for such Mandatory Redemption Date by (y) ninety-two percent (92%) of the Daily VWAP on the trading day immediately preceding such Advance Date (the "First Advance Shares");

(B) eleven (11) trading days prior to the applicable Mandatory Redemption Date (the "Second Advance Date" and together with the First Advance Date, the "Advance Dates" and each, an "Advance Date"), we shall deliver to the holders a number of shares of our Common Stock equal to the positive difference (if any) between (x) the quotient of (1) the Stock Payment Amount and (2) the average of the five lowest Daily VWAPs during the first (10) ten trading days of the applicable Stock Payment Pricing Period and (y) the number of First Advance Shares delivered to the holders in connection with such Mandatory Redemption Date (the "Second Advance Shares" and together with the First Advance Shares, the "Advance Shares"); and

(C) not later than three (3) trading days after the applicable Mandatory Redemption Date, we shall deliver an additional number of shares of our Common Stock (the "True-Up Shares"), if any, to the holders equal to the positive difference between (a) the Stock Payment Amount divided by the Stock Payment Price for such Mandatory Redemption Date and (b) the Advance Shares; provided; however, that if clause (b) exceeds clause (a), then each holder shall return its pro rata portion of

such excess number of shares of our Common Stock to us, and such excess shares shall immediately be deemed cancelled effective as of the True Up.

"Daily VWAP" means, for any date, (i) the daily volume weighted average price of our Common Stock for such date on the NYSE Amex Equities as reported by Bloomberg; (ii) if our Common Stock is not then listed on the NYSE Amex Equities, the daily volume weighted average price of our Common Stock for such date on such other trading market where our Common Stock is then listed as reported by Bloomberg; (iii) if the foregoing do not apply, the volume weighted average price of our Common Stock in the over-the-counter market on the electronic bulletin board for our Common Stock as reported by Bloomberg, or, if no volume weighted average price is reported for such security by Bloomberg, the highest bid as reported on the "pink sheets" at the close of trading; or (iv) in all other cases, the fair market value of a share of our Common Stock as determined by an independent appraiser selected in good faith by the Required Holders and reasonably acceptable to us.

To the extent that we elect to pay all or any portion of the applicable Mandatory Redemption Price in shares of our Common Stock:

(A) to the extent that the aggregate number of Advance Shares or True-Up Shares to be delivered to a holder in respect of any individual Stock Payment Amount would cause such holder to exceed the Beneficial Ownership Limitation (as defined below under "Ownership Cap"), then, (I) the holder shall provide written notice to us that such delivery of all or a portion of the Advance Shares or True-Up Shares would cause such holder to exceed the Beneficial Ownership Limitation, and (II) in addition to delivery of the number of Advance Shares or True-Up Shares that would not cause such holder to exceed the Beneficial Ownership Limitation, we shall pay to such holder in lieu of such number of Advance Shares or True-Up Shares that would cause such holder to exceed the Beneficial Ownership Limitation (such excess number of shares, the "Excess Shares"), not more than the later of three (3) trading days after the Mandatory Redemption Date or ten (10) trading days after the date of such holder's written notice, an amount in cash equal to the portion of the Stock Payment Amount that would otherwise be payable in respect of the Excess Shares;

(B) to the extent that such Stock Payment Amount, when aggregated with any shares of our Common Stock already issued in respect of all of the Series E Preferred Shares, would cause the Maximum Share Amount to be exceeded, then that portion of such Stock Payment Amount that would not exceed the Maximum Share Amount shall be delivered to the holders hereunder in shares of our Common Stock as provided above, ratably based on the holders' relative ownership of the outstanding Series E Preferred Shares, and we shall pay to the holders, not more than three (3) trading days after the Mandatory Redemption Date, an amount in cash equal to the Stock Replacement Payment in lieu of any portion of such Stock Payment Amount that would cause the Maximum Share Amount to be exceeded;

(C) if the Equity Conditions are neither (x) satisfied nor (y) waived, on the trading day immediately preceding the First Advance Date and/or on the First Advance Date, or if the Daily VWAP cannot be determined on the trading day immediately preceding the First Advance Date, or if we fail to deliver the First Advance Shares to the holders on the First Advance Date, then the holder may, at its options upon written notice to us, require us to pay to such holder, not later than three (3) trading days after the Mandatory Redemption Date, an amount of cash equal to the Stock Replacement Payment in lieu of such Stock Payment Amount; or

(D) if subsequent to the delivery of the First Advance Shares (A) the Equity Conditions are neither (x) satisfied nor (y) waived in accordance with the terms hereof, as applicable, on any day of the Stock Payment Pricing Period or (B) if the Daily VWAP cannot be determined on any day of the Stock Payment Pricing Period, then each holder may, at its option, elect in a written notice to us to redeliver all or any portion of the Advance Shares to us and we will pay to such holder, not later than three (3) trading days after the Mandatory Redemption Date, an amount of cash equal to the Stock Replacement Payment in lieu of such portion of the Stock Payment Amount for which such holder has elected in writing to redeliver Advance Shares to us.

The “Stock Replacement Payment” shall be determined according to the following formula:

SRP = (X/Y) * S

For the purposes of the foregoing formula:

SRP = Stock Replacement Payment

X = the average Daily VWAP of the shares of our Common Stock for the applicable Stock Payment Pricing Period

Y = the Stock Payment Price for the applicable Stock Payment Pricing Period

S = the Stock Payment Amount (or, (A) in the case that either or both of Maximum Share Amount and/or Beneficial Ownership Limitation is exceeded as provided above, only that portion of such Stock Payment Amount that would exceed the Maximum Share Amount and/or Beneficial Ownership Limitation, as applicable, and/or (B) that portion of the Stock Payment Amount for which the holder has elected in its written notice to redeliver Advance Shares to us).

Any shares of our Common Stock required to be delivered by us to a holder shall be credited to such holder’s or its designee’s balance account with DTC through its Deposit/Withdrawal at Custodian system (“DWAC”).

Each mandatory redemption (and the related payment of the Mandatory Redemption Price) shall be made pro rata among the holders based on each holder’s relative percentage ownership of the outstanding Series E Preferred Shares.

Notwithstanding the delivery of a Mandatory Redemption Notice, the holder may deliver a Conversion Notice with respect to all or any portion of the specific Mandatory Redemption Shares to be redeemed on the applicable Mandatory Redemption Date at any time prior to such Mandatory Redemption Date. Any Advance Shares delivered to such holder in connection with such Mandatory Redemption Date shall count towards the number of shares of our Common Stock that we will be obligated to deliver on the applicable Share Delivery Date (as defined below), and to the extent that the Advance Shares exceeds the number of shares of our Common Stock that we would be required to deliver on the applicable Share Delivery Date, the holder shall return such excess to us.

Each and every time that we sell any shares of our Common Stock pursuant to any Equity Line, we shall immediately deliver a written notice to each holder (an “Equity Line Draw Notice”), which Equity Line Draw Notice shall state the aggregate purchase price for such shares of our Common Stock (the “Equity Line Aggregate Purchase Price”). Each holder may, at its option, by delivering a written notice to us, require us to pay the Mandatory Redemption Price (or the appropriate portion thereof) on the next succeeding Mandatory Redemption Date (or to the extent that the date of such Equity Line Draw notice is subsequent to the date of the Mandatory Redemption Notice for such Mandatory Redemption Date, then the next succeeding Mandatory Redemption Date) in shares of our Common Stock in an amount equal to its pro rata portion of the Equity Line Aggregate Purchase Price. To the extent that the Equity Line Aggregate Purchase Price exceeds the aggregate amount of the entire Mandatory Redemption Price for such Mandatory Redemption Date, then on each succeeding Mandatory Redemption Date the holder may, at its option, by delivering a written notice to us, require us to pay its pro rata portion of the applicable Mandatory Redemption Price in shares of our Common Stock until we have made aggregate payments in shares of our Common Stock equal to its pro rata portion of the entire Equity Line Aggregate Purchase Price. Notwithstanding anything to the contrary, all payments of Mandatory Redemption Price made in shares of our Common Stock shall be subject the requirement to make the appropriate Stock Replacement Payment if applicable. Pro rata portion for a holder is the number of Series E Preferred Shares then held by such holder divided by the aggregate number of outstanding Series E Preferred Shares.

Optional Redemption. We may, at our option, redeem the Series E Preferred Shares, at any time and from time to time, in whole or in part (but not less than 1,000,000 Series E Preferred Shares at any one time) for an amount equal to (a) the liquidation preference per Series E Preferred Share plus any accrued and unpaid dividends through the optional redemption date (the “Base Redemption Price”) plus (b) (i) if such

prepayment occurs on or before the twelve month anniversary of the closing, an amount equal to 15% of the Base Redemption Price or (ii) if such prepayment occurs at any time after the twelve month anniversary of the closing date, an amount equal to 10% of the Base Redemption Price (the additional amount under clause (b) being referred to as the "Additional Redemption Price"). The Base Redemption Price will be paid in cash and the Additional Redemption Price will be paid in cash or, at our option and provided (w) the Equity Conditions are satisfied (unless waived by the Required Holders), (x) the portion of the Additional Redemption Price to be paid in shares of our Common Stock does not exceed the Dollar Volume Limitation (unless waived by the Required Holders), (y) the Maximum Share Amount is not exceeded and (z) the Daily VWAP is available on the trading day immediately preceding the First Optional Redemption Advance Date and on each day of the Stock Payment Pricing Period, in shares of our Common Stock.

We will deliver written notice of optional redemption to the holders 30 trading days prior to the date we set for such optional redemption, which may not be a Mandatory Redemption Date or any day of a Stock Payment Pricing Period with respect to any mandatory redemption date. Each holder may submit a conversion notice for the specific Series E Preferred Shares to be redeemed at any time prior to the optional redemption date. The optional redemption notice will specify the number of Series E Preferred Shares to be redeemed and what portion of the Additional Redemption Price will be paid in shares of our Common Stock (expressed in dollars), what portion of the Additional Redemption Price will be paid in cash (expressed in dollars) and (A) certify that the Equity Conditions are satisfied, (B) state the Dollar Volume Limitation (expressed in dollars) and certify that the portion of the Additional Redemption Price to be paid in shares of our Common Stock does not exceeded such Dollar Volume Limitation and (C) certify that the Maximum Share Amount has not been exceeded. The optional redemption notice will be irrevocable.

To the extent that any portion of the Additional Redemption Price will be paid in shares of our Common Stock, 21 trading days prior to the optional redemption date (the "First Optional Redemption Advance Date"), we will advance to the holders a number of shares of our Common Stock determined by dividing (x) that portion of the Additional Redemption Price to be paid in shares of our Common Stock by (y) 92% of the Daily VWAP on the trading day immediately preceding the First Optional Redemption Advance Date (the "First Optional Redemption Advance Shares"). In addition, 11 trading days prior to the applicable optional redemption date (the "Second Optional Redemption Advance Date" and together with the First Optional Redemption Advance Date, the "Optional Redemption Advance Dates" and each, an "Optional Redemption Advance Date"), we will advance to the holders an additional number of shares of our Common Stock equal to the positive difference (if any) between (x) the quotient of (1) the portion of the Additional Redemption Price to be paid in shares of our Common Stock and (2) the average of the five lowest Daily VWAPs during the first 10 trading days of the applicable Stock Payment Pricing Period and (y) the number of First Optional Redemption Advance Shares delivered to the holders in connection with such optional redemption date (the "Second Optional Redemption Advance Shares" and together with the First Optional Redemption Advance Shares, the "Optional Redemption Advance Shares"). Not later than three trading days after the optional redemption date, we will deliver an additional number of shares of our Common Stock, if any, to the holder equal to the positive difference between (1) that portion of the Additional Redemption Price to be paid in shares of our Common Stock divided by the Stock Payment Price and (2) the Optional Redemption Advance Shares. If clause (2) of the immediately preceding sentence exceeds clause (1) of the immediately preceding sentence, then each holder shall return to us its pro rata portion of such excess number of shares of our Common Stock. No holder shall have any liability to us to the extent that any Optional Redemption Advance Shares that are returned to us pursuant to the immediately preceding sentence decrease in value following the applicable Optional Redemption Advance Date.

Optional Conversion by the Holders. Each holder of the Series E Preferred Shares shall have the right at any time and from time to time, at the option of such holder, to convert all or any portion of the Series E Preferred Shares held by such holder, for such number shares of our Common Stock, free and clear of any liens, claims or encumbrances, as is determined by dividing (i) the Liquidation Preference times the number of Series E Preferred Shares being converted, by (ii) the Conversion Price (as defined below) in effect on the Conversion Date (as defined below). Immediately following such conversion, the persons entitled to receive the shares of our Common Stock upon the conversion of Series E Preferred Shares shall be treated for all purposes as having become the owners of such shares of our Common Stock, subject to the rights provided

herein to holders. Pursuant to the certificate of designations, the initial "Conversion Price" was $2.0004, subject to adjustment as provided therein. As of April 11, 2011, the adjusted Conversion Price was $1.9679. The Conversion Price is subject to further adjustment in accordance with the terms of the certificate of designations.

The Conversion Price is subject to adjustment under the following circumstances:

(i) in the event we effect a stock split or combination of our outstanding Common Stock, then the conversion price then in effect will be proportionately decreased or increased, as applicable.

(ii) in the event we make, issue or set a record date for the determination of holders of our Common Stock entitled to receive a dividend or other distribution payable in shares of our Common Stock, then the conversion price shall be decreased by multiplying the conversion price then in effect by a fraction equal to: (a) the total number of shares of our Common Stock issued and outstanding immediately prior to such issuance or the close of business on such record date divided by (b) the total number of shares our Common Stock issued and outstanding immediately prior to such issuance or the close of business on such record date plus the number of shares of our Common Stock issuable in payment of such dividend or distribution.

(iii) in the event we make, issue or set a record date for the determination of holders of our Common Stock entitled to receive a dividend or other distribution payable in securities or property other than shares of our Common Stock, then an appropriate revision shall be made to conversion price then in effect such that the holders of the Series E Preferred Shares shall receive upon conversion thereof, in addition to the shares of our Common Stock to which the holders would be entitled, the number of securities or other property that they would have received had such holders converted their Series E Preferred Shares into shares of our Common Stock on the date of such event.

(iv) in the event we issue or sell shares of our Common Stock (other than as provided above in connection with a stock split or combination or the payment of certain dividends and distributions) at a price per share less than the Conversion Price, or without consideration, the Conversion Price then in effect upon each such issuance shall be adjusted by multiplying the Conversion Price by a fraction equal to: (a) the total number of shares of our Common Stock issued and outstanding immediately prior to such issuance plus the number of shares of our Common Stock which the aggregate consideration for the total number of such additional shares of our Common Stock so issued would purchase at a price per share equal to the Conversion Price then in effect divided by (b) the number of shares of our Common Stock outstanding immediately after the issuance of such additional shares.

(v) in the event we shall issue or sell any rights, warrants or options to purchase or other securities convertible into or exchangeable or exercisable for, directly or indirectly, any shares of our Common Stock or securities convertible into or exchangeable or exercisable for, directly or indirectly, shares of our Common Stock or common stock equivalents and the price per share at which such additional shares of our Common Stock may be issued pursuant to any such common stock equivalent shall be less than the Conversion Price then in effect, or if after the issuance of any common stock equivalents, the price per share at for which such additional shares of our Common Stock may be issued pursuant to any such common stock equivalent is thereafter amended or adjusted such that the price as so amended or adjusted shall be less than the Conversion Price then in effect, then the conversion price then in effect upon each such issuance or adjustment shall be adjusted by multiplying the conversion price by a fraction equal to: (a) the total number of shares of our Common Stock issued and outstanding immediately prior to such issuance plus the number of shares of our Common Stock which the aggregate consideration for the total number of such additional shares of our Common Stock so issued would purchase at a price per share equal to the conversion price then in effect divided by (b) the number of shares of our Common Stock outstanding immediately after the issuance of such additional shares.

Notwithstanding the foregoing, the Conversion Price will not be adjusted for the sale or issuance of "Excluded Securities," which are defined in the certificate of designations as the following: (a) shares of our

Common Stock or common stock equivalents issued pursuant to a stock option plan that has been approved by our Board of Directors and our stockholders, pursuant to which our securities may be issued only to a person eligible for award under such plan, (b) shares of our Common Stock or common stock equivalents issued to employees or consultants (including in connection with investor relations activities) for compensatory purposes, (c) shares of our Common Stock or common stock equivalents issued upon the exercise or conversion of common stock equivalents outstanding on the closing date for the offering of the Series E Preferred Stock, (d) shares of our Common Stock or common stock equivalents issued to investors in our common stock offering that was conducted concurrently with the offering of Series E Preferred Stock, (e) shares of our Common Stock or common stock equivalents issued in the PCT Merger, (f) shares of our Common Stock or common stock equivalents issued in the offering of the Series E Preferred Stock, including pursuant to the certificate of designations or upon exercise of the warrants offered in connection with the Series E Preferred Stock, and (g) shares of our Common Stock or common stock equivalents issued or deemed to be issued in connection with any acquisition by our company, whether through a merger, an acquisition of stock or an acquisition of assets, or a license, of any business, product, assets or technologies, or any strategic partnership, strategic investment or joint venture involving any technology or product, or any other transaction the primary purpose of which is not to raise capital; provided however, that the number of shares of our Common Stock which may be issued pursuant to this clause (g) in any transaction or series of related transactions shall not exceed 33% of the number of shares of our Common Stock outstanding immediately prior to any such transaction.

In case of any reorganization or any reclassification of our capital stock or any consolidation or merger of our company with or into any other corporation or corporations or a sale or transfer of all or substantially all of our assets to any other person or a "going private" transaction under Rule 13e-3 promulgated pursuant to the Securities Exchange Act of 1934 (the "Exchange Act"), as amended, then, as part of such reorganization, consolidation, merger, or transfer if the holders of shares of our Common Stock receive any publicly traded securities as part or all of the consideration for such reorganization, reclassification, consolidation, merger or sale, then it shall be a condition precedent of any such event or transaction that provision shall be made such that each Series E Preferred Share shall thereafter be convertible into such new securities at a conversion price and pricing formula which places the holders of Series E Preferred Shares in an economically equivalent position as they would have been if not for such event. The foregoing does not limit the right that holders of the Series E Preferred Shares have to require us to repurchase the Series E Preferred Shares. See "Mandatory Repurchase By Us" below.

Reservation of Shares Issuable Upon Conversion. We shall at all times reserve and keep available out of our authorized but unissued shares of our Common Stock, solely for the purposes of effecting the conversion and/or redemption of the Series E Preferred Shares, an number of shares of our Common Stock equal to 200% of the number of shares issuable upon conversion of the Series E Preferred Shares at the conversion price then in effect. If at any time while any of the Series E Preferred Shares remain outstanding we do not have a sufficient number of authorized and unreserved shares of our Common Stock to satisfy such obligation to reserve for issuance upon conversion and/or redemption of the Series E Preferred Shares, then we shall promptly take all action necessary to increase the number of authorized shares of our Common Stock to an amount sufficient to allow us to satisfy such obligation to reserve for issuance upon conversion and/or redemption of the Series E Preferred Shares. Without limiting the generality of the foregoing sentence, as soon as practicable after the date on which we fail to have a sufficient number of authorized but unissued shares of our Common Stock available to satisfy such obligation, but in no event later than sixty (60) days (or the lesser of (i) ninety (90) days if the proxy statement is reviewed by the staff of the Securities and Exchange Commission or (ii) ten (10) days after the staff of the SEC indicated that it has no further comments to such proxy statement) after the occurrence of such failure, we shall hold a meeting of our stockholders for the approval of an increase in the number of authorized shares of our Common Stock. In connection with such meeting, we shall provide each stockholder with a proxy statement and shall use our reasonable best efforts to solicit our stockholders' approval of such increase in authorized shares of our Common Stock and to cause our board of directors to recommend to the stockholders that they approve such proposal.

Fractional Shares. No fractional shares shall be issued upon the conversion of any Series E Preferred Shares. All shares of our Common Stock (including fractions thereof) issuable upon conversion of more than one Series E Preferred Share by a holder thereof and all Series E Preferred Shares issuable upon the purchase thereof shall be aggregated for purposes of determining whether the conversion and/or purchase would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion and/or purchase would result in the issuance of a fraction of a share of our Common Stock, we shall, in lieu of issuing any fractional share, either round up the number of shares to the next highest whole number or, at our option, pay the holder otherwise entitled to such fraction a sum in cash equal to the fair market value of such fraction on the conversion date (as determined in good faith by our Board of Directors).

Failure to Redeliver. If any holder fails to re-deliver shares of our Common Stock to us within ten (10) trading days of being required to do so in connection with a Mandatory Redemption or an optional redemption by us, then, unless such shares of Common Stock have been called by us, we may, at our option, redeem a number of Series E Preferred Shares having a Liquidation Preference equal in value to the product of (x) such number of shares of our Common Stock and (y) the Stock Payment Price for such Mandatory Redemption Date or Optional Redemption Date, the case may be, in lieu of requiring such holder to return such shares of Common Stock.

Mandatory Repurchase by Us. Each holder of Series E Preferred Shares shall have the unilateral option and right to compel us to repurchase for cash any or all of such holder's Series E Preferred Shares within three days of a written notice requiring such repurchase (provided that no written notice shall be required for if any of the events described in clauses (v) and (vi) below occur and demand for repurchase shall be deemed automatically made upon the occurrence of any of those events), at a price per Series E Preferred Share equal to the sum of (a) the liquidation preference plus (b) any and all accrued and unpaid dividends on the Series E Preferred Shares (the sum of (a) and (b), the "Base Mandatory Repurchase Price") plus (c) (i) if such demand for repurchase occurs on or before the twelve month anniversary of the closing date, an amount equal to 15% of the Base Mandatory Repurchase Price, or (ii) if such demand for repurchase occurs at any time after the twelve month anniversary of the closing date, an amount equal to 10% of the Base Mandatory Repurchase Price, if any of the following events shall have occurred or are continuing:

(i) A Change in Control Transaction (as defined below);

(ii) A "going private" transaction under SEC rules;

(iii) A tender offer by our company under SEC Rule 13e-4;

(iv) the suspension from trading or the failure of our Common Stock to be listed on a trading market for a period of five consecutive trading days or for more than an aggregate of 10 trading days in any 365-day period;

(v) the entry by a competent court of (i) a decree or order for relief pertaining to our company or any of our subsidiaries under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law or (ii) a decree or order adjudging our company or any of our subsidiaries as bankrupt or insolvent or (iii) appointing a custodian, receiver, trustee or other similar official for our company or any of our subsidiaries or of any substantial part of our property, or ordering the liquidation of our company's affairs, and the continuance of any such decree or order for a period of 60 consecutive days;

(vi) the commencement by our company or any of our subsidiaries of a voluntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law, or the consent by us to the entry of a decree or order for relief in an involuntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against our company, or the consent by us to the appointment of or taking possession by a custodian, receiver, trustee or other similar official of our company or of any substantial part of our property, or the making by us of an assignment for the benefit of creditors, or the admission by our company in writing of its inability to pay its debts generally as they become due;

(vii) following an Authorized Share Failure (as defined), our failure to receive stockholder approval to approve the required increase in the number of shares of our Common Stock within five days after the Meeting Outside Date (as defined); or

(viii) our failure to deliver shares of our Common Stock on any Share Delivery Date, Advance Date, mandatory redemption date or optional redemption date, if such failure continues for two (2) trading days after the date that delivery of shares of Common Stock is due;

(ix) our failure to pay any amounts when and as due pursuant to the certificate of designations or any other document relating to the issuance of the Series E Preferred Shares, if such failure continues for two (2) trading days after the date that such payment is due;

(x) our breach of certain covenants contained in the certificate of designations and the stock purchase agreement;

(xi) our company or any of its subsidiaries shall (A) default in any payment of any amount or amounts of principal of or interest on any indebtedness the aggregate principal amount of which indebtedness is in excess of $1,000,000 or (B) default in the observance or performance of any other agreement or condition relating to any such indebtedness, or any other event shall occur or condition exist, as a result of which the holder or holders or beneficiary or beneficiaries of such indebtedness or a trustee on their behalf have declared such indebtedness to be due prior to its stated maturity;

(xii) the effectiveness of the registration statement pertaining to the Series E Preferred Shares or the ability to use the applicable prospectus supplement and the prospectus lapses for any reason and continues for a period of 10 consecutive days or for more than an aggregate of 20 days in any 365-day period;

(xiii) we breach any representation, warranty, covenant or other term or condition of the certificate of designations, the stock purchase agreement or the warrant to be issued with the Series E Preferred Shares, except to the extent that such breach would not have a material adverse effect (as defined in the stock purchase agreement), and except in the case of a breach of a covenant which is curable, only if such breach remains uncured for a period of at least 10 calendar days (the events described in clauses (v), (vi), (viii), (ix), (x), (xi), (xii) and (xiii) are collectively referred to as the “Trigger Events” and each, as a “Trigger Event”).

A “Change in Control Transaction” will be deemed to exist if (i) there occurs any consolidation or merger of our company with or into any other corporation or other entity or person (whether or not our company is the surviving corporation), or any other corporate reorganization or transaction or series of related transactions in which in excess of 50% of the voting power in our company is transferred through a merger, consolidation, tender offer or similar transaction, (ii) any person, together with its affiliates and associates, beneficially owns or is deemed to beneficially own (as described in Rule 13d-3 under the Exchange Act without regard to the 60-day exercise period) in excess of 50% of the voting power in our company (provided, however, that if any person is immediately prior to the closing date a beneficial owner of 40% or more of our Common Stock, it shall not be deemed to be a Change of Control Transaction if such person increases its beneficial ownership percentage by not more than 10 percentage points), (iii) there is a replacement of more than one-half of the members of our board of directors which is not approved by those individuals who are members of our board on the date thereof, in one or a series of related transactions or (iv) a sale or transfer of all or substantially all of our assets, determined on a consolidated basis; provided, however, that a Change in Control Transaction will not be deemed to have occurred pursuant to clause (iv) if such sale or transfer is the sale or transfer of not more than one business segment during the period from the closing of the offering of the Series E Preferred Shares (November 19, 2010) through the Maturity Date and we remain a publicly traded corporation and if, on the effective date of the sale or transfer described therein, we deposit funds in the escrow account (as defined in the stock purchase agreement) such that the balance in the escrow account after such deposit is the lesser of $5 million or 100% of the aggregate liquidation preference of the outstanding Series E Preferred Shares.

Ownership Cap. Notwithstanding anything to the contrary set forth herein, at no time may we issue to a holder, shares of our Common Stock if the number of shares of our Common Stock to be issued pursuant to such issuance would exceed, when aggregated with all other shares of our Common Stock beneficially owned by such holder at such time (as determined in accordance with relevant Exchange Act rules), the number of shares of our Common Stock that would result in the holder beneficially owning (as determined in accordance with relevant Exchange Act rules) more than 4.9% (the "Beneficial Ownership Limitation") of our then issued and outstanding Common Stock. Each holder shall have the right (with respect to itself only) to waive such ownership cap upon not less than sixty-five (65) days' prior notice to us. Notwithstanding the foregoing, the holder shall have the right to: (A) at any time and from time to time immediately reduce the Beneficial Ownership Limitation and (B) (subject to waiver) at any time and from time to time, increase the Beneficial Ownership Limitation immediately in the event of the announcement as pending or planned of a Change in Control Transaction.

Participation. The holders of the Series E Preferred Shares shall be entitled to such dividends paid and distributions made to the holders of shares of our Common Stock to the same extent as if such holders of the Series E Preferred Shares had converted the Series E Preferred Shares into shares of our Common Stock (without regard to any limitations on conversion herein or elsewhere) and had held such shares of Common Stock on the record date for such dividends and distributions.

Voting Rights. Except as expressly provided in the certificate of designations, holders of the Series E Preferred Shares shall not have any voting rights. So long as any Series E Preferred Shares are outstanding, in addition to any other vote or consent of our stockholders required by law or by our amended and restated certificate of incorporation and except where the vote or written consent of holders of a greater than number of shares is required by law or by another provision of our amended and restated certificate of incorporation, the affirmative vote, at a meeting duly called for such purpose or the written consent without a meeting, of the holders of at least a majority of the Series E Preferred Shares then outstanding, voting together as a single class, shall be required before we may: (a) amend or repeal any provision of, or add any provision to, the certificate of designations governing the Series E Preferred Shares, our amended and restated certificate of incorporation or bylaws, or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of preferred stock, if any such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the Series E Preferred Shares, regardless of whether any such action shall be by means of amendment to our certificate of incorporation or by merger, consolidation or otherwise; (b) increase or decrease (other than by conversion) the authorized number of Series E Preferred Shares (we may increase or decrease our number of authorized shares of undesignated "blank check" preferred stock); (c) create or authorize (by reclassification or otherwise) any new class or series of shares that has a preference over or is on a parity with the Series E Preferred Shares with respect to dividends or the distribution of assets on a Liquidation Event; (c) purchase, repurchase or redeem any shares of our Common Stock or other shares of our capital stock; (e) pay dividends or make any other distribution on our Common Stock or other capital stock; (f) whether or not prohibited by the terms of the Series E Preferred Shares, circumvent a right of the Series E Preferred Shares.

Ranking. The Series E Preferred Shares shall rank senior to our Common Stock and any other class or series of our stock now existing or hereinafter authorized over which the Series E Preferred Shares has preference or priority in the payment of dividends or in the distribution of assets on any voluntary or involuntary dissolution or winding up of our affairs. Without the prior written consent of the Required Holders, we may not authorize or issue additional or other capital stock that is of senior or *pari-passu* rank to the Series E Preferred Shares in respect of preferences as to dividends and other distributions, amortization and redemption payments and payments upon a liquidation event without the prior express written consent of the holders of a majority of the Series E Preferred Shares. We may issue preferred stock that is junior in rank to the Series E Preferred Shares in respect of the preferences as to dividends and other distributions, amortization and redemption payments and payments upon a liquidation event, provided, that the maturity date (or any other date requiring redemption, repayment or any other payment, including without limitation, dividends) of any such junior preferred shares is not on or before ninety-one (91) days after the maturity date for the Series E Preferred Shares.

Options

As of April 11, 2011, we had outstanding options to purchase an aggregate of approximately 19,067,595 shares of our Common Stock with exercise prices ranging from $0.71 to $15.00 per share, with an approximate weighted average exercise price of $1.82 per share. The shares of our Common Stock underlying all such options are or will be registered for sale with the SEC prior to exercises.

Warrants

As of April 11, 2011, we had outstanding warrants to purchase an aggregate of 25,137,010 shares of our Common Stock with exercise prices ranging from $0.50 to $7.00, consisting of: warrants to purchase an aggregate of 7,128,259 shares of our Common Stock at an approximate weighted average exercise price of $2.54 per share and warrants to purchase an aggregate of 95,250 shares of our Common Stock at an exercise price of $6.50 per share, certain of which are redeemable if our Common Stock trades at specified prices starting at a minimum of $2.40; Class A Warrants to purchase an aggregate of 635,000 shares of our Common Stock at an exercise price of $6.00 per share (redemption threshold of $8.00); Series D Warrants to purchase 12,932,512 shares of our Common Stock at an exercise price of $2.50 per share (redemption threshold of $3.50, except for the warrant held by RimAsia, which has a $5.00 redemption threshold); warrants (issued in connection with the November 2010 Preferred Stock Offering (as hereinafter defined)) to purchase an aggregate of 1,345,989 shares of our Common Stock at a current exercise price of $2.0510 (redemption threshold of twice the exercise price); and three series of warrants (issued in connection with the PCT Merger) to purchase up to 1,000,000 shares of our Common Stock per series (3,000,000 shares in the aggregate), at exercise prices of $3.00, $5.00 and $7.00, respectively, per share, and redeemable in certain circumstances (the “PCT Merger Warrants”). The holders of a vast majority of such warrants have registration rights for the shares underlying the warrants.

Class A Warrants

General. Each Class A warrant entitles the holder to purchase one share of our Common Stock at an exercise price per share of $6.00. The exercise price per share of each Class A warrant is subject to adjustment upon the occurrence of certain events as provided in the Class A warrant certificate and summarized below. The Class A warrants may be exercised at any time until July 16, 2012, which is the expiration date, unless redeemed. The Class A warrants which have not previously been exercised will expire on the expiration date. A Class A warrant holder will not be deemed to be a holder of the underlying Common Stock for any purpose until the Class A warrant has been properly exercised.

Redemption. In the event our Common Stock is trading at a price equal to or exceeding the redemption threshold of $8.00 per share for 20 consecutive trading days, we have the option to call the Class A warrants. If the holders of the Class A warrants have not exercised the Class A warrants within 30 days of the written notice to call, we may redeem the Class A warrants at $0.001 per warrant. We will send the written notice of call by first class mail to Class A warrant holders at their last known addresses appearing on the registration records maintained by the transfer agent for the Class A warrants. No other form of notice by publication or otherwise will be required. If we call any Class A warrants for redemption, they will be exercisable until the close of business on the business day next preceding the specified redemption date.

Exercise. A Class A warrant holder may exercise our Class A warrants only if an appropriate registration statement is then in effect with the SEC and if the shares of our Common Stock underlying the Class A warrants are qualified for sale under the securities laws of the state in which the holder resides.

During the term of the Class A warrants, the holders thereof are given the opportunity to profit from a rise in the market of our Common Stock, with a resulting dilution in the interest of all other stockholders. So long as the Class A warrants are outstanding, the terms on which we could obtain additional capital may be adversely affected. The holders of the Class A warrants might be expected to exercise them at a time when we would, in all likelihood, be able to obtain any needed capital by a new offering of securities on terms more favorable than those provided by the Class A warrants.

Adjustments of Exercise Price. The exercise price and redemption price of the Class A warrants are subject to adjustment in specified circumstances, including in the event we declare any stock dividend to stockholders or effect any split or reverse split with respect to our Common Stock after the issuance thereof.

Therefore, if we effect any stock split or reverse split with respect to our Common Stock, the exercise price in effect immediately prior to such stock split or reverse split will be proportionately reduced or increased, respectively. Any adjustment of the exercise price will also result in an adjustment of the number of shares purchasable upon exercise of a Class A warrant or, if we elect, an adjustment of the number of Class A warrants outstanding. The Class A warrants do not contain provisions protecting against dilution resulting from the sale of additional shares of our Common Stock for less than the exercise price of the Class A warrants or the current market price of our Common Stock.

No Voting and Dividend Rights. Until exercised, the Class A warrants will have no voting, dividend or other stockholder rights.

Class D Warrants

Each Class D warrant entitles the holder to purchase one share of our Common Stock at an exercise price per share of $2.50. The exercise price per share of each Class D warrant is subject to adjustment upon the occurrence of certain events as provided in the Class D warrant certificate and summarized below. The Class D warrants may be exercised at any time during their five year term, or eight year term in the case of a Class D warrant to purchase an aggregate of 4,000,000 shares held by RimAsia Capital Partners, L.P., a Cayman Islands exempted limited partnership and an affiliate of NeoStem ("RimAsia"), unless redeemed. The Class D warrants which have not been previously exercised will expire at the expiration date. A Class D warrant holder will not be deemed to be a holder of the underlying Common Stock for any purpose until the Class D warrant is exercised.

In the event our Common Stock is trading at a per share price equal to or exceeding the redemption threshold of $3.50, or $5.00 in the case of the Class D warrant held by RimAsia, for twenty consecutive trading days, we have the option to call the Class D warrants. If the holders of Class D warrants have not exercised the Class D Warrants within 30 days of the written notice to call, we may redeem the Class D warrants at $0.001 per warrant. We will send the written notice of call by first class mail to Class D warrant holders at their last known addresses appearing on the registration records maintained by the transfer agent of the Class D warrants. No other form of notice by publication or otherwise will be required. If we call any Class D Warrants for redemption, they will be exercisable until close of business on the business day next preceding the specified redemption date.

The exercise price and redemption price of the Class D warrants are subject to adjustment in specified circumstances, including in the event we declare any stock dividend to stockholders or effect any split or reverse split with respect to our Common Stock after the issuance thereof. Therefore, if we effect any stock split or reverse split with respect to our Common Stock, the exercise price in effect immediately prior to such stock split or reverse split will be proportionately reduced or increased, respectively. Any adjustment of the exercise price will also result in an adjustment of the number of shares purchasable upon exercise of a Class D warrant or, if we elect, an adjustment of the number of Class D warrants outstanding. The Class D warrants do not contain provisions protecting against dilution resulting from the sale of additional shares of our Common Stock for less than the exercise price of the Class D warrants or the current market price of our Common Stock.

Until exercised, the Class D warrants will have no voting, dividend or other stockholder rights.

Warrants Issued in Our November 2010 Common Stock Offering

On November 19, 2010, in connection with a public offering of our Common Stock and certain warrants, we issued (i) 6,337,980 shares of our Common Stock and (ii) warrants to purchase up to 3,168,993 shares of our Common Stock (the "November 2010 Common Stock Offering"). The material terms and provisions of the warrants issued in connection with our November 2010 Common Stock Offering are summarized below.

Term; Exercise Price and Exercisability. The warrants issued in our November 2010 Common Stock Offering represent the rights to purchase up to an aggregate of 3,168,993 shares of our Common Stock. Each warrant will have an exercise price of $1.85 per share, will be exercisable six months after issuance and will expire five years from the date of issuance. The number of warrant shares that may be acquired by any holder upon any exercise of the warrant will be limited to the extent necessary to insure that, following such exercise (or other issuance), the total number of shares of our Common Stock then beneficially owned by such holder

and its affiliates and any other persons whose beneficial ownership of common stock would be aggregated with the holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, does not exceed 4.99% of the total number of issued and outstanding shares of our Common Stock (including for such purpose the shares of our Common Stock issuable upon such exercise), which is referred to as the "beneficial ownership limitation." The holder may elect to change this beneficial ownership limitation from 4.99% to 9.99% of the total number of issued and outstanding shares of our Common Stock (including for such purpose the shares of our Common Stock issuable upon such exercise) upon providing us with not less than 61 days' prior written notice.

Call Provision. Subject to certain exceptions, while the warrants are outstanding, if the volume weighted average price of a share of our Common Stock for each of 20 consecutive Trading Days (the "Measurement Period," which 20 consecutive Trading Day period shall not have commenced until after the Initial Exercise Date) exceeds $3.70 (subject to adjustment), (i) the average daily volume for such Measurement Period exceeds $100,000 per Trading Day (subject to adjustment) and (ii) the holder is not in possession of any information that constitutes, or might constitute, material non-public information which was provided by us, then we may, within 1 Trading Day of the end of such Measurement Period, upon notice, call for cancellation of all or any portion of the warrants (a "Call") for consideration equal to $0.001 per share. Our right to Call the warrants shall be exercised ratably among the holders based on each holder's initial purchase of warrants from us.

Fundamental Transaction. If, at any time while the warrants are outstanding, (1) we consolidate or merge with or into another corporation, (2) we sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets, (3) any purchase offer, tender offer or exchange offer (whether by us or another individual or entity) is completed pursuant to which holders of our Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of our outstanding Common Stock or (4) we effect any reclassification or recapitalization of our Common Stock or any compulsory share exchange pursuant to which our Common Stock is converted into or exchanged for other securities, cash or property (each, a "Fundamental Transaction"), then upon any subsequent exercise of the warrants, each holder thereof will have the right to receive the same amount and kind of securities, as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of warrant shares then issuable upon exercise of the warrant, and any additional consideration payable as part of the Fundamental Transaction; *provided*, *however*, that in the event of a change of control transaction (as defined in the warrant) other than one in which the successor entity is a publicly traded corporation whose stock is listed or quoted for trading on the New York Stock Exchange, NASDAQ markets or the NYSE Amex and results in the warrants being exercisable for publicly traded common stock of such successor entity, at the request of a holder of a warrant delivered before the 90th calendar day after consummation of such change of control transaction, we (or the successor entity) will purchase the warrant by paying to the holder, cash in an amount equal to the Black Scholes value, as described in the warrant, of the remaining unexercised portion of the warrant on the date of consummation of such change of control transaction.

Certain Adjustments. The exercise price and the number of shares of our Common Stock purchasable upon the exercise of the warrants are subject to adjustment upon the occurrence of specific events, including stock dividends, stock splits, combinations and reclassifications of our Common Stock. Additionally, the exercise price of the warrants issued to the investors is subject to certain adjustments if we (i) issue rights, options or warrants to all holders of our Common Stock (and not to the warrant holder) entitling them to subscribe for or purchase shares of our Common Stock at a price per share less than the volume weighted average price (the "VWAP") of our Common Stock on the record date for the determination of stockholders entitled to receive such rights, options or warrants, or (ii) distribute to all holders of our Common Stock (and not to the warrant holder) evidences of our indebtedness or assets (including cash and cash dividends) or rights or warrants to purchase any security.

Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the warrants. As to any fraction of a share which the holder would otherwise be entitled to

purchase upon such exercise, we will, at our election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price or round up to the next whole share.

Exchange Listing. We do not plan on making an application to list the warrants on the NYSE Amex or any other national securities exchange or recognized trading system. Our Common Stock underlying the warrants is listed on the NYSE Amex.

The description of the warrants contained herein does not purport to be complete and is qualified in its entirety by reference to the form of warrant, which was filed as Exhibit 4.1 to our Current Report on Form 8-K filed with the SEC on November 16, 2010 in connection with the November 2010 Common Stock Offering.

Warrants Issued in Our November 2010 Preferred Stock Offering

On November 19, 2010, in connection with a registered direct placement of certain preferred stock, warrants and Common Stock, we issued (i) 10,582,011 shares of our Series E Preferred Stock, (ii) warrants to purchase up to 1,322,486 shares of our Common Stock (subject to adjustment) and (iii) 164,418 shares of our Common Stock (the "November 2010 Preferred Stock Offering"). The material terms and provisions of the warrants issued in connection with our November 2010 Preferred Stock Offering are summarized below.

Term; Exercise Price and Exercisability. As of April 11, 2011, the warrants issued in our November 2010 Preferred Stock Offering represent the rights to purchase up to an aggregate of 1,345,989 shares of our Common Stock (as adjusted). Each warrant will have an exercise price of $2.0510 per share (as adjusted), will be exercisable six months after issuance and will expire three years from the date of issuance. The number of warrant shares that may be acquired by any holder upon any exercise of the warrant will be limited to the extent necessary to insure that, following such exercise, the total number of shares of our Common Stock then beneficially owned by such holder and its affiliates and any other persons whose beneficial ownership of our Common Stock would be aggregated with the holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, does not exceed 4.9% of the then issued and outstanding shares of our Common Stock (including for such purpose the shares of our Common Stock issuable upon such exercise), which is referred to as the "beneficial ownership limitation." However, in the event of the announcement of a Change in Control Transaction (as defined in the certificate of designations with respect to the Series E Preferred Stock), the holder will have the right to (A) at any time and from time to time immediately reduce the beneficial ownership limitation and (B) (subject to waiver) at any time and from time to time, increase the beneficial ownership limitation immediately.

Exercise Elected by Us. Subject to certain exceptions, while the warrants are outstanding, if the daily volume weighted average price (the "Daily VWAP") of a share of our Common Stock for each of 20 trading days out of 30 consecutive trading days (the "Trigger Period") has remained at least 100% above the exercise price, then we may, subject to certain conditions, require the holder to exercise the warrant in full upon not less than 10 business days prior written notice (the "Mandatory Notice Period"). Notwithstanding such a notice, the holder may exercise the warrant at any time during the Mandatory Notice Period. Our right to require the exercise of the warrants is subject to the following additional conditions: (i) during each trading day of the Trigger Period and during each trading day of the Mandatory Notice Period, the Equity Conditions (as defined below) shall be satisfied; and (ii) the Daily VWAP of our Common Stock has remained at or above 100% of the exercise price during all trading days in the Mandatory Notice Period.

"Equity Conditions" means each of the following: (i) on each day of the Trigger Period and on each day of the Mandatory Notice Period, all warrants shares shall be eligible for resale by the holder without restriction and without need for additional registration under any applicable federal or state securities laws and we shall have no knowledge of any fact that would cause any warrant shares not to be so eligible for resale by the holder without restriction and without the need for additional registration under any applicable federal or state securities laws; (ii) on each day during the Trigger Period and the Mandatory Notice Period, our Common Stock is designated for listing on a Trading Market (as defined in the certificate of designations with respect to the Series E Preferred Stock) and shall not have been suspended from trading on such Trading Market nor shall delisting or suspension by such exchange or market have been threatened or pending in writing by such Trading Market nor shall there be any Securities and Exchange Commission or judicial stop

trade order or trading suspension stop order; (iii) any warrant shares may be issued in full without violating the rules or regulations of the Trading Market or any applicable laws; (iv) on each day during the Trigger Period and the Mandatory Notice Period, there shall not have occurred and be continuing, unless waived by the holder, either (A) a Trigger Event (as defined in the certificate of designations with respect to the Series E Preferred Stock) or (B) an event that with the passage of time or giving of notice would constitute a Trigger Event; (v) on each day during the Trigger Period and the Mandatory Notice Period, we have not provided the holder with any non-public information; (vi) on each day during the Trigger Period and the Mandatory Notice Period, neither the registration statement, the prospectus supplement nor the prospectus applicable to the November 2010 Preferred Stock Offering contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made not misleading, and the prospectus supplement and the prospectus comply with all applicable securities laws as to form and substance, (vii) the transfer agent for our Common Stock is participating in the Depository Trust Company ("DTC") Fast Automated Securities Transfer Program; and (viii) all warrants shares are duly authorized and will be validly issued, fully paid and non-assessable upon issuance, free and clear of all liens, claims or encumbrances, and the issuance of the warrant shares will not require any further approvals of our Board of Directors or stockholders.

Certain Adjustments. The exercise price and the number of shares of Common Stock purchasable upon the exercise of the warrants are subject to adjustment upon the occurrence of specific events, including stock dividends, stock splits, combinations and reclassifications of our Common Stock. Additionally, the exercise price of the warrants is subject to certain weighted average adjustments if NeoStem issues or sells any additional shares of Common Stock or common stock equivalents at a price per share less than the exercise price then in effect, or without consideration, the exercise price then in effect will be adjusted. Notwithstanding the foregoing, there will be no adjustment to the exercise price with respect to the sale or issuance of certain Excluded Securities, as defined in the certificate of designations with respect to the Series E Preferred Stock. See "Series E 7% Senior Convertible Preferred Stock — Optional Conversion by the Holders." As of April 11, 2011, (i) the exercise price of the warrants had been adjusted to $2.0510, and (ii) the number of shares of Common Stock purchasable upon the exercise of the warrants had been adjusted (in the aggregate) to 1,345,989 shares of Common Stock.

Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the warrants. As to any fraction of a share which the holder would otherwise be entitled to purchase upon such exercise, we will, at our election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price or round up to the next whole share.

Exchange Listing. We do not plan on making an application to list the warrants on the NYSE Amex or any other national securities exchange or recognized trading system. Our Common Stock underlying the warrants is listed on the NYSE Amex.

The description of the warrants contained herein does not purport to be complete and is qualified in its entirety by reference to the form of warrant, which was filed as Exhibit 4.2 to our Current Report on Form 8-K filed with the SEC on November 16, 2010 in connection with our November 2010 Preferred Stock Offering.

Warrants Issued in Connection With the PCT Merger

In connection with the closing of the PCT Merger on January 19, 2011 (and in addition to the Common Stock consideration for the PCT Merger which we deposited into an escrow account), we issued seven-year warrants to purchase an aggregate 3,000,000 shares of our Common Stock (collectively, the "PCT Merger Warrants"). The PCT Merger Warrants are being delivered in book entry form to the former members of PCT after receipt by us of an appropriate letter of transmittal from the respective former member. The PCT Merger Warrants are divided into three series as follows: (i) warrants to purchase an aggregate 1,000,000 shares of our Common Stock at an exercise price of $3.00 per share (the "$3.00 Warrants"); (ii) warrants to purchase an aggregate 1,000,000 shares of our Common Stock at an exercise price of $5.00 per share (the "$5.00 Warrants"); and (iii) warrants to purchase an aggregate 1,000,000 shares of our Common Stock at an exercise price of $7.00 per share, and which will vest only if the $7.00 Warrant Condition (as defined below) is

accomplished within three years of the closing of the PCT Merger (the "$7.00 Warrants"). The material terms and provisions of the PCT Merger Warrants are summarized below.

$3.00 Warrants and $5.00 Warrants

General. Each $3.00 Warrant and $5.00 Warrant entitles the holder to purchase one share of Common Stock at an exercise price per share of $3.00 and $5.00, respectively. The exercise price per share of each $3.00 Warrant and $5.00 Warrant is subject to adjustment upon the occurrence of certain events as provided in the applicable warrant certificate and summarized below. The $3.00 Warrants and $5.00 Warrants may be exercised at any time during their seven year term, unless redeemed. The $3.00 Warrants and $5.00 Warrants which have not been previously exercised will expire at the expiration date. Holders of the warrants will not be deemed to be a holder of the underlying Common Stock for any purpose until such warrant is exercised. As described below, the Warrants are redeemable in certain circumstances. Transfer of the shares issuable upon exercise of the Warrants is restricted until the one year anniversary of the Closing Date.

Redemption. In the event Common Stock is trading at a per share price equal to or exceeding the redemption threshold of $5.00 with respect to the $3.00 Warrant or $7.00 with respect to the $5.00 Warrant for twenty (20) out of thirty (30) consecutive trading days, NeoStem has the option to call the applicable warrant. If the warrant holders have not exercised the warrants within 14 days of the redemption notice, NeoStem may redeem the warrants at $0.001 per warrant. NeoStem will send the redemption notice by first class mail to warrant holders at their last known addresses appearing on the registration records maintained by the transfer agent of the warrants. No other form of notice by publication or otherwise will be required. If NeoStem calls any warrants for redemption, they will be exercisable until close of business on the business day next preceding the specified redemption date. Notwithstanding the foregoing, NeoStem may not redeem the Warrants unless (i) NeoStem waives the lock-up provisions in the applicable Warrant and (ii) the issuance of the shares underlying the Warrants is covered by an effective registration statement or there is an effective resale registration statement available to the holders of the Warrants with respect to the shares underlying the Warrants.

Adjustments of Exercise Price. The exercise price and redemption price of the warrants are subject to adjustment in specified circumstances, including in the event (i) there is a merger or consolidation and NeoStem is not the surviving corporation; (ii) there is subdivision, combination or reclassification of securities, recapitalization, automatic conversion, or other similar event affecting the number or character of outstanding shares of Common Stock; or (iii) NeoStem declares any stock dividend to stockholders or effects any split or reverse split with respect to the Common Stock after the issuance thereof. The warrants do not contain provisions protecting against dilution resulting from the sale of additional shares of Common Stock for less than the exercise price of the warrants or the current market price of the Common Stock.

No Voting and Dividend Rights. Until exercised, the holders of the warrants will have no voting, dividend or other stockholder rights.

Registration Rights. NeoStem has agreed to use its commercially reasonable efforts to maintain the effectiveness of a registration statement covering the shares underlying the Warrants at any time that both (a) the Warrants are exercisable and (b) the exercise price of the Warrants is less than 105% of the price at which the Common Stock is trading on the NYSE Amex (or, such other stock exchange on which the Common Stock trades). Under certain limited circumstances, if a registration statement is not effective or a prospectus supplement is not available during the last 20 business days prior to the expiration date of the Warrants, the exercise period of the Warrants would be extended for a period of 20 business days following such effectiveness or availability.

$7.00 Warrants

General. Each $7.00 Warrant entitles the holder to purchase one share of Common Stock at an exercise price per share of $7.00. The exercise price per share of each $7.00 Warrant is subject to adjustment upon the occurrence of certain events as provided in the $7.00 Warrant certificate and summarized below. The $7.00 Warrants may be exercised only if the $7.00 Warrant Condition (as defined below) is satisfied and at any time thereafter during their seven year term, unless redeemed. The $7.00 Warrants which have not been previously exercised will expire at the expiration date. A $7.00 Warrant holder will not be deemed to be a holder of the underlying Common Stock for any purpose until the $7.00 Warrant is exercised.

Performance Condition. The $7.00 Warrant Condition is a performance condition that provides that the $7.00 Warrants will not vest and will not become exercisable unless PCT secures, prior to the third annual anniversary of the Closing Date, one or more material binding commercial manufacturing contracts with one or more third parties, each on an arm's length basis, which commercial manufacturing contracts result in aggregate revenues to PCT in excess of $5 million per year over a period of at least 3 years and in the reasonable judgment of NeoStem's Board of Directors the manufacturing contracts will be profitable each year during the term of such contracts in accordance with GAAP.

Redemption. In the event Common Stock is trading at a per share price equal to or exceeding the redemption threshold of $9.00 for twenty (20) out of thirty (30) consecutive trading days, NeoStem has the option to call the $7.00 Warrants. If the holders of $7.00 Warrants have not exercised the $7.00 Warrants within 14 days of the redemption notice, NeoStem may redeem the $7.00 Warrants at $0.001 per warrant. NeoStem will send the redemption notice by first class mail to $7.00 Warrant holders at their last known addresses appearing on the registration records maintained by the transfer agent of the $7.00 Warrants. No other form of notice by publication or otherwise will be required. If NeoStem calls any $7.00 Warrants for redemption, they will be exercisable until close of business on the business day next preceding the specified redemption date. Notwithstanding the foregoing, NeoStem may not redeem the $7.00 Warrants unless (i) NeoStem waives the lock-up provisions in the applicable Warrant, (ii) the issuance of the shares of Common Stock underlying the $7.00 Warrants is covered by an effective registration statement or there is an effective resale registration statement available to the holders of the $7.00 Warrants with respect to such shares and (iii) the $7.00 Warrant Condition has been achieved or NeoStem waives the $7.00 Warrant Condition concurrently with its provision of the redemption notice.

Adjustments of Exercise Price. The exercise price and redemption price of the $7.00 Warrants are subject to adjustment in specified circumstances, including in the event (i) there is a merger or consolidation and NeoStem is not the surviving corporation; (ii) there is subdivision, combination or reclassification of securities, recapitalization, automatic conversion, or other similar event affecting the number or character of outstanding shares of Common Stock; or (iii) NeoStem declares any stock dividend to stockholders or effect any split or reverse split with respect to the Common Stock after the issuance thereof. The $7.00 Warrants do not contain provisions protecting against dilution resulting from the sale of additional shares of Common Stock for less than the exercise price of the $7.00 Warrants or the current market price of the Common Stock.

No Voting and Dividend Rights. Until exercised, the $7.00 Warrants will have no voting, dividend or other stockholder rights.

Registration Rights. NeoStem has agreed to use its commercially reasonable efforts to maintain the effectiveness of a registration statement covering the shares underlying the Warrants at any time that both (a) the Warrants are exercisable and (b) the exercise price of the Warrants is less than 105% of the price at which the Common Stock is trading on the NYSE Amex (or, such other stock exchange on which the Common Stock trades). Under certain limited circumstances, if a registration statement is not effective or a prospectus supplement is not available during the last 20 business days prior to the expiration date of the Warrants, the exercise period of the Warrants would be extended for a period of 20 business days following such effectiveness or availability.

The above description of the PCT Merger Warrants does not purport to be complete and is qualified in its entirety by reference to the Warrant Agreement (with the forms of $3.00 Warrant, $5.00 Warrant and $7.00 Warrant attached thereto), which was filed as Exhibit 4.1 to our Current Report on Form 8-K dated January 18, 2011 and filed with the SEC on January 24, 2011 in connection with the closing of the PCT Merger.

Anti-Takeover Effects of Certain Provisions of Delaware Law and Our Certificate of Incorporation and Bylaws

Our Amended and Restated Certificate of Incorporation and bylaws contain a number of provisions that could make our acquisition by means of a tender or exchange offer, a proxy contest or otherwise more difficult. These provisions are summarized below.

Classified Board of Directors. Pursuant to Article ELEVENTH of our Amended and Restated Certificate of Incorporation, the directors constituting our Board of Directors are classified, with respect to the time for which they severally hold office, into three classes as nearly equal in number as possible. In implementing the classified Board, our Board of Directors assigned members of the Board of Directors already in office into three classes, with one class assigned a term expiring at the annual meeting of stockholders to be held in 2010, a second class assigned a term expiring at the annual meeting of stockholders to be held in 2011, and a third class assigned a term expiring at the annual meeting of stockholders to be held in 2012, with each class to hold office until its successor is elected and qualified. At each annual meeting of stockholders commencing with the election in 2010, the successors of the class of directors whose term expires at that meeting are elected to hold office for a term expiring at the annual meeting of stockholders held in the third year following the year of their election. Pursuant to the Delaware General Corporation Law, if a board of directors is classified (as is our Board of Directors), unless the certificate of incorporation otherwise provides, members of the board of directors may be removed by the stockholders before the expiration of their respective terms only for cause.

Our classified Board of Directors may have an anti-takeover effect of making more difficult and discouraging a takeover attempt, merger, tender offer, or proxy fight. Additionally, our classified Board of Directors extends the time it would take for holders of a majority of our shares to remove incumbent management to obtain control of the Board of Directors. That is, as a general matter a majority stockholder could not obtain control of the Board of Directors until the second annual stockholder's meeting after it acquired a majority of the voting stock. Our classified Board of Directors may have the effect of making it more difficult for stockholders to remove our existing management.

Special Meetings. Our bylaws provide that special meetings of our stockholders may, unless otherwise prescribed by law, be called by our Chairman of the Board (if any), our Board of Directors or our Chief Executive Officer and shall be held at such place, on such date and at such time as shall be fixed by our Board of Directors or the person calling the meeting. Business transacted at any special meeting shall be limited to matters relating to the purpose or purposes stated in the notice of the meeting.

Undesignated Preferred Stock. The ability to authorize undesignated preferred stock makes it possible for our Board of Directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us. The ability to issue preferred stock may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

Delaware Anti-Takeover Statute. We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years following the date the person 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 completion of the transaction that resulted in the stockholder becoming an interested stockholder, the 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 (1) shares owned by persons who are directors and also officers and (2) shares owned 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; and
- on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with

affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, owned 15% or more of a corporation's outstanding voting securities. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our Board of Directors does not approve in advance. We also anticipate that Section 203 may discourage attempted acquisitions that might result in a premium over the market price for the shares of our Common Stock held by stockholders.

The provisions of Delaware law, our Amended and Restated Certificate of Incorporation and our bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our Common Stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Potential Effects of Authorized but Unissued Stock

We have shares of Common Stock and preferred stock available for future issuance without stockholder approval. We may utilize these additional shares for a variety of corporate purposes, including future public offerings to raise additional capital, to facilitate corporate acquisitions or payment as a dividend on the capital stock.

The existence of unissued and unreserved Common Stock and preferred stock may enable our Board of Directors to issue shares to persons friendly to current management or to issue preferred stock with terms that could render more difficult or discourage a third-party attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise, thereby protecting the continuity of our management. In addition, the Board of Directors has the discretion to determine designations, rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences of each series of preferred stock, all to the fullest extent permissible under the Delaware General Corporation Law and subject to any limitations set forth in our certificate of incorporation. The purpose of authorizing the Board of Directors to issue preferred stock and to determine the rights and preferences applicable to such preferred stock is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing desirable flexibility in connection with possible financings, acquisitions and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from acquiring, a majority of our outstanding voting stock.

Limitations of Director Liability and Indemnification of Directors, Officers and Employees

Section 145 of the Delaware General Corporation Law, permits indemnification of directors, officers, agents and controlling persons of a corporation under certain conditions and subject to certain limitations. Section 145 empowers a corporation to 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, by reason of the fact that he or she is or was a director, officer or agent of the corporation or another enterprise if serving at the request of the corporation. Depending on the character of the proceeding, a corporation may indemnify against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding if the person indemnified acted in good faith and in a manner he or she reasonably believed to be in or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. In the case of an action by or in the right of the corporation, no indemnification may be made with 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 of Chancery or the court in which such action or suit was brought shall determine that despite the adjudication of liability such person is fairly and reasonably entitled to indemnity for such expenses which the court shall deem proper. Section 145 further provides that to the extent a present or former director or officer of a corporation has been successful in the defense of any action, suit or proceeding referred to above or in the defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

Indemnification Agreements

We have entered into indemnification agreements with each of our Chief Executive Officer, Chief Financial Officer, General Counsel, certain other employees and each of our directors pursuant to which we have agreed to indemnify such party to the full extent permitted by law, subject to certain exceptions, if such party becomes subject to an action because such party is our director, officer, employee, agent or fiduciary.

Transfer Agent

The transfer agent and registrar for our Common Stock is Continental Stock Transfer & Trust Company. Its address is 17 Battery Place, New York, New York, 10004 and its telephone number is (212) 509-4000.

DESCRIPTION OF DEBT SECURITIES

We summarize below some of the provisions that will apply to the debt securities unless the applicable prospectus supplement provides otherwise. This summary may not contain all information that is important to you. The complete terms of the debt securities will be contained in the applicable notes. The notes will be included or incorporated by reference as exhibits to the registration statement of which this prospectus is a part. You should read the provisions of the notes. You should also read the prospectus supplement, which will contain additional information and which may update or change some of the information below.

General

This prospectus describes certain general terms and provisions of the debt securities. The debt securities will be issued under an indenture between us and a trustee to be designated prior to the issuance of the debt securities. When we offer to sell a particular series of debt securities, we will describe the specific terms of the securities in a supplement to this prospectus. The prospectus supplement will also indicate whether the general terms and provisions described in this prospectus apply to a particular series of debt securities.

We may issue, from time to time, debt securities, in one or more series, that will consist of either our senior debt ("senior debt securities"), our senior subordinated debt ("senior subordinated debt securities"), our subordinated debt ("subordinated debt securities") or our junior subordinated debt ("junior subordinated debt securities" and, together with the senior subordinated debt securities and the subordinated debt securities, the "subordinated securities"). Debt securities, whether senior, senior subordinated, subordinated or junior subordinated, may be issued as convertible debt securities or exchangeable debt securities.

We have summarized herein certain terms and provisions of the form of indenture (the "indenture"). The summary is not complete and is qualified in its entirety by reference to the actual text of the indenture. The indenture is an exhibit to the registration statement of which this prospectus is a part. You should read the indenture for the provisions which may be important to you. The indenture is subject to and governed by the Trust Indenture Act of 1939, as amended.

The indenture does not limit the amount of debt securities which we may issue. We may issue debt securities up to an aggregate principal amount as we may authorize from time to time which securities may be in any currency or currency unit designated by us. The terms of each series of debt securities will be established by or pursuant to (a) a supplemental indenture, (b) a resolution of our board of directors, or (c) an officers' certificate pursuant to authority granted under a resolution of our board of directors. The prospectus supplement will describe the terms of any debt securities being offered, including:

- the title of the debt securities;
- the limit, if any, upon the aggregate principal amount or issue price of the debt securities of a series;
- ranking of the specific series of debt securities relative to other outstanding indebtedness, including any debt of any of our subsidiaries;
- the price or prices at which the debt securities will be issued;
- the designation, aggregate principal amount and authorized denominations of the series of debt securities;
- the issue date or dates of the series and the maturity date of the series;
- whether the securities will be issued at par or at a premium over or a discount from their face amount;
- the interest rate, if any, and the method for calculating the interest rate and basis upon which interest shall be calculated;
- the right, if any, to extend interest payment periods and the duration of the extension;
- the interest payment dates and the record dates for the interest payments;
- any mandatory or optional redemption terms or prepayment, conversion, sinking fund or exchangeability or convertibility provisions;

- the currency of denomination of the securities;
- the place where we will pay principal, premium, if any, and interest, if any, and the place where the debt securities may be presented for transfer;
- if payments of principal of, premium, if any, or interest, if any, on the debt securities will be made in one or more currencies or currency units other than that or those in which the debt securities are denominated, the manner in which the exchange rate with respect to these payments will be determined;
- if other than denominations of $1,000 or multiples of $1,000, the denominations the debt securities will be issued in;
- whether the debt securities will be issued in the form of global securities or certificates;
- the applicability of and additional provisions, if any, relating to the defeasance of the debt securities;
- the portion of principal amount of the debt securities payable upon declaration of acceleration of the maturity date, if other than the entire principal amount;
- the currency or currencies, if other than the currency of the United States, in which principal and interest will be paid;
- the dates on which premium, if any, will be paid;
- any addition to or change in the "Events of Default" described in this prospectus or in the indenture with respect to the debt securities and any change in the acceleration provisions described in this prospectus or in the indenture with respect to the debt securities;
- any addition to or change in the covenants described in the prospectus or in the indenture with respect to the debt securities;
- our right, if any, to defer payment of interest and the maximum length of this deferral period; and
- other specific terms, including any additional events of default or covenants.

We may issue debt securities at a discount below their stated principal amount. Even if we do not issue the debt securities below their stated principal amount, for United States federal income tax purposes the debt securities may be deemed to have been issued with a discount because of certain interest payment characteristics. We will describe in any applicable prospectus supplement the United States federal income tax considerations applicable to debt securities issued at a discount or deemed to be issued at a discount, and will describe any special United States federal income tax considerations that may be applicable to the particular debt securities.

Senior Debt

Senior debt securities will rank equally and *pari passu* with all of our other unsecured and unsubordinated debt from time to time outstanding.

Subordinated Debt

The indenture does not limit our ability to issue subordinated debt securities. Any subordination provisions of a particular series of debt securities will be set forth in the supplemental indenture, board resolution or officers' certificate related to that series of debt securities and will be described in the relevant prospectus supplement.

If this prospectus is being delivered in connection with a series of subordinated debt securities, the accompanying prospectus supplement or the information incorporated by reference in this prospectus will set forth the approximate amount of senior indebtedness outstanding as of the end of the most recent fiscal quarter.

Conversion or Exchange Rights

Debt securities may be convertible into or exchangeable for our other securities or property. The terms and conditions of conversion or exchange will be set forth in the supplemental indenture, board resolution or officers' certificate related to that series of debt securities and will be described in the relevant prospectus supplement. The terms will include, among others, the following:

- the conversion or exchange price;
- the conversion or exchange period;
- provisions regarding our ability or the ability of the holder to convert or exchange the debt securities;
- events requiring adjustment to the conversion or exchange price; and
- provisions affecting conversion or exchange in the event of our redemption of the debt securities.

Merger, Consolidation or Sale of Assets

The indenture prohibits us from merging into or consolidating with any other person or selling, leasing or conveying substantially all of our assets and the assets of our subsidiaries, taken as a whole, to any person, unless:

- either we are the continuing corporation or the successor corporation or the person which acquires by sale, lease or conveyance substantially all our or our subsidiaries' assets is a corporation organized under the laws of the United States, any state thereof, or the District of Columbia, and expressly assumes the due and punctual payment of the principal of, and premium, if any, and interest, if any, on all the debt securities and the due performance of every covenant of the indenture to be performed or observed by us, by supplemental indenture satisfactory to the trustee, executed and delivered to the trustee by such corporation;
- immediately after giving effect to such transactions, no Event of Default described under the caption "Events of Default and Remedies" below or event which, after notice or lapse of time or both would become an Event of Default, has happened and is continuing; and
- we have delivered to the trustee an officers' certificate and an opinion of counsel each stating that such transaction and such supplemental indenture comply with the indenture provisions relating to merger, consolidation and sale of assets.

Upon any consolidation or merger with or into any other person or any sale, conveyance, lease, or other transfer of all or substantially all of our or our subsidiaries' assets to any person, the successor person shall succeed, and be substituted for, us under the indenture and each series of outstanding debt securities, and we shall be relieved of all obligations under the indenture and each series of outstanding debt securities to the extent we were the predecessor person.

Events of Default and Remedies

When we use the term "Event of Default" in the indenture with respect to the debt securities of any series, we mean:

(1) default in paying interest on the debt securities when it becomes due and the default continues for a period of 30 days or more;

(2) default in paying principal, or premium, if any, on the debt securities when due;

(3) default is made in the payment of any sinking or purchase fund or analogous obligation when the same becomes due, and such default continues for 30 days or more;

(4) default in the performance, or breach, of any covenant or warranty in the indenture (other than defaults specified in clause (1), (2) or (3) above) and the default or breach continues for a period of 60 days or more after we receive written notice of such default from the trustee or we and the trustee receive notice from the holders of at least 25% in aggregate principal amount of the outstanding debt securities of the series;

(5) certain events of bankruptcy, insolvency, reorganization, administration or similar proceedings with respect to us have occurred; and

(6) any other Event of Default provided with respect to debt securities of that series that is set forth in the applicable prospectus supplement accompanying this prospectus.

No Event of Default with respect to a particular series of debt securities (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an Event of Default with respect to any other series of debt securities. The occurrence of certain Events of Default or an acceleration under the indenture may constitute an event of default under certain of our other indebtedness that we may have outstanding from time to time. Unless otherwise provided by the terms of an applicable series of debt securities, if an Event of Default under the indenture occurs with respect to the debt securities of any series and is continuing, then the trustee or the holders of not less than 51% of the aggregate principal amount of the outstanding debt securities of that series may by written notice require us to repay immediately the entire principal amount of the outstanding debt securities of that series (or such lesser amount as may be provided in the terms of the securities), together with all accrued and unpaid interest and premium, if any. In the case of an Event of Default resulting from certain events of bankruptcy, insolvency or reorganization, the principal (or such specified amount) of and accrued and unpaid interest, if any, on all outstanding debt securities will become and be immediately due and payable without any declaration or other act on the part of the trustee or any holder of outstanding debt securities. We refer you to the prospectus supplement relating to any series of debt securities that are discount securities for the particular provisions relating to acceleration of a portion of the principal amount of such discount securities upon the occurrence of an Event of Default.

After a declaration of acceleration, the holders of a majority in aggregate principal amount of outstanding debt securities of any series may rescind this accelerated payment requirement if all existing Events of Default, except for nonpayment of the principal on the debt securities of that series that has become due solely as a result of the accelerated payment requirement, have been cured or waived and if the rescission of acceleration would not conflict with any judgment or decree. The holders of a majority in aggregate principal amount of the outstanding debt securities of any series also have the right to waive past defaults, except a default in paying principal or interest on any outstanding debt security, or in respect of a covenant or a provision that cannot be modified or amended without the consent of all holders of the debt securities of that series.

No holder of any debt security may seek to institute a proceeding with respect to the indenture unless such holder has previously given written notice to the trustee of a continuing Event of Default, the holders of not less than 51% in aggregate principal amount of the outstanding debt securities of the series have made a written request to the trustee to institute proceedings in respect of the Event of Default, the holder or holders have offered reasonable indemnity to the trustee and the trustee has failed to institute such proceeding within 60 days after it received this notice. In addition, within this 60-day period the trustee must not have received directions inconsistent with this written request by holders of a majority in aggregate principal amount of the outstanding debt securities of that series. These limitations do not apply, however, to a suit instituted by a holder of a debt security for the enforcement of the payment of principal, interest or any premium on or after the due dates for such payment.

During the existence of an Event of Default actually known to a responsible officer of the trustee, the trustee is required to exercise the rights and powers vested in it under the indenture and use the same degree of care and skill in its exercise as a prudent person would under the circumstances in the conduct of that person’s own affairs. If an Event of Default has occurred and is continuing, the trustee is not under any obligation to exercise any of its rights or powers at the request or direction of any of the holders unless the holders have offered to the trustee security or indemnity reasonably satisfactory to the trustee. Subject to certain provisions, the holders of a majority in aggregate principal amount of the outstanding debt securities of any series have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust, or power conferred on the trustee.

The trustee will, within 90 days after receiving notice of any default, give notice of the default to the holders of the debt securities of that series, unless the default was already cured or waived. Unless there is a default in paying principal, interest or any premium when due, the trustee can withhold giving notice to the holders if it determines in good faith that the withholding of notice is in the interest of the holders. In the case of a default specified in clause (4) above describing Events of Default, no notice of default to the holders of the debt securities of that series will be given until 60 days after the occurrence of the event of default.

The indenture requires us, within 120 days after the end of our fiscal year, to furnish to the trustee a statement as to compliance with the indenture. The indenture provides that the trustee may withhold notice to the holders of debt securities of any series of any Event of Default (except in payment on any debt securities of that series) with respect to debt securities of that series if it in good faith determines that withholding notice is in the interest of the holders of those debt securities.

Modification and Waiver

The indenture may be amended or modified without the consent of any holder of debt securities in order to:

- evidence a successor to the trustee;
- cure ambiguities, defects or inconsistencies;
- provide for the assumption of our obligations in the case of a merger or consolidation or transfer of all or substantially all of our assets that complies with the covenant described under "— Merger, Consolidation or Sale of Assets";
- make any change that would provide any additional rights or benefits to the holders of the debt securities of a series;
- add guarantors or co-obligors with respect to the debt securities of any series;
- secure the debt securities of a series;
- establish the form or forms of debt securities of any series;
- add additional Events of Default with respect to the debt securities of any series;
- add additional provisions as may be expressly permitted by the Trust Indenture Act;
- maintain the qualification of the indenture under the Trust Indenture Act; or
- make any change that does not adversely affect in any material respect the interests of any holder.

Other amendments and modifications of the indenture or the debt securities issued may be made with the consent of the holders of not less than a majority in aggregate principal amount of the outstanding debt securities of each series affected by the amendment or modification. However, no modification or amendment may, without the consent of the holder of each outstanding debt security affected:

- change the maturity date or the stated payment date of any payment of premium or interest payable on the debt securities;
- reduce the principal amount, or extend the fixed maturity, of the debt securities;
- change the method of computing the amount of principal or any interest of any debt security;
- change or waive the redemption or repayment provisions of the debt securities;
- change the currency in which principal, any premium or interest is paid or the place of payment;
- reduce the percentage in principal amount outstanding of debt securities of any series which must consent to an amendment, supplement or waiver or consent to take any action;
- impair the right to institute suit for the enforcement of any payment on the debt securities;
- waive a payment default with respect to the debt securities;

- reduce the interest rate or extend the time for payment of interest on the debt securities;
- adversely affect the ranking or priority of the debt securities of any series; or
- release any guarantor or co-obligor from any of its obligations under its guarantee or the indenture, except in compliance with the terms of the indenture.

Satisfaction, Discharge and Covenant Defeasance

We may terminate our obligations under the indenture with respect to the outstanding debt securities of any series, when:

- either:
  - all debt securities of any series issued that have been authenticated and delivered have been delivered to the trustee for cancellation; or
  - all the debt securities of any series issued that have not been delivered to the trustee for cancellation have become due and payable, will become due and payable within one year, or are to be called for redemption within one year and we have made arrangements satisfactory to the trustee for the giving of notice of redemption by such trustee in our name and at our expense, and in each case, we have irrevocably deposited or caused to be deposited with the trustee sufficient funds to pay and discharge the entire indebtedness on the series of debt securities; and
- we have paid or caused to be paid all other sums then due and payable under the indenture; and
- we have delivered to the trustee an officers' certificate and an opinion of counsel, each stating that all conditions precedent under the indenture relating to the satisfaction and discharge of the indenture have been complied with.

We may elect to have our obligations under the indenture discharged with respect to the outstanding debt securities of any series ("legal defeasance"). Legal defeasance means that we will be deemed to have paid and discharged the entire indebtedness represented by the outstanding debt securities of such series under the indenture, except for:

- the rights of holders of the debt securities to receive principal, interest and any premium when due;
- our obligations with respect to the debt securities concerning issuing temporary debt securities, registration of transfer of debt securities, mutilated, destroyed, lost or stolen debt securities and the maintenance of an office or agency for payment for security payments held in trust;
- the rights, powers, trusts, duties and immunities of the trustee; and
- the defeasance provisions of the indenture.

In addition, we may elect to have our obligations released with respect to certain covenants in the indenture ("covenant defeasance"). If we so elect, any failure to comply with these obligations will not constitute a default or an event of default with respect to the debt securities of any series. In the event covenant defeasance occurs, certain events, not including non-payment, bankruptcy and insolvency events, described under "Events of Default and Remedies," will no longer constitute an event of default for that series.

In order to exercise either legal defeasance or covenant defeasance with respect to outstanding debt securities of any series:

- we must irrevocably have deposited or caused to be deposited with the trustee as trust funds for the purpose of making the following payments, specifically pledged as security for, and dedicated solely to the benefits of the holders of the debt securities of a series:
  - money in an amount; or

- U.S. government obligations (or equivalent government obligations in the case of debt securities denominated in other than U.S. dollars or a specified currency) that will provide, not later than one day before the due date of any payment, money in an amount; or
- a combination of money and U.S. government obligations (or equivalent government obligations, as applicable),

in each case sufficient, in the written opinion (with respect to U.S. or equivalent government obligations or a combination of money and U.S. or equivalent government obligations, as applicable) of a nationally recognized firm of independent public accountants to pay and discharge, and which shall be applied by the trustee to pay and discharge, all of the principal (including mandatory sinking fund payments), interest and any premium at due date or maturity;

- in the case of legal defeasance, we have delivered to the trustee an opinion of counsel stating that, under then applicable federal income tax law, the holders of the debt securities of that series will not recognize income, gain or loss for federal income tax purposes as a result of the deposit, defeasance and discharge to be effected and will be subject to the same federal income tax as would be the case if the deposit, defeasance and discharge did not occur;
- in the case of covenant defeasance, we have delivered to the trustee an opinion of counsel to the effect that the holders of the debt securities of that series will not recognize income, gain or loss for federal income tax purposes as a result of the deposit and covenant defeasance to be effected and will be subject to the same federal income tax as would be the case if the deposit and covenant defeasance did not occur;
- no event of default or default with respect to the outstanding debt securities of that series has occurred and is continuing at the time of such deposit after giving effect to the deposit or, in the case of legal defeasance, no default relating to bankruptcy or insolvency has occurred and is continuing at any time on or before the 91st day after the date of such deposit, it being understood that this condition is not deemed satisfied until after the 91st day;
- the legal defeasance or covenant defeasance will not cause the trustee to have a conflicting interest within the meaning of the Trust Indenture Act, assuming all debt securities of a series were in default within the meaning of such Act;
- the legal defeasance or covenant defeasance will not result in a breach or violation of, or constitute a default under, any other agreement or instrument to which we are a party;
- if prior to the stated maturity date, notice shall have been given in accordance with the provisions of the indenture;
- the legal defeasance or covenant defeasance will not result in the trust arising from such deposit constituting an investment company within the meaning of the Investment Company Act of 1940, as amended, unless the trust is registered under such Act or exempt from registration; and
- we have delivered to the trustee an officers' certificate and an opinion of counsel stating that all conditions precedent with respect to the legal defeasance or covenant defeasance have been complied with.

Covenants

We will set forth in the applicable prospectus supplement any restrictive covenants applicable to any issue of debt securities.

Paying Agent and Registrar

The trustee will initially act as paying agent and registrar for all debt securities. We may change the paying agent or registrar for any series of debt securities without prior notice, and we or any of our subsidiaries may act as paying agent or registrar.

Form of Securities

Each debt security will be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of the series of debt securities. Certificated securities will be issued in definitive form and global securities will be issued in registered form. Definitive securities name you or your nominee as the owner of the security, and in order to transfer or exchange these securities or to receive payments other than interest or other interim payments, you or your nominee must physically deliver the securities to the trustee, registrar, paying agent or other agent, as applicable. Global securities name a depositary or its nominee as the owner of the debt securities represented by these global securities. The depositary maintains a computerized system that will reflect each investor's beneficial ownership of the securities through an account maintained by the investor with its broker/dealer, bank, trust company or other representative, as we explain more fully below.

Global Securities

We may issue the registered debt securities in the form of one or more fully registered global securities that will be deposited with a depositary or its custodian identified in the applicable prospectus supplement and registered in the name of that depositary or its nominee. In those cases, one or more registered global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal or face amount of the securities to be represented by registered global securities. Unless and until it is exchanged in whole for securities in definitive registered form, a registered global security may not be transferred except as a whole by and among the depositary for the registered global security, the nominees of the depositary or any successors of the depositary or those nominees.

If not described below, any specific terms of the depositary arrangement with respect to any securities to be represented by a registered global security will be described in the prospectus supplement relating to those securities. We anticipate that the following provisions will apply to all depositary arrangements.

Ownership of beneficial interests in a registered global security will be limited to persons, called participants, that have accounts with the depositary or persons that may hold interests through participants. Upon the issuance of a registered global security, the depositary will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal or face amounts of the securities beneficially owned by the participants. Any dealers, underwriters or agents participating in the distribution of the securities will designate the accounts to be credited. Ownership of beneficial interests in a registered global security will be shown on, and the transfer of ownership interests will be effected only through, records maintained by the depositary, with respect to interests of participants, and on the records of participants, with respect to interests of persons holding through participants. The laws of some states may require that some purchasers of securities take physical delivery of these securities in definitive form. These laws may impair your ability to own, transfer or pledge beneficial interests in registered global securities.

So long as the depositary, or its nominee, is the registered owner of a registered global security, that depositary or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by the registered global security for all purposes under the indenture. Except as described below, owners of beneficial interests in a registered global security will not be entitled to have the securities represented by the registered global security registered in their names, will not receive or be entitled to receive physical delivery of the securities in definitive form and will not be considered the owners or holders of the securities under the indenture. Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depositary for that registered global security and, if that person is not a participant, on the procedures of the participant through which the person owns its interest, to exercise any rights of a holder under the indenture. We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take any action that a holder is entitled to give or take under the indenture, the depositary for the registered global security would authorize the participants holding the relevant beneficial interests to give or take that action, and the participants would authorize beneficial owners owning through them to give or take that action or would otherwise act upon the instructions of beneficial owners holding through them.

Principal, premium, if any, and interest payments on debt securities represented by a registered global security registered in the name of a depositary or its nominee will be made to the depositary or its nominee, as the case may be, as the registered owner of the registered global security. Neither we nor the trustee or any other agent of ours or the trustee will have any responsibility or liability for any aspect of the records relating to payments made on account of beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to those beneficial ownership interests.

We expect that the depositary for any of the securities represented by a registered global security, upon receipt of any payment of principal, premium, interest or other distribution of underlying securities or other property to holders on that registered global security, will immediately credit participants' accounts in amounts proportionate to their respective beneficial interests in that registered global security as shown on the records of the depositary. We also expect that payments by participants to owners of beneficial interests in a registered global security held through participants will be governed by standing customer instructions and customary practices, as is now the case with the securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of those participants.

If the depositary for any of these securities represented by a registered global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act, and a successor depositary registered as a clearing agency under the Exchange Act is not appointed by us within 90 days, we will issue securities in definitive form in exchange for the registered global security that had been held by the depositary. Any securities issued in definitive form in exchange for a registered global security will be registered in the name or names that the depositary gives to the trustee or other relevant agent of ours or theirs. It is expected that the depositary's instructions will be based upon directions received by the depositary from participants with respect to ownership of beneficial interests in the registered global security that had been held by the depositary.

Unless we state otherwise in a prospectus supplement, the Depository Trust Company ("DTC") will act as depositary for each series of debt securities issued as global securities. DTC has advised us that DTC is a limited-purpose trust company created to hold securities for its participating organizations (collectively, the "Participants") and to facilitate the clearance and settlement of transactions in those securities between Participants through electronic book-entry changes in accounts of its Participants. The Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. Access to DTC's system is also available to other entities such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Participant, either directly or indirectly (collectively, the "Indirect Participants"). Persons who are not Participants may beneficially own securities held by or on behalf of DTC only through the Participants or the Indirect Participants. The ownership interests in, and transfers of ownership interests in, each security held by or on behalf of DTC are recorded on the records of the Participants and the Indirect Participants.

Governing Law

The indenture and each series of debt securities are governed by, and construed in accordance with, the laws of the State of New York.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement that includes this prospectus.

General

We may issue warrants for the purchase of common stock, preferred stock or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and debt securities, and the warrants may be attached to or separate from these securities.

We will evidence each series of warrants by warrant certificates that we will issue under a separate agreement. We may enter into a warrant agreement with a warrant agent. If we engage a warrant agent, each warrant agent will be a bank that we select which has its principal office in the United States and a combined capital and surplus of at least $50,000,000. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Additional Information

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;

- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreement and warrants may be modified;
- a discussion on any material or special United States federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 5 p.m., Eastern time, on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required 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 prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, 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 applicable prospectus supplement 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 comprising the units;
- the terms of the unit agreement governing the units;
- United States federal income tax considerations relevant to the units; and
- whether the units will be issued in fully registered global form.

This summary of certain general terms of units and any summary description of units in the applicable prospectus supplement do not purport to be complete and are qualified in their entirety by reference to all provisions of the applicable unit agreement and, if applicable, collateral arrangements and depositary arrangements relating to such units. The forms of the unit agreements and other documents relating to a particular issue of units will be filed with the SEC each time we issue units, and you should read those documents for provisions that may be important to you.

PLAN OF DISTRIBUTION

We may sell the securities through underwriters or dealers, through agents, or directly to one or more purchasers. The accompanying prospectus supplement will describe the terms of the offering of the securities, including:

- the name or names of any underwriters;
- the purchase price of the securities being offered and the proceeds we will receive from the sale;
- any over-allotment options pursuant to which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of the sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all the securities offered by the prospectus supplement. We may change from time to time the public offering price and any discounts or concessions allowed or reallowed or paid to dealers. We may use underwriters with whom we have a material relationship. We will describe such relationships in the prospectus supplement naming the underwriter and the nature of any such relationship.

We may engage in "at the market" offerings of our common stock, which are offerings into an existing trading market, at other than a fixed price, on or through the facilities of a national securities exchange or to or through a market maker otherwise than on an exchange.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of the securities, and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best efforts basis for the period of its appointment.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of common shares, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of common shares. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be identified in the applicable prospectus supplement or a post-effective amendment to this registration statement.

All securities we offer other than common stock will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

We may provide agents and underwriters with indemnification against civil liabilities related to this offering, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

Rules of the Securities and Exchange Commission may limit the ability of any underwriters to bid for or purchase securities before the distribution of the securities is completed. However, underwriters may engage in the following activities in accordance with the rules:

- *Stabilizing transactions* — Underwriters may make bids or purchases for the purpose of pegging, fixing or maintaining the price of the shares, so long as stabilizing bids do not exceed a specified maximum.
- *Over-allotments and syndicate covering transactions* — Underwriters may sell more shares of our common stock than the number of shares that they have committed to purchase in any underwritten offering. This over-allotment creates a short position for the underwriters. This short position may involve either "covered" short sales or "naked" short sales. Covered short sales are short sales made in an amount not greater than the underwriters' over-allotment option to purchase additional shares in any underwritten offering. The underwriters may close out any covered short position either by exercising their over-allotment option or by purchasing shares in the open market. To determine how they will close the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market, as compared to the price at which they may purchase shares through the over-allotment option. Naked short sales are short sales in excess of the over-allotment option. The underwriters must close out any naked position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that, in the open market after pricing, there may be downward pressure on the price of the shares that could adversely affect investors who purchase shares in the offering.
- *Penalty bids* — If underwriters purchase shares in the open market in a stabilizing transaction or syndicate covering transaction, they may reclaim a selling concession from other underwriters and selling group members who sold those shares as part of the offering.

Similar to other purchase transactions, an underwriter's purchases to cover the syndicate short sales or to stabilize the market price of our securities may have the effect of raising or maintaining the market price of our securities or preventing or mitigating a decline in the market price of our securities. As a result, the price of the securities may be higher than the price that might otherwise exist in the open market. The imposition of a penalty bid might also have an effect on the price of shares if it discourages resales of the securities.

If commenced, the underwriters may discontinue any of the activities at any time.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

The validity of the issuance of the securities offered by this prospectus will be passed upon for us by Lowenstein Sandler PC, Roseland, New Jersey.

EXPERTS

The consolidated financial statements as of and for the year ended December 31, 2010, incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2010, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

The consolidated financial statements as of and for the years ended December 31, 2009 and 2008, incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2010, have been audited by Holtz Rubenstein Reminick LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents previously filed by us with the SEC are incorporated in this prospectus by reference:

(a) Our Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on April 6, 2011.

(b) Amendment No. 1 on Form 10-K/A to our Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on May 2, 2011.

(c) Our Current Reports on Form 8-K and amendments thereto dated January 4, 2011, January 18, 2011 and March 4, 2011 (filed with the SEC on January 10, 2011, January 24, 2011 and March 8, 2011, respectively) (excluding any information deemed furnished pursuant to Item 2.02 or Item 7.01 of any such Current Report on Form 8-K).

(d) Description of our units, common stock and Class A warrants contained in the Registration Statement on Form 8-A, declared effective on August 8, 2007 (including any amendment or report filed with the SEC for the purpose of updating such description).

All reports and other documents that we file pursuant to Section 13(a) and 13(c), 14 and 15(d) of the Exchange Act prior to the filing of a post-effective amendment which indicates that all securities offered hereunder have been sold or which deregisters all such securities then remaining unsold shall be deemed to be incorporated by reference in this prospectus and to be a apart hereof from the date of filing of such reports and documents.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, copies of these filings, excluding all exhibits unless an exhibit has been specifically incorporated by reference in such filings, at no cost, upon written or oral request made to:

NeoStem, Inc.
420 Lexington Avenue, Suite 450
New York, NY 10170
(212) 584-4180
Attention: Catherine M. Vaczy, Esq., Vice President and General Counsel

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the Securities and Exchange Commission under the Securities Act of 1933. This prospectus omits some information and exhibits included in the registration statement, copies of which may be obtained upon payment of a fee prescribed by the Commission or may be examined free of charge at the principal office of the SEC in Washington, D.C.

We are subject to the informational requirements of the Securities Exchange Act of 1934 and in accordance therewith file reports, proxy statements and other information with the SEC. The reports, proxy statements and other information filed by us with the SEC can be inspected and copied at the Public Reference Room maintained by the SEC at 100 Fifth Street, N.E., Washington, D.C. 20549. Copies of filings can be obtained from the Public Reference Room maintained by the SEC by calling the SEC at 1-800-SEC-0330. In addition, the Commission maintains a website that contains reports, proxy and informational statements and other information filed electronically with the SEC at *http://www.sec.gov*.

You may request, orally or in writing, a copy of these documents, which will be provided to you at no cost, by contacting Catherine M. Vaczy, Esq., Vice President and General Counsel, NeoStem, Inc., 420 Lexington Avenue, Suite 450, New York, NY 10170, telephone (212) 584-4180.

You should rely only on the information contained in this prospectus, including information incorporated by reference as described above, or any prospectus supplement that we have specifically referred you to. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents or that any document incorporated by reference is accurate as of any date other than its filing date. You should not consider this prospectus to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Furthermore, you should not consider this prospectus to be an offer or solicitation relating to the securities if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

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$20,600,000

NeoStem, Inc.

Common Stock

PROSPECTUS SUPPLEMENT

September 30, 2011