10,582,011 Units



Units Consisting of One Share of Series E 7% Senior Convertible Preferred Stock, a Warrant to Purchase 0.25 of a Share of Common Stock and 0.0155 of a Share of Common Stock

We are offering 10,582,011 units, with each unit consisting of one share of our Series E 7% Senior Convertible Preferred Stock (the "Preferred Shares") (and the shares of common stock issuable upon conversion or redemption thereof), a warrant to purchase 0.25 of a share of our common stock (and the shares of common stock issuable from time to time upon exercise of the offered warrants) and 0.0155 of a share of our common stock pursuant to this prospectus supplement and the accompanying prospectus. The purchase price for each unit is \$0.945. Each warrant will have an exercise price of \$2.0874 per share, will be exercisable six months after issuance and will expire three years from the initial exercise date. Units will not be issued or certificated. The Preferred Shares, the warrants and the shares of common stock are immediately separable and will be issued separately, but will be purchased together in this offering.

Our common stock is traded on the NYSE Amex under the symbol "NBS." On November 15, 2010, the last reported sale price of our common stock was \$1.67 per share. There is no established public trading market for the Preferred Shares or the warrants and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Preferred Shares or the warrants on any national securities exchange.

Concurrently with this offering, we are offering to certain investors 6,337,980 units, each unit consisting of (i) one share of our common stock, and (ii) a warrant to purchase 0.50 of a share of our common stock pursuant to a separate prospectus supplement. See "Description of Capital Stock — Concurrent Common Stock Offering." The consummation of the offering described in this prospectus supplement is contingent upon the closing of the common stock offering.

Our business and an investment in our securities involve significant risks. See "Risk Factors" beginning on page S-<u>8</u> of this prospectus supplement and page <u>2</u> of the accompanying prospectus to read about factors that you should consider before making an investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

| | Per Unit | Total |
|----------------------------------|-------------|------------------|
| Public offering price | \$ 0.945 | \$ 10,000,000 |
| Placement agent commissions | 0.070875 | 750,000 |
| Proceeds, before expenses, to us | 0.874125 | 9,250,000 |

We have engaged Cowen and Company, LLC and LifeTech Capital, a division of Aurora Capital, LLC, as our placement agents in connection with this offering. The placement agents are not required to sell any specific number or dollar amount of securities, but will use their reasonable best efforts to arrange for the sale of the securities offered. We have agreed to pay the placement agents the fees set forth in the table above. Because there is no minimum offering amount required as a condition to closing in this offering, the actual public offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above. The placement agents are not purchasing or selling any securities pursuant to this prospectus supplement or the accompanying prospectus.

We expect to deliver the securities against payment to investors on November 19, 2010.

Cowen and Company

LifeTech Capital

November 16, 2010

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Prospectus

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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 the offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus dated May 19, 2010, including the documents incorporated by reference, provides more general information. 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 or in any document incorporated by reference that was filed with the Securities and Exchange Commission, or SEC, before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in the accompanying prospectus, including the information incorporated by reference and any free writing prospectus that we have authorized for use in connection with this offering, in their entirety before making an investment decision.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, along with the information contained in any free writing prospectus that we have authorized for use in connection with this offering. If the description of the offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement. We have not authorized anyone to provide you with different or additional information. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents 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 is accurate only as of the respective dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

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 or 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 and covenants were accurate only as of the date when made; therefore, such representations, warranties and covenants should not be relied on as accurate representations of the current state of our affairs.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and information appearing elsewhere in this prospectus supplement, in the accompanying prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all of the information that you should consider before making an investment decision. To fully understand this offering and its consequences to you, you should read this entire prospectus supplement and the accompanying prospectus carefully, including the factors described under the headings "Risk Factors" in this prospectus supplement beginning on page S-8 and page 2 of the accompanying prospectus, together with any free writing prospectus we have authorized for use in connection with this offering and the financial statements and all other information incorporated by reference in this prospectus supplement and the accompanying prospectus. When used in this prospectus supplement and the accompanying prospectus, except where the context otherwise requires, the terms "NeoStem," "we," "us" and "our" refer to NeoStem, Inc. and its subsidiaries.

About NeoStem

Overview

In 2009, through our expansion efforts within the People's Republic of China ("China" or the "PRC"), and with the acquisition of a controlling interest in Suzhou Erye Pharmaceuticals Company Ltd. ("Erye"), we transitioned into a multi-dimensional international biopharmaceutical company with product and service revenues, global research and development capabilities and operations in three distinct business units: (i) U.S. adult stem cells, (ii) China adult stem cells and (iii) China pharmaceuticals, primarily antibiotics. These business units are expected to provide platforms for the accelerated development and commercialization of innovative technologies and products in both the United States and China.

In the United States we are a leading provider of adult stem cell collection, processing and storage services enabling healthy 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. Our current network of U.S. adult stem cell collection centers is focused primarily in the Southern California and Northeast markets and during 2010 we have been entering into new agreements for collection centers with the goal of expanding our coverage to ten centers by the end of 2010. In addition to our services, we are conducting research and development activities on our own at our laboratory facility in Cambridge, Massachusetts and through collaborations in pursuit of diagnostic and therapeutic applications using

autologous adult stem cells, including applications using our VSELTM Technology, with regard to very small embryonic-like stem cells, which we license from the University of Louisville.

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 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 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 Orthopedic Hospital based in Wendeng, Shandong Province, China, and 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.

The cornerstone of our China pharmaceuticals business is the 51% ownership interest we acquired in 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 the manufacturing and distribution of generic antibiotic products and 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). Erye's revenue for 2009 was approximately \$61.4 million and for the nine months ended September 30, 2010 was approximately \$51.5 million.

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

Recent Developments

PCT Merger

On September 23, 2010, we entered into an Agreement and Plan of Merger (the "PCT Merger Agreement") with Progenitor Cell Therapy, LLC ("PCT") and NBS Acquisition Company LLC, our wholly-owned subsidiary ("Subco") pursuant to which Subco will merge (the "PCT Merger") with and into PCT, with PCT as the surviving entity and our wholly-owned subsidiary. The PCT Merger Agreement provides that all of the membership interests of PCT outstanding immediately prior to the effective time of the PCT Merger (the "Effective Time") will be converted into the right to receive, in the aggregate, 11,200,000 shares of our common stock, par value \$0.001 per share, subject to downward adjustment under certain circumstances and seven year warrants to purchase an aggregate of a minimum of 1,000,000 shares and a maximum of 3,000,000 shares of our common stock (depending on the market price of our common stock prior to closing) at prices ranging from \$3.00 to \$7.00 per share.

The consummation of the PCT Merger is subject to various conditions, including the approval by our stockholders and PCT's members; the affirmation by us that we have \$3 million available to us to repay certain indebtedness owed by PCT to an affiliate of PCT's chief executive officer; if requested by us, our receipt of an updated valuation analysis; the absence of any legal proceeding preventing the consummation of the PCT Merger and other legal and regulatory requirements.

Progenitor Cell Therapy Business Overview

PCT is an internationally recognized cell therapy services and development company that, through its cell therapy manufacturing facilities and team of professionals, facilitates the preclinical and clinical development and eventual commercialization of cellular therapies for clients in the United States and internationally. To its clients, PCT offers current Good Manufacturing Practices (cGMP)-compliant cell transportation, manufacturing, storage and distribution services and supporting clinical trial design, process development, logistics, and regulatory and quality systems development services.

PCT serves the developing cell therapy industry, including biotechnology, pharmaceutical and medical products companies, health care providers, and academic investigators, from licensed, state-of-the-art cell therapy manufacturing facilities in Allendale, New Jersey and Mountain View, California. PCT supports the research of leading academic investigators designed to expedite the broad clinical application of cell therapy. The business model addresses the unique challenges of cell therapeutics, including the regulatory framework and its logistics and storage needs. The core strategy is to develop and offer a global network of cell therapy industry and to prepare for participation in full-scale commercial manufacturing operations as therapies become approved for commercial use. PCT has accumulated extensive experience in the service and business of cell therapy manufacturing for clinical use. PCT has served over 100 clients and is experienced with more than 20 different cell based therapeutics, including neuronal and skin based cells for brain and spinal cord repair, myoblast, mesenchymal cells and bone marrow derived cells for heart disease, Tumor, T, B, NK and dendritic cells and monocytes for cancer treatment, cord blood, peripheral blood, bone marrow CD34+ selected cells for transplantation and islet cells for diabetes. PCT has performed over 30,000 cell therapy procedures in its cell therapy manufacturing facilities, processed and stored over 18,000 cell therapy products (including approximately 7,000 umbilical cord blood, 10,000 blood and marrow derived stem cells and 1,000 dendritic cells), and arranged the logistics and transportation for over 14,000 cell therapy products for clinical use by over 5,000 patients nationwide.

PCT was founded in 1997 by Dr. Andrew L. Pecora and Robert A. Preti, Ph.D.; both recognized thought leaders in the cell therapy industry. The management team of PCT has over 100 years of collective experience in the business and science of cell therapy. Team members are recognized experts in cell therapy product development and characterization, manufacturing, delivery, and clinical development and use. PCT's personnel have experience with the design, validation, and operation of cGMP cell therapy manufacturing facilities, participated in regulatory filings in the United States and Europe, and have contributed over 100 peer reviewed cell therapy publications. The team has extensive experience in biologics development, sales, marketing, medical practice, hospital administration, insurance contracting, and regulatory compliance. Collectively, the management team has experience in all aspects of cell therapy product and clinical development and use (other than with the use of embryonic stem cells), covering cancer, autoimmunity, infectious diseases, cardiovascular diseases, and spinal, brain, corneal, orthopedic, hormonal and skin regenerative therapies. PCT currently has two subsidiaries, DomaniCell, LLC and Athelos, LLC.

See NeoStem's Current Report on Form 8-K filed with the SEC on September 23, 2010, which is incorporated by reference to this prospectus for additional details regarding PCT's business.

Concurrent Offering of Common Stock

We are offering in a concurrent common stock offering 6,337,980 units, with each unit consisting of one share of our common stock and a warrant to purchase 0.50 of a share of our common stock (and the shares of common stock issuable from time to time upon exercise of the offered warrants), pursuant to a separate prospectus supplement. The consummation of this offering is contingent upon the closing of the common stock offering. We intend to use net proceeds from the common stock offering in the same manner as the net proceeds of this offering. See "Use of Proceeds" on page S-<u>46</u>.

Corporate Information

We were incorporated under the laws of the State of Delaware in September 1980 under the name Fidelity Medical Services, Inc., and commenced operations in our current line of business in January 2006. On October 30, 2009, we completed a merger with China Biopharmaceuticals Holdings, Inc., the former owner of the 51% interest in Erye. 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 website address is *www.neostem.com*. The information on our website is not incorporated by reference into this prospectus supplement or the accompanying prospectus and should not be considered to be a part of this prospectus. We have included our website address as an inactive technical reference only.

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 prospects, or included in any free writing prospectus that we have authorized for use in connection with this offering, are the property of their respective owners.

| | The Offering |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Securities offered by us | 10,582,011 units, each consisting of (i) one share (the "Preferred Shares") of our Series E 7% Senior Convertible Preferred Stock (the "Series E Preferred Stock"), (ii) warrants to purchase 0.25 shares of our common stock and (iii) 0.0155 shares of our common stock. This prospectus supplement also covers the shares of common stock issuable upon redemption or conversion, if any, of the senior convertible preferred stock offered and upon the exercise, if any, of the warrants offered. |
| Common stock to be outstanding after this offering and the concurrent common stock offering | 64,117,256 shares (assuming none of the warrants issued in this offering or the concurrent common stock offering are exercised and none of the Preferred Shares are converted to common stock) |
| Series E Preferred Stock outstanding after this offering | 10,582,011 shares of our Series E Preferred Stock |
| Concurrent common stock offering | Concurrently with this offering, we are offering 6,337,980 units, at a price of \$1.45 per unit, with each unit consisting of one share of our common stock and a warrant to purchase 0.50 of a share of our common stock (and the shares of common stock issuable from time to time upon exercise of the offered warrants), pursuant to a separate prospectus supplement. 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. Units will not be issued or certificated. The shares of common stock and the warrants are immediately separable and will be issued separately, but will be purchased together in the concurrent common stock offering, and the concurrent common stock offering, and the concurrent common stock offering. |
| Stockholder approval | We have to hold a special meeting of our stockholders as soon as practicable 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 senior convertible preferred stock, and, if necessary, all shares of common stock issuable pursuant to the warrants being offered in this offering. The purchasers of the senior convertible preferred stock will acknowledge that they cannot convert their preferred stock to common stock or exercise their warrants for more than 19.9% of the outstanding shares of our common stock, minus the shares of common stock to be issued in connection with the concurrent common stock offering and in this offering, or exercise any voting rights, until after shareholder approval of such issuance is obtained at the shareholders meeting. |
| Dividends | 7% per annum, payable monthly in cash or in common stock subject to certain conditions |
| Liquidation Preference | \$1.00 per share plus accrued and unpaid dividends |
| Maturity | May 20, 2013 |

| Repayment | Monthly interest and principal payments beginning on the fourth (4th) month after closing. Payments can be made in stock or cash at our option, provided the "Equity Conditions" (described below) are satisfied or holders of Preferred Shares (referred to herein as "holders") agree to waive the Equity Conditions for that payment period. If the Equity Conditions are not satisfied, we must make payments in cash. All payments made in stock will be at the VWAP Price (defined below). |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Payment of principal or interest in stock | Payments which are made in stock will be made in shares which are freely tradable ("Payment Shares"). The price of the shares will be calculated based on 92% of the average of the lowest five (5) VWAPs of the 20 trading days prior to the payment date (the "VWAP Price"). Between 22 and 25 trading days prior to each payment date, we will inform holders what percentage of the upcoming amortization and interest payment will be made in cash. Twenty-one (21) trading days prior to each payment date, we will provide holders with freely trading shares valued at the dollar amount of the stock payment divided by 92% of the prior day's VWAP. We and the holders will "true up" the number of shares based on the five (5) lowest VWAP prices during the previous 20 trading days. |
| Optional Prepayment: | At our option, we may pre-pay the outstanding balance of the Preferred Shares in full or in part (in increments of no less than \$1,000,000) at 115% of the then outstanding balance, reducing to 110% after twelve (12) months, with notice of not less than thirty days and adequate opportunity to convert. We may pre-pay a portion of the Preferred Shares in equity provided the Equity Conditions (described herein) apply. |
| Equity Conditions: | We can pay in equity no more than 15% multiplied by the total dollar trading volume (using the daily VWAP) of our common stock for the 22 trading days prior to the notification date for any given amortization and dividend payment or any pre-payment, so long as the Equity Conditions are satisfied. The "Equity Conditions" will be satisfied if, on each day of the pricing period, (i) the Payment Shares are eligible for resale by the holders without restriction, (ii) our common stock is not suspended from trading on the AMEX Market or other trading market, (iii) the Payment Shares may be issued in full without violating any rules of the AMEX Market, (iv) there is no event of default or Trigger Event (as defined in the certificate of designations), (v) we have not provided the holders with material non-public information, (vi) neither the registration statement of which this prospectus supplement and the attached prospectus is a part nor this prospectus supplement and such prospectus 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 this prospectus supplement and the prospectus supplement and the prospectus supplement and substance, (vii) our transfer agent is participating in the DTC Fast Automated |

| | Securities Transfer Program and (viii) the Payment Shares will be duly authorized, fully paid and non-assessable. |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conversion | The Preferred Shares will be convertible at an initial conversion price of \$2.0004, 115% of the VWAP (as defined herein) on the day prior to the execution date of the stock purchase agreement (the "stock purchase agreement") under which the Preferred Shares will be sold. The conversion price is subject to adjustment as provided in the certificate of designations and described herein. |
| Mandatory repurchase | The Preferred Shares are subject to mandatory redemption, including payment of the pre-payment premium upon certain trigger events, including a change in control transaction or certain material breaches of representation, warrant covenants or other terms of the certificate of designations. |
| Warrants | 25% warrant coverage. The warrants will have a strike price of \$2.0874 (120% of the VWAP on the day prior to the execution date of the stock purchase agreement), will become exercisable after six (6) months and will expire after three (3) years from the first date they are exercisable. We may force the exercise of the warrants, with notice and adequate opportunity to exercise, if the VWAP of our common stock has remained at least 100% above the conversion price (\$4.1748) for 20 out of 30 consecutive trading days. |
| Anti-dilution | The Preferred Shares and warrants will have "weighted average" anti-dilution. |
| Voting Rights | None, except in certain limited circumstances, as described herein. |
| Covenants | Except as provided in the certificate of designations or in the stock purchase agreement, we will not pledge any of our assets (outside of our Erye Pharmaceuticals subsidiary and if the acquisition of Progenitor Cell Therapy LLC ("PCT") is completed (the "PCT Merger"), the mortgage on its property up to specified limitations) to a creditor or incur any obligations senior to the Preferred Shares without the consent of holders of a majority of the Preferred Shares. |
| Escrow | A dollar amount in escrow equal to 25% of the purchase price paid by all purchasers in this offering (\$2,500,000). |
| Risk Factors | Our business and an investment in our securities involve a high degree of risk. See "Risk Factors" and other information included or incorporated into this prospectus supplement and the accompanying prospectus for a discussion of the factors you should carefully consider before deciding to invest in our securities. |
| Use of proceeds | We currently intend to use the net proceeds of this offering and the concurrent common stock offering in connection with the PCT Merger, including a \$3 million repayment of indebtedness owed by PCT, associated costs for the growth of the cord blood and adult stem cell banking, manufacturing and therapeutic business, expansion of our business in Asia and completion of the Beijing lab, development and acquisition of proprietary stem cell intellectual property and new technology and expansion of business into other countries. We intend to use the remaining net proceeds from this offering and the concurrent common stock |

offering for marketing, working capital and other general corporate purposes.
See "Use of Proceeds" on page S-46.Closing conditionsThis offering is contingent upon a number of closing conditions, including, but
not limited to, the completion of the concurrent common stock offering.ListingOur common stock is listed on the NYSE Amex under the trading symbol
"NBS." There is no established public trading market for the offered Preferred
Shares and warrants and we do not expect a market to develop. In addition, we
do not intend to apply for listing of the Preferred Shares or the warrants on any
national securities exchange.

The number of shares of common stock to be outstanding immediately after this offering and the concurrent common stock offering as shown above is based on 57,614,858 shares of common stock outstanding as of the close of business on November 11, 2010. This number excludes, as of the close of business on November 11, 2010:

- options representing the right to purchase a total of 13,588,214 shares of common stock at a weighted average exercise price of \$1.92 per share;
- 8,223,751 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;
- other warrants representing the right to purchase a total of 3,689,266 shares of common stock at a weighted average exercise price of \$3.21 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;
- up to 14,200,000 shares of common stock issuable upon consummation of the PCT Merger (inclusive of shares of common stock underlying up to 3,000,000 warrants which may be issued in the PCT Merger);
- any shares of common stock issuable upon exercise of any warrants issued in this offering or the concurrent common stock offering; and
- any shares of common stock into which the Preferred Shares offered hereby may be redeemed or converted.

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 and our concurrent common stock offering.

Risks Related to this Offering and the Preferred Shares

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

We have the obligation to make monthly redemption payments on the Preferred Shares commencing four months from the initial issuance dates, which mandatory redemption payments may be made at our option in cash or in shares of our common stock, except that our right to make payment in shares of common stock is dependent upon our satisfying certain Equity Conditions and is also subject to certain Dollar Volume Limitations. 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 Preferred Shares, as well as certain other Trigger Events, 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 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 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 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 Preferred Shares rank senior to the obligations to our common stock holders. Upon our liquidation, the holders of 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 Preferred Shares, and the holders of Preferred Shares, as well as the holders of the warrants being issued to the purchasers of Preferred Shares, have the right to participate in any payment of dividends or other distributions made to the holders of Common Stock to the same extent as if they had converted the Preferred Shares or exercised the warrants. The existence of such a senior security could have an adverse effect on the value of the Common Stock.

Holders of the Preferred Shares have rights that may restrict the ability of the Company to operate its business.

Under the Securities Purchase Agreement, we are subject to certain covenants that limit our ability to create new series of preferred stock, other than series junior to the 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 Preferred Shares are outstanding.

We will likely need to raise additional financing to fund our current business, including the development of our VSELTM Technology and other research and development efforts related to product development, as well as marketing activities in the United States and China.

We believe that our currently available cash and cash equivalents, together with the anticipated net proceeds from this offering and the concurrent preferred offering, are sufficient to fund our operations through at least December 31, 2011 and, assuming the PCT Merger is consummated, beyond. We will likely need to raise additional funding in the future to fund certain segments of our current business, including the development of our

VSELTM Technology and other research and development efforts related to product development, as well as marketing activities in the United States and China. Cash requirements may vary materially from those now planned because of expenses relating to marketing, advertising, sales, distribution, research and development and regulatory affairs, as well as the costs of maintaining, expanding and protecting our intellectual property portfolio, including potential litigation costs and liabilities.

If we cannot generate a sufficient amount of revenue to fully fund our cash requirements, which we may never do, we will need to finance future cash needs primarily through equity issuances, debt arrangements, a combination of the above or other arrangements. Our ability to raise such funding may be limited by certain restrictions on incurring debt and issuing preferred stock that are contained in the terms of the Preferred Shares. Any issuance of convertible debt securities, preferred stock or common stock may be at a discount from the then-current trading price of our common stock. If we issue additional common or preferred stock or securities convertible into common stock, our stockholders will experience additional dilution, which may be significant. Further, we do not know whether additional funding will be available on acceptable terms, or at all. The trading volume of our common stock, coupled with our history of operating losses and liquidity problems, may make it difficult for us to raise capital on acceptable terms or at all. The demand for the equity and debt of small cap biopharmaceutical companies like ours is dependent upon many factors, including the general state of the financial markets. If we are unable to raise substantial additional funding on acceptable terms or at all, our business, results of operations and financial condition could be adversely affected.

Failure to obtain shareholder approval for the Preferred Shares may have an adverse effect on our financial condition.

Under the rules of the NYSE-Amex, we are limited in the number of shares of our common stock which we may issue upon conversion or redemption of the Preferred Shares unless we get shareholder approval of such issuances. We intend to seek such approval as promptly as practical following consummation of the sale of the Preferred Shares. If we are required to repurchase the Preferred Shares in cash following a failure to secure shareholder approval, 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. Certain of our officers and other inside shareholders have agreed to vote in favor of the issuances to the holders of Preferred Shares, but such shareholders do not represent a majority of the voting power of our common stock.

The market price and trading volume of our shares of common stock may 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 November 11, 2010, 57,614,858 shares of our common stock were outstanding. In the nine months ended September 30, 2010, our common stock traded as low as \$1.26 and as high as \$3.50, and in the nine months ended September 30, 2009, traded as low as \$0.43 and as high as \$2.72. If we issue a significant number of shares of common stock or securities convertible into common stock in a short period of time, there could be a dilution of the existing common stock and a decrease in the market price of the common stock.

The market price of our shares of common stock may be highly volatile and could be subject to wide fluctuations. In addition, the trading volume in our shares of common stock may fluctuate and cause significant price variations to occur. In addition to our low stock trading volume, some of the other factors contributing to our stock's price volatility include announcements of government regulation, new products or services introduced by us or by our competition, healthcare legislation, trends in health insurance, litigation,

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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 other 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.

Because the Preferred Shares are convertible into shares of our common stock, volatility or depressed prices for our common stock could have a similar effect on the trading price of the Preferred Shares. Holders of Preferred Shares who receive our shares of common stock upon conversion of their Preferred Shares will be subject to the risk of volatile market prices and wide fluctuations in the market price of our shares of common stock. In addition, many of the factors listed above are beyond our control. These factors may cause the market price of our shares of common stock to decline, regardless of our financial condition, results of operations, business or prospects. It is impossible to assure you that the market prices of our shares of common stock will not fall in the future.

If you purchase the securities sold in this offering, you will experience immediate dilution as a result of the issuance of a significant number of shares of common stock in the concurrent common stock offering. You will experience further dilution upon the issuance of common stock upon conversion or redemption payments under the Preferred Shares, if the PCT Merger is consummated, if we issue additional equity securities in future financing transactions and if the shares of our common stock underlying our significant number of outstanding warrants are purchased.

The issuance of common stock as mandatory redemption payments or upon conversion of some or all of the Preferred Shares will dilute the ownership interests of our existing holders of our shares of common stock. We expect to make the mandatory redemption payments under the terms of the 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 the stock price. Any sales or perceived sales in the public market of our shares of common stock issuable upon such conversion or redemption payments could adversely affect prevailing market prices of our shares of common stock. The issuance of common stock upon conversion of the 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 Preferred Shares may encourage short selling by market participants because the conversion of the Preferred Shares or upon such depress the market price of our shares of common stock.

You will also experience dilution in connection with our concurrent common stock offering.

Additionally, pursuant to the PCT Merger we may issue up to 11,200,000 shares of common stock and warrants to purchase up to 3,000,000 shares of common stock. If we issue additional common stock, or securities convertible into or exchangeable or exercisable for common stock, our stockholders, including investors who purchase units in this offering, 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 securities convertible into, or allowing the purchase of our common stock. Investors could be subject to increased dilution. 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.

Investors in our company will be subject to increased dilution upon conversion of our preferred stock and upon the exercise of outstanding stock options and warrants. There were 57,614,858 shares of our common stock outstanding as of November 11, 2010. As of that date, preferred stock outstanding could be converted into 10,000 shares of our common stock and stock options and warrants outstanding that are exercisable represented an additional 24,467,529 shares of our common stock that could be issued in the future. 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.

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 Preferred Shares will be selling shares of common stock issued to them as mandatory redemption shares on each mandatory redemption date. We will also be issuing a significant number of new shares of common stock in our concurrent common stock offering. 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.

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

The repurchase rights in the Preferred Shares triggered by a change in control could discourage a potential acquiror. The term "change in control" is limited to specified transactions and may not include other events that might adversely affect our financial condition or business operations. Our obligation to offer to repurchase the Preferred Shares upon a change in control would not necessarily afford you protection in the event of a highly leveraged transaction, reorganization, merger or similar transaction involving us.

The premium payable on Preferred Shares redeemed in connection with certain change in controls or a mandatory repurchase may not adequately compensate you for any lost value of your Preferred Shares as a result of such transaction.

Holders who redeem their Preferred Shares in connection with certain change in control transactions or upon a Trigger Event or whose Preferred Shares are redeemed in connection with our decision to mandatorily redeem the Preferred Shares will be entitled to receive a premium or 15% or 10%, depending on the date of redemption. The premium will be determined based on the date on which the change in control becomes effective or the mandatory redemption date, as applicable. Any premium you may receive in connection with these events may not adequately compensate you for any lost value of your Preferred Shares as a result of such transaction.

The conversion rate of the Preferred Shares may not be adjusted for all dilutive events.

The conversion rate of the Preferred Shares is subject to adjustment for certain events, including, but not limited to, certain distributions on our shares of common stock, the issuance of certain rights or warrants to holders of our shares of common stock, subdivisions or combinations of our shares of common stock, and certain new issuances of common stock or common stock equivalents at prices below the conversion price of the Preferred Shares. The conversion rate will not be adjusted for other events, such as an issuance of our shares of common stock in certain acquisition transactions or pursuant to employee stock options, that may adversely affect the trading price of our shares of common stock. There can be no assurance that an event will not occur that is adverse to the interests of the holders and the value of the Preferred Shares but does not result in an adjustment to the conversion rate.

Some significant restructuring transactions may not constitute a change in control, in which case we would not be obligated to offer to repurchase the Preferred Shares.

Upon the occurrence of a change in control, the holders of the Preferred Shares will have the right to require us to repurchase the Preferred Shares. However, the change in control provisions will not afford protection to holders in the event of certain transactions. For example, sales of assets that do not constitute a sale of all or substantially all of our assets would not be a change in control. In the event of any such transaction, holders will not have the right to require us to repurchase the Preferred Shares, even though any of these transactions could adversely affect us, thereby adversely affecting the holders of Preferred Shares.



You may be deemed to receive a taxable distribution without the receipt of any cash or property.

The conversion rate of the Preferred Shares will be adjusted in certain circumstances. Adjustments to the conversion rate of the Preferred Shares that have the effect of increasing your proportionate interest in our assets or earnings may in some circumstances result in a taxable constructive distribution to you for U.S. federal income tax purposes, notwithstanding the fact that you do not receive an actual distribution of cash or property. In addition, you may be subject to U.S. federal withholding taxes in connection with such a constructive distribution. You are urged to consult your tax advisors with respect to the U.S. federal income tax consequences resulting from an adjustment to the conversion rate of the Preferred Shares.

Our common stock has had limited trading volume.

Our common stock is currently listed on the NYSE Amex and has had limited trading volume since its listing on August 9, 2007. Low volumes can result in fluctuating prices and downward pressure on the price per share should there develop an imbalance between the shares available for sale and the number of shares sought to be purchased. We cannot assure you that the liquidity of our common stock will improve or that it will not decline from current levels. Our Class A Warrants also trade on the NYSE Amex, but have had very limited trading volume. Investors holding our common stock may find it difficult to dispose of such shares.

Management will have broad discretion as to the use of the proceeds from this offering and the concurrent common stock offering, and we may not use the proceeds effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and the concurrent common stock offering 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.

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 the sole source of gain for the foreseeable future for holders of our common stock.

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 acquired China Biopharmaceuticals Holdings, Inc ("CBH") by merger in October 2009. CBH reported several material weaknesses in its internal control over financial reporting and concluded that it did not have effective internal control over financial reporting as of December 31, 2008 and September 30, 2009. If we fail to (1) fully remediate the material weaknesses identified in CBH's internal control over financial reporting that are continuing with regard to Erye, and integrate CBH's internal control over financial reporting to Erye with ours, or (2) we fail to maintain the adequacy of internal control over our financial reporting with regard to the financial condition and results of operations of Erye, 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 is not subject to the requirements of Section 404 of the Sarbanes-Oxley Act. Assuming the PCT Merger is consummated, 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) 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 November 11, 2010, our executive officers and directors collectively beneficially owned 37,963,483 shares of our common stock. These beneficial holdings represent 56.6% 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 42.9% of our common stock as of November 11, 2010. Mr. Shi Mingsheng (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 8.5% of our common stock as of November 11, 2010. 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, licensees and service providers and its ability to enter into new relationships in the future.

Risks Related to NeoStem's Business and 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 \$89.0 million through September 30, 2010. We incurred net losses attributable to common shareholders of approximately \$17.3 million for the nine month period ended September 30, 2010, approximately \$31.7 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 adult stem cell collection, processing and storage business 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 our activities under license and sponsored research

agreements relating to our VSELTM Technology and other research and development efforts to advance stem cell and other therapeutics, both in the U.S. and China. 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 recently acquired a 51% interest, had revenue of \$51.5 million for the nine months ended September 30, 2010 and \$11.4 million in revenue for the year ended December 31, 2009 (this reflects Erye's operations for the two months ended December 31, 2009 since the merger 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; and (4) costs related to expanding its existing sales network for new drug distribution. Pursuant to the current joint venture agreement that governs the ownership and management of Erye, or the Joint Venture Agreement for the next two years (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 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. As a result, we will not be able to supplement our cash flow fully from the operations and income expected to be generated by Erye.

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 pharmaceutical products and innovative stem cellbased therapies 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.

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

Erye recently passed the government inspection by the State Food and Drug Administration ("SFDA") in China to manufacture penicillin powder for injection and cephalosporin powder for injection at its new manufacturing facility which provides 50% greater manufacturing capacity than its existing plant. The two production lines recently approved accounted for over 70% of Erye's product sales in 2009. More recently, these two production lines became fully operational. These production lines, coupled with the approval of the lines earlier in 2010 for solvent crystallization sterile penicillin and freeze dried raw sterile penicillin, is allowing Erye to relocate over 90% of its 2009 sales to the new facility. Any interruptions in production with respect to those lines once they are operational 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 is in the process of relocating 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 may experience certain delays and disruptions in its manufacturing operations which may adversely impact our business.

All acquisitions intended to grow our business may expose us to additional risks.

We will continue to review acquisition prospects and other restructuring 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.

Risks Related to the Stem Cell Business

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

The terms of our exclusive license of the VSELTM 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 VSELTM 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

VSELTM Technology and have entered into additional sponsored research agreements, we are highly dependent on the University's cooperation and

performance in developing the VSELTM Technology. Further, the VSELTM 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

VSELTM 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 capabilities for our VSELTM 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 serves as our research and development headquarters. To pursue our business strategy, we must increase our internal research capabilities, which we are endeavoring to accomplish at this facility, and by establishing 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 VSELTM 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 VSELTM Technology and other stem cell technologies may depend upon our ability to successfully 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 VSELTM 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 VSELTM 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 VSELTM 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 VSELTM Technology and other populations of adult stem cells are subject to many of the same risks as our adult 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 VSELTM 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 VSELTM 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

VSELTM Technology or other stem cells for any therapeutic indication. Should we fail to develop our VSELTM 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 result 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 adult stem 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 use 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). 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.

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 aphereis 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.

State and other requirements may impact our ability to conduct a profitable collection, processing and storage business for adult stem cells.

Some states impose additional regulation and oversight of clinical 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 that must be complied with. Additionally, there may be state regulations impacting the use of blood products that would impact 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 market or perform our services or our ability to market or perform our services or our ability to market or perform our services or our ability to market or perform our services or our ability to do so profitably.

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 cellrelated 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 may need to obtain regulatory approval before we can market and sell any stem cell biomarker screening panels in the U.S.

In the U.S., our contemplated stem cell biomarker screening panels may be subject to regulation as a medical device by the FDA under the Federal Food, Drug and Cosmetic Act. These domestic regulations govern many of the commercial activities we plan to perform, including the purposes for which our proposed immunodiagnostic assays can be used, the development, testing, labeling, storage and use of our proposed assays with other products, and the manufacturing, advertising, promotion, sales and distribution of our proposed assays for the approved purposes. Compliance with these regulations could prove expensive and time-consuming and render such panels commercially impractical.

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.

The market for services related to the preservation and expansion of stem cells has become increasingly competitive.

Historically, 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 or LifebankUSA easily could enter the field of adult stem cell collection because of their processing labs, storage facilities and customer lists. We estimate that there are approximately 53 cord blood banks in the U.S., approximately 33 of which are autologous, meaning that the donor and recipient are the same, and approximately 20 of which are allogeneic, 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. We estimate that there are approximately 168 hospitals in the U.S. with stem cell transplant centers. These competitors may have better experience and greater financial,

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marketing, technical and research resources, name recognition, and market presence than we do. 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.

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.

We operate in a highly regulated environment and may be unable to comply with applicable federal regulations, registrations and approvals.

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.

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.

There can be no assurance that we will be able, or 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.

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.

Our success in developing future stem cell therapies 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 are dependent on relationships with third parties to conduct our business.

Apheresis is the process through which stem cells are extracted from a patient's whole blood and it is an integral part of our collection process. Our process involves the injection of a "mobilizing agent" which causes the stem cells to migrate from the bone marrow into the blood stream. The injection of this mobilizing agent is an integral part of the collection process. There is currently only one supplier of this mobilizing agent, called Neupogen®. Although we continue to explore alternative mobilizing agents and methods of stem cell collection, there can be no assurance that any alternative mobilizing agents will be available or alternative methods will prove to be successful. In the event that our supplier is unable or unwilling to continue to supply the mobilizing agent to us on commercially reasonable terms, and we are unable to identify alternative methods or find substitute suppliers on commercially reasonable terms, we may not be able to successfully commercialize our business. In addition, we are currently using only two outside apheresis providers. Although other third parties, including the centers themselves, subject to appropriate licensure as well as our Cambridge facility, are capable of providing apheresis services, any disruption in the provision of this service would cause a delay in the delivery of our services. Our failure to maintain relationships with these third parties or the failure of such parties to provide quality contracted services would have a material adverse impact on our business.

We are dependent upon our management, scientific and medical personnel and we may have difficulty attracting or retaining qualified personnel.

Our performance and success are dependent upon the efforts and abilities of our management, and medical and scientific personnel. Furthermore, our growth will require hiring a significant number of qualified technical, commercial, business and administrative personnel. If we are unable to attract and retain the qualified personnel necessary to develop our business, perform contractual obligations under our University of Louisville and other license agreements and maintain appropriate licensure, on acceptable terms, we may not be able to sustain our operations or achieve our commercialization and other business objectives and we may fail to grow or sustain our business as a going concern.

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 one patent and own or hold exclusive rights worldwide to twenty-five filed patent applications and exclusive rights in Asia to seven filed patent applications related to our products and technologies. Given the nature of our therapeutic programs, our patent applications cover certain methods of isolating, storing and using stem cells, including very small embryonic stem 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.

Our insurance may not be adequate to cover all claims or losses.

We have insurance coverage against operating risks, including product liability claims and personal injury claims related to our products and services, but no assurance can be given that the nature and amount of that insurance will be sufficient to fully indemnify us against liabilities arising out of pending and future claims and litigation or available on terms acceptable to us. This insurance has deductibles or self-insured retentions and contains certain coverage exclusions. The insurance may not provide complete protection against losses and risks, and our results of operations and financial condition could be materially and adversely affected by unexpected claims not covered by insurance.

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;

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- 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.

While Chinese merger and acquisition activity is increasing in frequency, assimilating cultural, language and managerial differences remains problematic. Personnel issues may develop as we endeavor to consolidate management teams from different cultural backgrounds. In addition, errors arising through language translations may cause miscommunications relating to material information. These factors may make the management of our operations in China more difficult. Should we be unable to coordinate the efforts of our U.S.-based management team with our China-based management team, our business, operating results and financial condition could 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 to protect material state interests or for other reasons. Should the PRC government want to regulate the export or import of 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: Qingdao Niao Bio-Technology Ltd., or Qingdao Niao, 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. 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, 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 next two years: (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.

Our business in China may be adversely affected by inaccurate claims about our technology.

We have learned of an effort by a principal of Shandong New Medicine Research Institute of Integrated Traditional and Western Medicine Limited

Liability Company, or Shandong New Medicine, to promote our VSELTM Technology as his own in China. While we have no reason to believe that Shandong New Medicine or such person has any VSELTM Technology or has access to or use of any of our proprietary information, we are analyzing the available facts and circumstances and have initiated and are reviewing and pursuing additional appropriate legal remedies in the U.S. and abroad. We cannot determine at this time what effect, if any, such actions by Shandong New Medicine or its principal will have on our reputation in China.

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 two 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, have limited and may continue to limit our ability to channel funds to the two VIE entities for their operation. We are exploring options with our PRC counsels and banking institutions in China as to acceptable methods of funding the operation of the two VIEs, including advances from Erye, but there can be no assurance that acceptable funding alternatives will be identified. Further, even if we find an acceptable funding alternative, 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 launching 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 adult stem cell-based 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 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.

In China, we plan to conduct research and development activities related to stem cells in cooperation with two domestic Chinese companies. 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 adult stem cells in China are conducted in cooperation with the Beijing Stem Cell Research Center, or Lab, and a consultant, the Shandong Life Science Institute and Technology Research, or SLSI. 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 or SLSI 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 or SLSI 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 will lose certain preferential tax concessions, which may cause our tax liabilities to increase and its 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 enterprise 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 2012. As a result, Erye will lose its preferential tax rates.

Because of the EIT Law, we expect that the tax liabilities of Erye will increase. 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 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.

Under the EIT Law, we may be classified as a "resident enterprise" of the PRC, which could result in unfavorable tax consequences to us and to non-PRC stockholders.

Under the EIT Law, an enterprise established outside of China with "de facto management bodies" within China is considered a "resident enterprise," meaning that it can be treated in a manner similar to a Chinese enterprise for enterprise income tax purposes, although the dividends paid to one resident enterprise from another may qualify as "tax-exempt income." The implementing rules of the EIT Law define de facto management as "substantial and overall management and control over the production and operations, personnel, accounting, and properties" of the enterprise. The EIT Law and its implementing rules are relatively new and ambiguous in terms of some definitions, requirements and detailed procedures, and currently no official interpretation or application of this new "resident enterprise" classification, other than for enterprises established outside of China whose main holding investor/s is/are enterprise/s established in China, is available; therefore, it is unclear how tax authorities will determine tax residency based on the facts of each case.

If the PRC tax authorities determine that we are a "resident enterprise" for PRC enterprise income tax purposes, the PRC could impose a 10% PRC tax on dividends we pay to our non-PRC stockholders and gains derived by our non-PRC stockholders from transferring our shares, if such income is considered PRC-sourced income by the relevant PRC authorities. In addition, we could be subject to a number of unfavorable PRC tax consequences, including: (a) we could be subject to enterprise income tax at a rate of 25% on our worldwide taxable income, as well as PRC enterprise income tax reporting obligations; and (b) although under the EIT Law and its implementing rules, dividends paid to us from our PRC subsidiaries through our sub-holding companies may qualify as "tax-exempt income," we cannot guarantee that such dividends will not be subject to withholding tax. Any increase in the taxation of our PRC-based revenues could materially and adversely affect our business, operating results and financial condition.

Taxing authorities in the PRC may attempt to impose an enterprise income tax on the gain on the transfer of the ownership of the 51% ownership interest in Erye.

Transactions involving the merger of two non-PRC companies, but that result in the change in ownership of joint venture interests in the PRC, historically have not been taxed by the taxing authorities in the PRC. However, the PRC State Administration of Taxation issued the *Notice on Strengthening the Administration of Enterprise Income Tax on Equity Transfer Gains of Non-residence Enterprise*, or Circular 698, in December of 2009, according to which, if any non-residence enterprise indirectly transfers the shares of any residence

enterprise, and if the total tax rate applicable in the country/jurisdiction, where the offshore holding company transferred is incorporated, is lower than 12.5% or there is no income tax on income of its residents sourced outside of such country/region, relevant parties shall submit the share transfer agreement and other relevant documents and information to the competent tax authority having jurisdiction over the residence enterprise, whose equity is indirectly transferred, within 30 days after the share transfer agreement is signed. Subject to approval by the State Administration of Taxation, if the non-residence enterprise transferring party is deemed to have indirectly transferred the shares of the residence enterprise for purpose of evading PRC enterprise income tax through abuse of transaction structure, and the transaction structure does not have reasonable commercial purposes, relevant tax authorities have the right to re-determine the nature of the transaction based on its substance and deny the existence of offshore vehicles established for purpose of evading PRC tax and levy enterprise income tax on the share transfer gains pursuant to PRC laws. The tax rate applicable to the share transfer gains under such circumstance should be 10% or lower treaty tax rate under EIT Law and its implementation rules. Accordingly, recently the taxing authorities in the PRC have levied enterprise income tax at the rate of approximately 10% of the gain on a few real estate and mining transactions that resulted in a change in ownership in joint ventures located in the PRC. Circular 698 applies retrospectively and shall be deemed to have become effective since January 1, 2008. Although it is still unclear on whether or not the Circular 698 shall also apply to the merger, as opposed to share transfer, of two non-PRC companies resulting in the change in ownership of PRC companies, there can be no assurance that the PRC taxing authorities will not impose enterprise income tax on the gain on the transfer to us of ownership

Risks Related to the PCT Merger

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

A condition to consummation of the PCT Merger is that we or PCT obtains certain consents or approvals from third parties. In addition, our stockholders must approve the issuance of the securities to be issued in the PCT Merger and the Members of PCT must approve the PCT Merger Agreement and PCT Merger. There can be no assurance that we or PCT will be able to obtain all such relevant consents and approvals on a timely basis or at all. Each of NeoStem and PCT has incurred, and expects to continue to incur, significant costs and expenses in connection with the proposed PCT Merger. Any failure to obtain, or delay in obtaining, the necessary consents or approvals would prevent NeoStem and PCT from being able to consummate, or delay the consummation of, the transactions contemplated by the PCT Merger Agreement, which could materially adversely affect the business, financial condition and results of operations of us and of PCT. 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 PCT Merger could cause our stock price to decline and could harm our business and operating results.

The PCT Merger Agreement contains conditions which we and PCT must meet in order to consummate the PCT Merger, including that we affirm to PCT that we have \$3 million available to repay certain indebtedness owed by PCT to an affiliate of PCT's CEO. We expect to use a portion of the proceeds from this offering and the concurrent common stock offering to satisfy this condition. Please see "Use of Proceeds" on page S-<u>46</u>. In addition, it is a condition to the closing of the PCT Merger that the outstanding principal amount under PCT's credit line with NNJCC be reduced from \$3.4 million to \$3 million. PCT will need to obtain additional financing in the form of a second mortgage on its Allendale, New Jersey property in the amount of approximately \$1 million in order to satisfy this condition. Although PCT applied for a second mortgage in the amount of approximately \$1 million on the Allendale property and was issued a Commitment Letter from TD Bank, no assurance can be given that PCT will be able to close on such financing. Also, the PCT Merger Agreement may be terminated by either us or PCT under certain circumstances. If the PCT Merger is not completed for any reason, we may be subject to a number of risks, including the following:

• the market price of our common stock may decline to the extent that the relevant current market price previously reflected a market assumption that the PCT Merger will be completed;

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- many costs related to the PCT Merger, such as legal, accounting and financial printing fees, must be paid regardless of whether the PCT Merger is completed; and
- there may be substantial disruption to our business and distraction of its workforce and management team.

The announcement of the PCT Merger may adversely affect us and PCT.

In response to the announcement of the PCT Merger, customers or suppliers of NeoStem and/or PCT may delay, defer or cancel purchase or other decisions. Any delay, deferral or cancellation in purchase or other decisions by customers or suppliers could harm the business of the relevant company, regardless of whether the PCT Merger is completed. Similarly, current and prospective NeoStem and/or PCT employees may experience uncertainty about their future roles with NeoStem or PCT until the PCT Merger is completed. As a result, the ability of NeoStem and/or PCT to attract and retain key management, sales, marketing and technical personnel could suffer. Any such disruption of purchases and/or orders, as well as any uncertainty regarding professional roles, could harm the business, financial condition and operating results of the constituent entities, and such setbacks could carry over into the combined entity.

Any acquisition exposes a company to additional risks.

Acquisitions may entail numerous risks for us, including:

- difficulties in assimilating acquired operations, technologies or products, including the loss of key employees from acquired businesses;
- diversion of management's attention from our core business;
- risks of entering markets in which we have limited or no prior experience;
- competing claims for capital resources; and
- our management team has limited experience in purchasing and integrating new businesses.

Our failure to successfully complete the integration of PCT could have a material adverse effect on our business, financial condition and operating results.

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

We and PCT expect that the combination of our respective 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:

- retention of key management, marketing and technical personnel after the PCT Merger;
- the ability of the combined 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 combined 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;



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- 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 the ability of NeoStem to make timely and accurate public disclosure; and
- the demand of managing new locations and new lines of business acquired from PCT 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 combined company's revenues, level of expenses and operating results, which could adversely affect the value of our common stock after the PCT Merger.

Our outstanding warrants may negatively affect our ability to raise additional capital.

As part of the PCT Merger, we will be issuing warrants to purchase up to an additional 3,000,000 shares of our common stock and additional warrants will be issued in this offering and the concurrent preferred stock offering. We already had, at November 11, 2010, 30,940,242 stock options and warrants outstanding. Holders of our outstanding warrants are given the opportunity to profit from a rise in the market price of our common stock. So long as these warrants are outstanding, the terms on which we could obtain additional capital may be adversely affected. The holders of these 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 these warrants.

If the market for the combined company's products and/or technology 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.

We and PCT 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 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.

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 sales and marketing programs, its manufacturing capacity, and its provision of innovative therapies 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 continually improve 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.

The PCT Merger will result in dilution of the ownership interests of our current stockholders.

Prior to giving effect to this offering and the concurrent common stock offering, the equity holders of PCT would have owned approximately 16.3% of our common stock outstanding after consummation of the PCT Merger (exclusive of the warrants to be issued to the PCT equity holders). This represents dilution of the ownership interests and voting power of our current stockholders.

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

The shares of our common stock issued to PCT and distributed to PCT's equity holders will be freely tradable in the public market once released from escrow (approximately 10% one month after Closing, 40% one year after Closing and 50% two years after Closing). The market price of our common stock could fall in response to sales of a large number of shares of our 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 our products and services. As a result, these sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price that its board of directors deems appropriate.

Risks Related to PCT and PCT's Business

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

PCT has had a history of losses and may continue to incur such losses for the near future. PCT faces liquidity issues.

Since PCT began operations in 1999, cumulative expenses have exceeded cumulative revenues, resulting in losses, accumulating to a deficit of approximately \$12.7 million through September 30, 2010.

PCT has not generated any significant amount of revenue nor been profitable in any quarter since inception. Operations have been funded through the sale of equity, loans from affiliates and a mortgage on PCT's property. PCT has limited working capital for development and growth; as of September 30, 2010, PCT had negative working capital of approximately \$7.0 million. PCT cannot provide any assurance that PCT will generate a profit from its operations in the near future to fund its growth.

As of September 30, 2010 and December 31, 2009, respectively, PCT had unrestricted cash balances of approximately \$0.2 million and \$1.1 million. See Notes to 4 and 6 of the Notes to the Consolidated Financial Statements of PCT filed on November 12, 2010 with the SEC as part of NeoStem's Current Report on Form 8-K which are incorporated by reference into this Prospectus for information regarding outstanding loan obligations, commitments and contingencies.

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

Revenues recognized for the nine months ended September 30, 2010 and for the year ended December 31, 2009 are concentrated with three customers. These three customers make up 19%, 13% and 15% of revenue (a total of 47% for all three) for the nine months ended September 30, 2010 and 18%, 15% and 12% of revenue (a total of 45% for all three) for the year ended December 31, 2009. One of these is a related party. The loss of one or more of our 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, delays in revenues or cash flows and such delays or reductions could have a material impact on the future revenue growth and profitability of PCT. See Note 11 to the PCT Consolidated Financial Statements filed on November 12, 2010 with the SEC as part of NeoStem's Current Report on Form 8-K which are incorporated by reference into this Prospectus.

PCT and its subsidiaries may require additional funding, and there is no certainty that either will be able to obtain such financing. If PCT's capital requirements are not met, the business of PCT and its subsidiaries may be adversely affected.

Assuming the PCT Merger is consummated and after giving effect to the anticipated net proceeds of this offering, and the concurrent common stock offering, PCT and its subsidiaries may require additional financing to fund ongoing operations. Additional financing may not be available when needed or may not be available on acceptable terms. If adequate funds are not available, PCT's business, results of operations and financial condition could be adversely affected.

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In addition, it is a condition to the closing of the PCT Merger that the outstanding principal amount under PCT's credit line with NNJCC be reduced from \$3.4 million to \$3 million. PCT will need to obtain additional financing in the form of a second mortgage on its Allendale, New Jersey property in the amount of approximately \$1 million in order to satisfy this condition. Although PCT applied for a second mortgage in the amount of approximately \$1 million on the Allendale property and was issued a Commitment Letter from TD Bank, no assurance can be given that PCT will be able to close on such financing.

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

The mortgage on PCT's Allendale facility contains debt coverage and total debt to tangible net worth financial covenants which limit its ability to incur additional debt and make capital expenditures. The mortgage note is secured by a first mortgage on the Allendale facility. In connection with the mortgage PCT assigned an amount approximately equal to 18 months of debt service to be held in escrow. In order to satisfy the condition to the closing of the PCT Merger described above, PCT plans to obtain a second mortgage on the Allendale property in the amount of approximately \$1 million. Although PCT applied for a second mortgage in the amount of approximately \$1 million on the Allendale property and was issued a Commitment Letter from TD Bank, no assurance can be given that PCT will be able to close on such financing.

PCT has a limited marketing staff and budget.

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

The demand for PCT's services depends in part on its customers' research and development and marketing efforts. PCT's business, financial condition and results of operations may be harmed if its 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 PCT's 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 PCT's customers operate may have an impact on such spending as customers integrate acquired operations, including research and development departments and their budgets. PCT's customers finance their research and development spending from private and public sources. A reduction in spending by PCT's customers could have a material adverse effect on its business, financial condition and results of operations. If PCT's customers are not successful in attaining or retaining product sales due to market conditions, reimbursement issues or other factors, PCT's results of operations may be materially impacted.

The nature and duration of PCT 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 PCT's work and the milestones which determine when revenues are received by PCT. Due to the fact that PCT's customers are engaged in businesses that are in many instances experimental, the objectives of such customer relationships with PCT 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, PCT may be required to alter or halt the activities for which such customers have contracted with PCT. Each of these factors may have an adverse affect on PCT's revenues.

Cell therapy is still a developing field and a significant global market for the services of PCT and DomaniCell is 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. PCT's subsidiary, DomaniCell, provides services related to the collection and storage of umbilical cord blood units. 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. Major medical institutions currently do not recommend private storage generally, and PCT believes 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. The success of PCT and its subsidiary, DomaniCell is dependent on the establishment of a large global market for their products and services and their ability to capture a share of this market.

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

The business of PCT exposes it 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 PCT. PCT presently has product liability insurance limited to \$2 million per incident and \$2 million in annual aggregate, and also maintains errors and omissions, directors and officers, workers' compensation and other insurance appropriate to the activities of PCT and those of DomaniCell. If PCT or DomaniCell were to be subject to a claim in excess of this coverage or to a claim not covered by PCT's insurance and the claim succeeded, PCT would be required to pay the claim from its own limited resources, which could have a material adverse effect on the financial condition, results of operations and business of PCT. Additionally, liability or alleged liability could harm the business of PCT by diverting the attention and resources of management and damaging the reputation of PCT and that of its subsidiaries.

PCT and its subsidiaries may fail to compete effectively, particularly against larger, more established biotechnology and life science companies, which may adversely affect their ability to develop and market its services and products.

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 PCT. 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.

PCT has limited manufacturing capabilities.

PCT's management believes that it can provide services and produce materials for clinical trials and for human use at its existing facilities, which it believes are compliant with FDA requirements for current Good Manufacturing Practices ("cGMP") and current Good Tissue Practices ("cGTP"). PCT's management also believes that PCT has sufficient capacity to meet expected near term demand. However, PCT may need to, depending on demand, expand its manufacturing capabilities for cell therapy services and products in the future. In 2007, PCT acquired an additional facility in Allendale, New Jersey, which is a cGMP compliant facility. The demand for PCT's services and products could, at times, exceed existing manufacturing capacity. If PCT does not meet rising demand for products and services on a timely basis or is not able to maintain

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cGMP compliance standards then PCT's clients and potential clients may elect to obtain the products and services from competitors, which could materially and adversely affect PCT's revenues.

If PCT's processing and storage facilities are damaged or destroyed, the business, programs, and prospects of DomaniCell could be negatively affected and could adversely affect the value of PCT as a whole.

PCT processes and stores the umbilical cord blood of customers of DomaniCell at PCT's facility in Allendale, New Jersey, and may do so at PCT's Mountain View, California facility in the future. If these facilities or the equipment in these facilities was to be significantly damaged or destroyed, PCT could suffer a loss of some or all of the stored cord blood units. Depending on the extent of loss, such an event could reduce the ability of DomaniCell to provide cord blood stem cells when requested, could expose DomaniCell to significant liability from its cord blood banking customers, and could affect its ability to continue to provide umbilical cord blood preservation services. While PCT believes that it has insured against losses from damage to or destruction of its facilities consistent with typical industry practices, if PCT has underestimated its insurance needs, PCT may not have sufficient insurance to cover losses beyond the limits on its policies. Such events could have a material adverse effect on the value of PCT as a whole.

PCT is required to comply with good manufacturing practice requirements and its failure to do so may subject it to fines and other penalties that will delay or prevent PCT or its affiliates and related parties from marketing and selling their products and services.

FDA current Good Manufacturing Practices (cGMP) requirements, set forth in Title 21, Parts 210 and 211, of the Code of Federal Regulations (21 CFR Parts 210 and 211) are federal regulations that govern the manufacture, processing, packaging and holding of drug and cell therapy products. PCT 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. PCT 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 PCT or third party manufacturers may be unable to comply with the revised requirements. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any quantities supplied by third-parties is compromised due to their failure to adhere to applicable laws or for other reasons, PCT may not be able to obtain regulatory approval for or successfully commercialize product candidates that it may develop.

PCT, DomaniCell, and their customers conduct business in a heavily regulated industry. If one or more of these companies fail to comply with applicable current and future laws and government regulations, PCT's 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 the ability of PCT, DomaniCell and their 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;

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- 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 PCT expands into other parts of the world, it will need to comply with the applicable laws and regulations in such foreign jurisdictions. PCT has not yet thoroughly explored the requirements or feasibility of such compliance. It is possible that it may not be permitted to expand its business into one or more foreign jurisdictions.

Although PCT intends to conduct its business in compliance with applicable laws and regulations and believes that PCT and DomaniCell are in material compliance with applicable governmental healthcare laws and regulations, the laws and regulations affecting these 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 PCT and its business are subject to frequent change and/or reinterpretation. There also can be no assurance that the laws and regulations applicable to PCT and DomaniCell will not be amended or interpreted in a manner that adversely affects their business, financial condition, or operating results. For example, the federal government could issue tighter restrictions on private cord blood banking that prevents DomaniCell from collecting cord blood for private banking. While PCT is not aware of any such developments or that any court or federal or state government is reviewing PCT's operations, it is possible that such a review could result in a determination that would have a material adverse effect on the business, financial condition and operating results of PCT.

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 the services of PCT and DomaniCell 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 of PCT and DomaniCell cannot obtain coverage or reimbursement for therapies and products related to which PCT and DomaniCell provide services, 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, could significantly influence the purchase of healthcare services and products, resulting in lower prices and reduced demand for cancer therapies.

PCT currently receives a small portion of its revenues from services rendered to patients enrolled in federal health care programs, such as Medicare, and DomaniCell 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 the ability of PCT to sell its services, which may have a material adverse effect on its revenues.

The limitation on reimbursement available from private and government payors may reduce the demand for, or the price of, the services of PCT, which would have a material adverse effect on their 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 the products and services of PCT.

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 the services of PCT 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 PCT or DomaniCell, 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.

PCT's management is not aware of any government investigations involving any of the facilities or management of PCT or DomaniCell. While management believes that PCT and DomaniCell are in material compliance with applicable governmental healthcare laws and regulations, any future investigations of PCT, DomaniCell or their executives or managers could result in significant liabilities or penalties, as well as damage to the reputation of both companies.

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.

FDA laws and regulations provide for registration and listing requirements for establishments that manufacture human cells, tissues, and cellular and tissue-based products ("HCT/Ps"), and additional FDA requirements may apply to HCT/Ps, or products comprised of HCT/Ps, that are regulated as a drug, biological product, or medical device. This includes the cellular therapy products that PCT may manufacture for itself or on behalf of its customers. In addition, certain state and local governments regulate stem cell laboratories by requiring them to be licensed or to register with the state or locality. 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. PCT's management believes that PCT and DomaniCell are in material compliance with current federal, state, and local stem cell laboratory licensure requirements. However, the licensing requirements in the states where it is currently licensed may change, and PCT and/or DomaniCell may become subject to the additional licensing, registration and/or compliance requirements of other states, local governments and/or the federal government as it expands its network and as new regulations are implemented. If PCT and/or DomaniCell fail to comply with the various licensure requirements, certification and accreditation standards to which it is subject, PCT and/or DomaniCell may be subject to a loss of licensure, certification, or accreditation that could adversely affect them.

Additionally, certain non-government entities have promulgated standards for certification, accreditation, and licensing of cord blood businesses that may apply to PCT and/or DomaniCell's 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 currently these standards are voluntary, in some cases compliance with them 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 can be costly and time-consuming. These accreditation, certification, or license requirements may also change and new standards may be developed. If PCT fails to comply with applicable standards, or fail to obtain or maintain applicable accreditations, certifications, or licenses, PCT and/or DomaniCell may be adversely affected.

Unintended consequences of recently adopted health reform legislation in the U.S. may adversely affect PCT's 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 PCT does not believe this legislation will have a direct impact on its business, the legislation has only recently been enacted and requires the adoption of implementing regulations, which may have unintended consequences or indirectly impact PCT's 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 PCT's business. Also, in some instances PCT's 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 PCT's 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 DomaniCell.

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, PCT believes 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 amount 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 the business of PCT and/or DomaniCell.

DomaniCell is an early-stage company and faces substantial risks and challenges, which could negatively affect the overall value of PCT.

DomaniCell was formed in 2005 and, as any company with a short history of operations, it is subject to all of the risks that similar entities are subject to, including:

- The ability to attract and retain competent and experienced management and operating personnel;
- The ability to secure appropriate debt and equity capital to finance desired growth;
- The ability to develop and protect intellectual property through patents, trademarks and other protective methods and licenses;
- The maintenance and development of good relations with referral sources;
- The efficient management of its everyday business operations; and
- The ability to implement its growth strategy.

PCT is yet to hire permanent management for DomaniCell and intends to continue to manage and fund the operations of DomaniCell until it has its own management and generates enough revenues to sustain its own operations. There can be no assurance that DomaniCell will be able to grow its business or achieve profitability in the near future and may, in fact, continue to generate losses, which would negatively affect the overall value of PCT.

Competitors of DomaniCell, may have greater resources or capabilities or better technologies than DomaniCell, or may succeed in developing better service than DomaniCell, and DomaniCell may not be successful in competing with them.

The private umbilical cord banking business is a relatively new, highly competitive, and an evolving field. DomaniCell 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 DomaniCell.

DomaniCell will also have to compete with the national, public program, which has the support of the medical community and which receives federal funding. In this regard, DomaniCell 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 the business and revenues of DomaniCell and of PCT.

Technologies for the treatment of cancer and other diseases and processes used by PCT are subject to rapid change, and the development of treatment strategies that are more effective than PCT's products and services could render the services of PCT and its subsidiaries obsolete. Given their exclusive focus on the field of cell therapy, such obsolescence could jeopardize the success or long-term survival of PCT and/or its subsidiaries.

The activities of PCT and DomaniCell 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 PCT 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 PCT and DomaniCell 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. PCT is exclusively focused on cell therapy, and if this field is substantially unsuccessful, this could jeopardize the long-term survival of PCT and/or its subsidiaries.

There is a scarcity of experienced professionals in the field of cell therapy and PCT may not be able to retain key officers or employees or hire new key officers or employees needed to implement its business strategy and develop its products and businesses. For example, DomaniCell does not have any management at the current time and is being managed by PCT with assistance from outside consultants. If PCT is unable to retain or hire key officers or employees, it may be unable to continue to grow its business or to implement its business strategy, and its 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. PCT and DomaniCell are substantially dependent on the skills and efforts of current senior management of PCT 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 of PCT who resign or are terminated could adversely affect the operations of PCT or DomaniCell, as the case may be. The future success of both PCT and DomaniCell also depends upon their ability to attract and retain additional qualified personnel to support their anticipated growth. There can be no assurance that PCT will be successful in attracting or retaining personnel required by PCT to continue and grow its operations. The loss of a key employee, the failure of a key employee to perform in his or her current position or PCT's or DomaniCell's inability to attract and retain skilled employees, as needed, could result in the inability of PCT and DomaniCell to continue to grow their business or to implement their business strategy, or may have a material adverse effect on PCT's 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 PCT's facility and arrives for re-infusion in the patient. Thus, PCT's current business model has to assume that, in order to effectively provide many of PCT's services in a market, PCT needs to have a suitable facility that can provide timely service in such market. This could add significantly to PCT's capital requirements and be a limiting factor on the growth and profitability of PCT.

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 PCT's facilities for processing, as well as constraints on the time that a processed product leaves PCT's 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 PCT 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. PCT cannot be certain that it 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 PCT can expand its cell processing and manufacturing services into new geographic markets and requires significant capital risk by PCT, which PCT 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.

PCT has determined that the weaknesses in 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. PCT evaluated the major domestic express carriers, and concluded that even their highest-level services are inadequate to meet the sector's needs. However, PCT 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 no 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 PCT's transportation needs, the lack of access to safe and effective transportation options could adversely affect PCT's business.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, and the documents incorporated by reference herein and therein contain forward-looking statements regarding our future performance. All forward-looking information is inherently uncertain and actual results may differ materially from assumptions, estimates or expectations reflected or contained in the forward-looking statements as a result of various factors, including those set forth under "Risk Factors" in this prospectus supplement and elsewhere in this prospectus supplement, the accompanying prospectus, and the documents incorporated by reference herein and therein. In addition, such "Risk Factors" may be updated from time to time by our filings under the Securities Exchange Act of 1934, or the Exchange Act. Forward-looking statements convey our current expectations or forecasts of future events. All statements contained in this prospectus supplement and the accompanying prospectus other than statements of historical fact are forward-looking statements. Forward-looking statements regarding our future financial position, business strategy, budgets, projected costs, plans and objectives of management for future operations. The words "may," "continue," "estimate," "intend," "plan," "will," "believe," "project," "expect," "anticipate" and similar expressions may identify forward-looking statements, but the absence of these words does not necessarily mean that a statement is not forward-looking. With respect to the forward-looking statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

These forward-looking statements speak only as of the date each such statement is made. Unless required by law, we undertake no obligation to publicly update or revise any forward-looking statements to reflect new information or future events or otherwise, and we do not intend to provide such updates.

USE OF PROCEEDS

We estimate that the net proceeds from this offering and the concurrent common stock offering, excluding the proceeds, if any, from the exercise of the warrants issued in this offering and the concurrent common stock offering, will be approximately \$16.7 million, after deducting the estimated underwriting discount, placement agent fees, financial advisory fees and estimated offering expenses payable by us. An aggregate of \$2,500,000 of the proceeds from this offering will be placed in escrow for a maximum of two and one half years as security for our obligations under the certificate of designations pertaining to the Preferred Shares.

We currently intend to use the net proceeds of this offering and the concurrent common stock offering in connection with the PCT Merger, including a \$3,000,000 repayment of indebtedness owed by PCT, associated costs for the growth of the cord blood and adult stem cell banking, manufacturing and therapeutic business, expansion of our business in Asia and completion of the Beijing lab, development and acquisition of proprietary stem cell intellectual property and new technology and expansion of business into other countries. We intend to use the remaining net proceeds from this offering and the concurrent common stock offering for marketing, working capital 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 and the concurrent common stock offering. Accordingly, we will retain broad discretion over the use of such proceeds. Pending use of the net proceeds of this offering and the concurrent common stock offering as described above, we intend to invest the net proceeds in short-term interest-bearing investment grade instruments.

CAPITALIZATION

The following table sets forth our capitalization as of September 30, 2010:

- on an actual basis, without giving effect to this offering and the concurrent common stock offering and the use of net proceeds as discussed in "Use of Proceeds";
- on an as adjusted basis to reflect this offering and the concurrent common stock offering and the use of net proceeds as discussed in "Use of Proceeds".

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, 2009 and the other financial information included and incorporated by reference in this prospectus supplement.

| | As of September 30, 2010 | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------|
| | Actual | Pro Forma, As Adjusted |
| Cash and Cash Equivalents | \$ 4,066.7 | \$ 20,795.5 |
| Debt: | | |
| Amounts due related party | 8,074.0 | 8,074.0 |
| Warrants to purchase common stock | | 946.6 |
| Series E 7% senior convertible preferred stock 0 shares issued and outstanding actual and 10,582,011 shares issued and outstanding pro forma, as adjusted | — | 7,574.3 |
| 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, 57,613,794 shares issued and outstanding, actual; 64,116,192 shares issued and outstanding, pro forma, as adjusted ⁽¹⁾ | 57.6 | 64.1 |
| Additional paid in capital | 132,974.3 | 141,175.7 |
| Accumulated other comprehensive income | 1,583.2 | 1,583.2 |
| Accumulated deficit | (88,978.7) | (88,978.7) |
| Total shareholders' equity | 45,636.5 | 53,844.4 |
| Total capitalization | \$ 53,710.5 | \$ 70,439.3 |

(1) Outstanding shares of common stock as of September 30, 2010 does not include (i) the shares of our common stock issuable upon exercise of the warrants offered hereby and in the concurrent common stock offering, (ii) the shares of our common stock issuable upon conversion or redemption of the senior convertible preferred stock offered hereby, and (iii) the following:

- options representing the right to purchase a total of 13,558,214 shares of common stock at a weighted average exercise price of \$1.92 per share;
- 8,253,751 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;
- other warrants representing the right to purchase a total of 3,689,266 shares of common stock at a weighted average exercise price of \$3.21 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; and
- up to 14,200,000 shares of common stock issuable upon consummation of the PCT Merger (inclusive of shares of common stock underlying up to 3,000,000 warrants which may be issued in the PCT Merger).



CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following is a general discussion of certain U.S. federal income tax considerations relevant to holders of the Series E Preferred Stock, Warrants and common stock underlying the Series E Preferred Stock and Warrants. This discussion is based upon the Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations promulgated thereunder, Internal Revenue Service ("IRS") rulings and judicial decisions now in effect, all of which are subject to change (possibly, with retroactive effect) or different interpretations. There can be no assurance that the IRS will not challenge one or more of the tax conclusions described herein. We have not obtained, nor do we intend to obtain, a ruling from the IRS with respect to the U.S. federal income tax consequences of acquiring, holding or disposing of Series E Preferred Stock, Warrants or common stock. This discussion does not purport to deal with all aspects of U.S. federal income taxation that may be relevant to a particular holder in light of the holder's circumstances (for example, persons subject to the alternative minimum tax provisions of the Code or a holder whose "functional currency" is not the United States dollar). Also, this discussion is not intended to be wholly applicable to all categories of investors, some of which (such as dealers in securities or currencies, traders in securities that elect to use a mark-to-market method of accounting, banks, thrifts, regulated investment companies, insurance companies, tax-exempt organizations, persons holding Series E Preferred Stock, Warrants or common stock as part of a "straddle", "hedge", "conversion transaction" or other risk reduction transaction, persons deemed to sell Series E Preferred Stock, Warrants or common stock under the constructive sale provisions of the Code or investors in partnerships or other pass-through entities) may be subject to special rules. The discussion also does not discuss any aspect of state, local or foreign law, or U.S. federal estate and gift tax law as applicable to the holders of the Series E Preferred Stock, Warrants and underlying common stock, other than U.S. federal estate tax law as applicable to a Non-U.S. Holder (as defined below). In addition, this discussion is limited to purchasers of Series E Preferred Stock, Warrants and common stock who hold the Series E Preferred Stock, Warrants and common stock as "capital assets" within the meaning of Section 1221 of the Code (generally, for investment), and who are original purchasers of the Series E Preferred Stock who acquire the Series E Preferred Stock at its original issue price within the meaning of Section 1273 of the Code.

We intend to treat the Series E Preferred Stock as indebtedness for all U.S. federal, state and local tax purposes. This summary also assumes that the IRS will respect the classification of the Series E Preferred Stock as indebtedness.

All purchasers of the Series E Preferred Stock, Warrants and common stock are advised to consult their own tax advisors regarding the federal, state, local and foreign tax consequences of the purchase, ownership and disposition of the Series E Preferred Stock, Warrants and common stock in their particular situations.

As used herein, the term **"U.S. Holder"** means a beneficial owner of Series E Preferred Stock, Warrants or common stock that is, for U.S. federal income tax purposes, (i) a citizen or resident alien individual of the United States, (ii) a corporation (or an entity treated as a corporation) organized under the law of the United States, any State thereof or the District of Columbia, (iii) an estate the income of which is subject to U.S. federal income tax without regard to its source, or (iv) a trust if (1) a court within the United States is able to exercise primary supervision over the administration of the trust, and one or more United States persons have the authority to control all substantial decisions of the trust, or (2) the trust was in existence on August 20, 1996 and properly elected to continue to be treated as a United States person. The term "U.S. Holder" also includes certain former citizens and former long-term residents of the United States whose income and gain on the Series E Preferred Shares, Warrants or common stock will be subject to U.S. taxation. A "Non-U.S. Holder" is any beneficial holder of a Series E Preferred Stock, Warrant or common stock that, for U.S. federal income tax purposes, is not a U.S. Holder.

If a partnership (including for this purpose any entity, domestic or foreign, treated as a partnership for United States tax purposes) is a beneficial owner of the Series E Preferred Stock, Warrants or underlying common stock, the United States tax treatment of a partner in the partnership generally will depend on the status of the partner and the activities of the partnership. As a general matter, income earned through a foreign or domestic partnership is attributed to its owners. A holder of the Series E Preferred Stock, Warrants or underlying common stock that is a partnership, and partners in such partnership, should consult their individual tax advisors about the United States federal income tax consequences of acquiring, holding and disposing of the Series E Preferred Stock.

U.S. Holders

Interest on the Series E Preferred Stock

Payment of interest on the Series E Preferred Stock. Stated interest paid on a note will be taxable to a U.S. Holder as ordinary interest income at the time it accrues or is received in accordance with the U.S. Holder's method of accounting for federal income tax purposes.

Original issue discount. U.S. Holders will be subject to the original issue discount rules. Original issue discount (**"OID**") is equal to (a) the redemption price of the Series E Preferred Stock at scheduled maturity plus all other payments to be made on the Series E Preferred Stock, through scheduled maturity, other than qualified stated interest, minus (b) the original issue price of the Series E Preferred Stock. A U.S. Holder will be required to include the OID in income for federal income tax purposes as it accrues, in accordance with a constant yield method based on a compounding of interest, before the receipt of cash payments attributable to this income. Under this method, U.S. Holders generally will be required to include in income increasingly greater amounts of OID in successive accrual periods.

The scheduled interest payments on the Series E Preferred Stock should be treated as qualified stated interest.

Accrued OID will increase the U.S. Holder's tax basis in the Series E Preferred Stock and any payments on the Series E Preferred Stock, other than payments of stated interest, will decrease the tax basis.

A U.S. Holder may make an election to include in gross income all interest that accrues on the Series E Preferred Stock (including stated interest, OID, de minimis OID and unstated interest) in accordance with a constant yield method based on the compounding of interest (**"constant yield election"**).

The Series E Preferred Stock and Warrants were issued to each Securities Purchase Agreement investor for a combined purchase price equal to the aggregate principal amount of the investor's Series E Preferred Stock. Therefore, the original issue price of the Series E Preferred Stock is less than the aggregate principal amount of such Series E Preferred Stock, by an amount equal to the original-issuance fair market value of the Warrants; and this shortfall will result in the original issue discount. We have not yet established the respective original issue prices of the Series E Preferred Stock and Warrants.

We believe the Series E Preferred Stock does not constitute contingent debt, because the likelihood that dividends will be paid on the common stock is considered to be remote and incidental, and because redeeming the Series E Preferred Stock pursuant to the optional redemption feature would not minimize the yield on the Series E Preferred Stock.

Conversion of Series E Preferred Stock Into Our Common Stock

A U.S. Holder will not recognize income, gain or loss on conversion of Series E Preferred Stock solely into our common stock, except with respect to (i) any amount attributable to accrued interest on the Series E Preferred Stock, which will be treated as interest for federal income tax purposes, as discussed above, and (ii) cash received in lieu of a fractional share, which will be taxed in the manner described in the succeeding paragraph. The U.S. Holder's tax basis in the common stock received on conversion of Series E Preferred Stock will be the same as the holder's adjusted tax basis in the converted Series E Preferred Stock at the time of conversion (reduced by any basis allocable to a fractional share), and the holding period for such common stock received on conversion of Series E Preferred Stock that is attributable to accrued interest generally will equal the amount of such accrued interest included in income, and the holding period for such shares would begin as of the date of conversion.

If we redeem Series E Preferred Stock in exchange for common stock and the Series E Preferred Stock is a "security" for U.S. federal income tax purposes, that exchange should be treated in the same manner as a conversion of Series E Preferred Stock. In the event we redeem Series E Preferred Stock in exchange for common stock and cash, and the Series E Preferred Stock is a "security" for U.S. federal income tax purposes, a U.S. Holder of Series E Preferred Stock will recognize gain to the extent of the lesser of the cash received or the amount of gain realized, and no loss will be allowed. If the Series E Preferred Stock is not a security, the U.S. federal income tax consequences are not certain. It is possible that the redemption for

common stock and/or cash could be treated as a taxable exchange pursuant to which a U.S. Holder would recognize gain or loss equal to the difference between the value of the cash and/or common stock received and the adjusted tax basis in the Series E Preferred Stock exchanged therefor. Because the Series E Preferred Stock matures in less than five years, it is unlikely the Series E Preferred Stock would be considered securities.

Cash received in lieu of a fractional share of common stock on conversion of Series E Preferred Stock into common stock or on redemption of Series E Preferred Stock for common stock generally will be treated as a payment in exchange for the fractional share of common stock. Accordingly, the receipt of cash in lieu of a fractional share of common stock generally will result in capital gain or loss measured by any difference between the cash received for the fractional share and the holder's adjusted tax basis in the fractional share.

Constructive Dividends

The conversion rate of the Series E Preferred Stock is subject to adjustment under certain circumstances. Section 305 of the Code and the Treasury regulations issued thereunder may treat the holders of the Series E Preferred Stock as having received a constructive distribution, resulting in a taxable dividend (subject to a possible dividends received deduction in the case of corporate holders) to the extent of our current and/or accumulated earnings and profits, if, and to the extent that certain adjustments in the conversion rate, which may occur in limited circumstances, increase the proportionate interest of a holder of Series E Preferred Stock in our assets or earnings and profits, whether or not such holder ever exercises its conversion privilege. Therefore, U.S. Holders may recognize dividend income in the event of a deemed distribution even though they may not receive any cash or property. Adjustments to the conversion rate made pursuant to a bona fide reasonable adjustment formula which has the effect of preventing dilution in the interest of the holders of the debt instruments, however, will generally not be considered to result in a constructive dividend distribution. Generally, a U.S. Holder's tax basis in Series E Preferred Stock will be increased to the extent any constructive distribution is treated as a dividend.

Sale, Exchange, Retirement or Repurchase of the Series E Preferred Stock and Common Stock

Each U.S. Holder generally will recognize capital gain or loss upon the sale, exchange (other than by exercise of the conversion privilege), retirement, repurchase, or other disposition of Series E Preferred Stock measured by the difference (if any) between (i) the amount of cash and the fair market value of any property received on the disposition (other than amounts attributable to accrued interest on the Series E Preferred Stock, which will be treated as interest for federal income tax purposes) and (ii) such U.S. Holder's adjusted tax basis in the Series E Preferred Stock. A U.S. Holder's adjusted tax basis in the Series E Preferred Stock generally will equal the cost of the Series E Preferred Stock to such holder plus any amounts paid in connection with a conversion representing interest at the time of such conversion less any principal payments received by such holder. Any such gain or loss recognized on the sale, exchange, retirement, repurchase or other disposition of the Series E Preferred Stock should be capital gain or loss and will generally be long-term capital gain or loss if the Series E Preferred Stock has been held for more than 12 months at the time of the sale or exchange. Generally, long term capital gain for individuals is eligible for a reduced rate of taxation. Capital gain that is not long term capital gain is taxed at ordinary income rates. The deductibility of capital losses is subject to certain limitations.

Gain or loss realized on the sale or exchange of common stock will equal the difference between the amount realized on such sale or exchange and the U.S. Holder's adjusted tax basis in such common stock. Such gain or loss will generally be long-term capital gain or loss if the holder has held or is deemed to have held the common stock for more than twelve months. Generally, long-term capital gain of non-corporate shareholders is eligible for a reduced rate of taxation. The deductibility of capital losses is subject to certain limitations.

Distributions on Common Stock

Distributions (including constructive distributions), if any, paid on our common stock to a U.S. Holder generally will constitute a taxable dividend, to the extent made from our current and/or accumulated earnings and profits, as determined under United States federal income tax principles. Any distribution in excess of our current and accumulated earnings and profits will be treated first as a tax-free return of capital, which will reduce the U.S. Holder's adjusted tax basis in the shares (but not below zero). To the extent such a

distribution exceeds the U.S. Holder's adjusted tax basis in the shares of common stock, the distribution will generally be taxable as capital gain. Dividends received by a corporate U.S. Holder may be eligible for a dividends received deduction. For taxable years beginning before January 1, 2011, subject to certain exceptions, dividends received by non-corporate shareholders (including individuals) from domestic corporations generally are taxed at the same preferential rates that apply to long-term capital gain.

<u>Warrants</u>

Upon the exercise of a Warrant for cash, a U.S. Holder will not recognize gain or loss and will have a tax basis in the common stock received equal to the tax basis in such holder's Warrant plus the exercise price of the Warrant. The holding period for the common stock purchased pursuant to the exercise of a Warrant for cash will begin on the day following the date of exercise and will not include the period that the holder held the Warrant.

Upon a sale or other disposition (other than exercise) of a Warrant, a U.S. Holder will recognize capital gain or loss in an amount equal to the difference between the amount realized and the holder's tax basis in the Warrant. Such a gain or loss will be long term capital gain if the holding period of the Warrant is more than one year.

In the event that a Warrant lapses unexercised, a U.S. Holder will recognize a capital loss in an amount equal to its tax basis in the Warrant. Such loss will be long term capital loss if the Warrant has been held for more than one year.

Non-U.S. Holders

For purposes of the following discussion, dividends and gain on the sale, exchange or other disposition of Series E Preferred Stock, Warrants or common stock will be considered to be "U.S. trade or business income" if such income or gain is (i) effectively connected with the conduct of a United States trade or business and (ii) in the case of a Non-U.S. Holder eligible for the benefits of an applicable United States bilateral income tax treaty, attributable to a permanent establishment (or, in the case of an individual, a fixed base) in the United States.

Interest on the Series E Preferred Stock

The payment to a Non-U.S. Holder of interest on Series E Preferred Stock generally will not be subject to 30% U.S. federal withholding tax *provided* that the Non-U.S. Holder (1) does not actually or constructively own 10% or more of the total combined voting power of all classes of our voting stock within the meaning of the Code and Treasury regulations; (2) is not a controlled foreign corporation that is related to us through stock ownership as provided in the Code and Treasury regulations; (3) is not a bank whose receipt of interest on the notes is in connection with an extension of credit made pursuant to a loan agreement entered into in the ordinary course of its trade or business; and (4)(a) provides its name and address on an IRS Form W-8BEN and certifies under penalties of perjury that it is not a U.S. person or (b) has a bank, brokerage house, or other financial institution that holds the Series E Preferred Stock on behalf of the Non-U.S. Holder in the ordinary course of its trade or business (a "financial institution") certify to us, under penalty of perjury, that it has received an IRS Form W-8BEN from the beneficial owner and furnishes us with a copy thereof. In the case of financial institutions that have entered into a withholding agreement with the IRS to become qualified intermediaries, an alternative method may be applicable for satisfying the certification requirement described in (4)(b).

If a Non-U.S. Holder cannot satisfy the requirements described in the immediately preceding paragraph, payments of interest made to the Non-U.S. Holder will be subject to 30% U.S. federal withholding tax, unless the Non-U.S. Holder provides us with a properly executed (1) IRS Form W-8BEN claiming an exemption from or reduction in the rate of withholding under the benefit of a tax treaty or (2) IRS Form W-8ECI stating that the interest paid on the note is not subject to withholding tax because it is effectively connected with the Non-U.S. Holder's conduct of a trade or business in the United States. In addition, the Non-U.S. Holder may, under certain circumstances, be required to obtain a U.S. taxpayer identification number (**"TIN"**).

If a Non-U.S. Holder of Series E Preferred Stock is engaged in a trade or business in the United States and interest on the Series E Preferred Stock is effectively connected with the conduct of such trade or business, the Non-U.S. Holder will be subject to U.S. federal income tax on such interest in the same manner

as if it were a U.S. Holder, unless the Non-U.S. Holder can claim an exemption under the benefit of a tax treaty. In addition, if such Non-U.S. Holder is a foreign corporation, it may be subject to a branch profits tax equal to 30% (or lower applicable treaty rate) of its earnings and profits for the taxable year, subject to adjustments, that are effectively connected with its conduct of a trade or business in the United States.

Conversion of Series E Preferred Stock Into/Exercise for Our Common Stock

A Non-U.S. Holder generally will not recognize any income, gain or loss on the conversion of Series E Preferred Stock into our common stock. However, cash received in lieu of a fractional share may give rise to gain that would be subject to the rules described below for the sale of Series E Preferred Stock, see "Non-U.S. Holders — Sale, Exchange, Retirement or Repurchase of Series E Preferred Stock and Common Stock" and common stock treated as issued for accrued interest may be treated as interest that would be subject to the rules described above for the payment of interest, see "Non-U.S. Holders — Interest on the Series E Preferred Stock."

The conversion rate of the Series E Preferred Stock is subject to adjustment in certain circumstances. Any such adjustment could, in certain circumstances, give rise to a deemed distribution to a Non-U.S. Holder of Series E Preferred Stock. In such case, the deemed distribution may be subject to the rules described below regarding the U.S. federal withholding tax on dividend income, see "Non-U.S. Holders — Distributions on Common Stock."

Constructive Dividends

Under certain circumstances, a Non-U.S. Holder may be deemed to have received a constructive dividend (see "U.S. Holders — Constructive Dividends" above). Any such constructive dividend you receive will be treated in the same manner as an actual dividend you receive, as discussed below under "Non-U.S. Holders — Distributions on Common Stock." We intend to deduct U.S. federal withholding tax with respect to any such constructive dividend from interest payments on your Series E Preferred Stock. If we deduct U.S. federal withholding tax from interest payments on your Series E Preferred Stock under these circumstances, you should consult your own tax adviser as to whether you can obtain a refund for all or a portion of any tax withheld.

Sale, Exchange, Retirement or Repurchase of Series E Preferred Stock and Common Stock

Except as described below and subject to the discussion concerning backup withholding, any gain realized by a Non-U.S. Holder on the sale, exchange (other than by exercise of the conversion or exercise privilege for our common stock), retirement, repurchase or other disposition of Series E Preferred Stock, Warrants or common stock generally will not be subject to United States federal income tax, unless (i) the gain is effectively connected with the conduct by the Non-U.S. Holder of a trade or business in the United States, (ii) subject to certain exceptions, the Non-U.S. Holder is an individual who holds the Series E Preferred Stock, Warrant or common stock as a capital asset and is present in the United States for 183 days or more in the taxable year of the disposition, (iii) the Non-U.S. Holder is subject to tax pursuant to the provisions of United States real property holding corporation within the meaning of Section 897 of the Code. Notwithstanding (i), (ii) and (iii), a Non-U.S. Holder will not be subject to U.S. federal income tax if a treaty exemption applies and the appropriate documentation is provided. We do not believe that we are currently a "United States real property holding corporation" within the meaning of Section 897 of the Code, or that we will become one in the future.

Distributions on Common Stock

In general, distributions paid to a Non-U.S. Holder of our common stock will constitute a dividend for U.S. federal income tax purposes to the extent of our current or accumulated earnings and profits determined under U.S. federal income tax principles. Dividends will be subject to U.S. federal withholding tax at a 30% rate or at a lower rate that may be specified by an applicable income tax treaty. A Non-U.S. Holder will generally be required to provide, in order to obtain a reduced rate of withholding under a tax treaty, an IRS Form W-8BEN establishing the Non-U.S. Holder's eligibility for benefits under a tax treaty.

A Non-U.S. Holder will not be subject to withholding tax on dividend income that is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States if the Non-U.S. Holder provides us with a properly executed IRS Form W-8ECI stating that the dividend income is so connected. Instead, such dividend income will be subject to U.S. federal income tax in the same manner as if the Non-U.S. Holder were a U.S. resident, unless the Non-U.S. Holder can claim an exemption under the benefit of a tax treaty. A Non-U.S. Holder that is a corporation may also be subject to a "branch profits tax" equal to 30% (or lower applicable tax treaty rate) of its earnings and profits for the taxable year, subject to adjustments, that are effectively connected with its conduct of a trade or business within the United States.

In addition, a Non-U.S. Holder may under certain circumstances be required to obtain a TIN and make certain certifications to us. Special procedures are provided for payments through qualified intermediaries. A Non-U.S. Holder of common stock that is eligible for a reduced rate of United States withholding tax pursuant to an income treaty may obtain a refund of amounts withheld at a higher rate by filing an appropriate claim for a refund with the IRS.

<u>Federal Estate Tax</u>

Series E Preferred Stock that is owned, or treated as owned, by an individual who is not a citizen of the United States and who is not domiciled in the United States at the time of death will not be subject to U.S. federal estate tax, *provided* the individual did not own, actually and constructively, 10% or more of the total combined voting power of all classes of stock in our company entitled to vote and *provided* the income on the Series E Preferred Stock was not effectively connected to a U.S. trade or business. A share of common stock owned, or treated as owned, by such an individual will be includible in his or her gross estate for U.S. federal estate tax purposes and may be subject to U.S. federal estate tax, unless an applicable estate tax treaty provides otherwise.

Backup Withholding and Information Reporting

If you are a U.S. Holder of Series E Preferred Stock or common stock, information reporting requirements generally will apply to all payments we make to you and to the payment to you of proceeds of a sale of Series E Preferred Stock or common stock, unless you are a corporation or other exempt recipient. In addition, backup withholding (currently at the rate of 28%) will apply to those payments if you fail to provide a TIN or a certification of exempt status or if you fail to report your interest and dividend income in full.

In general, if you are a Non-U.S. Holder you will not be subject to backup withholding with respect to payments of interest on the Series E Preferred Stock or dividends on our common stock provided we do not have actual knowledge or reason to know that you are a United States person and you have given us the certification described above under "Non-U.S. Holders — Interest Income." Such payments of interest or dividends, however, may be subject to certain reporting requirements.

Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds where the sale is effected outside the United States through a non-U.S. office of a non-U.S. broker and payment is not received in the United States. In addition, if you are a Non-U.S. Holder you will not be subject to backup withholding or information reporting with respect to the proceeds of the sale of Series E Preferred Stock or common stock within the United States or conducted through certain U.S.-related financial intermediaries, if the payer receives the certification described above under "Non-U.S. Holders — Interest Income" and does not have actual knowledge or reason to know that you are a United States person, as defined in the Code, or you otherwise establish an exemption.

Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against your U.S. federal income tax liability provided the required information is timely furnished to the IRS.

In addition, recently enacted legislation generally imposes a withholding tax of 30% on payments from the U.S. to certain foreign entities, after December 31, 2012, including payments of interest, dividends and gross proceeds from the disposition of securities, unless various U.S. information reporting and due diligence requirements have been satisfied. Non-U.S. Holders should consult their tax advisers regarding the possible implications of this legislation on their investment in Series E Preferred Stock.

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The preceding discussion of certain United States federal income tax consequences is for general information only and is not tax advice. Accordingly, each investor should consult its own tax adviser as to particular tax consequences to it of purchasing, holding and disposing of the Series E Preferred Stock, Warrants and underlying common stock, including the applicability and effect of any state, local or foreign tax laws, and of any proposed changes in applicable laws.

DESCRIPTION OF SECURITIES WE ARE OFFERING

We are offering units consisting of:

- shares of our Series E Preferred Stock;
- warrants to purchase shares of our common stock; and
- shares of our common stock.

The Series E Preferred Stock, warrants and common stock will be sold in units, with each unit consisting of (i) one share of Series E Preferred Stock, (ii) a warrant to purchase 0.25 of a share of our common stock and (iii) 0.0155 shares of our common stock. Units will not be issued or certificated. The shares of Series E Preferred Stock, warrants and common stock are immediately separable and will be issued separately. The shares of common stock issuable from time to time upon conversion of the preferred stock and exercise of the warrants, if any, are also being offered pursuant to this prospectus supplement and the accompanying prospectus.

Series E 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 (the "Preferred Shares").

The following is a brief description of the terms of the Preferred Shares being offering in this offering. The description of the Preferred Shares 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 7% Senior Convertible Preferred Stock, which will be filed as an exhibit to a Current Report on Form 8-K to be filed with the SEC by us in connection with this offering.

Stockholder Approval. We have to hold a special meeting of our stockholders as soon as practicable 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 senior convertible preferred stock, and, if necessary, all shares of common stock issuable pursuant to the warrants being offered in this offering. The purchasers of the senior convertible preferred stock will acknowledge that they cannot convert their preferred stock to common stock or exercise their warrants for more than 19.9% of the outstanding shares of our common stock, minus the shares of common stock to be issued in connection with these units, or exercise any voting rights, until after shareholder approval of such issuance is obtained at the shareholders meeting.

Dividends. Holders of our Preferred Shares 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 Preferred Share at the per share rate of seven percent (7%) per annum, which shall be cumulative. Dividends on the 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 the Corporation, either voluntary or involuntary (a "Liquidation Event"), the Holders of the Preferred Shares shall be entitled to receive, out of the assets of the Corporation available for distribution to stockholders ("Liquidation Funds"), prior and in preference to any distribution of any assets of the Corporation 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 assets of the Corporation; provided that the foregoing shall not affect any rights which

Holders may have with respect to any requirement that the Corporation repurchase the Preferred Shares or for any right to monetary damages. All the preferential amounts to be paid to the Holders of the 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 the Corporation to the holders of shares of other classes or series of preferred stock of the Corporation junior in rank to the 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 1/27th of the Preferred Shares initially issued pursuant to the stock purchase agreement (regardless of whether any holder has converted any Preferred Shares or we have optionally redeemed any Preferred Shares and (b) the Maturity Date, all outstanding 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 Preferred Shares (the "Mandatory Redemption Price"). The Mandatory Redemption Price shall be payable, at our option, in cash or shares of common stock or any combination of cash and Shares of common stock, provided, however, that no portion of the Mandatory Redemption Price may be paid in Shares of common stock unless the Equity Conditions are satisfied or waived by the holders of a majority of the 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 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 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 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 tradi

The term "Equity Conditions" means each of the following: (i) on each day during the Equity Conditions Measuring Period, all shares of shares of 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 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 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 this prospectus supplement and the attached prospectus is a part nor this prospectus supplement and such prospectus 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, this prospectus supplement and such prospectus 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 common stock is participating in the Depository Trust Company ("DTC") Fast Automated Securities Transfer Program; and (viii) all shares of 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 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"), the Corporation shall deliver to the Holders a number of Shares of 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"), the Corporation shall deliver to the Holders a number of Shares of 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, the Corporation shall deliver an additional number of Shares of 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 common stock to the 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 the 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"; 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 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 common stock already issued in respect of all of the 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 common stock as provided above, ratably based on the holders' relative ownership of the outstanding 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 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 common stock for the applicable Stock Payment Pricing Period

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

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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 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 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 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 common stock pursuant to any Equity Line, the Corporation 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 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 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 common stock until we have made aggregate payments in shares of 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 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 Preferred Shares then held by such holder divided by the aggregate number of outstanding Preferred Shares.

Optional Redemption. We may, at our option, redeem the preferred shares, at any time and from time to time, in whole or in part (but not less than 1,000,000 preferred shares at any one time) for an amount equal to (a) the liquidation preference per 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 shares of 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.

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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 preferred shares to be redeemed at any time prior to the optional redemption date. The optional redemption notice will specify the number of 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 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"), 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 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 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 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 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 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 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 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. The "Conversion Price" means \$2.0004, subject to adjustment as provided in 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 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 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 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 equivalents and the price per share at for 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 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 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 this offering, (d) shares of our common stock equivalents issued in our pending merger with Progenitor Cell Therapy, LLC ("PCT") pursuant to the Agreement and Plan of Merger, dated September 23, 2010, among us, NBS Acquisition Company LLC and PCT, (f) shares of our common stock or common stock or common stock equivalents issued or deemed to be issued in connection with any acquisition by us, 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 corporation 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 Preferred Share shall thereafter be convertible into such new securities at a conversion price and pricing formula which places the holders of the Preferred Shares have to require us to repurchase the Preferred Shares. See "Mandatory Repurchase By Us" on page S-<u>63</u>.

Reservation of Shares Issuable Upon Conversion. We shall at all times reserve and keep available out of its authorized but unissued shares of our common stock, solely for the purposes of effecting the conversion and/or redemption of the Preferred Shares, an number of shares of our common stock equal to 200% of the number of shares issuable upon conversion of the Preferred Shares at the conversion price then in effect. If at any time while any of the Preferred Shares remain outstanding we do not have a sufficient number of authorized and unreserved shares of common stock to satisfy such obligation to reserve for issuance upon conversion and/or redemption of the 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 atthorized 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 its reasonable best efforts to solicit its 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 Preferred Shares. All shares of our common stock (including fractions thereof) issuable upon conversion of more than one Preferred Share by a holder thereof and all 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 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 Preferred Shares having a Liquidation Preference equal in value to the product of (x) such number of shares of 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 preferred shares shall have the unilateral option and right to compel us to repurchase for cash any or all of such holder's 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 preferred share equal to the sum of (a) the liquidation preference plus (b) any and all accrued and unpaid dividends on the 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 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 us 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 us 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 us or any of our subsidiaries as bankrupt or insolvent or (iii) appointing a custodian, receiver, trustee or other similar official for us or any or our subsidiaries or of any substantial part of our property, or ordering the liquidation of our affairs, and the continuance of any such decree or order for a period of 60 consecutive days;
- (vi) the commencement by us 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 us, or the consent by us to the appointment of or taking possession by a custodian, receiver, trustee or other similar official of us 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 us in writing of our inability to pay our 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 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) we or any of our 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 Preferred Shares or the ability to use this 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 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 NeoStem with or into any other corporation or other entity or person (whether or not we are the surviving corporation), or any other corporate reorganization or transaction or series of related transactions in which in excess of 50% of our voting power 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 our voting power (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 date of this offering 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 Preferred Shares.

Issuance Limitation. The total number of shares of our common stock issued or issuable to the holders of any Preferred Shares shall not (when aggregated with any shares of common stock already issued in respect of all of the Preferred Shares) exceed the maximum number of shares of common stock which we can so issue pursuant to any rule or regulation of the NYSE Amex Equities (or any other national securities exchange on which shares of our common stock trade), subject to equitable adjustments from time to time for stock splits, stock dividends, combinations, capital reorganizations and similar events relating to our shares common stock occurring after the closing of this offering. Notwithstanding any other provision, no shares of common stock in excess of 4,962,000 shall be issued by us (x) under the warrants being offered in this offering and (y) under the Preferred Shares, whether by reason of conversion, redemption or otherwise, and no voting rights may be exercised, until after approval of our stockholders. See "Stockholder Approval" on p S-<u>55</u>.

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 the 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 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 Preferred Shares had converted the Preferred Shares into shares of our common stock (without regard to any limitations on conversion herein or elsewhere) and had held such shares of our 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 Preferred Shares shall not have any voting rights. So long as any Preferred Shares are outstanding, in addition to any other vote or consent of our stockholders required by law or 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 the 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 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, this certificate of designations, the 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 Preferred Shares, regardless of whether any such action shall be by means of amendment to the Certificate of Incorporation or otherwise; (b) increase or decrease (other than by conversion) the authorized number of 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 Preferred Shares with respect to dividends or the distribution of assets on a Liquidation Event; (c) purchase, repurchase or redeem any shares of 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 Preferred

Ranking. The 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 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 addition or other capital stock that is of senior or pari-passu rank to the 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 Preferred Shares. We may issue preferred stock that is junior in rank to the 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 Preferred Shares.

Book entry. Upon conversion or redemption of Preferred Shares, the holder shall not be required to physically surrender the certificate representing the Preferred Shares to us unless (A) the full or remaining number of Preferred Shares represented by the certificate are being converted or redeemed or (B) such holder has provided us with prior written notice requesting reissuance of Preferred Shares upon physical surrender of any Preferred Shares. Each holder and we will maintain records showing the number of Preferred Shares so converted or redeemed and the dates of such conversions or redemptions. Notwithstanding the foregoing, if Preferred Shares represented by a certificate are converted or redeemed, a holder may not transfer the certificate representing the Preferred Shares unless such holder first physically surrenders the certificate representing the Preferred Shares to us, whereupon we will forthwith issue and deliver upon the order of such holder a new certificate of like tenor, registered as such holder may request, representing in the aggregate the remaining number of Preferred Shares represented by such certificate.

Legend. Each certificate for Preferred Shares will bear a legend to the effect that each transferee shall review the entire certificate of designations for the Preferred Shares and that the number of Preferred Shares represented by the certificate may be less than the number of shares on the face of the certificate.

Warrants

The material terms and provisions of the warrants being offered pursuant to this prospectus supplement and the accompanying prospectus are summarized below.

Term; Exercise Price and Exercisability. The warrants to be issued in this offering represent the rights to purchase up to an aggregate of 1,322,486 shares of our common stock. Each warrant will have an exercise price of \$2.0874 per share, will be exercisable six months after issuance and will expire three years from the first date they are exercisable. 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 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 4.9% of the then issued and outstanding shares of common stock (including for such purpose the shares of 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), 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.

Manner of Exercise. Holders of the warrants may exercise their warrants to purchase shares of our common stock on or before the expiration date by delivering notice of exercise, appropriately completed and duly signed, and payment of the exercise price by wire transfer or cashier's check drawn on a United States bank, for the number of shares with respect to which the warrant is being exercised. In addition, if at any time after six months following the closing, there is no effective registration statement registering the issuance of the warrant shares or no current prospectus available for the resale of the warrant shares, then the warrants may also be exercised by means of the "cashless exercise" method, as described below. Warrants may be exercised in whole or in part, but only for full shares of common stock.

The total number of warrant shares shall not (when aggregated with any warrant shares already issued upon exercise of the warrants and any shares of common stock issued upon conversion or redemption of the senior convertible preferred stock) exceed the maximum number of shares of common stock which we can issue pursuant to any rule or regulation of the NYSE Amex Equities (or any other Trading Market (as defined in the certificate of designations) on which our shares of common stock trade) (the "Maximum Share Amount"), subject to equitable adjustments from time to time for stock splits, stock dividends, combinations, capital reorganizations and similar events relating to the shares of common stock occurring after the closing date.

We provide certain buy-in rights to a holder if we fail to deliver the shares of common stock underlying the warrants by the third trading day after the date on which delivery of the stock certificate is required by the warrant. The buy-in rights apply if after the third trading day on which delivery of the stock certificate is required by the warrant, the holder purchases (in an open market transaction or otherwise) shares of our common stock to deliver in satisfaction of a sale by the holder of the warrant shares that the holder anticipated receiving from us upon exercise of the warrant. In such event, we will:

- pay in cash to the holder the amount equal to the excess (if any) of the buy-in price (including brokerage commissions, if any) over the product of (A) the number of warrant shares that we were required to deliver to the holder in connection with the exercise at issue, times (B) the price at which the sell order giving rise to holder's purchase obligation was executed; and
- at the election of holder, either (A) reinstate the portion of the warrant as to such number of shares of common stock for which such exercise
 was not honored, or (B) deliver to the holder a certificate or certificates representing such number of shares of common stock that would have
 been exercised had we timely complied with our exercise and delivery obligations.

If the holder of a warrant desires to exercise its warrant and sell the shares issuable upon exercise of its warrant, or if the Company requires the holder to exercise its warrant as described herein, and there is no effective registration statement registering, or no current prospectus available for, the issuance or resale of the

shares of common stock underlying the warrants, in lieu of exercising its warrant by payment of a wire transfer or cashier's check, the holder may elect to receive shares equal to the value of such holder's warrant by surrender of the warrant to us, together with a properly endorsed notice of exercise. The number of shares to be issued would be determined by a formula based on the total number of shares with respect to which the warrant is being exercised, the volume weighted average price for the shares of our common stock on the trading day immediately prior to the date of exercise and the applicable exercise price of the warrants. This is referred to as a "cashless exercise."

The shares of common stock issuable on exercise of the warrants will be, when issued and paid for in accordance with the warrants, duly authorized, validly issued and fully paid and non-assessable. We will authorize and reserve at least that number of shares of common stock equal to the number of shares of common stock issuable upon exercise of all outstanding warrants.

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 \$4.1748, 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 the common stock has remained at or above \$4.1748 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) 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) 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 of which this prospectus supplement and the attached prospectus is a part nor this prospectus supplement and such prospectus 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 this prospectus supplement and the prospectus comply with all applicable securities laws as to form and substance; (vii) our transfer agent for the 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.

Corporate Events. Prior to the consummation of any change of control pursuant to which holders of shares of common stock are entitled to receive securities or other assets with respect to or in exchange for shares of common stock (a "Corporate Event"), we shall make appropriate provision to insure that the holder will thereafter have the right to receive upon exercise of the warrant, in substitution for the shares of common stock issuable upon exercise of the warrant, such securities or other assets to which the holder would have

been entitled with respect to such shares of common stock had such shares of common stock been held by the holder upon the consummation of such Corporate Event (without taking into account any limitations or restrictions on the exercisability of the warrant).

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 we issue or sell 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 and set forth herein on page S-<u>61</u>. See "Series E Preferred Stock — Optional Conversion by the Holders."

Delivery of Certificates. Certificates for warrant shares issuable upon exercise of a warrant shall be transmitted by our transfer agent to the holder by crediting the account of the holder's prime broker with the Depository Trust Company through its Deposit/Withdrawal at Custodian ("DWAC") system we are a participant in such system and there is an effective registration statement permitting the resale of the warrant shares by the holder, and otherwise by physical delivery to the address specified by the holder in the notice of exercise within three trading days after the receipt by us of the notice of exercise, surrender of the warrant and payment of the aggregate exercise price.

Notice of Corporate Action. We will provide prior notice to holders of the warrants in advance of certain record or effective dates (as specified below) in connection with the following corporate events, to provide the holders of the warrants with the opportunity to exercise their warrants and hold common stock:

- if we declare a redemption of the common stock;
- if we authorize the granting to all holders of our common stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights;
- if the approval of any of our stockholders shall be required in connection with any reclassification of our common stock, any consolidation or merger to which our company is a party, any sale or transfer of all or substantially all of our assets, or any compulsory share exchange whereby our common stock is converted into other securities, cash or property; or
- if we authorize the voluntary or involuntary liquidation or winding up of the affairs of our company,

then, in each case, we will mail to the holders of the warrants, a notice stating:

- the date on which a record is to be taken for the purpose of such redemption, or if a record is not to be taken, the date as of which the holders of
 our common stock of record to be entitled to such redemption are to be determined,
- the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the
 date as of which it is expected that holders of record of our common stock will be entitled to exchange their shares of common stock for
 securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange, or
- the date of such dissolution, liquidation or winding up.

Subject to applicable law, the holder will be provided a reasonable opportunity (which shall be not less than eight (8) calendar days notice) to exercise the warrant prior to the effective date of the event triggering such notice. No holders of the warrants will possess any rights as a stockholder under those warrants until the holder exercises those warrants.

Transferability. The warrants may be transferred independent of the common stock they were issued with, on a form of assignment, subject to all applicable laws.

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. The 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 will be filed as an exhibit to a Current Report on Form 8-K to be filed with the SEC by us in connection with this offering.

DESCRIPTION OF CAPITAL STOCK

General

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 and Class D warrants themselves, all of which are filed or incorporated by reference as exhibits to the registration statement of which this prospectus supplement is a part, and to the provisions of Delaware corporate law.

Common Stock

We are authorized to issue 500,000,000 shares of common stock, par value \$0.001 per share. As of November 11, 2010, we had 57,614,858 shares of our common stock issued and outstanding.

Holders of our common stock are entitled to one vote per share in the election of directors and on all other matters 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 our 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.

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 the common stock, diluting the voting power of the common stock, impairing the liquidation rights of the common stock, or delaying or preventing a change in control of NeoStem, all without further action by our stockholders.

As of November 11, 2010, 10,000 shares of our Series B Convertible Redeemable Preferred Stock, \$0.01 par value per share, are authorized and outstanding. No other series of preferred stock are currently outstanding.

Series B Preferred Stock

Our Series B Convertible Redeemable 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 our Series B Convertible Redeemable 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, our Series B Convertible Redeemable 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 our Series B Convertible Redeemable 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 our Series B Convertible Redeemable Preferred Stock.

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

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

In the event of any voluntary or involuntary dissolution, liquidation or winding up of NeoStem, 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 Convertible Redeemable Preferred Stock in respect of distributions upon the liquidation of NeoStem, the holder of each share of Series B Convertible Redeemable Preferred Stock then outstanding shall be entitled to be paid out of the assets of NeoStem available for distribution to its stockholders, an amount on a pari passu basis equal to ten times the amount per share distributed to the holders of the our common stock. After payment of the full amount of the distribution to which they are entitled, the holders of shares of our Series B Convertible Redeemable Preferred Stock will not be entitled to any further participation in any distribution of assets by the corporation.

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

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

Warrants

As of November 11, 2010, we had outstanding warrants to purchase an aggregate of 17,352,028 shares of our common stock with exercise prices ranging from \$0.50 to \$6.50, consisting of warrants to purchase an aggregate of 3,689,266 shares of our common stock at an approximate weighted average exercise price of \$3.21 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 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) and 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). The holders of a vast majority of such warrants have registration rights for the shares underlying the warrants.

Class A Warrants

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.

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.

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 for 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.

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.

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 the Company ("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.

Stock Options

As of November 11, 2010, there were 21,811,965 shares of our common stock reserved for issuance under our equity incentive plans. Of this number, 13,588,214 shares were reserved for issuance upon exercise of outstanding options that were previously granted under our equity incentive plans with exercise prices ranging from \$0.71 to \$15.00 per share, with an approximate weighted average exercise price of \$1.92 per share and 8,223,751 shares were reserved for future equity awards that may be granted in the future under our equity incentive plans. The shares of our common stock underlying all such options are or will be registered for sale with the SEC prior to exercises.

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. Each class of directors serves a three-year term, and each class is elected on a rotating or staggered basis, with each class being elected at the annual stockholder meeting coinciding with the expiration of that class's term. Pursuant to the Delaware General Corporation Law, if a board of directors is classified, 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.

Removal of Directors. Our bylaws provide that any one or more or all of our directors may be removed with cause only by the holders of at least a majority of the shares then entitled to vote at an election of our directors. No director may be removed by the stockholders without cause prior to the expiration of his or her term. 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.

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. The provisions of Delaware law, our Amended and Restated Certificate of Incorporation and 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.

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.

Transfer Agent and Registrar

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. We will act as transfer agent for the preferred shares and the warrants being offered hereby.

NYSE Amex Listing

Our common stock is traded on the NYSE Amex under the symbol "NBS." The preferred shares and the warrants to purchase common stock issued to the investors in this offering are not expected to be eligible for trading on any market.

Concurrent Common Stock Offering

The following is a description of the securities we are offering in our concurrent common stock offering.

We are offering units, with each unit consisting of:

- one share of our common stock; and
- a warrant to purchase 0.50 of a share of our common stock (and the shares of common stock issuable from time to time upon exercises of the offered warrants),

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. Units will not be issued or certificated. The shares of common stock and the warrants are immediately separable and will be issued separately, but will be purchased together in the concurrent common stock offering. This offering is contingent on the completion of the concurrent common stock offering is contingent upon the completion of this offering.

PLAN OF DISTRIBUTION

We are offering our units through placement agents. Subject to the terms and conditions contained in the placement agency agreement dated November 16, 2010, Cowen and Company, LLC and LifeTech Capital, a division of Aurora Capital, LLC, have agreed to act as the placement agents for the sale of up to 10,582,011 units, with each unit consisting of one share of our Series E 7% Senior Convertible Preferred Stock, a warrant to purchase 0.25 of a share of our common stock and 0.0155 of a share of our common stock (and the shares of common stock issuable from time to time upon conversion of the senior convertible preferred stock and exercise of the warrants). The placement agents are not purchasing or selling any units, nor are they required to arrange for the purchase or sale of any specific number or dollar amount of units, but have agreed to use best efforts to arrange for the sale of all the units.

The placement agency agreement provides that the obligations of the placement agents and the investors are subject to certain conditions precedent, including the absence of any material adverse change in our business and the receipt of customary legal opinions, letters and certificates.

On the scheduled closing date, which we currently anticipate will take place on or about November 19, 2010, the following will occur:

- we will receive funds in the amount of the aggregate purchase price; and
- Cowen and Company, LLC, as representative of the placement agents, will receive the placement agents' fee in accordance with the terms of the placement agency agreement.

We will pay the placement agents a commission equal to 7.5% of the gross proceeds of the sale of shares of our senior convertible preferred stock and warrants in the offering. We may also reimburse the placement agents for legal and other expenses incurred by them up to \$50,000 in the aggregate. The placement agents will not receive any commission with respect to the shares of common stock issuable upon conversion or redemption of the senior convertible preferred stock and exercise of the warrants. In no event will the total amount of compensation paid to the placement agents and other securities brokers and dealers upon completion of this offering exceed 8.0% of the maximum gross proceeds of the offering. The following table shows the per unit and total fees we will pay to the placement agents in connection with the sale of the securities offered pursuant to this prospectus supplement.

| | Per Unit | Total |
|------------------------------------------|-------------|---------------|
| Commission | \$ 0.070875 | \$ 750,000 |
| Legal and other expenses (not to exceed) | \$ 0.004725 | \$ 50,000 |
| Total | \$ 0.0756 | \$ 800,000 |

Because there is no minimum offering amount required as a condition to closing in this offering, the actual total offering commissions, if any, are not presently determinable and may be substantially less than the maximum amount set forth above. The estimated offering expenses payable by us, in addition to the placement agents' fee, are approximately \$480,000, which includes legal, accounting and printing costs and various other fees associated with the offering. After deducting the fees due to the placement agents and our estimated offering expenses, we expect the net proceeds from this offering to be up to approximately \$8.7 million.

We have agreed to indemnify the placement agents against certain liabilities, including liabilities under the Securities Act of 1933, as amended, as set forth in the placement agency agreement. We have also agreed to contribute to payments the placement agents may be required to make in respect of such liabilities.

Pursuant to certain "lock-up" agreements executed in connection with our concurrent common stock offering, we, our executive officers and directors, and certain of their affiliates and certain other stockholders have agreed, subject to certain exceptions, during a period of 90 days after the date of the pricing of this offering, not to, indirectly or directly, without the prior written consent of Cowen and Company, LLC, offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock. The exceptions include (1) our sale of senior convertible preferred stock, warrants and common stock in this offering and our sale of common stock and warrants in our concurrent offering, (2) our issuance of common stock, options to acquire common stock or other equity awards pursuant to our employee benefit plans, (3) our issuance of common

stock pursuant to the valid exercises, vesting or settlements of options, warrants or rights outstanding on the date of this prospectus supplement, (4) our issuance of common stock or securities convertible or exercisable into shares of common stock in connection with our transaction with PCT, (5) our issuance of shares of common stock or securities convertible or exercisable into shares of common stock to consultants (including in connection with investor relations activities) and (6) our issuance of shares of common stock or securities convertible or exercisable into shares of common stock in connection with any acquisition, strategic partnership, joint venture or collaboration to which we are a party, or the acquisition or license of any products or technology by us, but do not include any such transaction in which we are issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities; provided that the number of shares of our common stock issued or underlying securities convertible or exercisable for common stock issued pursuant to clause (6) shall not exceed 3.7 million shares in the aggregate and provided further that, prior to the issuance of any such securities pursuant to clause (5) or (6), we shall cause the recipients of such securities to execute and deliver to Cowen and Company, LLC an agreement to be bound by these same restrictions. We also agree that during such 90-day restricted period, other than for the sale of the common stock and warrants offered by this prospectus supplement, we will not file any registration statement, preliminary prospectus or prospectus, or any amendment or supplement thereto, under the Securities Act for any such transaction or which registers, or offers for sale, our common stock or any securities convertible into or exercisable or exchangeable for common stock, except (i) for the filing of a registration statement relating to employee benefit plans or to the transaction with PCT and (ii) for the filing of a registration statement at any time after the 30th day following the date of this prospectus supplement relating to the resale of our common stock on behalf of selling stockholders who have registration rights outstanding as of the date of this prospectus supplement. The 90-day restricted period will be automatically extended if (i) during the last 17 days of the 90-day restricted period we issue an earnings release or material news or a material event relating to us occurs or (ii) prior to the expiration of the 90-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 90-day restricted period, in either of which case the restrictions described above will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. The exceptions permit, among other things and subject to restrictions, (1) if the holder is a natural person, certain transfers made as a bona fide gifts to any member of the holder's immediate family, to a trust the beneficiaries of which are exclusively the holder or members of the holder's immediate family or to a charity or educational institute, or by will or intestate succession upon the death of the holder and (2) if the holder is a corporation, partnership, limited liability company or other business entity (a) transfers to any shareholder, partner or member of, or owner of a similar equity interest in, the holder if such transfer is not for value, (b) transfers in connection with the sale of all or substantially all of the holder's capital stock, partnership interests, membership interests or other similar equity interests, or all or substantially all of the holder's capital stock, partnership entry of avoiding the restrictions imposed by the "lock-up" agreement or (c) to another corporation, partnership, limited liability company or other business entity or the holder and such transfer is not for value.

The placement agents have from time to time performed and may in the future perform various financial advisory, commercial banking and investment banking services for us in the ordinary course of business, for which they received, or will receive, customary fees. Cowen and Company, LLC is acting as underwriter and LifeTech Capital, a division of Aurora Capital, LLC, is acting as financial advisor in connection with a concurrent offering of 6,337,980 units, each unit consisting of one share of our common stock and a warrant to purchase 0.50 of a share of our common stock.

The placement agency agreement, the form of securities purchase agreement that each investor will execute, the certificate of designations for the senior convertible preferred stock and the form of warrant are included as exhibits to our Current Report on Form 8-K that will be filed with the SEC in connection with this offering.

LEGAL MATTERS

Lowenstein Sandler PC, Roseland, New Jersey will pass upon the validity of the issuance of the securities offered by this prospectus supplement and the accompanying prospectus. The placement agents are being represented in connection with this offering by Goodwin Procter LLP, New York, New York.

EXPERTS

The consolidated financial statements incorporated in this prospectus supplement and elsewhere in the registration statement of which this prospectus supplement forms a part by reference from our Annual Report on Form 10-K for the year ended December 31, 2009, have been audited by Holtz Rubenstein Reminick LLP, an independent registered public accounting firm, as stated in their report dated March 31, 2010 with respect to their audit of the balance sheets of NeoStem, Inc. and its subsidiaries as of December 31, 2009 and 2008 and the related consolidated statements of operations, stockholders' equity (deficit) and cash flows for each of the years in the three-year period ended December 31, 2009, which report appears in our Annual Report on Form 10-K for the fiscal year ended December 31, 2009 and is incorporated herein by reference, and has 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 Progenitor Cell Therapy, LLC and its subsidiaries as of and for the years ended December 31, 2009, 2008 and 2007 included in our Current Reports on Form 8-K filed on September 23, 2010 and November 12, 2010, as set forth in their report dated September 17, 2010, 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 Progenitor Cell Therapy, LLC and its subsidiaries 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 ADDITIONAL INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these documents at the SEC's Public Reference Room, which is located at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the SEC's Public Reference Room. In addition, the SEC maintains an Internet website, which is located at *http://www.sec.gov*, which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Copies of our SEC filings are also available through our website (*http://www.neostem.com*) as soon as reasonably practicable after we electronically file the material with, or furnish it to, the SEC. We do not incorporate by reference into this prospectus supplement or the accompanying prospectus the information on, or accessible through, our website, and you should not consider it as part of this prospectus supplement or the accompanying prospectus.

We have filed with the SEC a registration statement on Form S-3 under the Securities Act of 1933 to register the securities offered by this prospectus supplement. This prospectus supplement, which along with the accompanying prospectus, constitutes a part of the registration statement, does not contain all of the information in the registration statement and the exhibits of the registration statement. For further information with respect to us and our securities, we refer you to the registration statement and to the exhibits to the registration statement. A copy of the registration statement may be inspected, without charge, at the offices of the SEC at 100 F Street, NE, Washington, DC 20549, and copies of all or any part of the registration statement may be obtained from the SEC's public reference room at 100 F Street, NE, Washington, DC 20549, upon the payment of any fees required by the SEC. The registration statement is also available on the SEC's website at *http://www.sec.gov*.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate" into this prospectus supplement information that we file with the SEC in other documents. This means that we can disclose important information to you by referring to other documents that contain that information. Any information that we incorporate by reference is considered part of this prospectus supplement and the accompanying prospectus.

Information contained in this prospectus supplement and the accompanying prospectus and information that we file with the SEC in the future and incorporate by reference in this prospectus supplement automatically modifies and supersedes previously filed information, including information in previously filed documents or reports that have been incorporated by reference in this prospectus supplement, to the extent the new information differs from or is inconsistent with the old information. Any information so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement and the accompanying prospectus.

The following documents previously filed by us with the SEC are incorporated in this registration statement by reference.

- (a) Annual Report on Form 10-K for the year ended December 31, 2009, filed on March 31, 2010.
- (b) Definitive Proxy Statement for our 2010 Annual Meeting of Stockholders, filed on April 30, 2010.
- (c) Quarterly Reports on Form 10-Q for the quarters ended March 31, 2010, filed on May 17, 2010, June 30, 2010, filed on August 16, 2010 and September 30, 2010, filed on November 12, 2010.
- (d) Current Reports on Form 8-K and amendments thereto filed on November 4, 2009 (as amended on January 5, 2010), January 7, 2010, February 12, 2010, February 19, 2010, March 16, 2010 (as amended on April 6, 2010), March 17, 2010, March 18, 2010, April 1, 2010, May 19, 2010, May 21, 2010, June 2, 2010, June 4, 2010, June 8, 2010, June 11, 2010, June 18, 2010, June 28, 2010, July 9, 2010, August 16, 2010, August 18, 2010, September 8, 2010, September 23, 2010 and November 12, 2010 (excluding any information deemed furnished pursuant to Item 2.02 or Item 7.01 of any such Current Report on Form 8-K).
- (e) Description of our common stock 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 posteffective 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 part 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 Catherine M. Vaczy, Esq., Vice President and General Counsel (212) 584-4180

You should rely only on the information provided in and incorporated by reference into this prospectus supplement and the accompanying prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus supplement or the accompanying prospectus is accurate as of any date other than the date on the front cover of these documents.

PROSPECTUS

\$45,000,000



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 \$45,000,000. 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 May 14, 2010 was \$3.41 per share. As of May 14, 2010, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$28,384,459. We have not offered any of our common stock pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar month period that ends on, and includes, the date of this prospectus.

Investing in our securities involves risks. See "Risk Factors" at page 2 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.

We may also offer from time to time shares of our common stock pursuant to this prospectus and any applicable prospectus supplement in accordance with the terms of a common stock purchase agreement we have entered into with Commerce Court Small Cap Value Fund, Ltd., or Commerce Court. The terms of the common stock purchase agreement are described in this prospectus under the section entitled "Plan of Distribution." Commerce Court is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended, with respect to the shares of our common stock that we may offer pursuant to the common stock purchase agreement, and any profits on the sales of shares of our common stock by Commerce Court and any discounts, commissions or concessions received by Commerce Court may be deemed to be underwriting discounts and commissions under the Securities. Act. We agreed to issue Commerce Court pursuant to the registration statement of which this prospectus forms a part, in consideration of its execution and delivery of the stock purchase agreement, 63,792 shares of our common stock, and this prospectus covers the sale to the public of those shares. We expect to deliver to Commerce Court the above-referenced shares of common stock on or about May 21, 2010.

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 May 19, 2010.

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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.

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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 \$45,000,000. 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 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 modifies or supersedes the earlier statement. 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 <u>24</u> and <u>25</u>, respectively.

NEOSTEM, INC.

In 2009, through our expansion efforts within the People's Republic of China ("China" or the "PRC"), and with the acquisition of a controlling interest in Suzhou Erye Pharmaceuticals Company Ltd. ("Erye"), we transitioned into a multi-dimensional international biopharmaceutical company with product and service revenues, global research and development capabilities and operations in three distinct business units: (i) U.S. adult stem cells, (ii) China adult stem cells and (iii) China pharmaceuticals, primarily antibiotics. These business units are expected to provide platforms for the accelerated development and commercialization of innovative technologies and products in both the U.S. and China.

In the U.S. we are a leading provider of adult stem cell collection, processing and storage services enabling healthy 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. Our current network of U.S. adult stem cell collection centers is focused primarily on the Southern California and Northeast markets and during 2010 we have begun to enter into new agreements for collection centers with the goal of expanding our coverage to ten centers by the end of 2010. In addition to our services, we are conducting research and development activities on our own at our new laboratory facility in Cambridge, Massachusetts and through collaborations in pursuit of diagnostic and therapeutic applications using autologous adult stem cells, including applications using our VSELTM technology, with regard to very small embryonic-like stem cells, which we license from the University of Louisville.

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 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 expect to begin offering stem cell banking services and certain stem cell therapies to patients in China, as well as to foreigners traveling to China seeking medical treatments that are either unavailable or cost prohibitive in their home countries.

The cornerstone of our China pharmaceuticals business is the 51% ownership interest we acquired in 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 the manufacturing and

distribution of generic antibiotic products and 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). Erye's revenue for 2009 was approximately \$61 million.

Our website address is *www.neostem.com*. The information on our website is not incorporated by reference into this prospectus and should not be considered to be a part of this prospectus. We have included our website address as an inactive technical reference only.

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 our current line of business in January 2006. On October 30, 2009, we completed a merger with China Biopharmaceuticals Holdings, Inc., the former owner of the 51% interest in Erye. 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. 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" located on page 19 of our Annual Report on Form 10-K for the year ended December 31, 2009 and on page 38 of our Quarterly Report on Form 10-Q for the quarter ended March 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 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. 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 \$45,000,000.

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 articles of incorporation and bylaws, and our Class A warrants and Class D warrants. The summary does not purport to be complete and is qualified in its entirety by reference to our articles of incorporation and bylaws and the Class A warrants and Class D warrants, each as amended to date, and to the provisions of the General Corporation Law of the State of Delaware, as amended, or the Delaware General Corporation Law.

Common Stock

We are authorized to issue 500,000,000 shares of common stock, par value \$0.001 per share. Holders of our common stock are entitled to one vote per share in the election of directors and on all other matters 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 common stock are entitled to dividends in the amounts and at times as may be declared by our 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 May 17, 2010, we had 53,034,089 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 common stock. The issuance of preferred stock could have the effect of restricting dividends on the common stock, diluting the voting power of the common stock, impairing the liquidation rights of the common stock, or delaying or preventing a change in control of our company, all without further action by our stockholders.

As of May 17, 2010, there were 825,000 shares of our Series B Convertible Redeemable Preferred Stock, \$0.01 par value per share (the "Series B Preferred Stock"), authorized for issuance, 10,000 shares of which were 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 our 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 our 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.

Options

As of May 17, 2010, we had outstanding options to purchase an aggregate of 10,265,574 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 \$1.90 per share. The shares of our common stock underlying all such options are currently registered for sale with the SEC.

Warrants

As of May 17, 2010, we had outstanding (i) warrants to purchase an aggregate of 4,145,099 shares of our common stock with exercise prices ranging from \$0.50 to \$6.50 or an approximate weighted average exercise price of \$2.86 per share, (ii) Class A warrants to purchase an aggregate of 635,000 shares of our common stock at an exercise price of \$6.00 per share and (iii) Class D warrants to purchase 12,932,512 shares of our common stock at an exercise price of a vast majority of such warrants have registration rights for the shares underlying the warrants.

Class A Warrants

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.

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.

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.

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.

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 the Company ("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.

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 shall be 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, 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.

Removal of Directors. Our bylaws provide that any one or more or all of our directors may be removed with cause only by the holders of at least a majority of the shares then entitled to vote at an election of our directors. No director may be removed by the stockholders without cause prior to the expiration of his or her term. 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.

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. The provisions of Delaware law, our Amended and Restated Certificate of Incorporation and 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.

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.

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 reasonable cause to believe his or her conduct was unlawful. In the case of an action by or in the right of 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 indemnify 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 entitled to indemnity for such expenses which the court shall deem proper.

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 (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. 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 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 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.

Equity Line of Credit

On May 19, 2010, we entered into what is sometimes termed as an equity line of credit arrangement with Commerce Court Small Cap Value Fund, Ltd., or Commerce Court. Specifically we entered into a Common Stock Purchase Agreement, or the Purchase Agreement, with which provides that, upon the terms and subject to the conditions set forth therein, Commerce Court is committed to purchase up to \$20,000,000 worth of shares of our common stock over the approximately 24-month term of the Purchase Agreement; provided, however, that in no event may we issue under the Purchase Agreement more than 10,536,208 shares of common stock, which is approximately 19.9% of our outstanding shares of common stock on the closing date of the Purchase Agreement, less 63,792 shares of common stock issued to Commerce Court on the closing date in payment of its commitment fee.

From time to time over the term of the Purchase Agreement, and at our sole discretion, we may present Commerce Court with draw down notices to purchase our common stock over ten consecutive trading days or such other period mutually agreed upon by us and Commerce Court, or the draw down period, with each draw down subject to limitations based on the price of our common stock and a limit of 2.5% of our market capitalization at the time of such draw down (which limitations may be waived or modified by mutual agreement of the parties). We are able to present Commerce Court with up to 24 draw down notices during

the term of the Purchase Agreement, with only one such draw down notice allowed per draw down period and a minimum of five trading days required between each draw down period.

Once presented with a draw down notice, Commerce Court is required to purchase a pro rata portion of the shares on each trading day during the trading period on which the daily volume weighted average price for our common stock exceeds a threshold price determined by us for such draw down. The per share purchase price for these shares will equal the daily volume weighted average price of our common stock on each date during the draw down period on which shares are purchased, less a discount of 5.0%, based on the trading price of our common stock. If the daily volume weighted average price of our common stock falls below the threshold price on any trading day during a draw down period, the Purchase Agreement provides that Commerce Court will not be required to purchase the pro-rata portion of shares of common stock allocated to that day. However, at its election, Commerce Court may buy the pro-rata portion of shares allocated to that day at the threshold price less the discount described above.

The Purchase Agreement also provides that, from time to time and at our sole discretion, we may grant Commerce Court the right to exercise one or more options to purchase additional shares of our common stock during each draw down period for an amount of shares specified by us based on the trading price of our common stock. Upon Commerce Court's exercise of an option, we would sell to Commerce Court the shares of our common stock subject to the option at a price equal to the greater of the daily volume weighted average price of our common stock on the day Commerce Court notifies us of its election to exercise its option or the threshold price for the option determined by us, less a discount calculated in the same manner as it is calculated in the draw down notices.

In addition to our issuance of shares of common stock to Commerce Court pursuant to the Purchase Agreement, the registration statement to which this prospectus relates also covers the sale of those shares from time to time by Commerce Court to the public. Commerce Court is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended, or the Securities Act.

Commerce Court has informed us that it will use an unaffiliated broker-dealer to effectuate all sales, if any, of common stock that it may purchase from us pursuant to the Purchase Agreement. Such sales will be made on the NYSE Amex at prices and at terms then prevailing or at prices related to the then current market price. Each such unaffiliated broker-dealer will be an underwriter within the meaning of Section 2(a)(11) of the Securities Act. Commerce Court has informed us that each such broker-dealer will receive commissions from Commerce Court which will not exceed customary brokerage commissions. Commerce Court may also pay other expenses associated with the sale of the common stock it acquires pursuant to the Purchase Agreement.

In connection with this transaction, a filing was made with the Corporate Finance Department of the Financial Industry Regulatory Authority ("FINRA"), pursuant to FINRA Rule 5110, and we have received written confirmation from FINRA to the effect that FINRA's Corporate Finance Department has determined not to raise any objection with respect to the fairness or reasonableness of the terms of the Purchase Agreement or the transactions contemplated thereby.

The shares of common stock issued under the Purchase Agreement may be sold in one or more of the following manners:

- ordinary brokerage transactions and transactions in which the broker solicits purchasers; or
- a block trade in which the broker or dealer so engaged will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction.

Commerce Court has agreed that during the periods listed above neither it nor any of its affiliates will enter into a short position with respect to shares of our common stock except that Commerce Court may sell shares that it is obligated to purchase under a pending draw down notice but has not yet taken possession of so long as Commerce Court covers any such sales with the shares purchased pursuant to such draw down notice. Commerce Court has further agreed that during the periods listed above it will not grant any option to purchase or acquire any right to dispose or otherwise dispose for value of any shares of our common stock or any securities convertible into, or exchangeable for, or warrants to purchase, any shares of our common stock,

or enter into any swap, hedge or other agreement that transfers, in whole or in part, the economic risk of ownership of our common stock, except for the sales permitted by the prior sentence.

In addition, Commerce Court and any unaffiliated broker-dealer will be subject to liability under the federal securities laws and must comply with the requirements of the Securities Act and the Securities Exchange Act or 1934, as amended, or the Exchange Act, including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares of common stock by Commerce Court or any unaffiliated broker-dealer. Under these rules and regulations, Commerce Court and any unaffiliated broker-dealer:

- may not engage in any stabilization activity in connection with our securities;
- must furnish each broker which offers shares of our common stock covered by the prospectus that is a part of our registration statement with the number of copies of such prospectus and any prospectus supplement which are required by each broker; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities other than as permitted under the Exchange Act.

These restrictions may affect the marketability of the shares of common stock purchased and sold by Commerce Court and any unaffiliated brokerdealer.

We have agreed to indemnify and hold harmless Commerce Court and each person who controls Commerce Court against certain liabilities, including certain liabilities under the Securities Act. We have agreed to pay up to \$35,000 of Commerce Court's reasonable attorneys' fees and expenses incurred by Commerce Court in connection with the preparation, negotiation, execution and delivery of the Purchase Agreement and related transaction documentation. In addition, during any full calendar quarter that falls within the term of the Purchase Agreement when no shares of our common stock have been purchased or sold because we did not deliver a draw down notice, we are required to pay all reasonable attorneys' fees and expenses, up to \$5,000, representing the due diligence expenses incurred by Commerce Court during such calendar quarter. Further, if we issue a draw down notice and fail to deliver the shares to Commerce Court on the applicable settlement date, and such failure continues for ten trading days, we have agreed to pay Commerce Court's option.

Commerce Court has agreed to indemnify and hold harmless us and each of our directors, officers and persons who control us against certain liabilities under the Securities Act that may be based upon written information furnished by Commerce Court to us for inclusion in this prospectus or any other prospectus or prospectus supplement related to this transaction.

Upon each sale of our common stock to Commerce Court under the Purchase Agreement, we have agreed to pay Reedland Capital Partners, an Institutional Division of Financial West Group, Member FINRA/SIPC, or FWG, a placement fee equal to 2% of the aggregate dollar amount of common stock purchased by Commerce Court. We also have agreed to pay up to \$10,000 of FWG's attorneys' fees and expenses incurred by FWG in connection with the preparation with filings required to be made on behalf of FWG in connection with the Purchase Agreement and the related transaction pursuant to FINRA Rule 5110. We have agreed to indemnify and hold harmless FWG and each person who controls FWG against certain liabilities, including certain liabilities under the Securities Act.

In consideration of Commerce Court's execution and delivery of the Purchase Agreement, we agreed to issue to Commerce Court upon the execution of the Purchase Agreement 63,792 shares of our common stock. The registration statement to which this prospectus relates covers the issuance of those shares to Commerce Court, as well as the sale of those shares from time to time by Commerce Court to the public.

VALIDITY OF SECURITIES

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 incorporated in this prospectus by reference from our Annual Report on Form 10-K for the year ended December 31, 2009, have been audited by Holtz Rubenstein Reminick LLP, an independent registered public accounting firm, as stated in their report dated March 31, 2010 with respect to their audit of the balance sheets of NeoStem, Inc. and its subsidiaries as of December 31, 2009 and 2008 and the related consolidated statements of operations, stockholders' equity (deficit) and cash flows for each of the years in the three-year period ended December 31, 2009, which report appears in our Annual Report on Form 10-K for the fiscal year ended December 31, 2009 and is incorporated herein by reference, and has 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 registration statement by reference.

- (a) Annual Report on Form 10-K for the year ended December 31, 2009, filed on March 31, 2010.
- (b) Definitive Proxy Statement for our 2010 Annual Meeting of Stockholders, filed on April 28, 2010.
- (c) Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, filed on May 17, 2010.
- (d) Current Reports on Form 8-K and amendments thereto filed on November 4, 2009 (as amended on January 5, 2010), January 7, 2010, February 12, 2010, February 19, 2010, March 16, 2010 (as amended on April 6, 2010), March 17, 2010, March 18, 2010, April 1, 2010 and May 19, 2010 (excluding any information deemed furnished pursuant to Item 2.02 or Item 7.01 of any such Current Report on Form 8-K).
- (e) 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 posteffective 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 Catherine M. Vaczy, Esq., Vice President and General Counsel (212) 584-4180

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 the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

10,582,011 Units



Units Consisting of One Share of Series E 7% Senior Convertible Preferred Stock, a Warrant to Purchase 0.25 of a Share of Common Stock and 0.0155 of a Share of Common Stock

PROSPECTUS SUPPLEMENT

Cowen and Company LifeTech Capital

November 16, 2010