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

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2011

OR
TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number: 001-33650

NEOSTEM, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)
420 Lexington Avenue
Suite 450
New York, New York
(Address of principal executive offices)

22-2343568
(I.R.S. Employer
Identification No.)
10170

(Zip Code)

Registrant's telephone number, including area code: **(212) 584-4180**

Securities Registered Pursuant to Section 12(b) of the Act:

| Title of Each Class | Name of Each Exchange On Which Registered |
|---|---|
| Common Stock, par value \$0.001 per share | NYSE Amex |
| Class A Common Stock Purchase Warrants | NYSE Amex |

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this Chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):
Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2011 (the last business day of the most recently completed second fiscal quarter) was approximately \$73.5 million, computed by reference to the closing sales price of \$1.48 for the common stock on the NYSE Amex reported for such date. Shares held by executive officers, directors and persons actually owning directly or indirectly more than 10% of the outstanding common stock have been excluded from the preceding number because such persons may be deemed to be affiliates of the registrant. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

On March 12, 2012, 114,348,438 shares of the registrant's common stock, par value \$0.001 per share, were outstanding.

Documents incorporated by reference: Portions of the registrant's definitive Proxy Statement for the 2012 Annual Meeting of Stockholders, to be filed with the Commission not later than 120 days after the close of the registrant's fiscal year, have been incorporated by reference, in whole or in part, into Part III, Items 10, 11, 12, 13 and 14 of this Annual Report on Form 10-K.

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TABLE OF CONTENTS

All references in this Annual Report on Form 10-K to “we,” “us,” the “Company” and “NeoStem” mean NeoStem, Inc., including subsidiaries and predecessors, except where it is clear that the term refers only to NeoStem, Inc. This Annual Report on Form 10-K contains forward-looking statements, which involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth under “Cautionary Note Regarding Forward-Looking Statements” and under “Risk Factors” and elsewhere in this Annual Report on Form 10-K.

| TABLE OF CONTENTS | |
|---|------------|
| <u>CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</u> | <u>ii</u> |
| PART I | |
| <u>ITEM 1. BUSINESS</u> | <u>1</u> |
| <u>ITEM 1.1 EXECUTIVE OFFICERS OF THE REGISTRANT</u> | <u>34</u> |
| <u>ITEM 1A RISK FACTORS</u> | <u>38</u> |
| <u>ITEM 1B UNRESOLVED STAFF COMMENTS</u> | <u>84</u> |
| <u>ITEM 2. PROPERTIES</u> | <u>84</u> |
| <u>ITEM 3. LEGAL PROCEEDINGS</u> | <u>86</u> |
| <u>ITEM 4. MINE SAFETY DISCLOSURES</u> | <u>86</u> |
| PART II | |
| <u>ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES</u> | <u>87</u> |
| <u>ITEM 6. SELECTED FINANCIAL DATA</u> | <u>89</u> |
| <u>ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATION</u> | <u>89</u> |
| <u>ITEM 7A QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u> | <u>103</u> |
| <u>ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA</u> | <u>103</u> |
| <u>ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE</u> | <u>146</u> |
| <u>ITEM 9A CONTROLS AND PROCEDURES</u> | <u>146</u> |
| <u>ITEM 9B OTHER INFORMATION</u> | <u>147</u> |
| PART III | |
| <u>ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE</u> | <u>148</u> |
| <u>ITEM 11. EXECUTIVE COMPENSATION</u> | <u>148</u> |
| <u>ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS</u> | <u>148</u> |
| <u>ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE</u> | <u>148</u> |
| <u>ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES</u> | <u>148</u> |
| PART IV | |
| <u>ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES</u> | <u>149</u> |

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K includes “forward-looking” statements within the meaning of the Private Securities Litigation Reform Act of 1995, as well as historical information. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements, or industry results, to be materially different from anticipated results, performance or achievements expressed or implied by such forward-looking statements. When used in this Annual Report on Form 10-K, statements that are not statements of current or historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words “plan,” “intend,” “may,” “will,” “expect,” “believe,” “could,” “anticipate,” “estimate,” or “continue” or similar expressions or other variations or comparable terminology are intended to identify such forward-looking statements, although some forward-looking statements are expressed differently. Additionally, statements regarding our ability to successfully develop, integrate and grow the business, including with regard to our research and development efforts in cellular therapy, our adult stem cell and umbilical cord blood collection, processing and storage business, contract manufacturing and process development of cellular based medicines, and the pharmaceutical manufacturing operations conducted in China, the future of regenerative medicine and the role of stem cells in that future, the future use of stem cells as a treatment option and the role of VSEL™ Technology in that future and the potential revenue growth of such businesses, are forward-looking statements. Our future operating results are dependent upon many factors and our further development is highly dependent on future medical and research developments and market acceptance, which is outside our control.

Forward-looking statements, including with respect to the successful execution of the Company’s strategy, may not be realized due to a variety of factors and we cannot guarantee their accuracy or that our expectations about future events will prove to be correct. Such factors include, without limitation, (i) our ability to manage the business despite operating losses and cash outflows; (ii) our ability to obtain sufficient capital or strategic business arrangements to fund our operations and expansion plans, including meeting our financial obligations under various licensing and other strategic arrangements, the funding of our clinical trials for AMR-001, and the commercialization of the relevant technology; (iii) our ability to build the management and human resources and infrastructure necessary to support the growth of the business; (iv) our ability to integrate our acquired businesses successfully and grow such acquired businesses as anticipated; (v) whether a large global market is established for our cellular-based products and services and our ability to capture a share of this market; (vi) competitive factors and developments beyond our control; (vii) scientific and medical developments beyond our control; (viii) our ability to obtain appropriate governmental licenses, accreditations or certifications or comply with healthcare laws and regulations or any other adverse effect or limitations caused by government regulation of the business; (ix) whether any of our current or future patent applications result in issued patents, the scope of those patents and our ability to obtain and maintain other rights to technology required or desirable for the conduct of our business; (x) whether any potential strategic benefits of various licensing transactions will be realized and whether any potential benefits from the acquisition of these licensed technologies will be realized; (xi) the results of our development activities, including the timing, enrollment, outcome and/or results of any clinical trials; (xii) our ability to successfully divest our 51% ownership of our Erye subsidiary and the value that may be realized given recent regulatory developments in China; (xiii) factors regarding our business and initiatives in China and, generally, regarding doing business in China, including through our variable interest entity structure, and our ability to successfully wind down most or all of our regenerative medicine initiatives in China; and (xiv) the other factors discussed in “Risk Factors” and elsewhere in this Annual Report on Form 10-K and in the Company’s other periodic filings with the Securities and Exchange Commission (the “SEC”) which are available for review at www.sec.gov under “Search for Company Filings.”

All forward-looking statements attributable to us are expressly qualified in their entirety by these and other factors. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. Except as required by law, the Company undertakes no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

PART I

ITEM 1. BUSINESS.

BUSINESS OVERVIEW

NeoStem, Inc. (“we,” “NeoStem” or the “Company”) continues to develop and build on its core capabilities in cell therapy to capitalize on the paradigm shift that we see occurring in medicine. In particular, we anticipate that cell therapy will have a large role in the fight against chronic disease and in lessening the economic burden that these diseases pose to modern society. Our January 2011 acquisition of Progenitor Cell Therapy, LLC (“PCT”) provides NeoStem with a foundation in both manufacturing and regulatory affairs expertise. We believe, this expertise, coupled with our existing research capabilities and collaborations will allow us to achieve our mission of becoming a premier cell therapy company. Our PCT subsidiary’s manufacturing base is one of the few current Good Manufacturing Practices (“cGMP”) facilities available for contracting in the burgeoning cell therapy industry. Amorcyte, LLC (“Amorcyte”), which we acquired in October 2011, is developing a cell therapy for the treatment of cardiovascular disease. Amorcyte’s lead compound, AMR-001, represents NeoStem’s most clinically advanced therapeutic and has commenced enrollment for a Phase 2 trial to investigate AMR-001’s efficacy in preserving heart function after a heart attack. We also expect to begin a Phase 1 clinical trial by 2013 to investigate AMR-001’s utility in arresting the progression of congestive heart failure and the associated comorbidities of that disease. Athelos Corporation (“Athelos”), which is approximately 80%-owned by our subsidiary, PCT, is engaged in collaboration with Becton-Dickinson that is exploring the earlier stage clinical development of a T-cell therapy for autoimmune conditions. In addition, our pre-clinical assets include our VSEL™ Technology platform as well as our MSC (mesenchymal stem cells) product candidate for regenerative medicine. NeoStem’s origins are in adult stem cell research and the collection and storage of adult stem cells. We believe that as new therapeutics are developed utilizing one’s own stored cells (autologous), the market penetration rate for the collection and storage business will rise sharply from its current low single digits percentage level. NeoStem is now ideally positioned to be an integrated leader in the cell therapy industry. We have strong basic research capabilities, manufacturing facilities on both the east and west coast of the United States, the support of regulatory and logistical expertise and the experience of a decade of clinical practice.

In 2011, we operated our business in three reportable segments: (i) Cell Therapy — United States; (ii) Regenerative Medicine — China; and (iii) Pharmaceutical Manufacturing — China. We are pursuing the divestiture of the majority of our China operations and anticipate they will have been exited by the close of 2012.

CELL THERAPY — UNITED STATES

Cell Therapy — Services

PCT

We acquired our PCT subsidiary in January 2011. PCT is engaged in a broad range of services in the cell therapy market for the treatment of human disease.

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

PCT is engaged in a broad range of services in the cell therapy market for the treatment of human disease. PCT offers cGMP compliant cell transportation, manufacturing, storage, and distribution services and supporting clinical trial design, product process development, logistics, regulatory and quality systems development services. Through its network of contacts throughout the cell therapy industry, PCT is able to identify early stage development opportunities in the cell therapy field and opportunistically develop these cell

TABLE OF CONTENTS

therapies through proof of concept. From that point, products can be further developed and ultimately commercialized through NeoStem's developing commercial structure. PCT's expertise in the cell therapy arena includes cell-based therapeutic vaccines (with applications in oncology), other cell therapeutics, and regenerative medicine. From this platform, we hope to develop cell-based therapeutics. In addition to using PCT's facilities and expertise to develop Amorcyte's product candidates, as well as our MSC and VSELTM technologies, we may develop internally, or through partnerships, other allogeneic (cells from a third-party donor) or autologous (cells from oneself) therapeutic technologies.

PCT is accredited by the Foundation for Accreditation of Cell Therapies ("FACT").

Cell Collection, Processing and Storage

In the United States, through NeoStem Family Storage, LLC, a wholly-owned subsidiary of PCT, we offer "Family Banking" of stem cells, which services include collection, processing and storage of cells for newborns as well as adults. This enables healthy individuals to donate and store their stem cells for future personal therapeutic use, as may be needed. We have established a network of adult stem cell collection centers in the U.S. and for our cord blood business distribution channel through hospitals and obstetrician practices with a current focus on the New York and New Jersey metropolitan areas. With our acquisition of PCT, we acquired the expertise associated with cGMP, the highest Food and Drug Administration ("FDA") standard, for stem cell banking.

Cell Therapy — Development

Amorcyte

We acquired our Amorcyte subsidiary in October 2011. Amorcyte is a clinical stage therapeutics company pursuing cell-based therapies for cardiovascular diseases. Amorcyte's most advanced product candidate is AMR-001, a chemotactic hematopoietic stem cell product comprised of autologous bone marrow ("BM") derived CD34+/CXCR4+ cells selected to treat damaged heart muscle following acute myocardial infarction ("AMI"). AMR-001 is being evaluated to determine its effect on myocardial perfusion (blood flow) and ability to prevent subsequent major adverse cardiac events following a significant AMI by preserving heart muscle tissue. AMR-001 is intended to increase microvascular blood flow in the myocardium (heart muscle) via neoangiogenesis (development and formation of new blood vessels), thereby reversing post-heart attack induced ischemia (restriction of blood supply) and rescuing tissue from hibernation and preventing eventual cell death (apoptosis). AMR-001 is injected 5 to 11 days post-stent placement (the repair phase) into the peri-infarct zone (that is, the living tissue on the periphery of the dead tissue), to restore perfusion surrounding the site of the heart attack.

Prior to its acquisition by NeoStem, Inc., Amorcyte completed a Phase 1 trial of AMR-001 in patients with damaged heart muscle following AMI and in January 2012, we commenced enrollment of a Phase 2 trial to investigate AMR-001's ability to preserve heart function after a heart attack. We believe that Amorcyte's Phase 1 study was the first stem cell trial to show dose-related, significant improvement over standard of care following AMI. The lack of myocardial perfusion remains a significant cause of morbidity and mortality in the United States and world-wide. Current interventions or medications have limited ability to prevent progressive myocardial cell apoptosis leading to cardiac deterioration and downstream major adverse cardiac events ("MACE"). We also believe that there are applications for AMR-001 in congestive heart failure, and we expect to begin a Phase 1 clinical trial of AMR-001 for this indication by 2013.

Just as it did for Amorcyte's Phase 1 trial, PCT will offer its expertise in cell therapy and core process development providing a cost advantage for AMR-001 manufacturing for the Phase 2 trial.

In September 2010, the U.S. Patent Office granted Amorcyte U.S. Patent 7,794,705, protecting this therapeutic compound and method of treatment. In January 2012, the U.S. Patent Office granted Amorcyte U.S. Patent 8,088,370, expanding the protection of AMR-001 to include treatment of all vascular injury caused by vascular insufficiency, not just AMI.

Other Stem Cell Research

We conduct other research and development activities on our own and in combination with academic, government and industry collaborators. These activities have been buttressed by our PCT acquisition with its cell therapeutic development expertise and facilities. For example, through Athelos, an 80% owned subsidiary, we are pursuing a novel regulatory T-cell (“T-reg”) therapy for restoring normal immune responses by enhancing T cell balance and function. This early clinical work provides potential applications in graft vs. host disease, solid organ rejection and autoimmune diseases such as asthma and diabetes. To date, government grants have provided funding for a portion of this program. In addition, our pre-clinical program is based on VSEL™ Technology licensed from the University of Louisville. VSEL™ (very small embryonic-like) stem cells have been shown to have characteristics generally found in embryonic stem cells without the potentially dangerous attributes of those cells. Our research efforts with VSEL™ stem cells target osteoporosis and bone regeneration, macular degeneration and glaucoma and chronic wound healing. To date, The Department of Defense has provided funding for a significant portion of this program.

Regenerative Medicine — China

In 2009, we began certain adult stem cell initiatives in the People’s Republic of China (“China” or “PRC”) including: (i) constructing a stem cell research and development laboratory and processing and manufacturing facility in Beijing (the “Beijing facility”), (ii) establishing relationships with hospitals to provide stem cell-based therapies, and (iii) obtaining product licenses covering certain adult stem cell therapeutics focused on regenerative medicine.

In December 2011, China’s Ministry of Health announced its intention to more tightly regulate stem cell clinical trials and stem cell therapeutic treatments in the PRC. Additionally, we operate our regenerative medicine business in China through a wholly foreign owned entity (“WFOE”) and variable interest entities (“VIEs”). While often foreign companies use structures similar to the ones pursuant to which we have operated our regenerative medicine business in the PRC, and while such arrangements are not uncommon in connection with business operations of foreign companies in China in industry sectors in which foreign direct investments are limited or prohibited, recently there has been greater scrutiny by the business community of the VIE structure. Accordingly, the Company has determined to take steps to restrict, and expects to ultimately eliminate, its regenerative medicine business in the PRC.

Our Beijing Facility is located at the Life Science Innovation Center, Life Science Park, Zhongguancun, Beijing. It has been designed for comprehensive cell manufacturing, collection, processing and storage that can enable the PCT business model to launch in the PRC should the opportunity be presented. With the upcoming expiration of this lease in May 2012, the Company is considering its options with respect to extending the lease to allow for manufacturing of cell therapies, which will depend in part upon guidance from the PRC Ministry of Health with respect to regulations applicable to stem cell clinical research and applications.

Pharmaceutical Manufacturing — China

We have a 51% ownership interest in Suzhou Erye Pharmaceutical Company Ltd. (“Erye”). Erye was founded more than 50 years ago and represents an established, vertically-integrated pharmaceutical business. Historically, Erye has concentrated its efforts on manufacturing and distributing of generic antibiotic products. It has received more than 160 production certificates from the State Food and Drug Administration of China, or SFDA, covering both antibiotic prescription drugs and active pharmaceutical intermediates (APIs). Our current senior executive management team at Erye, Mr. Shi Mingsheng, Chairman, and Madame Zhang Jian, General Manager, joined Erye in 1998 and in conjunction with others, bought it from the PRC government in 2003.

As part of our plan to focus our business on the cell therapy industry, we are pursuing strategic alternatives with respect to Erye. In June 2011 we engaged a financial advisor to lead the effort to pursue the possible divestiture of our 51% interest in Erye. Marketing efforts have led to a few nonbinding letters of intent. However, in addition to the factors set forth herein, it is too early to determine whether these or other proposals will lead to definitive agreements.

CELL THERAPY — GENERAL

Market Review and Analysis of the Therapeutics Industry

According to the MDB Capital Group's January 2011 report entitled "The Regenerative Medicine Report: Part II," cell-based therapies utilizing stem cells now represent a market of approximately \$50 billion with an expected growth rate of 15% compounded annually, projected to reach an estimated \$88 billion by 2014. NeoStem believes that an increasing portion of healthcare spending in the United States will be directed to cell and tissue based therapies in the coming years, driven both by aging baby boomers and the favorable pharmacoeconomic value proposition of a cell therapy treatment paradigm for chronic disease. The cardiovascular space represents one area where the forecasted burden on society is expected to rise substantially. Adverse consequences associated with severe myocardial infarctions (MI) and the progression to congestive heart failure even with current state of the art medical care, represent major unmet medical needs. These adverse consequences associated with MI typically result in an annual cost to society of \$50,000 per patient per year on average for five years of life post MI and in those patients who do progress to congestive heart failure the numbers become substantially higher. Cell therapy offers the promise of alleviating much of the burdens of these chronic diseases in a cost-effective way.

With approved products currently being sold, the promise of cell therapy is close to becoming a reality. However, in 2011 the industry has faced several crises of investor confidence as industry pioneer Geron Corporation discontinued its embryonic efforts and Osiris Therapeutics, Inc., a leader in investigating the use of allogeneic cells that had signed a robust early partnership with biotechnology giant, Genzyme Corporation saw product rights returned when Genzyme itself was acquired by large pharmaceutical leader Sanofi Aventis. Both companies experienced difficulties in their ability to navigate the regulatory requirements for product approval. Inadequate trial designs was cited in the executive summary of the 2012 New York Stem Cell Summit Report as contributing to the failures. NeoStem believes that PCT's decade of experience from manufacturing to regulatory affairs, from understanding product profile to basic mechanism of action, effective therapeutic dose, and the critical connection required in clinical design are major distinguishing characteristics of our Company versus the industry overall, and in fact position NeoStem to lead the industry in this way.

The number of companies that are currently in Phase 2 and Phase 3 trials in and around cell therapy has never been greater. As such, we believe the timeline to the next product approval in the cellular therapy industry will be visible within the next five years. While the dream of cell therapy and regenerative medicine has been the creation of biological or bio-hybrid tissues and organs that will replace and or partially regenerate tissues and organs damaged by disease, injury, or congenital anomaly, we believe the reality has never been closer. Regenerative medicine offers the promise to address many of these conditions by augmenting and or repairing malfunctioning tissues. Reports indicate that there are approximately eight million surgical procedures performed annually in the United States to treat these disorders. If approved and effective, cell therapies may have the effect of cutting health care cost as they may facilitate functional restoration of damaged tissues and not just abatement or moderation of symptoms. NeoStem's Amorcyte subsidiary hopes to accomplish exactly this goal by strengthening failing hearts and preventing the progression to congestive heart failure which, under current standards of care, ultimately results in heart assist devices or heart transplant.

In fact, one should observe that amongst the failures of early pioneers like Geron and Osiris there are also several success stories with newly approved commercial products that include Shire plc, TiGenix NV and Dendreon Corporation. While the regenerative medicine industry is still in its early stages, the number of companies in late-stage clinical trials (Phase 2 and Phase 3) in the cardiovascular space alone represents, what we believe is a beacon for the industry.

TABLE OF CONTENTS

The field of regenerative medicine continues to expand its scope but can be generally characterized into the following:

- Cell Therapy — the use of cells (adult or embryonic, donor or patient, stem or differentiated) for the treatment of many debilitating injuries and diseases. Therapeutic applications may include cancer vaccines, cell based immune-therapy, heart disease, diabetes, Parkinson's and Alzheimer's diseases, vision impairments, orthopedic diseases and spinal cord injuries to name a few. This sector also includes the development of growth factors and serums and natural reagents that promote and guide cell development.
- Tissue Engineering — using a combination of cells with biomaterials (also called "scaffolds") to generate partially or fully functional tissues and organs, or using a mixture of technology in a bioprinting process. Some natural materials, like collagen, can be used as biomaterial, but advances in materials science have resulted in a variety of synthetic polymers with attributes that would make them uniquely attractive for certain applications. Therapeutic applications may include heart patch, bone re-growth, wound repair, replacement neo-urinary conduits, saphenous arterial grafts, inter-vertebral disc and spinal cord repair.
- Tools, Devices and Diagnostics — i.e., creating cell lines that embody genetic defects or disease characteristics that are used for the discovery and development of new drugs. This sector also includes companies developing devices that are designed and optimized for regenerative medicine techniques, such as specialized catheters for the delivery of cells, tools for the extraction of stem cells and cell-based diagnostic tools.
- Aesthetic Medicine — includes developing cell therapies, tissues and biomaterials for cosmetic applications. This sector includes hair follicle cells for hair regeneration, and collagen-secreting human dermal fibroblasts for facial wrinkles and other skin disorders.

PCT is currently working with a wide range of clients in areas which range from regenerative medicine to virology and oncology. As such PCT has a unique and fundamental base platform of experience with virtually every cell type in development today. Our manufacturing service and developmental offerings are strategically aligned to participate in all of these aspects of the evolving cell therapy industry, as described above. Our goal is to continue to leverage the experience of PCT as a recognized leader of cell therapy manufacturing and development services in this industry.

The Field of Cell Therapy

All living complex organisms start as a single cell that replicates, differentiates (matures) and perpetuates in an adult through its lifetime. Cell therapy is aimed at tapping into the power of cells to prevent and treat disease, regenerate damaged or aged tissue and provide cosmetic applications. The most common type of cell therapy has been the replacement of mature, functioning cells such as through blood and platelet transfusions. Since the 1970s, bone marrow and then blood and umbilical cord-derived stem cells have been used to restore bone marrow and blood and immune system cells damaged by chemotherapy and radiation used to treat many cancers. These types of cell therapies have been approved for use world-wide and are typically reimbursed by insurance.

Over the past number of years, cell therapies have been in clinical development to attempt to treat an array of human diseases. The use of autologous (self-derived) cells to create vaccines directed against tumor cells in the body has been demonstrated to be effective and safe in clinical trials. Dendreon Corporation's Provenge therapy for prostate cancer received FDA approval in early 2010. PCT assisted Dendreon, as its manufacturing partner, in the development of its cellular therapy and supported Dendreon's various FDA submissions. Researchers around the globe are evaluating the effectiveness of cell therapy as a form of replacement or regeneration of cells for the treatment of numerous organ diseases or injuries, including those of the brain and spinal cord. We, as well as others, are developing cell therapies for cardiovascular disease. Cell therapies are also being evaluated for safety and effectiveness to treat autoimmune diseases such as diabetes, inflammatory bowel disease and bone diseases. While no assurances can be given regarding future medical developments, management believes that the field of cell therapy is a subset of biotechnology that

TABLE OF CONTENTS

holds promise to better the human experience and minimize or ameliorate the pain and suffering from many common diseases and/or from the process of aging.

Cell Therapy Development for Chronic Diseases

We are developing our business in cell therapeutics and capitalizing on the increasing importance and promise that adult stem cells have in regenerative medicine. Our most advanced candidate, AMR-001 is now in a US FDA Phase 2 clinical study evaluating the utility of autologous cells to preserve heart function after a ST segment elevated myocardial infarction (STEMI). Our early stage research initiatives include a focus on delivering therapies in retinal disease, orthopedics, wound indications and immunology.

Stem cells are very primitive and undifferentiated cells that have the unique ability to transform into many different cells, such as white blood cells, nerve cells or heart muscle cells. Adult stem cells are found in the bone marrow, in peripheral blood umbilical cord blood and other body organs. For over 40 years, physicians have been using adult stem cells to treat various blood cancers, and only recently has the promise of using adult stem cells to treat a myriad of other diseases begun to be realized.

Within the adult stem cell classification, the use of cells is either autologous (meaning donor and recipient/patient are the same) or allogeneic (donor and recipient are different people). The use of allogeneic stem cells will be appropriate for certain disease conditions while autologous will have its advantages depending on the indication and therapeutic goal. Our Amorcyte program is focused on autologous therapy as we believe the integration to the host and long term benefits of the therapy can best be achieved with an autologous product. In our Athelos subsidiary we are evaluating the use of an autologous and an allogeneic product, tailored to the specific indication, such as solid organ transplant (“SOT”), Graft Versus Host Disease (“GVHD”), Asthma and Type 1 Diabetes.

CELL THERAPY — SERVICES

PCT

Our January 2011 acquisition of PCT is expected to greatly facilitate the translation of NeoStem’s research and development capabilities and other proprietary technologies into the manufacturing of stable, reproducible, well characterized cell products tailored for specific therapeutic applications. PCT is an internationally recognized commercial cell therapy company with operations on the east and west coasts of the U.S., serving the cell therapy community with cGMP, state-of-the art cell therapy research, development, and manufacturing facilities, and processing and storage facilities for stem cells collected from both adults and umbilical cord blood. We believe that the combined capabilities of NeoStem, PCT and our prestigious academic collaborators could lead to the effective and validated emergence of AMR-001, VSELTM stem cells and other stem cell therapies in a wide range of regenerative applications.

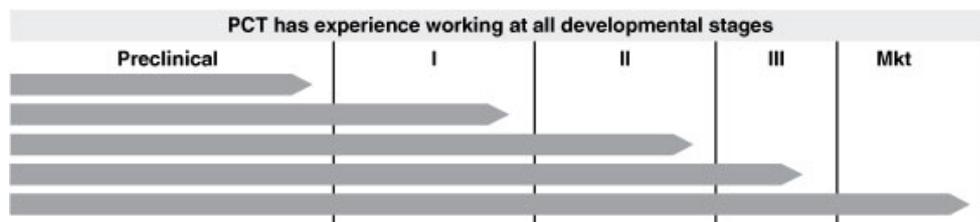
We believe that PCT is the first company that is focused exclusively on developing a client-based offering for manufacturing and related support services to the emerging regenerative medicine industry, and we believe that based upon its provision of high quality services to that industry, PCT has earned a global reputation of expertise, competence, and quality in this area of therapeutic development. We believe that, with this platform as a foundation, and in connection with our scientific infrastructure, we possess the capacity to successfully develop our own cellular therapeutic pipeline. PCT serves the developing cell therapy industry including biotechnology, pharmaceutical and medical products companies, health care providers, and academic investigators from licensed 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. PCT’s core strategy is to provide a global network of cell therapy manufacturing and storage facilities and an integrated and regulatory compliant distribution capacity for the evolving cell therapy industry to meet international commercial demands. To this end, PCT is currently looking at opportunities to expand its manufacturing activities into Europe and to the manufacturing facility retrofitted by NeoStem and PCT in Beijing, China.

TABLE OF CONTENTS

The management team of PCT has extensive 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 has experience with the design, validation, and operation of cGMP cell therapy manufacturing facilities, have participated in regulatory filings in the U.S. and Europe, and has 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 has accumulated 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, 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. Importantly, PCT manufactured over 85% of Dendreon’s approved Provenge® product during its Phase 3 clinical testing, and over 60% of all Dendreon cell therapeutics in clinical testing from 1999 through 2007.

As illustrated below, PCT has experience working at all developmental stages:



Informed by this experience and enabled by the infrastructure and staff required to service the industry, PCT’s strategy historically has included the periodic formation of companies intended to develop specific therapeutic products. In this regard, PCT management founded a GMP cord blood company (formerly named DomaniCell, and now our subsidiary NeoStem Family Storage, LLC), a cardiac cell therapy company (our subsidiary Amorcyte) and an immunotherapy company (our 80% owned subsidiary Athelos). In this way, PCT successfully leveraged its capabilities to bring its own cell therapy product portfolio to the market.

More recently, PCT has secured from clients in addition to cash fees, equity participation, rights to back-end royalties and locked in commercial manufacturing. For example, in January 2012, PCT entered into an agreement with Islet Sciences, Inc. (“Islet”), a development stage biotechnology company engaged in the research, development and commercialization of patented technologies in the field of transplantation therapy for patients with diabetes. Pursuant to the agreement, PCT is providing contract manufacturing and regulatory services related to the development of Islet Sciences — PTM, an injectable suspension of microencapsulated insulin-producing, pancreatic islet cells which are harvested from designated pathogen free pigs. In partial consideration for these services, PCT has received an equity interest in Islet and has the right to certain royalties and to manufacture on commercialization.

TABLE OF CONTENTS

PCT believes that it is qualified and experienced to reduce the risk of development of cell therapy products because it has:

- the expertise to cost efficiently and rapidly analyze the potential for product development through commercialization;
- the structure in place to develop new cell therapy products and to enable the commencement of Phase 1 clinical trials for such products;
- the personnel and facilities in place to offer cost effective development and manufacturing services;
- the technical, scientific, clinical, and business expertise to make timely go/no go development decisions for potential cell therapy products;
- the fiscal discipline and low incremental capital investment to cut project development early if chances for success are low thus preserving resources for future product development.

In light of the above, NeoStem's business development focuses on all stages of regenerative medicine, cell and tissue therapeutic product companies, academic stem cell and other cell therapy clinical trials, device companies serving the regenerative medicine sector, investors and pharmaceutical companies with an interest in a cell or tissue therapeutic or research product, and any other potential client with needs in the manufacturing and development of a cell or tissue-based product. Serving such clients, NeoStem aims to:

- Establish a nationwide and international infrastructure, capacity and expertise to meet clients' needs
- Maximize penetration of start-up companies in the sector
- Optimize use of PCT's physical plants
- Evaluate international opportunities and enter markets as necessary
- Develop information systems, logistics and proprietary intellectual property (e.g., process patents)
- Work closely with the FDA (and other regulatory authorities as appropriate)
- Be a leader in services for the development, regulatory approval and commercialization of cell and tissue therapies around the world
- Be a leader in the development and manufacture of cells and tissues as therapeutic agents in cGTP (current Good Tissue Practices) cGMP facilities
- Leverage PCT's domain experience to create product-based companies which would exclusively use PCT's services for manufacturing, delivery and commercialization

We expect that the number of companies in the cell therapy field will continue to increase and the relative distribution of stage of development of the therapeutics will begin to weigh more heavily towards Phase 2 and Phase 3 trials. These trials generate greater revenue because of the volume of manufacturing activity they require.

To prepare for the potential of increased manufacturing activity, PCT invested in and built a state-of-the-art manufacturing facility in Allendale, New Jersey, complementing the capacity of its Mountain View, California facility. Further, the additional capacity is designed to produce products that will be acceptable in other areas of the world as well as the United States. Current key clients of PCT are expected to continue to generate revenues for PCT as maturing products advance towards commercialization. PCT is looking at opportunities to expand its manufacturing activities into Europe and to the manufacturing facility retrofitted by NeoStem and PCT in Beijing, China.

TABLE OF CONTENTS

Transportation Network

We believe that today's commercially available transportation systems are not designed for shipment of biological or other perishable goods and will not be able to meet the demands of the emerging cell therapy market. A successful transportation network for cell therapy will require a completely secure point-to-point chain of control and custody; cGMP standard operating procedures in all phases of transit; a highly specialized and trained air and ground courier network; quality assurance at each transfer point; and real-time package tracking.

We strive to maintain high standards in transportation and handling of client cell products. Shipments of products are tracked as PCT and its clients develop confidence in the abilities of PCT's transportation partners. PCT is laying the groundwork for such a network as part of its business development process.

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, including Federal Express and UPS, and concluded that even their highest-level services are inadequate to meet the sector's needs. However, PCT identified and validated AirNet Systems, Inc., a specialty air carrier with a fleet of over 100 aircraft serving over 100 cities nationwide, as a transportation partner. AirNet has built its business on check delivery and other services to banks, and it now specializes in shipping medical products, including whole blood and blood products, tissue for transplantation, and diagnostic specimens. AirNet also handles cryopreserved specimens and biologics. PCT currently uses the services of AirNet for its transportation needs..

Cell Collection, Processing and Storage Business

In the United States, through a wholly-owned subsidiary of PCT, NeoStem Family Storage, LLC, we offer "Family Banking" of stem cells, which services include collection, processing and storage of cells for newborns as well as adults. This enables healthy individuals to donate and store their stem cells for personal therapeutic use in the future, if needed. NeoStem Family Storage provides cGMP compliance, the highest FDA standard, for stem cell banking, which gives us a competitive advantage in the industry.

Our process for collecting adult stem cells for autologous use involves the administration of a mobilizing agent prior to collection, allowing the migration of stem cells from bone marrow to peripheral blood. Once the stem cells have reached the bloodstream, an individual goes through a safe and minimally-invasive procedure called "apheresis," similar to donating platelets, at one of the collection centers in our network. Then, the stem cells are processed and stored under cGMP standards at one of PCT's facilities. Our process does not change or alter the underlying cells and does not require cell expansion technology.

We believe that individuals will view the ability to pre-donate and store autologous adult stem cells for future personal therapeutic use as a valuable part of a "bio-insurance" program. The benefits of pre-donation include: having a known supply of autologous stem cells rather than an uncertain supply of compatible allogeneic stem cells; collecting and storing the cells while healthy, since autologous stem cells may be compromised once a patient becomes sick; and storing the patients cells when available, since the quantity and quality of stem cells generally diminish with age. This perceived value of pre-donation should increase as additional indications for stem cell-based therapies are developed. For example, first line therapy for exposure to radiation continues to be stem cell transplantation. With the threat of nuclear disaster and terrorism, we believe this is a critical program to protect human health.

Our processing at PCT's facilities typically occurs in class 10,000, Controlled Environment Rooms (CER) in a class 100 Biologic Safety Cabinet (BSC). Environmental monitoring, done weekly, includes air sampling, contact plates for surface monitoring, and Met One particle counts. PCT's cleaning and sanitizing program involves daily, weekly, monthly, and quarterly cleaning protocols for the equipment and the rooms with bactericidal and sporicidal agents to control introduction of microorganisms and insect and pest control procedures. PCT has ongoing equipment validation, calibration and preventive maintenance programs to ensure reproducibility and consistency of results.

TABLE OF CONTENTS

PCT employs an inspection and testing program for incoming materials, and for in-process and final products, as required. PCT employs scientifically sound procedures approved by a quality assurance function, and performs product sterility testing and release assays reviewed by the quality assurance department. PCT has labeling controls to prevent product mix-ups, employs a materials management program to ensure that only approved materials are used in manufacturing and to provide forward and backward traceability. A supplier approval program further ensures that the raw materials used are made under acceptable conditions and provides a high degree of confidence in their efficacy. A separate quality unit is charged with the responsibility for review and approval of anything that affects the identity, strength, quality, and purity of the cell therapy product.

Our research shows that while cord blood banking is gaining in acceptance, the market is still in its infancy with cord blood banking occurring for only 3.5% of total births in the United States. However, we hope to expand this business by offering to parents banking their infants cord blood the opportunity to also bank their own adult stem cells. Patients, regardless of age, can choose stem cell and immune system cell collection and storage as a form of personal “insurance” that their stem cells will be available for their own use if needed in the future. Building on PCT’s experience in immune reconstitution we will be working to optimize collection yields for clients.

We also intend to focus marketing and educational programs on current uses for stem cells over potential future uses and leverage the combined collection business with the umbilical cord business as it has historically been a more prevalent revenue opportunity. We also plan to leverage and market key endorsements, including our government research grants, our relationship with the Vatican’s Pontifical Council, and celebrity and corporate endorsements.

CELL THERAPY — DEVELOPMENT

Amorcyte, LLC

Overview

Our Amorcyte subsidiary is a clinical stage therapeutics company pursuing cell-based therapies for cardiovascular diseases. Amorcyte’s most advanced product candidate is AMR-001, a chemotactic hematopoietic stem cell product comprised of autologous bone marrow (“BM”) derived CD34+/CXCR4+ cells selected to treat damaged heart muscle following acute myocardial infarction (“AMI”). AMR-001 is being evaluated to determine its effect on myocardial perfusion and ability to prevent subsequent major adverse cardiac events following a significant AMI by preserving heart muscle tissue. AMR-001 is intended to increase microvascular blood flow in the myocardium (heart muscle) via neoangiogenesis (development and formation of new blood vessels), thereby reversing post-heart attack induced ischemia (restriction of blood supply) and rescuing tissue from hibernation and preventing eventual cell death (apoptosis). AMR-001 is injected 5 to 11 days post-stent placement (the repair phase) into the peri-infarct zone (that is, the living tissue on the periphery of the dead tissue), to restore perfusion (or blood flow) surrounding the site of the heart attack.

In September 2010, the U.S. Patent Office granted Amorcyte U.S. Patent 7,794,705 protecting this therapeutic compound and method of treatment. In January 2012, the U.S. Patent Office granted Amorcyte U.S. Patent 8,088,370, expanding the protection of AMR-001 to include treatment of all vascular injury caused by vascular insufficiency, not just AMI.

Amorcyte completed a Phase 1 trial of AMR-001 in patients with damaged heart muscle following AMI and has begun enrolling patients in its PreSERVE Phase 2 trial investigates AMR-001’s ability to preserve heart function after a heart attack. We believe that Amorcyte’s Phase 1 study was the first stem cell trial to show dose-related, significant improvement over standard of care in perfusion following AMI, the lack of which perfusion remains a significant cause of morbidity and mortality in the United States and world-wide. Current interventions or medications have limited ability to prevent progressive myocardial cell apoptosis leading to cardiac deterioration and downstream major adverse cardiac events. We also believe that there are applications for AMR-001 in congestive heart failure, and, we expect to begin a Phase 1 clinical trial of AMR-001 for that indication by 2013.

TABLE OF CONTENTS

PCT is continuing to offer its expertise in cell therapy and core process development to provide a cost advantage for AMR-001 manufacturing for the Phase 2 clinical trial through commercialization.

Clinical Development

Phase 2 Trial of AMR-001

In January 2012, we enrolled the first patient in our PreSERVE Phase 2 trial, a 160 patient multicenter, randomized, double-blind, placebo-controlled U.S. clinical trial to evaluate the efficacy and safety of a single intra-coronary infusion of a minimum of 10 million cells of AMR-001 post AMI in subjects with ejection fractions of 48% or less. To date, 10 clinical trial sites have been activated. The objective of the Phase 2 study is to determine the safety and the effect of cell infusion of CD34+ cells containing a subpopulation of biologically active CD34+/CXCR4+ cells, on cardiac function and outcomes of patients after AMI. The primary assessment for the effect of AMR-001 on cardiac function will be improvement in cardiac perfusion. We also intend to evaluate the impact of AMR-001 on cardiac function and adverse events post-myocardial infarction as defined by reduction in cumulative MACE at 6, 12, 18, 24 and 36 months, premature death, recurrent heart attack, congestive heart failure, significant arrhythmias, and acute coronary syndrome. Enrollment is expected to be completed after approximately one year with the first data readout in the second half of 2013.

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

Phase 1 Trial of AMR-001

Results of the Phase 1 trial of Amorcyte's AMR-001 were initially presented at the 2009 American College of Cardiology Annual Scientific Session and were the basis for the launch of the Phase 2 trial. The peer-reviewed full publication has been cited above (American Heart Journal, 2011). AMR-001 showed a dose-related significant improvement in myocardial perfusion (amount of blood in the heart). Resting Total Severity Score ("RTSS") is a measure of perfusion and of prevention of cell death, and the metric employed in the Phase 1 study. Single-photon emission computerized tomography ("SPECT"), employed in the Phase 1 study, permits imaging where MRI would be ineffective as a result of stents, pacemakers and defibrillators. In brief, technetium dye used in a SPECT scan is taken up by the heart muscle. If the heart muscle is healthy and there is adequate blood flow, the muscle will take up the dye. If the heart muscle is not healthy, dye uptake is diminished or does not occur at all. The study results demonstrated that patients receiving 10 million cells (n=5) or 15 million cells (n=4) showed significant improvement in resting perfusion rates at six months as compared to patients receiving 5 million cells (n=6) or the control groups (n=15), as measured by the SPECT total severity score.

The Phase 1 data also showed that patients receiving 10 or 15 million cells showed a trend towards improvement in ejection fraction (the percentage of blood pumped out of the ventricles with each heart beat), end systolic volume (the blood volume remaining in a ventricle at the end of contraction and the beginning of filling, which can be used clinically as a measurement of the adequacy of cardiac emptying), and reduction in infarct size while subjects receiving 5 million cells or the control infusion did not.

Amorcyte's Advantages

Amorcyte's business strategy focuses on cellular therapeutics for cardiovascular indications. The markets for Amorcyte's targeted indications are expected to expand as the baby boomer generation ages.

Amorcyte has a dominant intellectual property position that includes ownership of the first U.S. issued patents for a chemotactic hematopoietic stem cell product (a product enriched for CD34+/CXCR4+ cell that migrates to areas of ischemic damage), with a delivery and the cell potency and stability that Amorcyte believes is necessary to efficaciously treat the consequences of a vascular injury, together with multiple modalities of delivering the cell product.

Additionally, members of Amorcyte's management have been involved in obtaining reimbursement and regulatory approval of cell-based therapies. Dr. Pecora, Amorcyte's Chief Scientific Officer, has been involved in the clinical testing of a variety of cell based therapies and is very experienced in the use of devices to

TABLE OF CONTENTS

manipulate cells for human use. Dr. Preti, the President of Amorcyte's exclusive cell processing provider PCT, has been involved in the development of laboratory regulations and standards. As officers of PCT, both Drs. Pecora and Preti were directly involved in the cGMP manufacturing of Dendreon's cell therapy product, Provenge®, now an FDA approved product for prostate cancer as well as multiple other cell therapy products under development by PCT's multiple clients. Dr. Pecora is an advisor to several insurance companies on matters regarding new technologies and reimbursement for complex therapies, including cell-based therapies.

Although other companies are developing stem cell based therapies for cardiovascular disease, we believe Amorcyte is in a strong competitive position due to the very early indicia of effect seen in its Phase 1 trial, cGMP manufacturing experience, and dominant patent portfolio.

There are five categories of competitive therapies representing different sources of stem cells: fat derived cells, mesenchymal cells, cord blood, adult stem cells and hematopoietic (bone marrow derived) cells. Of these, the allogeneic sources (that is, where donor and recipient are different persons) face a series of technical limitations that can minimize their clinical value, including the potential need for immunosuppressants, toxicity concerns and durability issues. Of the autologous sources of stem cells (donor and recipient the same) listed above, only Amorcyte, to our knowledge, has positive Phase 1 data and a cGMP process for manufacturing, together with a patented technology supporting dosing.

As part of the pre-clinical development work done by Amorcyte, validation experiments of four different coronary artery balloon catheters were performed, leading to their approval for use in the Phase 1 clinical trial. Intra-coronary artery delivery has an advantage over intra-cardiac muscle delivery because the procedure can be performed at virtually any cardiac catheterization laboratory (intra-muscle delivery is limited to experienced centers) and is less invasive. Amorcyte's product had a validated 48 hour product shelf life in the Phase 1 study, but now has been validated to 72 hours. A shelf life of greater than 24 hours allows the product (following manufacturing and distribution from the manufacturing site) to be stored locally in a blood bank refrigerator for use at a convenient elective time, and importantly eases the logistic burdens anticipated with commercial distribution of the therapy, reducing the need for multiple regionally placed manufacturing facilities.

Amorcyte's Business Strategy and Primary Market

There are approximately 160,000 patients per year who have an ST Elevation Myocardial Infarction (or "STEMI," the most dangerous type of heart attack resulting from a sudden blockage of one of the arteries that supplies nutrient-rich blood to the heart muscle) resulting in a reduced left ventricular ejection fraction (that is, the fraction of blood pumped out of the left ventricle with each heartbeat) of 48% or less. These patients represent a large cost segment and are the greatest financial burden for many managed care programs, post heart attack. Amorcyte expects this burden to increase as the "baby boomer" population ages. AMR-001, if approved, could have a significant pharmacoeconomic benefit by preventing downstream cardiac adverse events.

Amorcyte's Product Development Pipeline — AMR-001

Amorcyte's therapeutic strategy focuses on developing product candidates designed to prevent subsequent major adverse cardiac events following a significant AMI by preserving heart muscle tissue. AMI remains a significant cause of morbidity and mortality in the United States and worldwide. Current interventions or medications have limited ability to prevent progressive myocardial cell death leading to cardiac functional deterioration and downstream major adverse cardiac events.

AMR-001, Amorcyte's lead product candidate is an autologous derived (donor and recipient the same), CD34+/CXCR4+ selected stem cell product, which we believe, has the potential to limit progressive cardiomyocyte (heart muscle cell) loss following AMI and to maintain cardiac muscle function and prevent further adverse cardiac events. The AMR-001 platform can be applied to other conditions resulting from underlying ischemia including chronic myocardial ischemia post-AMI, congestive heart failure, critical limb ischemia and cryopreserved preparations of AMR-001 for future vascular insufficiency. We expect to begin a Phase 1 trial in CHF by 2013.

TABLE OF CONTENTS

Preclinical Research — Rationale for the Use of CD34+ Cell Populations for Cardiovascular Indications

Pre-clinical (animal) models of induced AMI have shown that CD34+/CXCR4+ expressing cells home along a gradient of hypoxia-induced Stromal-Derived Factor-1 — that is, these cells migrate naturally to oxygen-deprived locations. More specifically, these cells home to the viable tissue surrounding the infarcted (dead) myocardium, known as the peri-infarct zone, because of the steep SDF gradient created by cells under ischemic (oxygen deprived) stress. Moreover, CD34+/CXCR4+ expressing cells have been shown to be capable of inducing neoangiogenesis (development and formation of new blood vessels) over time and preventing late heart cell death due to chronic ischemia (restriction of blood supply). These cells were also shown to prevent cell death through alternative pathways. Other studies demonstrated that CD34+/CXCR4+ cells that take up residence in the peri-infarct zone are likely the cell type that affects neo-angiogenesis, relieves ischemia and prevents apoptosis. Collectively these results provided the rationale for the exploration of a pharmaceutical grade specific cell-based therapy with a defined hypothesized mechanism of action to reduce the incidence and severity of MACE after an extensive AMI.

Mechanism of Action of AMR-001

AMR-001 works by increasing microvascular blood flow in the myocardium (heart muscle) via neoangiogenesis (development and formation of new blood vessels), thereby reversing post-heart attack induced ischemia (restriction of blood supply) and rescuing tissue from hibernation and preventing eventual cell death (apoptosis). The treatment process works as follows:

- A patient's own bone marrow is harvested and CD34+/CXCR4+ cells are isolated using Amorcyte's patented technology to increase the potency of the product.
- The isolated cells are infused via catheter into the infarct-related artery 7 to 10 days following an AMI — which we believe is the optimal time frame for cellular intervention, after the pro-inflammatory "hot phase" and prior to permanent scar formation.
- The infused CD34+/CXCR4+ cells home to the at-risk tissue along a hypoxia-induced Stromal-Derived Factor-1 gradient to a signal emitted from the infarct as described above, inducing neoangiogenesis and a resultant functional benefit.

Amorcyte's Phase 1 trial results are supportive of this mechanism of action (CD34+/CXCR4+ cell induced neoangiogenesis resulting in a functional cardiac benefit) and have been published in *Am Heart J* 2011; 161:98-105. The role of these CD34+ cells in functional improvement and mechanism of action has also been demonstrated in an animal model (Wang J et al., *Circ Res* 2010; 106:1904-1911).

Manufacturing

Our PCT subsidiary provides all of Amorcyte's cell processing and processing services, including in connection with our PreSERVE Phase 2 trial of AMR-001 for acute myocardial infarction, and PCT may in the future perform such services for other clinical trials that we may launch. While it is advantageous for our Company to have the capability to perform these services in-house, this means that a portion of PCT's potential external revenue-generating capacity is being diverted in furtherance of our Company's own development efforts. PCT will dedicate approximately 20% of its existing revenue generating capacity in 2012 for our own internal development activities which could have a material and adverse impact on our future revenue growth and profitability.

Intellectual Property

There have been several recent and important developments in the Amorcyte patent portfolio. In addition to our centerpiece US patent 7,794,705 covering composition and method of vascular injury repair post-acute myocardial infarction, the US Patent and Trademark Office on January 3, 2012 issued incremental claims in US patent 8,088,370 for "vascular insufficiency," materially expanding the reach of our patent protection into all forms of cardiac insufficiency, including congestive heart failure and chronic myocardial ischemia. We believe further that these claims extend protection for vascular insufficiency conditions beyond the cardiac setting.

Other Stem Cell Research and Development

Athelos, Inc.

Athelos is a Delaware corporation 80% owned by NeoStem through PCT. To further expand and diversify NeoStem's efforts in cell therapy, the mission of Athelos is to develop a person's immune cells as a therapeutic product to treat disorders of the immune system. Many immune-mediated diseases are a result of an imbalance in the immune system wherein inflammatory cells go unchecked. Therapy using regulatory T cells (T-reg) represents a novel approach to restoring immune balance by enhancing T-reg cell number and function to inhibit pathogenic immune responses.

Through exclusive world-wide licenses, Athelos has secured the rights to a broad patent estate within the T-reg field, covering natural T-regs (nTregs) as well as induced T-regs (iTregs). Both types of T-regs have been shown in pre-clinical studies to be important in modulating autoimmune and inflammatory diseases. Natural T-regs have been evaluated by others in early phase human clinical trials and shown to be safe with suggestions of clinical benefit in graft-versus-host disease. Both types of T-regs have demonstrated the ability to treat conditions like diabetes, inflammatory bowel disease and organ transplant tolerance in animal models of disease. To complement those important intellectual property rights, Athelos has established consulting relationships with thought leaders in the field of T-reg therapy for immune disorders, including David Horowitz, MD, Chief of the Division of Rheumatology and Immunology at the University of Southern California Keck School of Medicine, and Bruce Blazar, MD, Chief of Blood and Marrow Transplantation and Director of Center of Translational Medicine, Masonic Cancer Center, University of Minnesota. Athelos plans to investigate the clinical feasibility of T-reg-based therapeutics to prevent and treat graft vs. host disease, solid organ rejection as well as a broad class of other autoimmune diseases. This ongoing research program is developing methods to isolate and expand human T-regs for large scale manufacturing and for evaluation in Phase 1 clinical trials. Results from ongoing Phase 1 work under several independent physician INDs of T-reg cell therapy for autoimmune disorders will determine the future clinical direction.

VSELTM Technology

Mariusz Ratajczak, M.D., Ph.D., head of the Stem Cell Biology Program at the James Graham Brown Cancer Center at the University of Louisville, has discovered that mammalian bone marrow contains a heterogeneous population of stem cells that has properties similar to those of an embryonic stem cell. These cells, first described in mice, are referred to as very small embryonic-like stem cells, or VSELs. We are engaged in research and development of new therapies based on VSELTM Technology with the University of Louisville Research Foundation and on our own, and have a worldwide exclusive license to VSELTM Technology.

The use of human VSELs for regenerative medicine presents another possibility of capturing the key advantages associated with embryonic stem cells without the ethical or moral dilemmas associated with the use of fetal cells, or the potential negative biological effects associated with embryonic stem cells, such as their propensity to form tumors. Yet another potential benefit to this unique population of adult stem cells is the advantage of being able to use autologous stem cells (i.e., the patient's own cells) for therapy, as opposed to having to rely on donor cells which are susceptible to immune rejection. NeoStem's research and development laboratory in Cambridge, Massachusetts has identified cells in human blood and bone marrow that have many of the key properties described for murine VSELs. This research includes the demonstration of primitivism, pluripotency, tri-lineage differentiation and the ability of these cells to expand in culture. These observations provide the groundwork for the development of VSELTM therapies to regenerate or repair damaged or diseased tissues in human subjects.

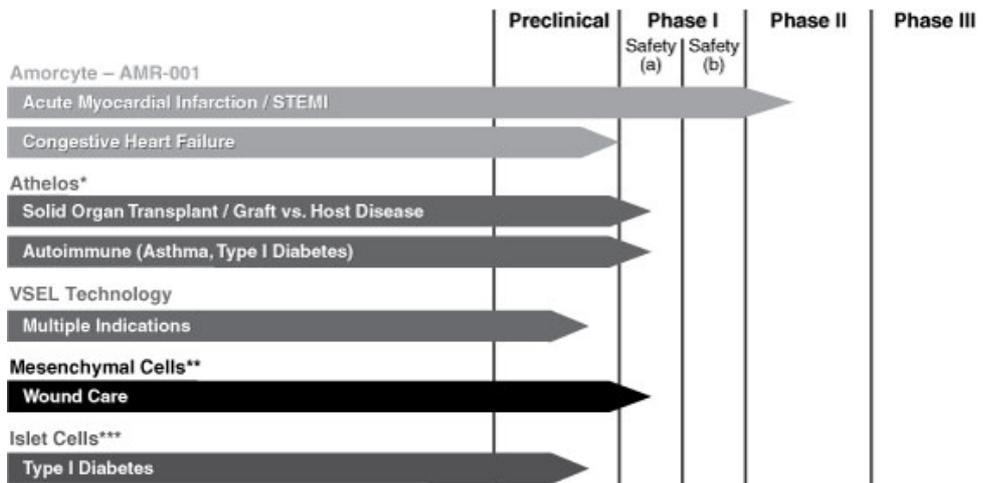
NeoStem is currently engaged in the early stage development of therapies using VSELTM, and other in-licensed technologies using mesenchymal stem cells, for indications such as wound healing, orthopedics and ophthalmics. More specifically, through grants, we are funding studies at the University of Michigan using human VSELs to promote bone healing in animals. Those experiments have indicated that human VSELs can differentiate into bone and blood vessel cells, and can form coherent human bone in a mouse. We have also funded research at the Schepens Eye Research Institute, a charitable corporation of Massachusetts and an affiliate of Harvard Medical School, relating to VSEL treatment for macular degeneration — a leading cause

TABLE OF CONTENTS

of blindness in the Western world. Early results using mouse models of retinal damage have shown VSELs display remarkable survivability characteristics, as well as the potential to be integrated into the retinal ganglion layer of cells and to differentiate along the retinal lineage. We expect to begin a Phase 1 safety trial by 2013.

In parallel with those studies, we are engaged in a multi-year sponsored research agreement with Roger Williams Medical Center, funded by the Department of Defense, to study the use of VSELs and mesenchymal stem cells for the treatment of chronic wounds.

Outlined below is an illustration of stages of pre-clinical and clinical development:



* This work is being done pursuant to independent physician INDs that will help determine the Company’s clinical direction.

** Pursuant to our exclusive license agreement with Dr. Vincent Falanga, NeoStem controls the world-wide rights to Dr. Falanga’s wound healing technology utilizing autologous bone marrow-derived cultured mesenchymal stem cells and very small embryonic-like (VSEL) stem cells. Dr. Falanga has been treating human cutaneous wounds under a physician IND for several years. Recently, NeoStem was awarded a Department of Defense funded grant to examine rapid wound healing utilizing MSCs and VSELs and we are collaborating with Dr. Falanga and the Roger William Medical Center, as our sub-awardee, on that grant.

***We are providing contract manufacturing and regulatory services to Islet Sciences, Inc. and in connection with that arrangement have acquired an equity interest in them as well as a right to backend royalties and commercial manufacturing.

Government Initiatives

To further drive our stem cell initiatives, we will continue to target key governmental agencies, congressional committees and not-for-profit organizations to contribute funds for our research and development programs. In 2010 we were awarded a \$700,000 contract from the U.S. Army Medical Research and Material Command, Telemedicine and Advanced Technology Research Center (USAMRMC-TATRC). This contract will fund through 2014 the evaluation and use of topically applied bone marrow-derived adult mesenchymal stem cells for rapid wound healing.

NeoStem recently commenced a study awarded and funded by the Department of Defense Peer Reviewed Medical Research Program (PRMRP) of the Office of the Congressionally Directed Medical Research Programs (CDMRP). Almost \$2,000,000 from this grant will be used to fund research through 2015 on the use of VSELs to treat osteoporosis and improve bone health.

TABLE OF CONTENTS

In addition to these awards, we have submitted a PHASE II SBIR grant proposal, based on the positive results of our Phase 1SBIR studies, to the NIH-SBIR program for \$1.6 million to continue work on VSELs in bone regeneration. We were also recently invited to submit a clinical trial proposal to CDMRP in collaboration with Walter Reed Medical Center for a multi-million dollar award to explore the use of VSELs to treat combat wound injuries. These recent submissions, together with our other submitted grants, to the extent funded, would not only further research efforts already underway in the areas of wound healing, bone regeneration and retinal disease, but potentially could launch new inquiries and further diversify our base of research partners in areas such as reconstructive surgery and radiation sickness. We may continue to apply for SBIR grants but will not be able to draw down funds until we re-attain our status as a small business post our divestiture of Erye.

Vatican Initiatives

In May 2010, the Vatican's Pontifical Council for Culture and NeoStem announced what has been characterized as the Vatican's first-ever contract of collaboration with an outside commercial venture to advance stem cell research. The initiative partners NeoStem and the public charity it helped form, *The Stem for Life Foundation*, with the Pontifical Council and its charitable organization, *STOQ International*, to expand research and raise awareness of adult stem cell therapies. The partnership entails work on collaborative activities with the goal of advancing scientific research on adult stem cells and exploring their clinical application in the field of regenerative medicine, as well as the cultural impact of such research. The Pontifical Council pledged \$1 million in connection with these activities for which a donor provided a contribution in 2011.

In addition to research initiatives, NeoStem and the Pontifical Council are spearheading an education campaign geared towards generating awareness of the cultural relevance of such a fundamental shift in medical treatment options, particularly with regard to the impact on theological and ethical issues. Specifically, NeoStem and the Pontifical Council are pursuing the development of educational programs, publications and academic courses with an interdisciplinary approach for theological and philosophical faculties, including those of bioethics, around the world.

As one of the initial highlights of this partnership, in November 2011 we were honored to co-host a three day event at the Vatican that was the first international conference on adult stem cells. Entitled "Adult Stem Cells: Science and the Future of Man and Culture." This event brought together a unique roster of Church leaders, policymakers, government health ministers, ambassadors to the Holy See, scientists, stem cell companies and patients who have participated in adult stem cell trials.

The gathering also featured Tommy Thompson, former U.S. Secretary of Health and Human Services, who called upon President Obama to create a commission of private sector business leaders to recommend ways to coordinate discovering and funding therapies that use adult stem cells. This first event co-sponsored by NeoStem and the Pontifical Council for Culture since the two entered into a formal partnership in 2010 is part of a larger effort to foster education and networking in support of adult stem cell research.

All initiatives aim at providing information, teaching and research regarding important issues of human health and of the present and future of medical progress in relation to adult stem cell research and with respect to the great value of human life. NeoStem and the Pontifical Council for Culture through their collaboration aspire to reach religious leaders and academicians working in the Pontifical and Catholic Institutions but also to extend their work and results to different institutions beyond the Catholic environment.

Competition — Cell Therapy — United States

The biotechnology industry, specifically our areas of cell processing and manufacturing, clinical development of cellular therapies and cell collection, processing and storage, are characterized by rapidly evolving technology and intense competition. Our competitors include pharmaceutical, biopharmaceutical and biotechnology companies, as well as numerous academic and research institutions and government agencies engaged in drug discovery activities or funding, both in the United States and abroad. Many of these companies are well-established and possess technical, research and development, financial, and sales and marketing resources significantly greater than ours. In addition, many of our smaller potential competitors have formed strategic collaborations, partnerships and other types of joint ventures with larger, well

TABLE OF CONTENTS

established industry competitors that afford these companies potential research and development and commercialization advantages in the technology and therapeutic areas currently being pursued by us. Academic institutions, governmental agencies and other public and private research organizations are also conducting and financing research activities which may produce products directly competitive to those being commercialized by us. Moreover, many of these competitors may be able to obtain patent protection, obtain FDA and other regulatory approvals and begin commercial sales of their products before us.

The primary competitors in the field of cell therapy for AMI and other cardiovascular-related disorders include public companies like Baxter International Inc., MesoBlast Limited, Athersys, Inc., Aastrom Biosciences, Inc., Cytomedix, Inc., Pluristem Therapeutics Inc. and Cytori Therapeutics, Inc. These companies are pursuing cell based approaches for cardiovascular diseases that relate to AMI (chronic ischemia, congestive heart failure, dilated cardiac myopathy and related indications like critical limb ischemia). The field remains highly competitive. However, we believe we have a differentiated approach utilizing a highly purified, active cell population, which is covered by composition of matter intellectual property.

In the general area of cell-based therapies, we potentially compete with a variety of companies, most of whom are specialty medical products or biotechnology companies. Some of these, such as Baxter, Johnson & Johnson, Medtronic and Miltenyi Biotec, are well-established and have substantial technical and financial resources compared to ours. However, as cell-based products are only just emerging as viable medical therapies, many of our most direct competitors are smaller biotechnology and specialty medical products companies. These include Advanced Cell Technology, Inc., Cytomedix, Inc., Arterioocyte Medical Systems, Inc., Athersys, Inc., Bioheart, Inc., Cytori Therapeutics, Inc., Genzyme Corporation, Harvest Technologies Corporation, Mesoblast, Osiris Therapeutics, Inc., Pluristem, Inc. and others.

In addition, cord blood banks such as ViaCord, a PerkinElmer company, or LifebankUSA, a Celgene company, easily could enter the field of adult stem cell collection because of their processing labs, storage facilities and customer lists. We estimate that, combined, there are approximately 75 cord blood banks in the U.S., approximately 36 of which are private autologous banks, meaning that the donor and recipient are the same, and approximately 39 of which are public allogeneic banks, meaning that the donor and recipient are not the same. Hospitals that have transplant centers to serve cancer patients may elect to provide some or all of the services that we provide. According to the National Marrow Donor Program, there are approximately 52 hospitals in the U.S. with stem cell transplant centers. These competitors may have better experience and access to greater financial resources than us. In addition, other established companies may enter our markets and compete with us.

We believe we have a strategic advantage over our competitors based on our ability to meet cGMP regulatory requirements in an industry that is widely dispersed with a range of quality issues.

GOVERNMENT REGULATION: CELL THERAPY — UNITED STATES

U.S. Government Regulation

The health care industry is one of the most highly regulated industries in the United States. The federal government, individual state and local governments, as well as private accreditation organizations, oversee and monitor the activities of individuals and businesses engaged in the development, manufacture and delivery of health care products and services. Federal laws and regulations seek to protect the health, safety, and welfare of the citizens of the United States, as well as to prevent fraud and abuse associated with the purchase of health care products and services with federal monies. The relevant state and local laws and regulations similarly seek to protect the health, safety, and welfare of the states' citizens and prevent fraud and abuse. Accreditation organizations help to establish and support industry standards and monitor new developments. The following is a general description of the current material laws and regulations.

TABLE OF CONTENTS

HCT/P Regulations

Manufacturing facilities that produce cellular therapies are subject to extensive regulation by the FDA. In particular, FDA regulations set forth requirements pertaining to establishments that manufacture human cells, tissues, and cellular and tissue-based products (“HCT/Ps”). Title 21, Code of Federal Regulations, Part 1271 (21 CFR Part 1271) provides for a unified registration and listing system, donor-eligibility, cGTP, and other requirements that are intended to prevent the introduction, transmission, and spread of communicable diseases by HCT/Ps. More specifically, key elements of Part 1271 include:

- Registration and listing requirements for establishments that manufacture HCT/Ps;
- Requirements for determining donor eligibility, including donor screening and testing;
- cGTP requirements, which include requirements pertaining to the manufacturer’s quality program, personnel, procedures, manufacturing facilities, environmental controls, equipment, supplies and reagents, recovery, processing and process controls, labeling, storage, record-keeping, tracking, complaint files, receipt, pre-distribution shipment, distribution, and donor eligibility determinations, donor screening, and donor testing;
- Adverse reaction reporting;
- Labeling of HCT/Ps; and
- FDA inspection, retention, recall, destruction, and cessation of manufacturing operations.

PCT currently collects, processes, stores and manufactures HCT/Ps, including manufacturing cellular therapy products. NeoStem Family Storage also collects, processes, and stores HCT/Ps. Therefore, both PCT and NeoStem Family Storage must comply with cGTP (current Good Tissue Practices, 21 CFR Part 1271) and with the cGMP guidelines that apply to biological products. PCT’s management believes that certain other requirements pertaining to biological products, such as requirements pertaining to premarket approval, do not currently apply to PCT because PCT is not currently investigating, marketing or selling cellular therapy products. If either PCT or NeoStem Family Storage changes its business operations in the future, the FDA requirements that apply to PCT or NeoStem Family Storage may also change.

State Regulation of Cell Therapy

Certain state and local governments regulate cell-processing facilities by requiring them to obtain other specific licenses. As required under applicable state law, PCT’s New Jersey and California facilities are licensed, respectively, as a blood bank in New Jersey and as a drug manufacturing facility in California. PCT also maintains licenses with respect to states that require licensure of out-of-state facilities that process cell, tissue and/or blood samples of residents of such states (e.g., New York and Maryland). PCT has the relevant state licenses needed for processing and is AABB (American Association of Blood Banks) accredited for this purpose. PCT’s management believes that it is in material compliance with currently applicable federal, state, and local laboratory licensure requirements, and intends to continue to comply with new licensing requirements that may become applicable in the future.

Certain states may also have enacted laws and regulations, or may be considering laws and regulations, regarding the use and marketing of stem cells or cell therapy products, such as those derived from human embryos. While these laws and regulations should not directly affect PCT’s business, they could affect the business of some of PCT’s clients and therefore the amount of business PCT receives from these clients.

Federal Regulation of Clinical Laboratories

The Clinical Laboratory Improvement Amendments (“CLIA”) extends federal oversight to clinical laboratories that examine or conduct testing on materials derived from the human body for the purpose of providing information for the diagnosis, prevention, or treatment of disease or for the assessment of the health of human beings. CLIA requirements apply to those laboratories that handle biological matter. CLIA requires that these laboratories be certified by the government, satisfy governmental quality and personnel standards, undergo proficiency testing, be subject to biennial inspections, and remit fees. The sanctions for failure to comply with CLIA include suspension, revocation, or limitation of a laboratory’s CLIA certificate necessary to conduct business, fines, or criminal penalties. Additionally, CLIA certification may sometimes be needed when

TABLE OF CONTENTS

an entity, such as PCT or NeoStem Family Storage, desire to obtain accreditation, certification, or license from non-government entities for cord blood collection, storage, and processing. PCT has obtained CLIA certification for its facilities in New Jersey. PCT has been advised that, currently, CLIA certification is not required for its PCT facilities in California. However, to the extent that any of the activities of PCT or NeoStem Family Storage (for example, with regard to processing or testing blood and blood products) require CLIA certification, PCT intends to obtain and maintain such certification and/or licensure.

Stem Cell Therapeutic and Research Act of 2005

The Stem Cell Therapeutic and Research Act of 2005 established a national donor bank of cord blood and created a national network for matching cord blood to patients. The National Marrow Donor Program (NMDP) carries out this legislation, which entails acting as the nation's Cord Blood Coordinating Center and actively recruiting 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 could be used to treat patients all over the United States. Importantly, the legislation also authorized federal funding to support the legislation's goals for collecting cord blood units.

The existence and proliferation of this public cord blood bank may adversely affect PCT and/or the business of NeoStem Family Storage, because 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. 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, this national, public cord blood registry is widely accepted by the medical community, and therefore physicians and others in the health care community may be less willing to use or recommend a private cord blood facility.

PHARMACEUTICAL PRODUCTS — UNITED STATES

Government authorities in the United States, at the federal, state and local level, and in other countries, extensively regulate, among other things, the research, development, testing, manufacture, including any manufacturing changes, packaging, storage, recordkeeping, labeling, advertising promotion, distribution, marketing, import and export of biological products such as AMR-001. The process of obtaining required regulatory approvals and the subsequent compliance with appropriate statutes and regulations require the expenditure of substantial time and money, and there is no guarantee that Amorcyte will successfully complete the steps needed to obtain regulatory approval of AMR-001 or any future product candidates. In addition, these regulations may change and Amorcyte's product candidates may be subject to new legislation or regulations.

FDA approval process

In the United States, pharmaceutical products, including cellular therapies, are subject to extensive pre- and post-market regulation by the U.S. FDA. The Federal Food, Drug, and Cosmetic Act ("FD&C Act"), and other federal and state statutes and regulations, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical products. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as FDA refusal to approve pending new drug applications, or ("NDAs"), warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties, and criminal prosecution.

Pharmaceutical product development in the U.S. typically involves preclinical laboratory and animal tests, the submission to the FDA of a notice of claimed investigational exemption or an investigational new drug application ("IND"), which must become effective before clinical testing can commence, and adequate and well-controlled clinical trials to establish the safety and effectiveness of the drug for each indication for which FDA approval is sought. Satisfaction of FDA pre-market approval requirements typically takes many years and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease.

TABLE OF CONTENTS

Preclinical tests include laboratory evaluation of product chemistry, formulation and toxicity, as well as animal trials to assess the characteristics and potential safety and efficacy of the product. The conduct of the preclinical tests must comply with federal regulations and requirements including good laboratory practices. The results of preclinical testing are submitted to the FDA as part of an IND along with other information including information about product chemistry, manufacturing and controls and a proposed clinical trial protocol. Long term preclinical tests, such as animal tests of reproductive toxicity and carcinogenicity, may continue after the IND is submitted.

The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises concerns or questions about the conduct of the clinical trial, including concerns that human research subjects will be exposed to unreasonable health risks. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before a clinical trial can begin. Submission of an IND may not result in FDA authorization to commence a clinical trial. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development.

Clinical trials involve the administration of the investigational new drug to healthy volunteers or patients under the supervision of a qualified investigator. Clinical trials must be conducted in compliance with federal regulations; good clinical practice, or GCP, as set forth in FDA regulations and guidance, which is meant to protect the rights and health of patients and to define the roles of clinical trial sponsors, administrators, and monitors; as well as under protocols detailing the objectives of the trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. Each protocol involving testing on U.S. patients and subsequent protocol amendments must be submitted to the FDA as part of the IND.

The FDA may order the temporary or permanent discontinuation of a clinical trial at any time, or impose other sanctions, if it believes that the clinical trial is not being conducted in accordance with FDA requirements, or presents an unacceptable risk to the clinical trial patients. The study protocol and informed consent information for patients in clinical trials must also be submitted to an institutional review board, or IRB, for approval. An IRB may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the IRB's requirements, or may impose other conditions.

Clinical trials to support NDAs for marketing approval are typically conducted in four sequential phases, but the phases may overlap.

- *Phase 1:* Studies are initially conducted in a limited population to test the product candidate for safety, dose tolerance, absorption, metabolism, distribution and excretion in healthy humans or, on occasion, in patients, such as cancer patients when the drug is too toxic to be ethically given to health individuals.
- *Phase 2:* Studies are generally conducted in a limited patient population to identify possible adverse effects and safety risks, to determine the efficacy of the product for specific targeted indications and to determine dose tolerance and optimal dosage. Multiple Phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.
- *Phase 3:* These are commonly referred to as pivotal studies. When Phase 2 evaluations demonstrate that a dose range of the product is effective and has an acceptable safety profile, Phase 3 clinical trials are undertaken in large patient populations to further evaluate dosage, to provide substantial evidence of clinical efficacy and to further test for safety in an expanded and diverse patient population at multiple, geographically-dispersed clinical trial sites.
- *Phase 4:* In some cases, FDA may condition approval of an NDA or Biologic License Application ("BLA") for a product candidate on the sponsor's agreement to conduct additional clinical trials after NDA or BLA approval. In other cases, a Sponsor may voluntarily carry out additional trials post approval to gain more information about the drug. Such post approval trials are typically referred to as Phase 4 studies.

TABLE OF CONTENTS

After completion of the required clinical testing, an NDA is prepared and submitted to the FDA. FDA approval of the NDA is required before marketing of the product may begin in the U.S. The NDA must include the results of all preclinical, clinical, and other testing and a compilation of data relating to the product's pharmacology, chemistry, manufacture, and controls. The cost of preparing and submitting an NDA is substantial. Under federal law, the submission of most NDAs is additionally subject to a substantial application user fee, currently exceeding \$1.8 million, and the manufacturer and/or sponsor under an approved new drug application are also subject to annual product and establishment user fees, currently almost \$99,000 per product and over \$520,000 per establishment. These fees are typically increased annually.

The FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. Once the submission is accepted for filing, the FDA begins an in-depth review. The FDA has agreed to certain performance goals in the review of new drug applications. Most such applications for standard review drug products are reviewed within ten months; most applications for priority review drugs are reviewed in six months. Priority review can be applied to drugs that the FDA determines offer major advances in treatment, or provide a treatment where no adequate therapy exists. For biologics, priority review is further limited only for drugs intended to treat a serious or life-threatening disease relative to the currently approved products. We expect FDA to amend each of these goals to extend them by two months for applications received after September 2012. The review process for both standard and priority review may be extended by the FDA for three additional months to consider certain late-submitted information, or information intended to clarify information already provided in the submission. The FDA may also refer applications for novel drug products or drug products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation, and a recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations.

Before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. Additionally, the FDA will inspect the facility or the facilities at which the drug is manufactured. The FDA will not approve the product unless compliance with current good manufacturing practice, or GMP — a quality system regulating manufacturing — is satisfactory and the NDA contains data that provide substantial evidence that the drug is safe and effective in the indication studied.

After the FDA evaluates the NDA and the manufacturing facilities, it issues an approval letter or a complete response letter. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If and when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in 2 or 6 months depending on the type of information included.

An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. As a condition of NDA approval, the FDA may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy and may impose other conditions, including labeling restrictions which can materially affect the potential market and profitability of the drug. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

Biologics

Biological products are approved for marketing under provisions of the Public Health Service Act, or PHS Act. However, because most biological products also meet the definition of "drugs" under the FD&C Act, they are also subject to regulation under FD&C Act provisions. The PHS Act requires the submission of a biologics license application ("BLA"), rather than an NDA for market authorization. Clinical development of biologics is conducted in accordance with the IND regulations for drugs described above. The PHS Act emphasizes the importance of manufacturing control for products that cannot be defined to help reduce the increased risk of the introduction of adventitious agents. The PHS Act also provides authority to the FDA to immediately suspend licenses in situations where there exists a danger to public health, to prepare or procure

TABLE OF CONTENTS

products in the event of shortages and critical public health needs, and to authorize the creation and enforcement of regulations to prevent the introduction or spread of communicable diseases in the US and between states.

Manufacturers of cell and tissue based products must comply with the FDA's cGTP rules and regulations which govern the methods used in, and the facilities and controls used for, the manufacture of such products. The primary intent of the cGTP requirements is to ensure that cell and tissue based products are manufactured in a manner designed to prevent the introduction, transmission and spread of communicable disease.

As with drugs, after approval of biologics, manufacturers must address any safety issues that arise, are subject to recalls or a halt in manufacturing, and are subject to periodic inspection after approval.

The Patient Protection and Affordable Care Act, or Affordable Care Act, signed into law on March 23, 2010, included a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCI Act, which created an abbreviated approval pathway for biological products shown to be similar to, or interchangeable with, an FDA-licensed reference biological product. This is conceptually similar to the established process for drug approval in that it attempts to minimize duplicative testing. Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, can be shown through analytical studies, animal studies, and a clinical study. Interchangeability requires that a product must demonstrate that it can be expected to produce the same clinical results as the reference product and, for products administered multiple times, the biologic and the reference biologic may be switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. However, complexities associated with the larger and often more complex structures of biological products, as well as the process by which such products are manufactured, pose significant hurdles to implementation which are still being worked out by the FDA.

A reference biologic is granted twelve years of exclusivity from the time of first licensure of the reference product. The first biologic product submitted under the abbreviated approval pathway that is determined to be interchangeable with the reference product has exclusivity against other biologics submitting under the abbreviated approval pathway for the lesser of (i) one year after first commercial marketing, (ii) eighteen months after the initial application if there is no legal challenge, (iii) 18 months after the resolution in the applicant's favor of a lawsuit challenging the biologics' patents if an application has been submitted, or (iv) 42 months after the application has been approved if a lawsuit is ongoing within the 42 month period.

Advertising and Promotion

Once an NDA or BLA is approved, a product will be subject to certain post-approval requirements. For instance, FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the internet.

Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved labeling. Changes to some of the conditions established in an approved application, including changes in indications, labeling, or manufacturing processes or facilities, require submission and FDA approval of a new NDA or BLA or NDA supplement or BLA supplement before the change can be implemented. An NDA or BLA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA supplements and BLA supplements as it does in reviewing NDAs or BLAs. The FDA has broad enforcement authority under the FFDCAs, and failure to abide by these regulations can result in enforcement action, including the issuance of a Warning Letter directing entities to correct deviations from FDA standards, a requirement that future advertising and promotional materials be pre-cleared by the FDA, and federal civil and criminal investigations, prosecutions and penalties. State enforcement actions relating to promotional violations are also becoming more common.

Post Marketing Requirements

Adverse experiences associated with the use of the drug must be reported to the FDA and could result in the imposition of market restrictions through labeling changes or in product removal. Product approvals may be withdrawn if compliance with regulatory requirements is not maintained or if problems concerning safety or efficacy of the product occur following approval.

FDA can require post-approval studies and clinical trials, known as Phase 4 studies, if the FDA finds, after approving the drug, that scientific data, including information regarding related drugs, deem it appropriate. The purpose of such studies would be to assess a known serious risk or signals of serious risk related to the drug or to identify an unexpected serious risk when available data indicates the potential for a serious risk. The FDA may also require a labeling change if it becomes aware of new safety information that it believes should be included in the labeling of a drug.

As a condition of NDA or BLA approval, the FDA may require a risk evaluation and mitigation strategy, or REMS, to help ensure that the benefits of the drug outweigh the potential risks. REMS can include medication guides, communication plans for healthcare professionals, and elements to assure safe use, or ETASU. ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patient registries. The requirement for a REMS can materially affect the potential market and profitability of the drug. Moreover, product approval may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

Failure to comply with statutory and regulatory requirements also subjects a manufacturer to possible legal or regulatory action, including Warning Letters, the seizure or recall of products, injunctions, consent decrees placing significant restrictions on or suspending manufacturing operations, and civil and criminal penalties.

Current Good Manufacturing Practices (cGMP) Standards

Additional FDA laws and regulations govern the quality control, manufacture, packaging, and labeling procedures of products regulated as a drug, biological product, or medical device, including cellular therapies comprised of HCT/Ps. These laws and regulations include requirements for cGMP. These requirements are designed to ensure that a facility's processes — and products resulting from those processes — meet defined safety requirements and have the identity, strength, quality and purity characteristics that they are represented to have.

The cGMP requirements, set forth in 21 CFR Parts 210 and 211, are federal regulations that govern the manufacture, processing, packaging and holding of drug and cell therapy products. The objective of compliance with cGMP standards is to protect the public health and safety by ensuring that:

- Products have the identity, strength, quality and purity that they purport or are represented to possess;
- Products meet their specifications; and
- Products are free of objectionable microorganisms and contamination.

A central focus of the cGMP requirements is to design and build quality into the manufacturing processes and the facilities in which products are produced. This is done by implementing quality systems and processes, such as:

- Identifying critical points that need to be controlled, monitored and tested.
- Preparing a set of written instructions or procedures, including product specifications, to ensure consistency and reproducibility of results and product characteristics.
- Designing systems and procedures to prevent contamination and ensure product integrity.
- Documentation of product testing results and procedures.

TABLE OF CONTENTS

- Validating the process and test methods to ensure reliability of results and consistency in processing.
- Protecting the product from introduction of contamination or objectionable microorganisms by manufacturing in a clean room environment, which includes control of particulates and microorganisms while ensuring adequate space and proper facility controls.

In addition, drug manufacturers and certain of their subcontractors are required to register their establishments with FDA and certain state agencies. Registration with the FDA subjects entities to periodic unannounced inspections by the FDA, during which the agency inspects manufacturing facilities to assess compliance with cGMPs. Accordingly, manufacturers must continue to expend time, money, and effort in the areas of production and quality-control to maintain compliance with cGMPs. Further, failure to comply with applicable FDA requirements can result in regulatory inspections and associated observations, warning letters, other requirements of remedial action, and, in the case of failures that are more serious, suspension of manufacturing operations, seizure, injunctions, product recalls, fines, and other penalties. Management believes that its facilities are in material compliance with applicable existing FDA requirements, and intends to continue to comply with new requirements that may apply in the future.

Additionally, FDA, other regulatory agencies, or the United States Congress may be considering, and may enact laws or regulations regarding the use and marketing of stem cells, cell therapy products, or products derived from human cells or tissue. These laws and regulations can affect us directly or the business of some of PCT's clients and therefore the amount of business PCT receives from these clients.

Pediatric Information

Under the Pediatric Research Equity Act, or PREA, NDAs or BLAs or supplements to NDAs or BLAs must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. The FDA may grant full or partial waivers or deferrals for submission of data. Unless otherwise required by regulation, PREA does not apply to any drug for an indication for which orphan designation has been granted.

The Best Pharmaceuticals for Children Act, or BPCA, provides NDA holders a six-month extension of patent and non-patent exclusivity and BLA holders a six-month extension of non-patent exclusivity for a drug if certain conditions are met. Conditions for exclusivity include the FDA's determination that information relating to the use of a new drug in the pediatric population may produce health benefits in that population, FDA making a written request for pediatric studies, and the applicant agreeing to perform, and reporting on, the requested studies within the statutory timeframe. Applications under the BPCA are treated as priority applications with all of the benefits that designation confers.

OTHER HEALTH CARE

Health Privacy Laws

The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended by the Health Information Technology for Economic and Clinical Health Act ("HITECH Act"), require health care plans, health care providers and health care clearinghouses, collectively defined under HIPAA as "Covered Entities," to comply with standards for the use and disclosure of health information within such organizations and with third parties. These include standards for:

- Common health care transactions, such as claims information, plan eligibility, payment information and the use of electronic signatures;
- Unique identifiers for providers, employers, health plans and individuals; and
- Security and privacy of health information.

Although the obligations of HIPAA only apply directly to Covered Entities, any Covered Entity that uses third parties (referred to in HIPAA as "Business Associates") to perform functions on its behalf involving the creation or use of certain patient health information is required to have a contract with the Business Associate that limits the use and disclosure of such information by the Business Associate.

TABLE OF CONTENTS

HIPAA does not preempt, or override, state privacy laws that provide even more protection for individuals' health information. These laws' requirements could further complicate Amorcyte's ability to obtain necessary research data from its collaborators. In addition, certain state privacy and genetic testing laws may directly regulate Amorcyte's research activities, affecting the manner in which it uses and discloses individuals' health information, potentially increasing the cost of doing business, and exposing Amorcyte and the combined company to liability claims. In addition, patients and research collaborators may have contractual rights that further limit Amorcyte's ability to use and disclose individually identifiable health information. Claims that Amorcyte violated individuals' privacy rights or breached its contractual obligations, even if Amorcyte is not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm the business.

While management believes that the current business operations of PCT or NeoStem Family Storage would not cause either of them to be considered a Covered Entity, there is a risk that due to conflicting interpretations of the regulations, NeoStem Family Storage may be a Covered Entity. If NeoStem Family Storage is a Covered Entity, there is a risk of liability that NeoStem Family Storage may not be complying fully with all HIPAA requirements. PCT has signed Business Associate Agreements where requested by PCT's customers who are Covered Entities, which would require compliance with certain privacy and security requirements relating to individually identifiable health information created or used in connection with such relationships. PCT is in substantial compliance with such Business Associate Agreements. However, given its complexity and the possibility that the regulations may change and may be subject to changing and even conflicting interpretation, PCT's ability to comply fully with all of the HIPAA requirements and requirements of its Business Associate Agreements is uncertain. Further, as a result of amendments the HITECH Act, PCT's and NeoStem Family Storage's compliance burden has increased and they will be subject to audit and enforcement by the federal government and, in some cases, by state authorities. Further, they are obligated to publicly disclose wrongful disclosures or losses of personal health information.

Fraud and Abuse Laws

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal laws have been applied to restrict certain marketing practices in the pharmaceutical industry in recent years. These laws include anti-kickback statutes and false claims statutes. The federal healthcare program anti-kickback statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other. Violations of the anti-kickback statute are punishable by imprisonment, criminal fines, civil monetary penalties and exclusion from participation in federal healthcare programs. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exemption or safe harbor.

Federal false claims laws prohibit any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to be made, a false statement to have a false claim paid. Recently, several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, certain marketing practices, including off-label promotion, may also violate false claims laws. The majority of states also have statutes or regulations similar to the federal anti-kickback statute and false claims laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

TABLE OF CONTENTS

Affordable Care Act

In late March 2010, the Federal government enacted a comprehensive health care reform package which consists of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (“Affordable Care Act”). Among other provisions, the Affordable Care Act imposes individual and employer health insurance requirements, provides certain insurance subsidies (e.g., premiums and cost sharing), mandates extensive insurance market reforms, creates new health insurance access points (e.g., State-based health insurance exchanges), expands the Medicaid program, promotes research on comparative clinical effectiveness of different technologies and procedures, and makes a number of changes to how products and services will be reimbursed by the Medicare program. Amendments to the Federal False Claims Act under the Affordable Care Act 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.

There are a number of provisions in the Affordable Care Act that may directly impact our customers and, therefore, indirectly affect us. For example, the Affordable Care Act expands the number of individuals that will be covered by either private or public health insurance, which may, in turn, increase the pool of potential purchasers for our customers’ products to the extent they are reimbursable by private or public health insurance. The Affordable Care Act also requires health insurance issuers in the individual and small group markets to cover certain “essential health benefits,” which include prescription drugs and which may increase coverage for our customers’ products. In addition, the Affordable Care Act reduces income and raises costs for our customers through, for instance, the imposition of drug price discounts for Medicare Part D enrollees in the “donut hole” and the imposition of an annual fee on prescription drug and biologic manufacturers. Such provisions may cause our customers to seek to restrain costs in other areas, including the services which we provide. The effective dates of the various provisions within the Affordable Care Act are staggered over the next several years, with some changes occurring immediately. Much of the interpretation of the Affordable Care Act will be subject to administrative rulemaking, the development of agency guidance, and court interpretation.

Other Applicable Laws

In addition to those described above, other federal and state laws and regulations that could directly or indirectly affect our ability to operate the business and/or financial performance include:

- State and local licensure, registration and regulation of laboratories, the processing and storage of human cells and tissue, and the development and manufacture of pharmaceuticals and biologics;
- Other laws and regulations administered by the United States FDA, including the Federal Food, Drug, and Cosmetic Act and related laws and regulations and the Public Health Service Act and related laws and regulations;
- Laws and regulations administered by the United States Department of Health and Human Services, including the Office for Human Research Protections;
- State laws and regulations governing human subject research;
- Federal and state coverage and reimbursement laws and regulations, including laws and regulations administered by the Centers for Medicare & Medicaid Services and state Medicaid agencies;
- The federal Medicare and Medicaid Anti-Kickback Law and similar state laws and regulations;
- The federal physician self-referral prohibition commonly known as the Stark Law, and state equivalents of the Stark Law;
- Occupational Safety and Health (“OSHA”) requirements;
- State and local laws and regulations dealing with the handling and disposal of medical waste; 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.

Other Regulations

In addition to privacy law requirements and regulations enforced by the FDA, we are also subject to various local, state and federal laws and regulations relating to safe working conditions, laboratory and manufacturing practices, the experimental use of animals and the use and disposal of hazardous or potentially hazardous substances, including chemicals, micro-organisms and various radioactive compounds used in connection with our research and development activities. These laws include, but are not limited to, the Occupational Safety and Health Act, the Toxic Test Substances Control Act and the Resource Conservation and Recovery Act. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards prescribed by state and federal regulations, there can be no assurances that accidental contamination or injury to employees and third parties from these materials will not occur. Our insurance program does not include environmental coverage.

Foreign Regulation

In addition to regulations in the United States, our cellular development activities may be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of biological products. Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. The requirements governing the conduct of clinical trials and the approval process vary from country to country and the time may be longer or shorter than that required for FDA approval. In the European Union, marketing authorizations may be submitted under a centralized or decentralized procedure. The centralized procedure is mandatory for the approval of biotechnology products and many pharmaceutical products, and provides for the grant of a single marketing authorization that is valid in all European Union member states. The decentralized procedure provides for mutual recognition of national approval decisions and is available at the request of the applicant for medicinal products that are not subject to the centralized procedure.

In addition to regulations in Europe and the United States, we may be subject to a variety of other foreign regulations governing, among other things, the conduct of clinical trials, pricing and reimbursement and commercial distribution of its products. If Amorceyte fails to comply with applicable foreign regulatory requirements, it may be subject to fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

To date, Amorceyte has not initiated any discussions with the European Medicines Agency or any other foreign regulatory authorities with respect to seeking regulatory approval for AMR-001 in Europe or in any other country outside the United States.

REGENERATIVE MEDICINE — CHINA

In 2009, we began certain adult stem cell initiatives in the People's Republic of China ("China" or "PRC") including: (i) constructing a stem cell research and development laboratory and processing and manufacturing facility in the Beijing Facility; (ii) establishing relationships with hospitals to provide stem cell-based therapies, and (iii) obtaining product licenses covering certain adult stem cell therapeutics focused on regenerative medicine.

In December 2011, China's Ministry of Health announced its intention to more tightly regulate stem cell clinical trials and the use of stem cell treatments in the PRC. Additionally, we operate our regenerative medicine business in China through a wholly foreign owned entity ("WFOE") and variable interest entities ("VIEs"). While often foreign companies use structures similar to the ones pursuant to which we have operated our regenerative medicine business in the PRC, and while such arrangements are not uncommon in connection with business operations of foreign companies in China in industry sectors in which foreign direct investments are limited or prohibited, recently there has been greater scrutiny by the business community of the VIE structure. Accordingly, the Company has determined to take steps to restrict, and expects to ultimately eliminate, its regenerative medicine business in the PRC.

TABLE OF CONTENTS

The Beijing Facility is located at the Life Science Innovation Center, Life Science Park, Zhongguancun, Beijing. It has been designed for comprehensive cell manufacturing, collection, processing and storage that can enable the PCT business model to launch in the PRC should the opportunity be presented. With the upcoming expiration of this lease in May 2012, the Company is considering its options with respect to extending the lease to allow for manufacturing of cell therapies, which will depend in part upon guidance from the PRC Ministry of Health with respect to regulations applicable to stem cell clinical research and applications.

PHARMACEUTICAL MANUFACTURING — CHINA

We have a 51% ownership interest in Erye. Our current senior executive management team at Erye, Mr. Shi, Chairman, and Madame Zhang, General Manager, joined Erye in 1998, who in conjunction with others bought it from the PRC government in 2003 and, in the years that followed, transformed it into a profitable private enterprise. Erye had approximately 692 employees as of March 1, 2012, of which approximately 413 were full-time.

The Erye Merger was consummated pursuant to the terms of an Agreement and Plan of Merger, dated November 2, 2008, as amended (the “Erye Merger Agreement”). Pursuant to the Erye Merger Agreement, on October 30, 2009, China Biopharmaceuticals Holdings, Inc. (“CBH”) merged with and into our wholly owned subsidiary. Following the Erye Merger, Erye Economy and Trading Co. Ltd. (“EET”) (the “Erye Merger”), an entity controlled by management of Erye, continued to own the remaining 49% ownership interest in Erye.

An amended joint venture agreement and articles of association of Erye was approved by the requisite PRC governmental authorities on or about December 28, 2009 (the “Joint Venture Agreement”). Under the Joint Venture Agreement, for the three years commencing with the fiscal quarter after which the revised Joint Venture Agreement became effective: (i) 49% of net profit, after tax, will be distributed to 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 (to be repaid gradually after construction is completed); (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.

Erye was founded more than 50 years ago and represents an established, vertically-integrated pharmaceutical business, focused primarily on the manufacturing and sale of antibiotics. 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 SFDA covering both antibiotic prescription drugs and active pharmaceutical intermediates, or APIs. Erye’s revenue for 2010 and 2011 was approximately \$69.6 million and \$63.4 million, respectively.

Our Pharmaceutical Manufacturing — China reportable segment consists of our interest in the Erye business. We are considering strategic alternatives with respect to our 51% interest in Erye, as described further below under the caption “Pharmaceutical Manufacturing — China — Strategic Alternatives With Respect to Erye.”

Industry

China has a large population with a rapidly growing demand for pharmaceutical drugs and has committed to providing increased governmental insurance to provide a larger segment of the population greater access to pharmaceuticals. The antibiotics market in China is approximately \$11 billion. The overall pharmaceuticals market in China is forecasted to reach \$110 billion by 2015.

In early 2009, the PRC government announced that improving healthcare for its citizens would be a major priority and China’s State Council approved the spending of \$124 billion on its healthcare system between 2009 and 2011. This spending initiative, coupled with a population approaching 1.4 billion, makes China a large market opportunity for pharmaceutical drugs. As part of this initiative, China has created the New Rural and Urban Cooperative Medical Insurance System. More than 70% of the drugs produced by Erye are covered under this new medical insurance system.

TABLE OF CONTENTS

Products

Erye offers a broad portfolio of anti-infective drugs, with no single product accounting for more than 10% of total revenues for 2011. In 2011, approximately seven of the top 20 antibiotics used in Chinese hospitals were products offered by Erye. Erye's top ten products, by revenue, for 2011, are set forth in the following table:

| <u>Product Name</u> | <u>Product Type</u> | <u>% of Sales</u> |
|---|-----------------------------|-------------------|
| 1.0g ceftizoxime sodium injection | Injectable Finished Product | 6% |
| piperacillin sodium and sulbactam sodium for injection (1.5g) | Injectable Finished Product | 4% |
| Amoxicillin and Sulbactam for injection (1.5g) | Injectable Finished Product | 4% |
| Mezlocillin sodium for injection (1.0g) | Injectable Finished Product | 4% |
| Cefamandole Natate for injection (0.5g) | Injectable Finished Product | 4% |
| 1.2g Injection Amoxicillin Sodium and Clavulanate Potassium | Injectable Finished Product | 3% |
| Cefamandole Natate for injection (1.0g) | Injectable Finished Product | 3% |
| Top of Form 0.5g injection Ceftizoxime | Injectable Finished Product | 3% |
| Mezlocillin sodium for injection (2.0g) | Injectable Finished Product | 3% |
| Mezlocillin sodium for injection (3.0g) | Injectable Finished Product | 3% |

Erye is currently focused on bringing more differentiated and higher-margin product offerings to its portfolio.

Distribution/Customers

In China, consumers generally receive prescription drugs through hospitals. Antibiotics are distributed almost exclusively through hospitals. Since pharmaceutical manufacturers in China are not permitted to sell directly to hospitals, it is essential to have an effective and extensive distributor network. Erye's distributor network covers all of mainland China's provinces and municipalities and generates sales principally through three channels:

- exclusive distributors of prescription drugs, referred to as "co-sales teams": this distribution channel handles the clinical promotion and distribution of differentiated, higher-margin product lines, within exclusive province-based and municipality-based territories;
- non-exclusive distributors of prescription drugs: this distribution channel is devoted to selling established product lines that require little, if any, clinical promotion; and
- exclusive distributors of APIs: this distribution channel is devoted to selling APIs to large pharmaceutical manufacturers nationwide.

Erye has an internal sales and marketing team of more than 80 individuals that supervise the distributor network, assist with clinical promotions and manage hospital relationships. Many of Erye's sales executives have long-term experience in pharmaceutical sales and previously held sales positions with state-owned pharmaceutical companies, where they established long-standing relationships with large distribution centers in several key regions nationwide and, in particular, within the Yangzi River Triangle.

Production Facilities

In 2005, the PRC government issued a mandate requiring the relocation of many of Erye's existing manufacturing facilities. In order to comply with this mandate and to meet the growing demands of its business, Erye acquired land use rights to approximately 27 acres in the Xiangcheng District of Suzhou and, in 2007, commenced the construction of a new, state-of-the-art production facility. This new campus-style facility includes 16 buildings containing a total of approximately 53,186 square meters of space.

TABLE OF CONTENTS

Erye has substantially completed the construction of its new manufacturing facility. Erye began transferring its operations to its new manufacturing facility in January 2010. The relocation and new production lines have been completed and have received cGMP certification. To date, Erye has received the following SFDA cGMP certifications:

- solvent crystallization sterile penicillin;
- freeze dried raw sterile penicillin;
- penicillin;
- cephalosporin powder for injection;
- freeze dried powder for injection; and
- its capsule line.

We recognize that there will be continuous price pressure on Erye as over 70% of the manufactured drugs are on the essential drug list. During 2011, there has been evidence of such price pressure — e.g., on March 2, 2011 the National Development and Reform Commission issued price cuts for medical insurance drugs which substantially impacts two of Erye’s drugs. We anticipate that Piperacillin Sodium Sulbactam Sodium will experience as much as a 50% price decline while the price of Ligustrazine Phosphate may be reduced by approximately 75%. As of December 31, 2011 the price reduction experienced by Erye on these products was approximately 24%. In 2010 Piperacillin Sodium Sulbactam Sodium accounted for approximately 3% of sales and Ligustrazine Phosphate accounted for approximately 2.5% of sales and through the twelve months ended December 31, 2011 accounted for approximately 5% and 1% of sales, respectively. In addition, in late 2011 the Ministry of Health of the PRC issued for public comment, a draft policy “Administrative Measures on Clinical Use of Antibiotics” to curb their overuse, which has in part had, and may in the future have, the effect of limiting the sales volume of certain antibiotics of Erye. See “Government Regulation — Pharmaceutical Manufacturing — China.”

The estimated total cost of the new facility is approximately \$39 million.

Research and Development — Product Pipeline

Erye provides a well-established and capable platform and network for the introduction of pharmaceuticals, and other health-related products, to the vast domestic patient and consumer markets in China.

In 2010, Erye engaged in research and development for antitumor drugs and Penem antibiotics. In 2011, Erye completed the registration documents for three cancer drugs and two Impenem products, which were also submitted for SFDA approval. Also in 2011, Erye received production approval for Mezlocillin sodium and Sulbactam sodium for injection.

Governmental Regulation — Pharmaceutical Manufacturing — China

In connection with our interest in Erye, we rely upon the experience of Erye as well as certain of our other PRC advisors and consultants with the Drug Administration Law of China, which governs the licensing, manufacturing, marketing and distribution of pharmaceutical products in China. Additionally, our operations are subject to various PRC regulations and permit systems.

The application and approval procedure in China for a newly-developed drug product is nearly as detailed and lengthy as that for U.S. new drug applicants, requiring the documentation of pharmacological studies, toxicity studies and pharmacokinetics and drug metabolism (PKDM) studies and new drug samples. Documentation and samples are then submitted to a provincial food and drug administration, or the provincial FDA. The provincial FDA sends its officials to the applicant to check the applicant’s research and development facilities and to arrange a new drug examination committee meeting for approval deliberations. This process usually takes three months. After the documentation and samples are approved by the provincial FDA, the provincial FDA will submit the approved documentation and samples to the SFDA. The SFDA examines the documentation and tests the samples and arranges a new drug examination committee meeting for approval deliberations. If the application is approved by the SFDA, the SFDA will issue a clinical trial

TABLE OF CONTENTS

license to the applicant allowing the applicant to conduct human clinical trials. The clinical trial license approval typically takes one year. The applicant completes the clinical trial process and prepares documentation and files submitted to the SFDA for new drug approval. The clinical trial process usually takes one or two years depending on the category and class of the new drug. The SFDA examines the documentation and gives final approval for the new drug and issues the new drug license to the applicant. This process usually takes 8 months. As a result, the entire process for new drug approval, from start to finish, usually takes three to four years.

In late 2011, the PRC Ministry of Health issued, for public comment, a draft policy “Administrative Measures on Clinical Use of Antibiotics” to curb their overuse. The proposed guidelines set forth three categories of antibiotics, which include (1) restricted, (2) non-restricted, and (3) special-use only. According to the October 12, 2011 China Healthcare report published by Deutsche Bank, AG (the “China Healthcare report”), it has been projected that the limitation of antibiotic usage in China will reduce the historical compound annual growth rate which has been approximately 20%. According to the China Healthcare report, it has been estimated that China’s population consumes about ten times the global per capita average of antibiotics. These regulations have not been finalized but issuance of a draft policy has created uncertainty on the part of distributors and has reduced purchases by distributors and in part has contributed to sales reduction during 2011.

The PRC government is in the process of reviewing its industry policies relating to the pharmaceutical industry and, as a part of this review, has been reviewing drug permits and licenses that have been issued. As of now, Erye maintains good standing of its drug permits and licenses. Although the PRC government has published regulations regarding stem cell clinical applications, there is currently not implemented guidance. Without guidance, it is difficult to definitively know how the regulations are to be implemented.

Competition — Pharmaceutical Business In China

Pharmaceutical operations in China are still at an early stage of development due to heavy state involvement in the past. However, competition from China-based drug manufacturing companies is growing rapidly. Our direct competitors are domestic pharmaceutical companies and new drug research and development institutes such as Harbin Pharmaceutical Group Holding Co., Ltd., Shanghai Asia Pioneer Pharmaceutical Co., Ltd, Shandong Lukang Pharmaceutical Co., Ltd., Shandong Luoxin Pharmacy Stock Co. Ltd., China Pharma Holdings, China Biologic Products, China Sky One Medical, Sinovac Biotech and Tianyin Pharma. We also face competition from foreign companies who have strong proprietary pipelines and strong financial resources.

Strategic Alternatives With Respect to Erye

As part of our plan to focus our business on capturing the paradigm shift to cell therapies following our January 2011 acquisition of PCT, we are pursuing strategic alternatives with respect to our 51% interest in Erye. We are planning to devote our resources and management efforts to cell therapy manufacturing and development, and other related activities, including adult stem cell collection and storage. We also believe that if we could monetize Erye, we would have additional capital needed to pursue the development of cell therapies. To that end, in June 2011, we engaged a financial advisor to lead the effort to pursue the possible divestiture of our 51% interest in Erye. Marketing efforts have led to a few nonbinding letters of intent. However, in addition to the factors set forth below, it is too early to determine whether these or other proposals will lead to definitive agreements.

Any sale of our interest would also be subject to a right of first refusal held by Suzhou Erye Economy & Co. Ltd. (“EET”) pursuant to the terms of the Joint Venture Agreement between a subsidiary of ours and EET. EET owns the remaining 49% interest in Erye. A number of issues have arisen between EET and us with respect to the operation and financing of Erye. For instance, while EET is required to lend back to Erye dividends received by it to finance Erye’s move to and construction of its new facilities, Erye has recently reported to us that such arrangement is no longer tax efficient in light of the ratio of Erye’s shareholder loans to its registered capital. In connection with exploring ways to remedy the additional tax burden caused by the level of shareholder loans and in preparing for a sale process, other issues have also surfaced, including the issue of our Company and Erye needing to obtain all Chinese regulatory approvals (and associated registrations) required to reflect the legal title of our 51% interest in Erye as being held by the proper entity

TABLE OF CONTENTS

within our Company's group which is its current beneficial owner as that term is used under U.S. law. The Company believes it has now determined what governmental approvals (and associated registrations) will need to be issued by the Suzhou Municipal Bureau of Foreign Investment and Commerce and the Suzhou Administration for Industry and Commerce to remediate these deficiencies and the Company has had counsel in China prepare these filings. The Company's management believes these regulatory deficiencies can be remediated and should not delay a possible divestiture of the Company's interests in Erye that is currently under evaluation. However, the Company requires the cooperation of the officers of Erye as to which no assurance can be given, and we could be compelled to seek to replace those officers or to commence legal action to obtain the required consents or otherwise move forward with requisite filings. In addition, even if the filings are made, no assurance can be given that any unremediated regulatory deficiencies would not have an adverse effect on the operating results and liquidity of Erye and the Company and will not impede or delay efforts to divest the Company's interest in Erye. In addition, the remediation process is expected to trigger certain tax liabilities and penalties, however the ultimate liability will be based on future discussions with the relevant Chinese authorities. The Company cannot reasonably assess the exposure as of December 31, 2011.

We have not yet determined to sell our interest in Erye, and will not do so until we can assess the level of interest generated, the potential price and transaction terms we might be offered and any regulatory impediments to a transaction. The challenging nature of the current China pharmaceutical market makes it a difficult time for us to be pursuing a divestiture of our 51% ownership interest in Erye, and we expect that any sale of this interest will result in our not recouping our original investment. The process to divest Erye has also led to our interests becoming unaligned with those of the 49% shareholder, as it from time to time has indicated a desire to be a buyer, and this has led to strained relations between the parties. A sale of our interest in Erye, if a sale can be consummated, would have a material effect on the business, results of operations and balance sheet of our Company. Factors that may impede a sale may include, but not be limited to, (i) EET's right of first refusal and the significant time and money that exercise of such right could cause a potential purchaser, (ii) the need for any purchaser to negotiate a new Joint Venture Agreement and a shareholder loan repayment schedule with EET if EET does not wish to either sell its interest or exercise its right of first refusal, (iii) recent regulatory changes in China which reduce prices that may be charged for certain of Erye's products and limit use of antibiotics, (iv) recent disappointing financial performance by Erye resulting at least in part from such changes, including a decrease in revenues in 2011 and a net loss for fourth quarter 2011, (v) tax or regulatory issues affecting Erye, including those described above and other tax increases described in this filing which will adversely affect Erye going forward, (vi) availability of financing for a potential purchaser, and (vii) other factors typical of any sale process.

INTELLECTUAL PROPERTY

We aggressively are seeking international patent protection for our own internally developed technologies, as well as those technologies to which we have an exclusive license. The following is an overview of the key components of our patent estate, both issued and pending, to which NeoStem claims original ownership or exclusive rights pursuant to license:

NeoStem is prosecuting patent applications for in-house developed technologies that cover processes by which stem cells are isolated from various tissues. We have filed patent applications covering low-dose, short course, cytokine induction of stem cell mobilization as well as claims to methods of isolating adult stem cells using various proprietary techniques. In addition, we have filed applications for what we believe are novel stem cell populations. These applications have been filed in the U.S. and outside the U.S.

Pursuant to our VSELTM Technology license agreement with the University of Louisville, we have the exclusive, world-wide rights, to technology and know-how relating to very small embryonic-like stem cells. These patent applications, filed in the U.S. and abroad, relate to VSEL stem cell methods of isolation, collection, treating disease, as well as other related technology.

Amorcyte presently has three issued patents for our lead clinical product, AMR-001. In addition to our U.S. 7,794,705 patent (and a corresponding patent in South Africa) covering composition and method of vascular injury repair post-acute myocardial infarction, the US Patent and Trademark Office recently granted U.S. 8,088,370 for "vascular insufficiency," materially expanding the reach of our patent protection into all forms of cardiac insufficiency, including congestive heart failure and chronic myocardial ischemia. We believe

TABLE OF CONTENTS

that these claims extend protection for vascular insufficiency to conditions beyond the cardiac setting. Amorcyte has applications pending around the world for three families of patents comprising no fewer than 18 applications in a dozen countries.

Athelos has secured exclusive world-wide rights to a broad patent estate comprised of approximately 30 issued patents and approximately 50 pending patent applications from major U.S. academic institutions. Those patent rights relate to regulatory T cell compositions, the in vitro culture of regulatory T cells and methods of treating or preventing certain conditions and/or diseases by use of regulatory T cells, as well as certain materials known as artificial antigen presenting cells. Most patent families within the estate have been filed in the U.S. and under the Patent Cooperation Treaty pursuant to which they have been/are being nationalized in other countries, generally including Australia, Japan, Europe, China, Canada, or some combination thereof.

Pursuant to our exclusive license agreement with Vincent Falanga, M.D., we have an exclusive, world-wide license to technology and know-how relating to wound healing using autologous mesenchymal stem cells to treat wounds.

There can be no assurance that any of our patent applications will issue as patents, or that, should patents issue, they will be found valid if contested in litigation. The patent positions of biotechnology companies are highly uncertain and involve complex legal, scientific and factual questions, the answers to which cannot be predicted with certainty.

EMPLOYEES

As of March 1, 2012, NeoStem had approximately 786 employees, including those employees of our subsidiaries, broken down as follows: PCT had 69 employees, Erye had 692 employees, of which 413 are full time and 279 are part time and NeoStem China had 1 employee. Amorcyte and Athelos have no employees unique to them. NeoStem US had 24 employees. None of our employees are covered by a collective bargaining agreement. All of Erye's employees are located in Jiangsu Province, China. Although a significant number of Erye's employees have employment contracts, none of the employees are covered by a collective bargaining agreement. As further discussed in this report, we are pursuing the divestiture of the majority of our China operations.

CORPORATE INFORMATION

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

NeoStem, Inc. was incorporated under the laws of the State of Delaware in September 1980 under the name Fidelity Medical Services, Inc. and commenced operations in the adult stem cell collection, processing and storage services business in January 2006.

This report includes trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included in this report are the property of their respective owners.

[TABLE OF CONTENTS](#)

ITEM 1.1. EXECUTIVE OFFICERS OF THE REGISTRANT.

The following table sets forth certain information about the executive officers of our Company. There are no family relationships among any of the below named persons. For biographical information regarding our executive officers, see the discussion under the caption “Biographical Information” below.

| <u>Name</u> | <u>Age</u> | <u>Position</u> |
|----------------------------------|------------|---|
| Robin L. Smith, M.D. | 47 | Chief Executive Officer and Chairman of the Board |
| Andrew L. Pecora, M.D., F.A.C.P. | 54 | Chief Medical Officer of NeoStem, Chief Medical Officer of PCT and Chief Scientific Officer of Amorcyte |
| Larry A. May | 62 | Vice President and Chief Financial Officer |
| Catherine M. Vaczy | 50 | Vice President and General Counsel |
| Joseph Talamo | 43 | Vice President, Corporate Controller and Chief Accounting Officer |
| Jason Kolbert | 52 | Vice President of Strategic Business Development |
| Madam Zhang Jian | 50 | Vice President of Pharmaceutical Operations, NeoStem and General Manager, Erye |
| Shi Mingsheng | 60 | Chairman of the Board, Eyre |
| Robert A. Preti, Ph.D. | 55 | President and Chief Scientific Officer of PCT |

Biographical Information

Robin L. Smith, M.D.

Dr. Robin L. Smith joined us as Chairman of our Advisory Board in September 2005 and, effective June 2, 2006, became the Chief Executive Officer and Chairman of the Board. Dr. Smith, who received a medical degree from Yale University in 1992 and a master’s degree in business administration from the Wharton School in 1997, brings to us extensive experience in medical enterprises and business development. From 2000 to 2003, Dr. Smith served as President & Chief Executive Officer of IP2M, a multi-platform media company specializing in healthcare. During her term, the company was selected as being one of the ten fastest growing technology companies in Houston. IP2M was sold to a publicly-traded company in February 2003. Previously, from 1998 to 2000, she was Executive Vice President and Chief Medical Officer for HealthHelp, Inc., a National Radiology Management company that managed 14 percent of the healthcare dollars spent by large insurance companies.

Dr. Smith has acted as a senior advisor to, and investor in, both publicly-traded and privately-held companies including but not limited to China Biopharmaceuticals Holdings, Inc. (“CBH”), the Madelin Fund, HC Innovations Inc., Navstar Media Holdings, Strike Force, Health Quest, Red Lion Partners and All American Pet, where she has played a significant role in restructuring and or growing the companies. Dr. Smith served on the Board of Directors of two privately held companies, Talon Air and Biomega, and also served on the Chemotherapy Foundation Board of Trustees and The New York Theatre Ballet. She currently serves on the Board of Trustees of the NYU Medical Center Board, is a member of the Board of Directors for the New York University Hospital for Joint Diseases and serves on the Board of Choose Living. Dr. Smith is the President and serves on the Board of Trustees of The Stem for Life Foundation.

Andrew L. Pecora, M.D., F.A.C.P.

Andrew L. Pecora, M.D., F.A.C.P., is co-founder and past Chairman and Chief Executive Officer of Progenitor Cell Therapy, LLC (“PCT”), which is a subsidiary of the Company. Dr. Pecora has served as NeoStem’s Chief Medical Officer since August 17, 2011. Dr. Pecora also serves as PCT’s Chief Medical Officer pursuant to an employment agreement that became effective on January 19, 2011, currently providing for an annualized base salary of \$210,000 and option grants to purchase 400,000 shares of NeoStem Common Stock at a per share exercise price of \$1.50 (and an option granted on August 17, 2011 to purchase an additional 500,000 shares of NeoStem Common Stock at a per share exercise price of \$0.71). Prior to our acquisition of PCT, Dr. Pecora had served from 1999 to 2011 as Chairman, Chief Executive Officer and Chief Medical Officer of PCT, and as a member of PCT’s Board of Managers. Dr. Pecora is also Chief Scientific

TABLE OF CONTENTS

Officer of Amorcyte, LLC, a subsidiary of the Company acquired in October 2011, and held such position prior to the acquisition. Dr. Pecora served as the Chairman and Director of the John Theurer Cancer Center at Hackensack University Medical Center (HUMC) from 2001 to 2011, and commencing 2011 Dr. Pecora serves the John Theurer Cancer Center as Chief Innovations Officer, Professor and Vice President of Cancer Services. Since 1996 Dr. Pecora has been Co-Managing Partner of the Northern New Jersey Cancer Center, which is a private physicians practice group affiliated with HUMC. He has also been a Professor of Medicine at the University of Medicine and Dentistry of New Jersey since 2004. Dr. Pecora serves on the board of Cancer Genetics, Inc. and is chairman of the board of Tetralogics, Inc., a company developing small molecules to treat cancer. Dr. Pecora brings a variety of business development and practical business skills to NeoStem. He has worked with numerous companies in developing their products and manages a large clinical practice and the cancer department at a major health care institution. Dr. Pecora also has significant experience in the design of clinical trials (Phase 1 to 3), institutional review board practices, conduct of clinical trials, clinical research, and payor relationships both domestically and on a global basis. Dr. Pecora received an M.D. from the University of Medicine and Dentistry of New Jersey, graduating with honors. He went on to complete his medical education in internal medicine at New York Hospital and in hematology and oncology at Memorial Sloan-Kettering Cancer Center, both in New York City. He is board certified in internal medicine, hematology, and oncology. Dr. Pecora's appointment to the NeoStem Board of Directors was a term of the Company's merger agreement with PCT in January 2011.

Larry A. May

Mr. May, the former Treasurer of Amgen (NASDAQ GS: AMGN), one of the world's largest biotechnology companies, initially joined us to assist with licensing activities in September 2003. He became an officer upon our acquisition of the business of NS California in January 2006. For the last 25 years, Mr. May has worked in the areas of life science and biotechnology. From 1983 to 1998, Mr. May worked for Amgen as Corporate Controller (1983 to 1988), Vice President/Corporate Controller/Chief Accounting Officer (1988 to 1997), and Vice President/Treasurer (1997 to 1998). At Amgen, Mr. May helped build Amgen's accounting, finance and IT organizations. From 1998 to 2000, Mr. May served as the Senior Vice President, Finance & Chief Financial Officer of Biosource International, Inc., a provider of biologic research reagents and assays. From 2000 to May 2003, Mr. May served as the Chief Financial Officer of Saronyx, Inc., a company focused on developing productivity tools and secure communication systems for research scientists. From August 2003 to January 2005, Mr. May served as the Chief Financial Officer of NS California. In March 2005, Mr. May was appointed CEO of NS California and in May 2005 he was elected to the Board of Directors of NS California. He received a Bachelor of Science degree in Business Administration & Accounting in 1971 from the University of Missouri.

Catherine M. Vaczy

Ms. Vaczy joined us in April 2005 as Vice President and General Counsel. Ms. Vaczy is responsible for overseeing our legal affairs. From 1997 through 2003, Ms. Vaczy held various senior positions at ImClone Systems Incorporated, a then publicly-traded company developing a portfolio of targeted biologic treatments to address the medical needs of patients with a variety of cancers, most recently as its Vice President, Legal and Associate General Counsel. While at ImClone, Ms. Vaczy served as a key advisor in the day-to-day operation of the company and helped forge a number of important strategic alliances, including a \$1 billion co-development agreement for Erbitux®, the company's targeted therapy approved for the treatment of metastatic colorectal and head and neck cancers. From 1988 through 1996, Ms. Vaczy served as a corporate attorney advising clients in the life science industry at the New York City law firm of Ross & Hardies. Ms. Vaczy is Secretary and serves on the Board of Trustees of The Stem for Life Foundation. Ms. Vaczy received a Bachelor of Arts degree in 1983 from Boston College and a Juris Doctor from St. John's University School of Law in 1988.

Joseph Talamo

Joseph Talamo has been NeoStem's Vice President, Corporate Controller and Chief Accounting Officer since June 2011. From 1996 to 2010, Mr. Talamo held various senior positions at OSI Pharmaceuticals, Inc. ("OSI"), a publicly-traded biopharmaceutical company focused on discovering, developing and commercializing products for the treatment of cancer, diabetes and obesity, and most recently served as its

TABLE OF CONTENTS

Vice President and Corporate Controller from 2006 to 2010 and its Corporate Controller from 2002 to 2006. While at OSI, Mr. Talamo helped build the accounting and finance infrastructure to support the clinical development and commercial launch of Tarceva®, OSI's targeted therapy approved for the treatment of patients with non-small cell lung cancer and pancreatic cancer. Prior to OSI, Mr. Talamo worked at Bristol-Myers Squibb from 1995 to 1996 in the Financial Reporting and Consolidations Group, and at KPMG from 1993 to 1995 in the Health Care and Life Sciences Audit Group. Mr. Talamo also served as Treasurer of the OSI Pharmaceuticals Foundation from 2008 to 2010. Mr. Talamo received a Bachelor of Business Administration in Accounting from Hofstra University in 1991, and a Master of Business Administration in Finance from Hofstra University in 1999. Mr. Talamo is a certified public accountant in the State of New York.

Jason Kolbert

Jason Kolbert joined us in March 2011 as Vice President of Strategic Business Development. Prior to joining NeoStem, Mr. Kolbert served as a managing director and the head of research at National Securities from 2009 to 2011 where he followed emerging biotechnology companies with an emphasis in cell based therapeutics. Prior to joining National Securities, Mr. Kolbert spent seven years at Susquehanna International Group where he managed a dedicated life science fund and later led a team of analysts to cover emerging life science companies. Mr. Kolbert's work has been featured in the media with multiple presences on CNBC and well known financial and industry publications. Mr. Kolbert's career began as a chemist in the pharmaceutical industry, during which time he pursued his masters in business administration in finance. As a fluent Japanese speaker, with a background in chemistry and a finance degree he was recruited by Schering-Plough into a corporate finance position reporting to the President. Upon returning from Japan, Mr. Kolbert joined Salomon Smith Barney (7 years) in research working with industry leaders across multiple sectors in the healthcare space focused on companies in Asia and the U.S. Mr. Kolbert received his undergraduate degree in Chemistry from the State University of New York — New Paltz, where he graduated with honors and holds a Master's Degree in Business with a specialization in finance from the University of New Haven.

Madam Zhang Jian

Ms. Zhang Jian has been our Vice President — Pharmaceutical Operations since June 2010 and General Manager of Erye since 2003. She was elected to be the Chairwoman and a director of CBH on April 30, 2007, and served to 2009. From the end of 2007 until the consummation of the Erye Merger in 2009, Ms. Zhang Jian was the Chief Financial Officer (CFO) of CBH. Prior to being the General Manager for Erye, she served for more than 5 years as the deputy general manager of Suzhou Number 2 Pharmaceutical Company and more than a year as the deputy general manager of Suzhou Number 4 Pharmaceutical Company after working in various positions in charge of human resources and quality control. Ms. Zhang graduated from Central Television University majoring in electronics and later graduated with a certificate in accounting from Suzhou Adult Education University and a graduate degree in finance and accounting from the School of Finance and Economics of Suzhou University. Ms. Zhang has extensive background and experience in the pharmaceuticals industry having worked in various managerial positions and various aspects of the industry. She has turned Erye into a successful operation after taking it over from the PRC government with Mr. Shi Mingsheng and others in 2003.

Shi Mingsheng

Pursuant to the terms of the Erye Merger agreement, Shi Mingsheng was appointed to the NeoStem Board of Directors on March 11, 2010. Shi Mingsheng has been serving as chairman of the board of directors of Suzhou Erye Pharmaceuticals Company Ltd. ("Erye") (of which entity NeoStem has acquired a 51% interest), since 2003. Mr. Shi was a director of CBH (from which NeoStem acquired its interest in Erye), from 2007 to 2009. Currently, Mr. Shi is also the chairman of Suzhou Erye Economy and Trading Co. Ltd. ("EET"), which entity owns the remaining 49% ownership interest in Erye. Prior to these affiliations, Mr. Shi served for five years as the assistant director of Suzhou No. 4 Pharmaceutical Limited Company, and for seven years as the deputy director of Suzhou No. 4 Pharmaceutical Limited Company, and for five years as the factory director of Suzhou No. 2 Pharmaceutical Limited Company, the predecessor company of Erye. Mr. Shi has a bachelor's degree in Economics & Management from the Party School of the CPC. Mr. Shi holds a professional title which is Senior Economist.

[TABLE OF CONTENTS](#)

Robert A. Preti, Ph.D.

Dr. Preti serves as President of PCT, pursuant to an employment agreement that became effective on January 19, 2011, currently providing for a base salary of \$350,000, discretionary bonuses, and an option grant to purchase 400,000 shares of NeoStem Common Stock at a per share exercise price of \$1.50. Dr. Preti also serves as Chief Scientific Officer of PCT. Prior to our acquisition of PCT, Dr. Preti had served from 1999 to 2011 as President and Chief Scientific Officer for PCT, and as a member of PCT's Board of Managers.

Dr. Preti was Scientific Director of Hackensack University Medical Center's stem cell laboratory from 1996 – 1999. Prior to that, he served as director at the Clinical Services Division of the New York Blood Center from 1989 to 1996. He is one of the country's leading authorities on cell engineering and the principal investigator for a number of clinical trials relating to stem cell transplantation. He was a founding member and Treasurer of the International Society for Hematotherapy and Graft Engineering and served for 10 years on its Executive Committee and Board of Directors. He is now representing Cellular Therapy as a Director of the American Association of Blood Banks. Dr. Preti has authored numerous papers in the field and has been invited to speak at national and international meetings relating to the manufacturing, regulatory and quality aspects of cell therapy and regenerative medicine. In addition to having served as an inspector for the Foundation for Accreditation of Cellular Therapy, Dr. Preti also serves on professional and state committees charged with the development of regulations for cellular therapy. Dr. Preti received his Doctor of Philosophy degree from New York University, graduating with distinction. During his tenure at NYU, Dr. Preti studied and received his degrees in Cellular Biology, with a specialty in hematology, studying erythropoiesis under the mentorship of Albert S. Gordon, PhD. Immediately following his graduate work, Dr. Preti joined Marrow Tech, Inc. (which later became Advanced Tissue Sciences) where he served as Group Leader in the development Marrow Tech's proprietary three-dimensional, matrix-based hematopoietic culture system for *ex vivo* expansion of bone marrow stem cells.

ITEM 1A. RISK FACTORS.

THE RISKS DESCRIBED BELOW ARE NOT THE ONLY RISKS FACING THE COMPANY. ADDITIONAL RISKS THAT WE DO NOT YET KNOW OF OR THAT WE CURRENTLY THINK ARE IMMATERIAL MAY ALSO IMPAIR OUR BUSINESS OPERATIONS. THE FOLLOWING RISK FACTORS SHOULD BE CONSIDERED CAREFULLY, IN ADDITION TO THE OTHER INFORMATION CONTAINED IN THIS ANNUAL REPORT ON FORM 10-K. THE STATEMENTS CONTAINED IN THIS ANNUAL REPORT ON FORM 10-K THAT ARE NOT HISTORIC FACTS ARE FORWARD-LOOKING STATEMENTS THAT ARE SUBJECT TO RISKS AND UNCERTAINTIES THAT COULD CAUSE ACTUAL RESULTS TO DIFFER MATERIALLY FROM THOSE SET FORTH IN OR IMPLIED BY FORWARD-LOOKING STATEMENTS. IF ANY OF THE RISKS OCCUR, OUR BUSINESS STRATEGY, FINANCIAL CONDITION OR OPERATING RESULTS COULD BE ADVERSELY AFFECTED.

RISK FACTORS

Our business, financial condition, operating results and cash flows can be affected by a number of factors, including, but not limited to, those set forth below, any one of which could cause our actual results to vary materially from recent results or from our anticipated future results. The risks described below are not the only ones we face, but those we currently consider to be material. There may be other risks which we now consider immaterial, or which are unknown or unpredictable, with respect to our business, our competition, the regulatory environment or otherwise that could have a material adverse effect on our business.

RISKS RELATED TO OUR FINANCIAL CONDITION

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

We are a company with a limited operating history, limited capital, and limited sources of revenue. Since our inception in 1980, we have incurred net losses of approximately \$143.1 million through December 31, 2011. We incurred net losses attributable to common shareholders of approximately \$47.8 million for the year ended December 31, 2011 and approximately \$23.5 million for the year ended December 31, 2010, and we expect to incur additional operating losses and negative cash flow in the future. The revenues from our United States Cell Therapy segment are not sufficient to cover costs attributable to that business. We expect to incur losses and negative cash flow for the foreseeable future as a result of development activities associated with our product candidate AMR-001 (including clinical trials), our VSELTM Technology, a T-cell therapeutic and other research and development efforts to advance cell therapeutics. We also expect to continue to incur significant expenses related to sales, marketing, general and administrative and product research and development in connection with the development of our business.

Although Erye, a Chinese pharmaceutical company in which we acquired a 51% interest in October 2009, had revenues of approximately \$63.4 million for the year ended December 31, 2011, and approximately \$69.6 million for the year ended December 31, 2010, it has only a limited history of earnings. Pursuant to the October 2009 joint venture agreement that governs the ownership and management of Erye, or the Joint Venture Agreement, for the three-year period commencing on the first day of the first fiscal quarter after the Joint Venture Agreement became effective distributions are made as follows: (i) 49% of undistributed profits, after tax, will be distributed to Suzhou Erye Economy and Trading Co. Ltd., or EET, which owns the remaining 49% of Erye, and loaned back to Erye for use in connection with its construction of and relocation to the new Erye facility (to be repaid gradually after construction is completed); (ii) 45% of the net profit after tax due to the Company will be provided to Erye as part of the new facility construction fund, which will be characterized as paid-in capital for our 51% interest in Erye; and (iii) only 6% of the net profit will be distributed to us directly for our operating expenses. As a result, we will not be able to supplement our cash flow fully from the income expected to be generated by Erye in the short term. We are pursuing strategic alternatives with respect to our interest in Erye.

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

TABLE OF CONTENTS

We consummated our acquisition of Amorcyte on October 17, 2011. Our Amorcyte subsidiary has no product revenue and to date has not received regulatory approval to commercialize any of its products under development. Amorcyte has not completed development of any of its product candidates. Because of the numerous risks associated with drug and biologics development, we are unable to predict whether the development efforts of our Amorcyte subsidiary will be successful. In January 2012, we commenced enrollment of Amorcyte's Phase 2 PreSERVE clinical trial. The trial is expected to cost approximately \$14 million over the first two years and anticipated to cost up to approximately \$18 million over a five year period, inclusive of manufacturing costs.

While our recent acquisition of Amorcyte will further our strategy of focusing our business on cell therapies, the development and marketing of cell therapies is a new business direction for us.

Beginning with our January 2011 acquisition of PCT, we began to shift our business plan to focus on capturing the paradigm shift to cell therapies. It is anticipated that our recent acquisition of Amorcyte will help to further our expansion into the cell therapy field. However, we have limited experience in the areas of cell therapy development and marketing of cell therapy products, and in the related regulatory issues and processes. While the founders of PCT, Dr. Andrew Pecora and Dr. Robert Preti, will continue to provide services in connection with development activities, we can provide no assurances that our management will successfully oversee Amorcyte's or our other clinical development activities and integrate these businesses into the NeoStem business.

We are heavily dependent on the successful development and commercialization of AMR-001, and if we encounter delays or difficulties in the development of this product candidate, our business would be harmed.

We are heavily dependent upon the successful development of AMR-001 for cardiovascular disease. Our business could be materially harmed if we encounter difficulties in the development of this product candidate, such as:

- delays in the ability to manufacture the product in quantities or in a form that is suitable for any required clinical trials;
- delays in the design, enrollment, implementation or completion of required clinical trials;
- an inability to follow our current development strategy for obtaining regulatory approval from the FDA because of changes in the regulatory approval process;
- less than desired or complete lack of efficacy or safety in clinical trials; and
- intellectual property constraints that prevent us from making, using, or commercializing the product candidate.

We are pursuing a significant change in the nature of our business.

As part of our plan to focus our business on capturing the paradigm shift to cell therapies following our January 2011 acquisition of PCT, we are pursuing strategic alternatives with respect to our 51% interest in Erye. We plan to devote our resources and management efforts to cell therapy manufacturing and development, and other related activities, including adult stem cell collection and storage. We believe that if we were to monetize Erye, we would have additional capital needed to pursue the development of cell therapies. To that end, in June 2011, we engaged a financial advisor to lead the effort to pursue the possible divestiture of our 51% interest in Erye. Marketing efforts to date have led only to a few nonbinding letters of intent. However, in addition to the factors set forth below, it is too early to determine whether these or other proposals will lead to definitive agreements.

Any sale of our interest would be subject to a right of first refusal held by EET pursuant to the terms of the Joint Venture Agreement between a subsidiary of ours and EET. EET owns the remaining 49% interest in Erye. A number of issues have arisen between EET and NeoStem with respect to the operation and financing of Erye. For instance, while EET is required to lend back to Erye dividends received by it to finance Erye's move to and construction of its new facilities, Erye has recently reported to us that such arrangement is no

TABLE OF CONTENTS

longer tax efficient in light of the ratio of Erye's shareholder loans to its registered capital. In connection with exploring ways to remedy the additional tax burden caused by the level of shareholder loans and in preparing for a sale process, other issues have also surfaced, including the issue of our and Erye's needing to obtain all Chinese regulatory approvals (and associated registrations) required to reflect the legal title of our interest in Erye as being held by the proper entity within our group which is its current beneficial owner as that term is used under U.S. law. The Company believes that we have now determined what government approvals (and associated registrations) will need to be issued by the Suzhou Municipal Bureau of Foreign Investment and Commerce and the Suzhou Administration for Industry and Commerce to remediate these deficiencies and the Company has had counsel in China prepare these filings. The Company's management believes these regulatory deficiencies can be remediated and should not delay a possible divestiture of the Company's interests in Erye that is currently under evaluation. However, the Company requires the cooperation of the officers of Erye, as to which no assurance can be given, and we may be compelled to seek to replace these officers or to commence legal action to obtain the required consents or otherwise move forward with requisite filings. In addition, even if the filings are made, no assurance can be given that any unremediated regulatory deficiencies would not have an adverse effect on the operating results and liquidity of Erye and our Company and will not impede or delay efforts to divest our interest in Erye. Also, the remediation process is expected to trigger certain tax liabilities and penalties; however, the ultimate liability will be based on discussions with the relevant Chinese authorities. The Company cannot reasonably assess the exposure as of December 31, 2011.

We may not be able to materially enhance our liquidity through a sale of our interest in Erye.

We have not yet determined to sell our interest in Erye, and will not do so until we can assess the level of interest generated, the potential price and transaction terms we might be offered and any regulatory impediments to a transaction. The challenging nature of the current China pharmaceutical market makes it a difficult time for us to be pursuing a divestiture of our 51% ownership interest in Erye, and we expect that any sale of this interest will result in our not recouping our original investment. The process to divest Erye has led to our interests becoming unaligned with those of the 49% shareholder, as it from time to time has indicated a desire to be a buyer, and this has led to strained relations between the parties. A sale of our interest in Erye, if a sale can be consummated, would have a material effect on the business, results of operations and balance sheet. Factors that may impede a sale may include, but not be limited to, (i) EET's right of first refusal and the significant time and money that exercise of such right could cause a potential purchaser, (ii) the need for any purchaser to negotiate a new Joint Venture Agreement and a shareholder loan repayment schedule with EET if EET does not wish to either sell its interest or exercise its right of first refusal, (iii) recent regulatory changes in China which reduce prices that may be charged for certain of Erye's products and limit use of antibiotics, (iv) recent disappointing financial performance by Erye resulting at least in part from such regulatory changes, including a decrease in revenues in 2011, and a net loss for fourth quarter 2011, (v) tax or regulatory issues affecting Erye, including those described above and other tax increases described in our filings which will adversely affect Erye going forward, (vi) availability of financing for a potential purchaser, and (vii) other factors typical of any sale process. There can be no assurance that any sale of our Erye interest will be made, or will be made at a price that provides material additional capital for our cell therapy development efforts.

Erye may require additional lines of credit and bank loans.

Due to a number of factors including tightening of monetary policy in China, government-imposed pricing constraints on certain of its products, the additional expenses described above, and constraints on certain bank accounts arising from the *Welman* litigation described in Item 3 of this Form 10-K under the caption "Legal Proceedings", Erye has experienced cash flow constraints and may consider seeking additional bank loans. In connection with the *Welman* litigation, as of December 31, 2011, approximately 15,656,000 RMB (approximately \$2,460,000) of cash had been frozen in six Erye bank accounts. No assurances can be given that it will be able to secure additional credit on satisfactory terms, or at all.

RISKS RELATED TO CELL THERAPY — UNITED STATES

Risks Related to the Cell Therapy Industry, Clinical Development and Commercialization

Cell therapy is still a developing field and a significant global market for our services has yet to emerge. Our cellular therapy candidates are based on novel cell technologies that are inherently risky and may not be understood or accepted by the marketplace.

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 trials and processing of stem cell products for transplantation programs. Our Amorcyte and Athelos subsidiaries are involved in developing cell-based therapies: Amorcyte for cardiovascular indications, and Athelos for T-cell therapy for restoring normal immune responses. Our access to these markets will depend on the progress of our development activities, particularly with respect to Amorcyte, for which the Phase 2 clinical trial for AMR-001 is now enrolling, as well as subsequent trials. We also provide services related to the collection and storage of umbilical cord blood units and adult stem cells. There currently is no significant global market for stem cell processing or their collection and storage, nor is there any guarantee that such markets will develop in the near future, or at all. Major medical institutions currently do not generally recommend private storage, and we believe that the medical community is supportive of the public cord blood collective system. Patients can donate their cord blood to the system without charge. The market for cell and tissue-based therapies is early-stage, substantially research oriented, and financially speculative. Very few companies have been successful in their efforts to develop and commercialize a stem cell product. Stem cell products in general may be susceptible to various risks, including undesirable and unintended side effects, unintended immune system responses, inadequate therapeutic efficacy, or other characteristics that may prevent or limit their approval or commercial use. The demand for stem cell processing and the number of people who may use cell or tissue-based therapies is difficult to forecast. As there are no real experts who can forecast this market with accuracy, there is limited data from which the future use of our services may be forecasted. Our success is dependent on the establishment of a large global market for our products and services and our ability to capture a share of this market.

Our development efforts including our Phase 2 trial of AMR-001, are susceptible to the risks of failure inherent in the development and commercialization of therapeutic products based on new technologies. The novel nature of cellular therapeutics creates significant challenges with regards to product development and optimization, manufacturing, government regulation, third-party reimbursement and market acceptance. For example, the United States FDA has relatively limited experience regulating therapies based on cells, and there are few approved treatments utilizing cell therapy.

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

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

TABLE OF CONTENTS

Our drug product candidates subject us to additional extensive regulatory scrutiny. If we are not able to obtain the necessary regulatory approvals for AMR-001 or future product candidates, we may not be able to continue our business operations, and our Company may be materially and adversely affected.

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

The process of obtaining FDA and other regulatory approvals is expensive, often takes many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved and challenges by competitors. Because all of its product candidates are based on its CD34+ stem cell technology, any adverse events in our Amorcyte subsidiary's clinical trials of one of its product candidates could negatively affect the clinical trials and approval process for Amorcyte's other product candidates. Changes in regulatory approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application or may make it easier for our competitors to gain regulatory approval to enter the marketplace. The FDA has substantial discretion in the approval process and may refuse to accept any application or may decide that Amorcyte's data are insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying agency interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate. Any regulatory approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

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

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

Any difficulties that we encounter in obtaining regulatory approval would have a substantial adverse impact on our ability to generate product sales, and could make any search for a collaborative partner more difficult.

Our VSEL™ Technology and our other research and development activities using cells in therapeutic indications present additional risks.

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

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

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

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

TABLE OF CONTENTS

- our product candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators to halt or terminate the trials.

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

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

If we are required to conduct additional clinical trials or other testing of AMR-001 beyond those that we currently contemplate, or if we are required to conduct additional trials or testing of future product candidates beyond what we currently anticipate, or if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive, or if there are safety concerns, we may:

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

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

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

We initiated a Phase 2 clinical trial of AMR-001, enrolling our first patient in January 2012, and we are targeting enrolling approximately 160 patients over the course of a year or so. If the results of the Phase 2 clinical trial are positive and support Phase 3 development, we intend to initiate and complete one or more pivotal Phase 3 clinical trials before seeking regulatory approval to commercialize AMR-001. Our Amorcyte subsidiary is required to have certain validated and established manufacturing controls with respect to AMR-001 related to its safety, purity and potency when administered to patients. Manufacturing control issues will need to be addressed and resolved with the FDA if we seek to initiate a Phase 3 clinical trial of AMR-001. Specifically, we must develop a potency assay for AMR-001 and lot release specifications that correlate with AMR-001 activity or clinical response. We may not be successful in our efforts to address these chemistry, manufacturing and controls, or CMC, issues for AMR-001 in a manner satisfactory to the FDA. If we cannot initiate, or if we are delayed in initiating, a pivotal Phase 3 clinical program of AMR-001 as a

TABLE OF CONTENTS

result of our failure to satisfy the FDA's CMC concerns or otherwise, the timing of our regulatory submission for commercialization of AMR-001 could be delayed, or we may not be able to seek regulatory approval to commercialize AMR-001 at all.

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

The number of CD34+/CXCR4+-cells and the composition of the CD34+ cell population from bone marrow vary from patient to patient. These cells are the basis of our product candidate AMR-001. Such variability in composition could adversely affect our ability to manufacture these product candidates derived from a patient's bone marrow or to establish and meet acceptable specifications for release of the product candidate for use in a clinical trial or, if approved, for treatment of a particular patient. As a consequence, the development and regulatory approval process for these product candidates could be delayed or may never be completed.

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

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

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

We may not be able to initiate or continue clinical trials of AMR-001 (or other product candidates) if we are unable to locate and enroll a sufficient number of eligible patients to participate in the clinical trials required by the FDA or other regulatory authorities. We may also be unable to engage a sufficient number of clinical trial sites to conduct our trials. The challenge of enrolling patients will become more difficult if we are required by the FDA or a similar regulatory agency outside the United States to conduct a trial on a larger population than we currently anticipate. In that event, we might be required to seek patients to participate in our trials from Europe or other foreign jurisdictions, which could raise regulatory uncertainties and increase clinical trial costs. Moreover, because our PCT subsidiary does not currently have FDA registered manufacturing facilities operating outside of the United States, our ability to conduct trials outside of the U.S. may be constrained by our ability to transport trial materials to foreign destinations within the expiry period of such materials unless we commence operation outside of the United States.

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

Additional factors that may affect our ability to enroll patients in clinical trials include:

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

TABLE OF CONTENTS

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

The cell sorting system we are using in the Phase 2 clinical trial of AMR-001 is owned by an unaffiliated third party.

The essential cell sorting system that we are using in our Phase 2 clinical trial of AMR-001 is being provided to us by the unaffiliated third party that owns the system. Any lack of continued availability of the system, for any reason, would have a material adverse effect on our AMR-001 product development and commercialization efforts. Although there are other available systems in the marketplace, we have not evaluated their costs or safety and effectiveness, or whether AMR-001 would be compatible with such systems. Moreover, if the system becomes unavailable during or after Phase 2, we would need to demonstrate that the Phase 2 data obtained with this system are still relevant to future trials using cells sorted with other systems.

We may also use other third-party collaborators to help us develop or commercialize AMR-001 or future product candidates, and our ability to commercialize such candidates may be impaired or delayed if collaborations are unsuccessful.

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

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

If the potential of AMR-001 or our other cell therapy product candidates to address the indications that we are pursuing is not realized, or if we are unable to demonstrate in clinical trials that AMR-001 or any other cell therapeutic is safe and effective for the indications pursued, the value of our technology and development programs could be significantly reduced. Contractual arrangements between our Company and any licensors or collaborators may require us to pay royalties or make other payments in connection with the successful development of a product candidate. For example, even if we successfully commercialize AMR-001, we will have to pay a portion of any AMR-001 revenues to the former stockholders of Amorcyte as an earn out.

We are currently exploring in clinical development, the potential of Amorcyte's AMR-001 to address certain targeted cardiovascular indications, and the potential of Athelos' T-reg therapy for restoring normal immune responses. This technology is still in early stages of discovery and development, and our Amorcyte subsidiary has not proven in clinical trials that its product candidate will be safe and effective for the indications for which it intends to seek approval. Our Athelos subsidiary's T-reg therapeutic for autoimmune disorders is in earlier stages of clinical development. These and other cell therapy product candidates we may pursue are susceptible to various risks, including undesirable and unintended side effects, inadequate therapeutic efficacy or other characteristics that may prevent or limit their marketing approval or commercial use. For example, our Amorcyte subsidiary has not treated a sufficient number of patients to allow us to

TABLE OF CONTENTS

evaluate the most frequent or most serious adverse events that could occur with AMR-001. Any undesirable side effects that might be caused by AMR-001 (or future cell therapy product candidates) could interrupt, delay or halt clinical trials and could result in the denial of regulatory approval by the FDA or other regulatory authorities for any or all targeted indications. We could also be required to change the manner in which a product candidate is administered, which could require that additional clinical trials be conducted. If the potential of AMR-001, Athelos' T-reg therapeutic, or any other cell therapeutic product candidate of ours is not realized, whether as a result of unintended consequences or otherwise, the value of our technology and development programs could be significantly reduced.

Even if we obtain all applicable regulatory approvals and successfully commercialize one or more of our cell therapy candidates, contractual arrangements between our Company and a licensor, collaborator or other third party, as applicable, in connection with the respective product, may require that we make royalty or other payments to the respective third party, and as a result our Company would not receive all of the revenue derived from commercial sales of the respective product. For example, the Amorcyte Merger Agreement requires us to pay certain earn out payments following the first commercial sale of AMR-001 for the benefit of the former stockholders of Amorcyte, generally equal to 10% of net sales (or 30% of any sublicensing fees, royalties and milestone fees or profit sharing payments, in the event we license or otherwise grant an unaffiliated third party the right to commercialize or otherwise exploit AMR-001), less NeoStem's out-of-pocket clinical development costs not previously paid or reimbursed and other expenses. Also, the license agreements relating to the T-reg therapeutics being developed by Athelos include obligations to pay royalties on net sales of licensed products, maintenance fees and milestone fees upon events such as initiation of clinical trial stages, license application filings and regulatory approvals. Where such an agreement applies, the payment by us of the applicable royalties and other fees mean that our Company does not receive all of the revenue upon a successful commercialization of the respective product candidate.

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

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

Even if we are successful in developing a therapeutic application using our cell technologies, we still may be unsuccessful in creating a commercially viable and profitable business.

The commercial viability of our stem cell technologies may depend on our ability to successfully isolate and expand the number of stem cells collected through adult stem cell collection processes in order to achieve a therapeutically-viable dose. Today, the number of very small embryonic-like stem cells that can be isolated from the peripheral blood of an adult donor is relatively small and this volume of cells may not be sufficient for therapeutic applications. Cell expansion processes may thus prove to be a critical component of our adult stem cell collection, processing and storage services as it relates to the VSEL™ Technology and other potential cell technologies. There are many biotechnology laboratories attempting to develop cell expansion technology, but to date, cell expansion techniques remain very inefficient. There can be no assurance that such technology will be effective or available at all. The unavailability of cost effective and reliable expansion technologies could severely limit the commercial opportunities of our VSEL™ Technology program and other potential 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.

TABLE OF CONTENTS

Successful biotechnology development in general is highly uncertain and is dependent on numerous factors, many of which are beyond our control. While our AMR-001 product candidate, our Athelos program and our VSEL™ Technology 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.

Technological and medical developments or improvements in conventional therapies could render the use of cell therapy 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 cell therapy services, planned products and therapeutic efforts. There is no assurance that cell therapies will achieve the degree of success envisioned by us in the treatment of disease. Nor is there any assurance that new technological improvements or techniques will not render obsolete the processes currently used by us, the need for our services or our planned products. 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. We are focused on cell therapy, and if this field is substantially unsuccessful, this could jeopardize our success or future results. The occurrence of any of these factors may have a material adverse effect on our business, operating results and financial condition.

Cell therapies may not be successfully developed by us or others, and in such case, demand for the ancillary services that we provide (such as cell processing and manufacturing, adult stem cell collection, and processing and storage) may never develop.

The value of our development programs, as well as the value of the ancillary supporting services that we provide (such as our stem cell collection, processing and storage business, or the processing and manufacturing services offered by our PCT subsidiary), could be significantly impaired, and our ability to become profitable and continue our business could be materially and adversely affected, if cell therapies under development by us or by others to treat disease are not proven effective, demonstrate unacceptable risks or side effects or, where required, fail to receive regulatory approval. The therapeutic application of cells to treat serious diseases is currently being explored by a number of companies. Cells collected and used for the same individual are referred to as autologous cells and those collected from an individual who is not the user of the cells are referred to as allogeneic cells. To our knowledge, the only allowed therapeutic uses of stem cells in the U.S., other than in connection with clinical trials, involves hematopoietic stem cell transplants to treat certain types of blood-based cancers (hematopoietic stem cells are the stem cells from which all blood cells are made) and adult autologous cultured cartilage cells for implantation for the repair of symptomatic cartilage defects of the femoral condyle (the distal end of the femur). No other stem cell therapeutic products have received regulatory approval for sale in the U.S. While stem cell-based therapy has been reported to be susceptible to various risks, including some undesirable side effects and immune system responses, these problems have been primarily associated with allogeneic use. Inadequate therapeutic efficacy also is a risk that may prevent or limit approval or commercial use of adult stem cells, whether for autologous use or allogeneic use. In addition, the time and cost necessary to complete the clinical development and to obtain regulatory approval of new therapies using stem cells are expected to be significant. If a market for underlying cell therapies never materializes, the market for ancillary and supporting services would also suffer.

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

Many of PCT's customers are engaged in research, development, production and marketing. The amount of customer spending on research, development, production and marketing has a large impact on our revenues and profitability, particularly the amount customers choose to spend on outsourcing. Customers determine the amounts that they will spend based upon, among other things, available resources and their need to develop new products, which, in turn, is dependent upon a number of factors, including their competitors' research, development and production initiatives, and the anticipated reimbursement scenarios for specific products and

TABLE OF CONTENTS

therapeutic areas. In addition, consolidation in the industries in which our customers operate may have an impact on such spending as customers integrate acquired operations, including research and development departments and their budgets. Our customers finance their research and development spending from private and public sources. A reduction in spending by our customers could have a material adverse effect on our business, financial condition and results of operations. If our customers are not successful in attaining or retaining product sales due to market conditions, reimbursement issues or other factors, our results of operations may be materially impacted. Further, the nature and duration of PCT's contracts with customers, which may be subject to repeated renegotiation and amendments which change the objectives of our work and the milestones which determine when revenues are received by us, can yield varying revenues and profits, which may have an adverse effect on our revenues.

Adverse outcomes or limitations of our stem cell or cord blood collection and storage services, 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 or encounter limitations in connection with our stem cell or cord blood collection and storage services. For example, when stem cells are collected from a customer for storage, there is the possibility of an infection acquired from the apheresis process, which is the process of extracting stem cells from a patient's whole blood, which is an integral part of our collection process. Both our stem cell and cord blood collection and storage services may be subject to additional limitations, including (i) collection of insufficient quantities of stem cells for therapeutic applications; (ii) failure of the equipment supporting our cryopreservation storage service to function properly and thus maintain a supply of usable adult stem cells; and (iii) 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. We may not carry sufficient business interruption insurance and/or liability insurance to compensate for losses and claims that might arise in the event of such an interruption. 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.

In addition, the value of our cord blood storage services is related to the higher success rate of autologous cord blood transplants over unrelated ones. If medical research discovers new and more effective medical procedures that make allogeneic cord blood transplants safer and more effective, the clinical advantage of storing a child's umbilical cord blood for his or her own future therapeutic use may significantly decline.

We have limited manufacturing capabilities. In the event of regulatory approval of a commercial application of AMR-001, we may not be able to manufacture AMR-001 (or any other product that may be approved) in compliance with evolving regulatory standards or in quantities sufficient for commercial sale.

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

Components of therapeutic products approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with cGMP. Manufacturers of cell-based product candidates such as AMR-001 also must comply with the cGTP. In addition, therapeutic products may be required to modify their manufacturing process from time to time in response to FDA requests. Manufacture of live cellular-based products is complex and subjects companies to significant regulatory burdens that may change over time. We may encounter difficulties in the production of our product candidates due to our limited manufacturing

TABLE OF CONTENTS

experience. Although Amorcyte's cell processing services are provided "in-house" through its sister subsidiary PCT, we may not have sufficient manufacturing capacity to meet any commercial demand that might develop should AMR-001 demonstrate efficacy, receive necessary approvals and be cleared for commercialization. These difficulties could reduce sales of our products, if any are approved for marketing, increase costs or cause production delays, any of which could damage the reputation and diminish potential profitability.

We expect that we would need to significantly expand our manufacturing capabilities to meet potential demand for commercial production of product candidates that might attain regulatory approval. Such expansion would require additional regulatory approvals. We may also encounter difficulties in the commercial-scale manufacture that may be required following any regulatory approval. PCT is currently developing new processes and is in discussions with other companies to develop new instruments to improve manufacturing efficiency. Improving the speed and efficiency of our manufacturing process including cell sorters and other instruments PCT uses in connection with AMR-001 production is a key element of our business plan. We cannot provide assurances that we will be able to develop process enhancements that are acceptable to the FDA, on a timely basis, on commercially reasonable terms, or at all. If we fail to develop these improvements, we could face significantly higher capital expenditures than we anticipate in connection with AMR-001 development, increased facility and personnel costs and other increased operating expenses. We may need to demonstrate that product candidates manufactured using new processes or instruments are comparable to the product candidates used in clinical trials. Depending on the type and degree of differences, we may be required to conduct additional studies or clinical trials to demonstrate comparability.

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

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

We process and store adult autologous stem cells from our network of U.S. adult stem cell collection centers and the umbilical cord blood of customers of NeoStem Family Storage, LLC at PCT's facility in Allendale, New Jersey, and may do so at PCT's Mountain View, California, facility in the future. We also process and store cellular therapy products for clinical trials at PCT's facility in Allendale, New Jersey, and may do so at PCT's Mountain View, California, facility. If these facilities or the equipment in these facilities was to be significantly damaged or destroyed, we could suffer a loss of some or all of the stored adult autologous stem cells, cord blood units, and cellular therapy products. Depending on the extent of loss, such an event could reduce the ability of us, NeoStem Family Storage, LLC, and PCT to provide stem cells when requested, could expose us, NeoStem Family Storage, LLC, and PCT to significant liability from our customers, and could affect the ability to continue to provide adult autologous stem cells and umbilical cord blood preservation services and manufacturing of cellular therapy services and products. While we believe that we have insured against losses from damage to or destruction of our facilities consistent with typical industry practices, if we have underestimated our insurance needs, we may not have sufficient insurance to cover losses beyond the limits on its policies. Such events could have a material adverse effect on our value.

Furthermore, AMR-001 for our Amorcyte subsidiary's clinical trials is produced by PCT at PCT's facilities. Because PCT serves as Amorcyte's exclusive provider of all cell processing services (including production of AMR-001 for clinical trials), Amorcyte relies on PCT's Allendale or Mountain View facilities and on the continuing suitability of PCT's facility to provide necessary services. If PCT's Allendale or Mountain View facilities (or the equipment therein) are significantly damaged or destroyed, Amorcyte will likely experience significant disruptions to the manufacturing capacity for AMR-001, which capacity might not be quickly or inexpensively replaced. In such a situation, we may be required to negotiate agreements with third parties for cell processing services, which would likely increase our operating costs. In the event of a temporary or protracted loss of PCT's facility or equipment, it is possible that Amorcyte might not be able to transfer manufacturing to a third party. Even if Amorcyte could transfer manufacturing to a third party, the shift would likely be expensive and time-consuming, particularly since the new facility would need to comply with the necessary regulatory requirements and Amorcyte would need FDA approval before selling any

TABLE OF CONTENTS

products manufactured at that facility. Such an event could delay clinical trials or, if any Amorcyte product candidates are approved by the FDA, reduce sales of such products.

We have a limited marketing staff and budget.

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

For any other product candidate that receives marketing approval from the FDA, we would need either to hire a sales force with expertise in biologic products or to contract with a third party to provide a sales force to meet its needs.

We have no experience in the selling, marketing or distribution of biologic products. To achieve commercial success for any product that might be approved in the future for marketing, we would be required either to develop a sales and marketing organization or to outsource these functions to third parties.

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

The market for services related to the collection, preservation and expansion of cells has become increasingly competitive. Our competitors may have greater resources or capabilities or better technologies than do we, or may succeed in developing better service than do we and we may not be successful in competing with them. Additionally, the product development initiatives of our Amorcyte subsidiary face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do.

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

Historically, in the U.S. we have faced competition from other established operators of stem cell preservation businesses and providers of stem cell storage services. Today, there is an established and growing market for cord blood stem cell banking. We are aware of at least one other 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. We are also aware that other technologies are being developed, for example, to turn skin cells into cells that behave like embryonic stem cells or to harvest stem cells from the pulp of baby teeth. While these and other approaches remain in early stages of development, they may one day be competitive.

In addition, cord blood banks such as ViaCord, a Perkin Elmer company, or LifebankUSA, a Celgene company, easily could enter the field of adult stem cell collection because of their processing labs, storage facilities and customer lists. We estimate that, combined, there are approximately 75 cord blood banks in the U.S., approximately 36 of which are private autologous banks, meaning that the donor and recipient are the same, and approximately 39 of which are public allogeneic banks, meaning that the donor and recipient are

TABLE OF CONTENTS

not the same. Hospitals that have transplant centers to serve cancer patients may elect to provide some or all of the services that we provide. According to the National Marrow Donor Program, there are approximately 52 hospitals in the U.S. with stem cell transplant centers. These competitors may have better experience and access to greater financial resources than do we. In addition, other established companies may enter our markets and compete with us. There can be no assurance that we will be able to compete successfully.

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

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

Amorcyte's product candidate generally targets patients without other revascularization options. Therefore, we do not believe that Amorcyte will compete directly with pharmaceutical therapies being developed to treat less severe stages of our target indications. However, to the extent that therapies are developed that reverse the progression of the ischemic damage or improve blood flow to damaged tissue, they could have the effect of reducing demand for Amorcyte's product candidate. In addition, because Amorcyte's product candidate may require the removal of bone marrow from the patient, potential competing products that do not require this invasive procedure may have a competitive advantage against Amorcyte products in terms of patient appeal. New pharmaceutical agents or devices that improve the repair of cardiac injury after a heart attack, with the result that fewer patients develop ischemic heart failure, would also represent a competitive threat for AMR-001. Furthermore, cell-based therapies, such as skeletal myoblasts, bone marrow-derived stem cells and adipose cells are being pursued by companies such as Aastrom Biosciences, Inc., Angioblast Systems, Inc., Athersys, Inc., Pluristem Therapeutics, Inc., ReNeuron Group, Stemedica Cell Technologies Inc. and Bioheart, Inc. Some other companies, such as Cytori and Miltenyi, are developing devices to facilitate the production of therapeutic cell populations by clinicians for the treatment of Amorcyte's target indications. Such devices may be approved by the FDA under a less rigorous regulatory process, and less extensive clinical testing and manufacturing controls than Amorcyte is required to pursue for AMR-001. Development and approval of such a device on the basis of this more limited dataset may take less time than development of AMR-001 and substantially affect our ability to market an Amorcyte product candidate if approved.

As a general matter, our Company may also face competition in the future from other companies that are researching and developing cell therapies. We are aware of many companies working in this area. Many of the companies competing against us have financial and other resources substantially greater than ours. In addition, many of these competitors have significantly greater experience in testing pharmaceutical and other therapeutic products, obtaining FDA and other regulatory approvals of products, and marketing and selling those products. If we obtain necessary regulatory approval and commences significant commercial sales of any products, we will also be competing with respect to manufacturing efficiency and marketing capabilities, areas in which we have limited or no commercial-scale experience. Mergers and acquisitions in the pharmaceutical and

TABLE OF CONTENTS

biotechnology industries may result in even more resources being concentrated by our competitors. Competition may increase further as a result of advances made in the commercial applicability of our technologies and greater availability of capital for investment in these fields.

As a result, competitors of ours may:

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

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 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 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.

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

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

TABLE OF CONTENTS

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

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

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

Weaknesses in our existing transportation carriers include the lack of a true point-to-point chain of control, non-controlled X-ray and inspection, no guarantee of package orientation, handling or storage conditions and in many cases no standard, documented and tracked operating procedures. While reliable ground carriers with experience in the transport of blood products already exist in major metropolitan areas of the country, air carriers meeting such needs are limited. We evaluated the major domestic express carriers, and concluded that even their highest-level services are inadequate to meet the sector's needs. However, we identified and validated only one specialty air carrier as a transportation partner, which specializes in shipping medical products, including whole blood and blood products, tissue for transplantation, and diagnostic specimens. There are presently few alternative sources for the safe transportation of cell therapy products. If this carrier should cease its medical shipping operations or otherwise be unable to properly meet our transportation needs, the lack of access to safe and effective transportation options could adversely affect our business.

We may be subject to significant product liability claims and litigation, including potential exposure from the use of our Amorcyte subsidiary's product candidates in human subjects, and our insurance may be inadequate to cover claims that may arise.

Our business exposes us to potential product liability risks inherent in the testing, processing and marketing of cell therapy products. Such liability claims may be expensive to defend and result in large judgments against us. We face an inherent risk of product liability exposure related to the testing of AMR-001 and any future product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop following requisite approvals therefor. No product candidate has been widely used over an extended period of time, and therefore safety data is limited. Cell therapy companies derive the raw materials for manufacturing of product candidates from human cell sources, and therefore the manufacturing process and handling requirements are extensive, which increases the risk of quality failures and subsequent product liability claims. We presently have product liability insurance limited to \$5 million per incident and \$5 million in annual aggregate. In connection with the launch of our Phase 2 clinical trial of AMR-001, a clinical trial endorsement was added to our product liability policy, including Amorcyte as an additional insured.

TABLE OF CONTENTS

We will need to increase our insurance coverage when we begin commercializing product candidates, if ever. If and when any product enters the commercialization phase, we may not be able to obtain or maintain product liability insurance on acceptable terms with adequate coverage or at all. If we are unable to obtain and maintain adequate insurance, or if claims against us substantially exceed our coverage, then our financial position could be significantly impaired.

Whether or not we are ultimately successful in any product liability litigation that may arise, such litigation could consume substantial amounts of our financial and managerial resources and could result in:

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

We also maintain errors and omissions, directors and officers, workers' compensation and other insurance appropriate to our business activities. If we were to be subject to a claim in excess of this coverage or to a claim not covered by our insurance and the claim succeeded, we would be required to pay the claim from our own limited resources, which could have a material adverse effect on our financial condition, results of operations and business. Additionally, liability or alleged liability could harm our business by diverting the attention and resources of our management and damaging our reputation and that of our subsidiaries.

RISKS RELATED TO GOVERNMENT REGULATION

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

Facilities engaged in the recovery, processing, storage, labeling, packaging or distribution of any HCT/Ps, or the screening or testing of a donor, are required to register with the FDA. Any third party retained by us to process our samples must be similarly registered with the FDA and comply with HCT/P regulations. We and any third-party processors are also required to comply with FDA's cGTP regulations. If we, or any third-party processors, fail to register or update registration information in a timely way, or fail to comply with cGTP regulations, we will be out of compliance with FDA regulations which could adversely affect our business. Adverse events or other considerations in the field of stem cell therapy that may occur could result in greater governmental regulation of our business, creating increased expenses for our stem cell collection and storage services.

Our manufacture of certain cellular therapy products for ourselves or on behalf of our customers triggers additional FDA requirements applicable to HCT/Ps, or products comprised of HCT/Ps, which are regulated as a drug, biological product, or medical device. FDA or cGMP, are federal regulations that govern the manufacture, processing, packaging and holding of cell therapy products regulated as drugs. FDA's Quality System Regulation, or QSR, similarly govern the manufacture, processing, packaging and holding of cell therapy products regulated as medical devices. We must comply with cGMP or QSR requirements including quality control, quality assurance and the maintenance of records and documentation for certain products. We may be unable to comply with these cGMP or QSR requirements and with other FDA, state and foreign regulatory requirements. These requirements may change over time and we or third-party manufacturers may be unable to comply with the revised requirements.

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

TABLE OF CONTENTS

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

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

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

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

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

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

TABLE OF CONTENTS

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 but should not be classified as a medical device, biologic or drug. There can be no assurance that the FDA will not classify the adult stem cells collected, processed and stored through our collection services as a medical device, biologic or drug. Any such classification 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.

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

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

One subject in the AMR-001 Phase 1 study died from ventricular fibrillation soon after infusion of the product candidate AMR-001. The ventricular fibrillation was attributed to recurrent myocardial infarction from stent thrombosis preceding AMR-001 infusion. This subject's death resulted in a clinical hold during the Phase 1 trial. The hold was removed upon FDA's review of the complete documentation on the patient and changes to the enrollment process that were submitted by Amorceyte.

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

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

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

TABLE OF CONTENTS

Any product for which we obtain marketing approval will be subject to extensive ongoing regulatory requirements, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, when and if any of them are approved.

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

- changes in product manufacturing processes;
- restrictions on product marketing;
- restrictions on product distribution;
- requirements to conduct post-marketing clinical trials;
- warning letters;
- withdrawal of a product from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenue;
- suspension or withdrawal of regulatory approvals;
- refusal to permit the import or export of our products;
- product seizure;
- injunctions; or
- imposition of civil or criminal penalties.

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

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

TABLE OF CONTENTS

countries. We may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize any products in any market and therefore may not be able to generate sufficient revenues to support our business.

Our business involves the use of hazardous materials that could expose our Company to environmental and other liability.

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

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

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

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. We are obligated to comply with privacy and security standards adopted under HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (the "HITECH Act"). As a result of the HITECH Act, our compliance burden has increased, and we will be subject to audit and enforcement by the federal government and, in some cases, enforcement by state authorities. We may 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.

TABLE OF CONTENTS

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

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

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

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

Although we intend to conduct our business in compliance with applicable laws and regulations and believe that we are in material compliance with applicable governmental healthcare laws and regulations, the laws and regulations affecting our business and relationships are complex, and many aspects of such relationships have not been the subject of judicial or regulatory interpretation. Furthermore, the cell therapy industry is the topic of significant government interest, and thus the laws and regulations applicable to us and our strategic partners and customers and to their business are subject to frequent change and/or reinterpretation and there can be no assurance that the laws and regulations applicable to us and our strategic partners and customers will not be amended or interpreted in a manner that adversely affects our business, financial condition, or operating results. For example, the federal government could issue tighter restrictions on private

TABLE OF CONTENTS

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

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

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

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

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

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

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

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

TABLE OF CONTENTS

programs and increase in uninsured populations could have a negative impact on the demand for our services to the extent they relate to products and services which are reimbursed by government and private payors.

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

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

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

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

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

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

The Stem Cell Therapeutic and Research Act of 2005 established requirements for a national donor bank of cord blood and for a national network for matching cord blood to patients. The federal government has entered into contracts with the National Marrow Donor Program (NMDP) to carry out the provisions of this legislation. Under these contracts, the NMDP acts as the nation’s Cord Blood Coordinating Center and actively recruits parents for cord blood donations. The NMDP also administers the National Cord Blood Inventory (NCBI), which has a goal of collecting 150,000 cord blood units that may be used for patients throughout the United States. The legislation also authorized federal funding to support its goals and requirements. Parents may opt to donate their newborn’s cord blood to the public registry and to use the public registry if stem cells from cord blood are needed for treatment purposes. In this regard, an important advantage of the national, public cord blood collection system is that it costs nothing for patients to donate

TABLE OF CONTENTS

their cord blood. This national, public cord blood registry has also been widely accepted and supported by the medical community, so physicians and others in the health care community may be less willing to use or recommend a private cord blood facility when public collection is available. Additionally, major medical organizations, including the American Academy of Pediatrics (AAP), the American Medical Association (AMA), the American College of Obstetricians and Gynecologists (ACOG), and the American Society of Blood and Marrow Transplantation (ASBMT) do not recommend private storage, except in very limited instances. Further, we believe that the medical community is currently supportive of public cord blood donation and the national cord blood registry that is administered by the National Marrow Donor Program. For these reasons, a significant number of patients may choose to use to donate their cord blood to the national, public cord registry instead of privately banking cord blood. The medical community could also issue stronger recommendations and opinions that favor the use of the national registry. Therefore, the existence and proliferation of the national registry may adversely affect our business.

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

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

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

RISKS RELATED TO OUR INTELLECTUAL PROPERTY

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

We own or hold exclusive rights to over 30 issued patents and over 80 pending patent applications. In January 2012, the U.S. Patent Office granted Amorcyte U.S. Patent No. 8,088,370 which expands the breadth of AMR-001 protection to include all treatments of vascular injury caused by vascular insufficiency. Given the nature of our therapeutic programs, our patents and patent applications cover certain methods of isolating, storing and using stem cells, including very small embryonic stem cells, as well as compositions and methods relating to T regulatory cells. There can be no assurance that the patent applications to which we hold rights will result in the issuance of patents, or that any patents issued or licensed to us will not be challenged and held to be invalid or of a scope of coverage that is different from what we believe the patent’s scope to be. Our success will depend, in part, on whether we can: obtain patents to protect our own products and technologies; obtain licenses to use the technologies of third parties if necessary, which may be protected by patents; and protect our trade secrets and know-how. Our inability to obtain and rely upon patents essential to our business may have a material adverse effect on our business, operating results and financial condition.

TABLE OF CONTENTS

Our ability to successfully commercialize AMR-001, or any other product candidate, depends in large part on our ability to obtain and maintain patent protection for our product candidates. Issued patents may be challenged by third parties, resulting in patents being invalidated, rendered unenforceable, narrowed in scope, or enabling a third party to circumvent any such issued patents. The patent position of biotechnology companies is generally highly uncertain, involves complex legal and factual questions and has been the subject of much litigation and recent court decisions introducing uncertainty in the strength of patents owned by biotechnology companies. The legal systems of some foreign countries do not favor the aggressive enforcement of patents, and the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Therefore, any patents that we own or license may not provide sufficient protection against competitors.

The claims of the issued patents, and the claims of any patents which may issue in the future and be owned by or licensed to us, may not confer on us significant commercial protection against competing products. Also, any pending patent applications may not issue, and we may not receive any additional patents. The patents might not contain claims that are sufficiently broad to prevent others from utilizing the covered technologies. For instance, patents relating to our AMR-001 product candidate are limited to an isolated and nonexpanded population of autologous mononuclear cells enriched for CD34⁺ cells, which further contains a subpopulation of potent CD34⁺/CXCR4⁺ cells that have CXCR4-mediated chemotactic activity. Products that do not contain enriched CD34⁺/CXCR4⁺ cells, or which contain populations of cells that derive efficacy from a different mechanism of action, may not infringe the existing AMR-001 patents. Consequently, our competitors may independently develop competing products that do not infringe our patents or other intellectual property. To the extent a competitor can develop similar products using a different chemistry, these patents will not prevent others from directly competing with us.

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

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

We may be unable to protect our intellectual property from infringement by third parties. We may become involved in lawsuits to protect or enforce patents (including the patents of potential collaborators or licensors), which could be expensive and time consuming.

Despite our efforts to protect our intellectual property, third parties may infringe or misappropriate our intellectual property, including infringement of patents held by, or the patents of the respective potential collaborators or licensors of, our Amorcyte subsidiary. 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.

TABLE OF CONTENTS

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

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

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

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.

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

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

As a result of intellectual property infringement claims, or in order to avoid potential claims, Amorcyte may choose, or be required, to seek a license from the third party. These licenses may not be available on acceptable terms, or at all. Even if Amorcyte is able to obtain a license, the license would likely obligate the licensee to pay license fees or royalties or both, and the rights granted to the licensee might be nonexclusive, which could result in competitors gaining access to the same intellectual property. Ultimately, we could be

TABLE OF CONTENTS

prevented from commercializing a product, or be forced to cease some aspect of our business operations, if, as a result of actual or threatened patent infringement claims, we are unable to enter into licenses on acceptable terms. All of the issues described above could also affect potential collaborators to the extent our Amorcyte subsidiary has any collaborations then in place, which would also affect the success of the collaboration and therefore the success of our Company as a whole.

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

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.

Certain of our 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.

If we are unable to protect the confidentiality of our proprietary information and know-how, our competitive position would be impaired.

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

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

Many countries, including some countries in Europe, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, most countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may be limited to monetary relief and may be unable to enjoin infringement, which could materially

TABLE OF CONTENTS

diminish the value of the patent. Compulsory licensing of life-saving products is also becoming increasingly popular in developing countries, either through direct legislation or international initiatives. Such compulsory licenses could be extended to our Amorceye subsidiary's respective product candidates, which may limit our potential revenue opportunities, including with respect to any future revenues which may result from AMR-001.

Changes to U.S. Patent Law may have a material adverse effect on our intellectual property rights.

The Leahy-Smith America Invents Act (AIA), which was signed into law on September 16, 2011, significantly changes United States patent law. It may take some time to establish what the law means, since regulations that will govern how the new law is implemented have not yet been established, and since the law has not yet been implemented, it has not yet been interpreted by the lower courts, and reviewed by either the Federal Circuit Court of Appeals or the Supreme Court, a process that will take years. The first major change is that AIA switches the U.S. patent system from a "first to invent" system to a "first to file" system. Once the first to file system is in effect, there is a risk that another company may independently develop identical or similar patents at approximately the same time, and be awarded the patents instead of us. Once "first to file" is implemented, there will no longer be a need to determine who is the inventor of an invention. As a result, for the second major change, AIA abolishes interference proceedings, and establishes derivation proceedings to replace interference proceedings in all cases in which the time period for instituting an interference proceeding has not lapsed where an inventor named in an earlier application derived the claimed invention from a named inventor. Once derivation proceedings are in effect, there is a risk that the inventorship of any pending patent application can be challenged for reasons of derivation. The third major change is that AIA establishes post-grant opposition proceedings that will apply to patent applications filed after "first to file" becomes effective. Post-grant opposition will enable a person who is not the patent owner to initiate proceedings in the Patent office within 9 months after the grant of a patent that can result in cancellation of a patent as invalid. Therefore there is a risk that any of our patents once granted after the effective date of these provisions of the new law (March 16, 2013) may be subject to post-grant opposition, which will increase uncertainty on the validity of any newly granted patent or can ultimately result in cancellation of the patent.

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 are currently 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 are 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.

TABLE OF CONTENTS

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

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

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

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

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

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

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

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

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

Our businesses in China are subject to government regulation that limit or prohibit direct foreign investment, limiting our ability to control these businesses, and making future pursuit of these businesses inadvisable.

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 business historically was limited.

TABLE OF CONTENTS

If the relevant Chinese authorities find us or any 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.

In December 2011, China's Ministry of Health announced its intention to more tightly regulate stem cell clinical trials and the use of stem cell therapeutic treatments in the PRC. As a result of this and the factors noted above, the Company has determined to take steps to restrict, and expects to ultimately eliminate, its regenerative medicine business in the PRC.

Early termination of cooperative relationship with local hospitals due to tightened and uncertain regulatory environment may subject us to damages for the hospitals' direct and indirect losses; we may suffer other costs related to our winding down of our China regenerative medicine activities.

On December 16, 2011, the SFDA and Ministry of Health ("MOH") jointly issued a notice to halt unproven stem-cell clinical trials and suspend new application for stem-cell clinical trials until July 1, 2012. This ban has significantly added risk associated with our operation in China. Given the nature and extent of such notice as well as recent tightening in Chinese government's scrutiny of VIE structures in the prohibited business sectors, we are seeking to unilaterally terminate our cooperative agreements with local hospitals on cell-based therapies prior to the end of their term. In the event of a claim of default by the hospitals, we may be liable for damages for those hospitals' direct and indirect losses resulting from our early termination of the cooperative agreements. Although the cooperative agreements provide that either side may terminate the agreements due to a force majeure event that includes adverse changes in government regulations directly affecting the performance of these agreements, the hospitals might claim that the aforesaid change and uncertainty of the regulatory environment does not constitute a force majeure event. In such event, we may need to litigate whether we had legitimate grounds to early terminate the agreements, which would be subject to the determination in a Chinese venue. We could also be exposed to other costs associated with the winding down of our PRC regenerative medicine business such as employee severance costs.

We may suffer losses if we cannot utilize our assets in China.

The Company's Beijing laboratory facility was originally intended for stem cell research and development, but has been equipped to provide comprehensive cell manufacturing, collection, processing and storage capabilities to enable the PCT business model to launch in the PRC and provide cells for clinical trials. The lease for this facility expires in May 2012 and the Company is considering its options with respect to extending this lease to allow for manufacturing for clinical trials in Asia. If the Company does not determine to renew the lease due to limitations on its utility under the new regulatory initiatives in China or otherwise, the Company may incur certain expenses in connection with returning the premises to the landlord.

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 domestic variable interest entities, or VIEs: Tianjin Niou Bio-Technology Ltd., or Tianjin Neo Bio-Technology, and Beijing Ruijieao Bio-Technology Ltd., or Beijing Ruijieao, each a Chinese domestic company controlled by the Chinese employees of NeoStem (China), Inc., our wholly foreign-owned entity, or the WFOE, through various business agreements, referred to, collectively, as the VIE documents. Tianjin Neo-Biotechnology conducts operations formerly conducted by another Company VIE, Qingdao Neo Biotechnology. We control these companies and operate these businesses through contractual arrangements with the companies and their individual owners, but we have no direct equity ownership or control over these companies. Our contractual arrangements may not be as effective in providing control over these entities as direct ownership. For example, the VIEs could fail to take actions required for our business or fail to conduct business in the manner we desire despite their contractual obligation to do so. These companies are able to transact business with parties not affiliated with us. If these companies fail to perform under their agreements with us, we may have to rely on legal remedies under PRC law, which may

TABLE OF CONTENTS

not be effective. In addition, we cannot be certain that the individual equity owners of the VIEs would always act in our best interests, especially if they have no other relationship with us.

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

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

In addition, the Ministry of Commerce, or the MOFCOM, promulgated the *Rules of Ministry of Commerce on Implementation of Security Review System of Mergers and Acquisitions of Domestic Enterprises by Foreign Investors* in August 2011, or the MOFCOM Security Review Rules, to implement the *Notice of the General Office of the State Council on Establishing the Security Review System for Mergers and Acquisitions of Domestic Enterprises by Foreign Investors* promulgated on February 3, 2011, or Circular No. 6. The MOFCOM Security Review Rules came into effect on September 1, 2011 and replaced the *Interim Provisions of the Ministry of Commerce on Matters Relating to the Implementation of the Security Review System for Mergers and Acquisitions of Domestic Enterprises by Foreign Investors* promulgated by MOFCOM in March 2011. According to these circulars and rules, a security review is required for mergers and acquisitions by foreign investors having “national defense and security” concerns and mergers and acquisitions by which foreign investors may acquire the “de facto control” of domestic enterprises having “national security” concerns. In addition, when deciding whether a specific merger or acquisition of a domestic enterprise by foreign investors is subject to the security review, the MOFCOM will look into the substance and actual impact of the transaction. The MOFCOM Security Review Rules further prohibit foreign investors from bypassing the security review requirement by structuring transactions through proxies, trusts, indirect investments, leases, loans, control through contractual arrangements or offshore transactions. There is no explicit provision or official interpretation stating that our business falls into the scope subject to the security review, and there is no requirement for foreign investors in those mergers and acquisitions transactions already completed prior to the promulgation of Circular No. 6 to submit such transactions to MOFCOM for security review. The enactment of the MOFCOM National Security Review Rules specifically prohibits circumvention of the rules through VIE arrangement in the area of foreign investment in business of national security concern. Although we believe that our business, judging from its scale, should not cause any concern for national security review at its current state, there is no assurance that MOFCOM would not apply the same concept of anti-circumvention in the future to foreign investment in prohibited areas through VIE structure, the same way that our investment in China was structured.

For so long as we own an interest in Erye, we expect to rely, in part, on dividends paid by Erye to supply cash flow for our U.S. business, and statutory or contractual restrictions may limit their ability to pay dividends to us.

For so long as we own an interest in Erye, we intend to rely partly on dividends paid to us under the October 2009 Joint Venture Agreement, attributable to our 51% ownership interest in Erye, to meet our future cash needs. Pursuant to the Joint Venture Agreement that governs the ownership and management of Erye, for the three-year period commencing on the first day of the first fiscal quarter after the Joint Venture Agreement became effective distributions are made as follows: (i) 49% of undistributed profits (after tax) will be distributed to EET and loaned back to Erye for use in connection with its construction of the new Erye facility (to be repaid gradually after construction is completed); (ii) 45% of the net profit after tax will be

TABLE OF CONTENTS

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 Erye only out of accumulated distributable earnings, if any, as determined in accordance with accounting standards and regulations in China. Moreover, Erye is 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 Erye. In addition, if Erye incurs additional debt on its own behalf to finance the building of the new facility in the future, the instruments governing the debt may restrict Erye's or the joint venture's ability to pay dividends or make other distributions to us. This may diminish the cash flow we receive from Erye's operations, which would have a material adverse effect on our business, operating results and financial condition.

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

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

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

We prepare our financial statements in U.S. dollars, while our underlying businesses operate in two currencies, U.S. dollars and Chinese Renminbi. It is anticipated that our Chinese operations will conduct their operations primarily in Renminbi and our U.S. operations will conduct their operations in dollars. At the present time, we do not expect to have significant cross currency transactions that will be at risk to foreign currency exchange rates. Nevertheless, the conversion of financial information using a functional currency of Renminbi will be subject to risks related to foreign currency exchange rate fluctuations. The value of Renminbi against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in China's political and economic conditions and supply and demand in local markets. As we have

TABLE OF CONTENTS

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.

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 lose rights to certain business assets and our business, operating results and financial condition may be materially harmed.

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

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

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

According to *Good Manufacturing Practices for Pharmaceutical Products (revised edition 2010)*, or the New GMP Rules promulgated by the Ministry of Health of the PRC on January 17, 2011 which became effective on March 1, 2011, all the newly constructed manufacturing facilities of drug manufacture enterprises in China shall comply with the requirements of the New GMP Rules, which are stricter than the original GMP standards. Therefore, should Erye fail to maintain its cGMP certifications in accordance with the New GMP Rules 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

TABLE OF CONTENTS

related activities. Government regulations may substantially increase our costs for developing, licensing, manufacturing and marketing any products or services, which could have a material adverse effect on our business, operating results and financial condition.

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

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

Erye's financial performance is heavily dependent on government pricing policies and procedures, which are subject to change. The *Rules on Introduction of Suzhou's Local Enterprises Produced Drugs into Suzhou's Local Medical Insurance Drugs Catalogue*, which was promulgated in 2006, may soon cease to be effective. The cancellation of such Rules would likely reduce Erye's sales and profits. On March 2, 2011, the National Development and Reform Commission issued price cuts for drugs covered by national medical insurance which substantially impacts two of Erye's drugs. It is anticipated that the price of Piperacillin Sodium Sulbactam Sodium will decrease by 50% and the price of Ligustrazine Phosphate will be cut by 75%; in 2011 the price reduction experienced by Erye on these products was approximately 24%. In 2011 Piperacillin Sodium Sulbactam Sodium accounted for approximately 5% of sales and Ligustrazine Phosphate accounted for approximately 1% of sales. These policies regarding drug pricing and the resulting price reductions experienced by Erye will likely negatively affect the offers presented to us in connection with the divestiture of our 51% interest in Erye that we are pursuing.

PRC policies limiting the use of antibiotics may have a material adverse effect on Erye's and our results of operations and financial condition.

Recently, the PRC Ministry of Health issued, for public comment, a draft policy "Administrative Measures on Clinical Use of Antibiotics" to curb their overuse. The proposed guidelines set forth three categories of antibiotics, which include (1) restricted, (2) non-restricted, and (3) special-use only. According to the October 12, 2011 China Healthcare report published by Deutsche Bank, AG (the "China Healthcare report"), it has been projected that the limitation of antibiotic usage in China will reduce the historical compound annual growth rate which has been approximately 20%. According to the China Healthcare report, it has been estimated that China's population consumes about ten times the global per capita average of antibiotics. These regulations have not been finalized but issuance of a draft policy has created uncertainty on the part of distributors and has reduced purchases by distributors and in part has contributed to sales reductions in 2011. This draft policy regarding antibiotic use and the uncertainty that has been created will likely negatively affect the offers that have been presented to us.

Erye's production is concentrated in a small number of production lines and Erye is operating in a new facility.

Erye began transferring its operations to its new manufacturing facility in January 2010. The construction of this facility is substantially complete. The relocation and new production lines have been completed and have received cGMP certification. To date Erye has received the following SFDA cGMP certifications:

- solvent crystallization sterile penicillin
- freeze dried raw sterile penicillin
- penicillin
- cephalosporin powder for injection

TABLE OF CONTENTS

- freeze dried powder for injection
- its capsule line.

Erye's production is concentrated in a small number of production lines. Any interruptions in production with respect to those lines will have a material adverse effect on Erye's business and ours.

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

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

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

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

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

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 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.

On December 16, 2011, China's Ministry of Health announced its intention to more tightly regulate stem cell clinical trials and stem cell therapeutic treatments in the PRC. The Ministry of Health ordered an immediate halt to "unapproved stem cell clinical trials and applications," and put applications for new stem cell trials on hold until July 1, 2012. For those clinical trials for stem cell products already approved by the SFDA, the Clinical Trial Approval Instructions and the Good Clinical Practice, or GCP, shall be strictly followed, with unwarranted changes to the approved clinical trial protocol and profit-seeking activities strictly forbidden. As a result of this and other factors, the Company has determined to take steps to restrict, and expects to ultimately eliminate, its regenerative medicine business in the PRC. We are currently investigating the potential impact of the Ministry of Health's announcement, as well as other regulatory initiatives and regulations in China, on potential PRC-based operations through our Beijing Facility.

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

TABLE OF CONTENTS

awards to our officers, directors and employees, some of whom are PRC citizens. Circular 78 may require our officers, directors and employees who receive option grants and are PRC citizens to register with the SAFE. We believe that the registration and approval requirements contemplated in Circular 78 will be burdensome and time consuming. If it is determined that any of our equity compensation plans are subject to Circular 78, failure to comply with such provisions may subject us and participants of our equity incentive plan who are PRC citizens to fines and legal sanctions and prevent us from being able to grant equity compensation to our PRC employees. In that case, our ability to compensate our officers, directors and employees through equity compensation would be hindered and our business operations may be adversely affected.

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

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

RISKS RELATED TO OUR SECURITIES

We anticipate that we will need substantial additional financing in the future to continue our operations. If we are unable to raise additional capital as needed, we may be forced to delay, reduce or eliminate one or more of our product development programs, cell therapy initiatives or commercialization efforts.

We anticipate that we will require additional capital to fund our current operating plan, including our existing U.S.-based cell therapy operations (such as clinical trials of AMR-001, development of our VSEL™ technology and a T-cell therapeutic, our stem cell collection and storage business, and our cell manufacturing and processing operations).

Our research and development expenses have increased with the addition to our Company of our Amorceyte subsidiary, particularly as the Phase 2 clinical trial enrolls with respect to AMR-001. AMR-001 is in the development stage and will require significant investment before it can be commercialized. We anticipate that AMR-001 will not be commercially available for a number of years, if ever. Even if we raise additional capital in the event that Amorceyte's Phase 2 clinical trial of AMR-001 produces positive results, it is anticipated that it will be necessary to enter into one or more collaboration agreements with one or more third parties to conduct and fund additional clinical trials, including larger, potentially pivotal Phase 3 clinical trials. If we are not able to enter into collaboration agreements on terms that are acceptable to us, we will need to raise additional capital to fund these trials or otherwise delay or abandon the trials. In addition, subject to obtaining regulatory approval of any present or future Amorceyte product candidate, we expect to incur significant commercialization expenses for product sales and marketing.

Our future capital requirements will depend on many factors, including:

- The scope, progress and results of our historic cell therapy research, development, processing and manufacturing programs (including any revenues generated by our subsidiary PCT) and our adult and cord blood stem cell collection and storage business;
- the scope, progress, results, costs, timing and outcomes of the clinical trials of AMR-001 and any other product candidates;
- the scope, progress and results of other development programs being conducted by our Amorceyte subsidiary;
- the timing of entering into, and the terms of, any collaboration agreements with one or more third parties for one or more product candidates;

TABLE OF CONTENTS

- the timing of and the costs involved in obtaining regulatory approvals for our product candidates, a process which could be particularly lengthy or complex given the FDA's limited experience with marketing approval for cell therapy products;
- the costs of operating, expanding and enhancing our manufacturing facilities and capabilities to support our clinical activities and, if any product candidates are approved, our commercialization activities;
- the costs of maintaining, expanding and protecting our intellectual property portfolio, including potential litigation costs and liabilities;
- revenues received from sales of our product candidates, if approved by the FDA; and
- if and when there is a divestiture of Erye.

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

Our cash requirements may vary materially from those now planned because of expenses relating to marketing, advertising, sales, distribution, research and development and regulatory affairs (including the expenses related to clinical trials), as well as the costs of maintaining, expanding and protecting our intellectual property portfolio, including potential litigation costs and liabilities. See also the discussion above under the caption "Erye may require additional lines of credit and bank loans." Additional financing may not be available when needed or may not be available on terms acceptable to us. Our inability to obtain necessary capital or financing to fund these needs could adversely affect our business, results of operations and financial condition.

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

As of March 5, 2012, there were 114,348,438 shares of our Common Stock outstanding. In 2011, our Common Stock traded as low as \$0.43 and as high as \$2.10, and in 2010 traded as low as \$1.10 and as high as \$3.50. In addition to our low stock trading volume, some of the other factors which may contribute to our stock's price volatility include the issuance of a significant number of shares of our Common Stock or securities convertible into Common Stock in a short period of time, announcements of government regulation, new products or services introduced by us or by our competition, the status of our clinical trials, healthcare legislation, trends in health insurance, litigation, fluctuations in operating results, our success in commercializing our business, market conditions for cell therapy stocks or healthcare stocks in general as well as economic recession. We cannot assure you that the market price of our shares of Common Stock will not fluctuate or decline significantly in the future. Some of the factors that could negatively affect our share price or result in fluctuations in the price or trading volume of our shares of Common Stock include those set forth under "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements".

TABLE OF CONTENTS

Any adverse development relating to any of our product candidates, such as a significant clinical trial failure, could substantially depress our stock price and prevent us from raising additional capital.

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

The nature of the business of our Amorcyte subsidiary could subject the trading prices of our Common Stock to additional volatility.

The stock market in general and the market for biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. While the market price of our Common Stock has been historically volatile, the clinical trials and additional development activities being undertaken through our Amorcyte subsidiary may contribute to additional volatility of the market price of our Common Stock, as investors react to the results of these clinical trials of product candidates and those of our competitors. In addition to the foregoing, factors that could contribute to enhanced volatility of our stock price include:

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

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

TABLE OF CONTENTS

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

The issuance of Common Stock as mandatory redemption payments, dividend payments or upon conversion of some or all of our Series E Preferred Shares issued in November 2010 will dilute the ownership interests of our existing holders of our shares of Common Stock (as of March 5, 2012, 6,270,821 Series E Preferred shares were outstanding, convertible into an aggregate of 3,823,671 shares of our Common Stock). We are permitted to make each monthly mandatory redemption payment in shares of our Common Stock (at a discounted formula price), cash, or a combination of the two, subject to the terms governing our Series E Preferred Shares. In the past, we have elected to pay a portion (if not all) of each mandatory redemption payment in shares of our Common Stock, and may continue to do so. Although the dollar amount of such redemption payments are known, to the extent paid in shares of our Common Stock, the number of shares to be issued in connection with such redemption payments fluctuates based on our stock price. Any sales or perceived sales in the public market of our shares of Common Stock issuable upon such mandatory redemption payments or upon conversion could adversely affect prevailing market prices of our shares of Common Stock. The issuance of Common Stock upon conversion of the Series E Preferred Shares or upon such redemption payments may also have the effect of reducing our net income per share. In addition, the existence of the Series E Preferred Shares may encourage short selling by market participants because the conversion of the Series E Preferred Shares or the existence of the redemption payments could depress the market price of our shares of Common Stock. The number of shares issuable upon conversion of the Series E Preferred Shares is subject to weighted average antidilution adjustment.

If in the future we issue additional Common Stock, or securities convertible into or exchangeable or exercisable for Common Stock, our stockholders will experience additional dilution, and any such issuances may result in downward pressure on the price of our Common Stock.

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

Investors will be subject to increased dilution upon conversion of our outstanding Series B preferred stock and upon the exercise of outstanding stock options and warrants. There were 114,348,438 shares of our Common Stock outstanding as of March 5, 2012. As of that date, Series B preferred stock outstanding could be converted into 10,000 shares of our Common Stock and stock options and warrants outstanding represented an additional 58,685,091 shares of our Common Stock that could be issued in the future. The number of shares issuable upon exercise of warrants issued with the Series E Preferred Stock are subject to weighted average antidilution adjustment. Most of the outstanding shares of our Common Stock, as well as the vast majority of the shares of our Common Stock that may be issued under our outstanding options and warrants, are not restricted from trading or have the contractual right to be registered. Also, the issuance of additional shares as a result of such conversion or purchase, or their subsequent sale, could adversely affect the price of our Common Stock.

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

Any sales of our Common Stock to Aspire Capital pursuant to our Purchase Agreement may cause substantial dilution to our existing stockholders and the sale of the shares of Common Stock acquired by Aspire Capital could cause the price of our Common Stock to decline.

On September 28, 2011, we entered into a Common Stock Purchase Agreement (the "Purchase Agreement") with Aspire Capital Fund, LLC ("Aspire Capital"). Pursuant to the Purchase Agreement, we have a right to sell to Aspire Capital up to a maximum of 100,000 shares of our Common Stock per day, which total may be increased by mutual agreement up to an additional 1,000,000 shares per day. In addition, under certain circumstances we also have the right to sell to Aspire Capital an amount of stock equal to up to 30% of the aggregate shares of our Common Stock traded on the NYSE Amex on the next business day,

TABLE OF CONTENTS

subject to a maximum number of shares determined by us. However, we may only effect sales of shares of our Common Stock to Aspire Capital pursuant to the Purchase Agreement (up to a maximum of \$20 million in the aggregate) on a business day on which the closing sale price of our Common Stock is not less than 75% of the closing sale price of our Common Stock (rounded down to the nearest penny) on the business day immediately preceding the date the Purchase Agreement was executed. The extent to which we rely on Aspire Capital as a source of funding will depend on a number of factors, including the prevailing market price of our Common Stock and the extent to which we are able and desire to secure working capital from other sources. The aggregate number of shares that we can sell to Aspire Capital under the Purchase Agreement may in no case exceed 15,282,502 shares of our Common Stock (plus the 990,099 Commitment Shares previously issued), unless shareholder approval is obtained to issue more. The number of shares ultimately offered for sale to Aspire Capital under the Purchase Agreement is dependent upon the number of shares we elect to sell to Aspire Capital, if any, under the Purchase Agreement. Depending upon market liquidity at the time, sales of shares of our Common Stock under the Purchase Agreement may cause the trading price of our Common Stock to decline.

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

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 holders of our Series E Preferred Shares will be selling any shares of Common Stock issued to them as mandatory redemption shares on each mandatory redemption date. In addition, a substantial number of shares of Common Stock are being offered by the Selling Stockholders under our effective Registration Statement on Form S-3 (File No. 333-173853) and we cannot predict if and when the Selling Stockholders may sell such shares of Common Stock in the public markets. As of January 20, 2012, one-half of the base stock consideration issued in connection with the PCT Merger had been released from escrow and these shares are now freely tradable (an aggregate of 5,300,000 shares of our Common Stock), with the remaining one-half of the base stock consideration scheduled to be released from escrow on January 20, 2013. We cannot predict if and when following this escrow release the recipients of the PCT Merger consideration may sell such shares of Common Stock in the public markets. Additionally, a substantial number of shares of Common Stock may come into the public markets as a result of the Amorcyte Merger: (i) at the closing, 5,843,483 shares of Common Stock were placed in escrow as the “Base Stock Consideration”, for eventual distribution to the former stockholders of Amorcyte (with the first release from escrow, consisting of 20% of the Base Stock Consideration, to be effected in April 2012), and (ii) up to 4,092,768 shares of our Common Stock may become issuable to the former Amorcyte stockholders as “Contingent Shares” if certain business milestones are achieved. We cannot predict if and when (following, as applicable, release of the Base Stock Consideration from escrow, or issuance of Contingent Shares if the relevant milestones are achieved) the recipients of the Amorcyte Merger consideration may sell such shares of Common Stock in the public markets. We cannot predict the number of the above-described 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.

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

At March 5, 2012, we had approximately 58,685,091 stock options and warrants outstanding. Holders of our outstanding options and warrants are given the opportunity to profit from a rise in the market price of our Common Stock. As long as these options and warrants are outstanding, the terms on which we could obtain additional capital may be adversely affected. The holders of these options and 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 options and warrants.

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 have concluded that as of December 31, 2011 we have a material weakness in our internal control relating to our financial reporting of Erye. Specifically, the Company has determined the accounting staff at Erye does not have sufficient qualified accounting and finance personnel. If we fail to (1) fully remediate the material weakness identified, or (2) we fail to maintain the adequacy of internal control over our financial reporting, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act, as such standards are modified, supplemented or amended from time to time.

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

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

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

As of March 5, 2012, our executive officers and directors collectively owned 33,727,064 shares of our Common Stock, representing approximately 29.5% of our outstanding Common Stock. As of such date, our executive officers and directors collectively beneficially owned 47,429,892 shares of our Common Stock. These beneficial holdings represent approximately 37.0% 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.

TABLE OF CONTENTS

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

Eric H.C. Wei, a member of our Board of Directors, is also the Managing Partner of RimAsia Capital Partners, L.P., or RimAsia. RimAsia, a substantial stockholder of our company, beneficially owns approximately 22.5% of our Common Stock as of March 5, 2012. Mr. Shi Mingsheng (the Chairman of the Board of Erye, and who became a director of our company in March 2010) and Madam Zhang Jian (our Vice President of Pharmaceutical Operations and the General Manager of Erye), together with certain other persons, have shared voting and dispositive power over the shares of our Common Stock held by Fullbright Finance Limited, or Fullbright. Fullbright, together with Mr. Shi, and Madam Zhang, beneficially owns approximately 4.6% of our Common Stock as of March 5, 2012. These relationships create, or, at a minimum, appear to create potential conflicts of interest when members of our company's senior management are faced with decisions that could have different implications for our company and the other entities with which our directors or officers are associated.

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

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

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

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

The rights of the holders of the Series E Preferred Shares rank senior to the obligations to holders of our Common Stock. Upon our liquidation, the holders of Series E Preferred Shares are entitled to receive a liquidation preference of \$1.00 per share, plus all accrued but unpaid dividends at the rate of 7% per annum prior and in preference to any distribution to the holders of any other class of our equity securities. Further, no dividends can be paid without the consent of the holders of a majority of the outstanding Series E

[TABLE OF CONTENTS](#)

Preferred Shares, and the holders of Series E Preferred Shares, as well as the holders of the warrants which were issued to the purchasers of Series E Preferred Shares, have the right to participate in any payment of dividends or other distributions made to the holders of our Common Stock to the same extent as if they had converted the Series E Preferred Shares or exercised the warrants. The existence of such a senior security could have an adverse effect on the value of our Common Stock.

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

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

[TABLE OF CONTENTS](#)

ITEM 1B. UNRESOLVED STAFF COMMENTS.

Not applicable.

ITEM 2. PROPERTIES.

PCT

We presently operate two cell therapy manufacturing facilities, in Allendale, New Jersey and in Mountain View, California. Longer-term plans could include the acquisition and development of other such buildings within and outside of the United States, to be developed into replicable and scalable manufacturing facilities, strategically located to best serve clients' needs. Inherent in the nature of cell therapy today is the biologic shelf life of the cell therapy product itself. This limits the transit times between the time the cell product is extracted from a patient until it arrives at a manufacturing facility and the time that a processed product leaves the manufacturing facility and arrives for re-infusion in the patient. Therefore, it is preferable for cell therapy manufacturing facilities to be located in major population centers and within close proximity of major airport hubs.

In 2007, PCT acquired the facility in Allendale, New Jersey which has been developed into a cell manufacturing facility. 22,000 square feet of the Allendale facility's approximately 30,000 square feet have been developed. The Allendale facility is comprised of ISO Class 7, Class 10,000 manufacturing suites, in addition to quality control, research and development laboratories and support facilities. It has been designed to meet the accreditation requirements of the Foundation for the Accreditation of Cellular Therapy (FACT) and to comply with the FDA's requirements, including applicable cGMP regulations, and to meet the standards of the American Association of Blood Banks (AABB). The facility is also in compliance with a range of state and federal regulatory and licensing requirements. The Allendale facility is subject to two mortgages in favor of T.D. Bank, N.A. having an aggregate principal amount of approximately \$3.6 million as of December 31, 2011.

The Mountain View facility is also a licensed cell therapy manufacturing facility, encompassing 25,024 square feet within a single building, of which 17,425 square feet is developed. The developed space is presently used for manufacturing client products. Mountain View is equipped with ISO Class 7, Class 10,000 manufacturing suites, quality control, research and development laboratories and support facilities. We expect to further develop space for cell therapy manufacturing within the facility on an as needed basis. The Mountain View facility is subject to a lease agreement, as amended to date, having a current term that extends through June 2017. The base monthly rent is currently \$46,294. Commencing July 1, 2012, the base monthly rent will be \$41,289.60, subject to adjustments as of July 1, 2013 and each annual anniversary thereafter during the term to reflect any changes in the cost of living; provided, however, that each such annual rental adjustment will not be less than 3% or more than 7% of the rent payable for the calendar month immediately preceding the applicable rental anniversary date. PCT is permitted to make certain improvements, additions and alterations to the premises subject to the terms of the lease with the lessor providing an Improvement Allowance equal to the lesser of \$500,000 or the aggregate amount of Reimbursable Costs, as defined in the July 2011 amendment to the lease. In connection with the July 2011 amendment to the lease, the lessor required that NeoStem, as sole member of PCT, execute a Guaranty of Lease.

Because of the specialized nature of these cell processing facilities and the time required to conceptualize, design, build, and obtain certification and operating authority, it takes approximately nine months to go from concept to operations once space has been qualified.

These properties are used in the Company's Cell Therapy — United States — reportable segment.

NeoStem

Effective April 1, 2009, we leased executive offices at 420 Lexington Avenue, New York, NY 10170, which serve as our headquarters. The lease has a current term that extends through June 2013 and is believed to be sufficient space for the near future. The base monthly rent, which includes storage space, is currently approximately \$22,000 per month. This property is used as our corporate headquarters.

TABLE OF CONTENTS

In September 2009, we leased office and laboratory space at 840 Memorial Drive, Cambridge, Massachusetts for approximately three years. The Cambridge space is being used for general office, research and development, and laboratory space. The base rent under the Cambridge lease is currently \$30,750 per month. In May 2011, the Company sublet a portion of the Cambridge facility to another life science company. The Company is assessing its need for the Cambridge facility going forward given the acquisition of PCT with its Allendale, NJ and Mountain View, CA facilities. This property was used in the Company's Cell Therapy — United States reportable segment.

China Stem Cell Operations

NeoStem (China) is a party to a lease originally entered into in May 2009, with Beijing Zhong-guan-cun Life Science Park Development Corp., Ltd. pursuant to which NeoStem (China) is leasing laboratory, office and storage space in Beijing for the aggregate monthly amount of approximately \$25,377. Lease payments are due quarterly in advance. The term of the lease is through May 2012. The Beijing Facility was built to provide comprehensive adult stem cell collection, processing and storage capabilities, and a laboratory to provide cell therapy process, development and manufacturing. In order to implement the establishment of the Beijing Facility, as of December 31, 2009, our Company, NeoStem (China) and PCT, entered into an agreement, whereby NeoStem and NeoStem (China) engaged PCT to perform the services necessary (1) to construct the Beijing Facility and (2) to effect the installation of quality control systems which comply with cGMP standards and regulatory standards that would be applicable in the United States under GTP standards, as well as all regulatory requirements applicable to the program under the laws of the PRC. The project commenced on April 1, 2010 and Phase 1 of the project was completed at year-end 2010. The Beijing Facility is located at the Life Science Innovation Center, Life Science Park, Zhongguancun, Beijing. This property is used in the Company's Regenerative Medicine — China reportable segment. With the upcoming expiration of this lease, the Company is considering its options with respect to extending the lease to allow for manufacturing of cell therapies, which will depend in part upon guidance from the PRC Ministry of Health with respect to regulations applicable to stem cell clinical research and applications.

Qingdao Neo Bio-Technology had been leasing office space since August 2009. The most recent lease was effective through September 2011 at a monthly rent of approximately \$1,300. Qingdao Neo Bio-Technology's operations have moved to Tianjin to take advantage of tax and other concessions that are being made available and in May 2011 the Qingdao lease was terminated. In connection therewith, Tianjin Neo Bio-Technology entered into a one-year lease for office space in Tianjin at a monthly rent of approximately \$5,000. This property is used as corporate offices.

Erye

In 2005, Erye acquired land use rights to approximately 27 acres in the Xiangcheng District of Suzhou for approximately \$2.0 million and, in 2007, commenced the construction of a new, state-of-the-art production facility. This new campus-style facility includes 16 buildings containing a total of approximately 53,186 square meters. Erye has substantially completed the construction of its new manufacturing facility. Erye began transferring its operations to its new manufacturing facility in January 2010. The relocation and new production lines have been completed and received cGMP certification.

The estimated total cost of the new facility is approximately \$39 million. Construction has been self-funded by Erye and EET, the holder of the minority joint venture interest in Erye. We agreed during the three-year period commencing on the first day of the first fiscal quarter after the Joint Venture Agreement became effective to reinvest in Erye approximately 90% of the net earnings we would be entitled to receive under the Joint Venture Agreement by reason of our 51% interest in Erye.

These properties are used in the Company's Pharmaceutical Manufacturing — China reportable segment.

ITEM 3. LEGAL PROCEEDINGS.

Xiangbei Welman Pharmaceutical Co., Ltd. v Suzhou Erye Pharmaceutical Co., Ltd. and Hunan Weichu Pharmacy Co., Ltd. involves a patent infringement dispute with respect to a particular antibiotics complex manufactured by Erye (the “Product”). The Changsha Intermediate Court ruled initially in Welman’s favor and Erye appealed that judgment to the Hunan High Court. The Supreme Court of PRC recently rendered a final ruling that Welman is not entitled to the disputed patent right, and on January 16, 2012 the Hunan High Court rejected Welman’s suit against Erye on that claimed patent infringement. The initial judgment was rendered on May 13, 2010 in the amount of approximately 5 million RMB (approximately \$778,500), which was fully accrued for at September 30, 2011 and reversed in the fourth quarter of 2011 based on these subsequent rulings.

In 2009, Welman brought a copyright infringement lawsuit against Erye claiming the package inserts with respect to the Product infringed their copyright. Erye was enjoined from copying and using the package inserts on the Product and from selling the Product with the package inserts and Welman was awarded RMB 50,000. Erye has filed application for a retrial of the previous lawsuit brought by Welman to the Hunan High Court, which application filing was accepted by the court.

In July 2011, a new copyright infringement lawsuit was brought by Welman against Erye claiming that Erye was not complying with the earlier judgment enjoining them from copying and using the package inserts for the Product. The Changsha Intermediate Court was applied to for property preservation and issued a civil decision freezing Erye’s bank deposit of up to RMB 50 million (approximately US \$7.9 million), or to seal up or detain Erye’s other properties of equal value. As of December 31, 2011, approximately 15,656,000 RMB (approximately US \$2,460,000) of cash had been frozen in six Erye bank accounts. Erye has contended that jurisdiction is not proper, and the case is now in review of the Hunan High Court.

A similar copyright infringement lawsuit was recently instituted by Welman against Erye in the Guangzhou Intermediate Court to (i) enjoin Erye from copying and using the package inserts from the Product and selling the drugs with the aforesaid package inserts; and (ii) award Welman economic losses of approximately RMB 2,000,000 (approximately US \$320,000) against Erye. That case is being reviewed by the Court. Welman made an application for preliminary injunction to prohibit Erye from copying and using the package inserts from the Product and selling the drugs with the aforesaid package inserts and Welman’s application was denied by the Court on September 6, 2011. Welman subsequently obtained a preliminary injunction from a lower court Guangzhou Haizhu District Court on September 14, 2011. But on October 28, 2011, upon the appeal by Erye, the Haizhu District Court issued a decision withdrawing the preliminary injunction.

Additionally, we are subject to litigation in the ordinary course.

ITEM 4. MINE SAFETY DISCLOSURES.

Not Applicable.

PART II**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.****ITEM 5(a). MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.****Market For Our Common Equity**

Our Common Stock trades on the NYSE-Amex under the symbol "NBS." The following table sets forth the high and low sales prices of our Common Stock for each quarterly period presented, as reported by the NYSE-Amex.

| 2011 | High | Low |
|----------------|-------------|------------|
| First Quarter | \$ 2.10 | \$ 1.14 |
| Second Quarter | \$ 2.08 | \$ 1.31 |
| Third Quarter | \$ 1.55 | \$ 0.55 |
| Fourth Quarter | \$ 0.75 | \$ 0.43 |
| 2010 | High | Low |
| First Quarter | \$ 2.15 | \$ 1.26 |
| Second Quarter | \$ 3.50 | \$ 1.58 |
| Third Quarter | \$ 2.15 | \$ 1.52 |
| Fourth Quarter | \$ 2.15 | \$ 1.10 |
| 2009 | High | Low |
| First Quarter | \$ 1.08 | \$ 0.43 |
| Second Quarter | \$ 2.72 | \$ 0.80 |
| Third Quarter | \$ 2.33 | \$ 1.40 |
| Fourth Quarter | \$ 2.50 | \$ 1.28 |

 Holders

As of March 9, 2012, there were approximately 1,356 stockholders of record of our Common Stock (which does not include beneficial owners for whom Cede & Co. or others act as nominees).

Dividends and Dividend Policy

We have not paid cash dividends on our Common Stock during the periods set forth in the stock price table that appears above. The holders of our Common Stock are each entitled to receive dividends when and if declared by the board of directors out of funds legally available therefor, subject to the terms of any outstanding series of preferred stock (as further described below). Other than payments that are required pursuant to the terms of our Series E 7% Senior Convertible Preferred Stock (the "Series E Preferred Stock"), we intend to retain any future earnings to fund the development and growth of our business, and therefore we do not anticipate paying any cash dividends on our Common Stock in the foreseeable future.

So long as any shares of our Series E Preferred Stock are outstanding, no dividends can be paid on our Common Stock without the consent of the holders of a majority of the outstanding shares of Series E Preferred Stock, and the holders of the Series E Preferred Stock, as well as the holders of the warrants issued to the purchasers of the Series E Preferred Stock, have the right to participate in any payment of dividends or other distributions made to the holders of our Common Stock to the same extent as if they had converted the Series E Preferred Stock or exercised the warrants.

Furthermore, for so long as we own an interest in Erye and the VIE structure is in place, we expect to rely on dividend payments from our subsidiaries, NeoStem (China) and China Biopharmaceuticals Holdings, Inc. (which is the holder of our 51% interest in Erye), which may, from time to time, be subject to certain additional restrictions on their ability to make distributions or other payments to us, including PRC law governing liquidation. PRC accounting standards and regulations currently permit payment of dividends only

TABLE OF CONTENTS

out of accumulated profits, a portion of which must be set aside to fund certain reserve funds. Our inability to receive all of the revenues from NeoStem (China) and China Biopharmaceuticals Holdings, Inc. may in turn provide an additional obstacle to our ability to pay dividends on our common stock in the future. Additionally, because the PRC government imposes controls on the convertibility of RMB into foreign currencies and, in certain cases, the remittance of currency out of the PRC, shortages in the availability of foreign currency may occur, which could restrict our ability to remit sufficient foreign currency to pay dividends.

Finally, any distributions we may receive by reason of our ownership of a 51% interest in Erye will be subject to the provisions of the Joint Venture Agreement, which presently provides that, for 2010 and for a period of approximately two years thereafter, we will receive annual distributions of only six percent of Erye's net profit.

Recent Sales of Unregistered Securities

As previously disclosed, and as follows:

The Company has agreed to issue equity to certain consultants for services. Effective November 1, 2011, pursuant to a two month agreement for consulting services in financial and public relations and other specified related matters, the Company agreed to issue 50,000 shares of Restricted Common Stock, vesting as to 25,000 shares on November 1, 2011 and 25,000 shares on December 1, 2011. Effective December 1, 2011, pursuant to a six month agreement for consulting services in corporate finance, investor communications and public relations, the Company agreed to issue 250,000 shares of Restricted Common Stock, vesting ratably over the term of the agreement on a monthly basis. Effective December 15, 2011, pursuant to a three month agreement for specified investor relations and other services, the Company agreed to issue 150,000 shares of Restricted Common Stock, vesting as to one-third on each of the first, second and third one-month anniversaries of the effective date. Also on December 15, 2011, pursuant to a four month agreement for financial advisory services, the Company agreed to issue a total of 100,000 shares of Restricted Common Stock, at the rate of 25,000 shares per month. Effective December 20, 2011, the Company agreed to issue a five year warrant to a PRC regulatory and clinical trial consultant to purchase 100,000 shares of Restricted Common Stock at \$0.56 per share, vesting as to 50,000 shares on each of the six month and one year anniversaries of the commencement date. Effective February 22, 2012, pursuant to a one year agreement for consulting services related to the healthcare industry, government affairs and public policy, the Company agreed to issue a five year warrant to purchase 125,000 shares of Restricted Common Stock at \$0.63 per share, vesting as to 25,000 shares on the commencement date and as to 50,000 shares on each of the six month and one year anniversaries of the commencement date. The issuance of all such securities is or was subject to the approval of the NYSE Amex.

On February 17, 2012, we consummated a private placement pursuant to which three persons and entities acquired an aggregate of 3,465,404 shares of Common Stock for an aggregate consideration of \$2,250,000 (as to which 1,449,275 shares had a purchase price of \$0.69 per share and 2,016,129 shares had a purchase price of \$0.62 per share).

The offer and sale by the Company of the securities described above were made in reliance upon the exemption from registration provided by Section 4(2) of the Securities Act of 1933, as amended (the "Securities Act"), for transactions by an issuer not involving a public offering. The offer and sale of such securities were made without general solicitation or advertising to "accredited investors" as such term is defined in Rule 501(a) of Regulation D promulgated under the Securities Act and/or pursuant to Regulation D or Regulation S, each promulgated under the Securities Act and may not be resold in the United States or to U.S. persons unless registered under the Securities Act or pursuant to an exemption from registration under the Securities Act.

ITEM 5(b). USE OF PROCEEDS.

Not applicable.

ITEM 5(c). REPURCHASES OF EQUITY SECURITIES.

There were no repurchases of equity securities by or on behalf of the Company or any affiliated purchaser during the fourth quarter of the fiscal year ended December 31, 2011 as to which information is required to be furnished.

ITEM 6. SELECTED FINANCIAL DATA

Not Applicable.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Cautionary Note Regarding Forward-Looking Statements" and under "Risk Factors" and elsewhere in this annual report. The following discussion should be read in conjunction with our consolidated financial statements and related notes thereto included in Item 8 of this annual report.

Overview

NeoStem, Inc. is an international biopharmaceutical company. In 2011, we operated our business in three reportable segments: (i) Cell Therapy — United States; (ii) Regenerative Medicine — China; and (iii) Pharmaceutical Manufacturing — China. We are pursuing the divestiture of the majority of our China operations and anticipate they will have been exited by the close of 2012.

Through the Cell Therapy — United States segment, we are focused on the development of proprietary cellular therapies in cardiovascular disease, immunology and regenerative medicine and becoming a single source for collection, storage, manufacturing, therapeutic development and transportation of cells for cell based medicine and regenerative science. Within this segment, we also are a provider of adult stem cell collection, processing and storage services in the U.S., enabling healthy individuals to donate and store their stem cells for personal therapeutic use. In addition, the Company collects and stores cord blood cells of newborns which help to ensure a supply of autologous stem cells for the child should they be needed for future medical treatment.

The Company strengthened its expertise in cellular therapies, for its Cell Therapy — United States segment, with its January 19, 2011 acquisition of Progenitor Cell Therapy, LLC, a Delaware limited liability company ("PCT"). PCT is engaged in a wide range of services in the cell therapy market for the treatment of human disease, including, but not limited to contract manufacturing, product and process development, regulatory consulting, product characterization and comparability, and storage, distribution, manufacturing and transportation of cell therapy products. PCT's legacy business relationships also afford NeoStem introductions to innovative therapeutic programs.

In March 2011 PCT's wholly owned subsidiary, Athelos, Inc. (Athelos), acquired rights and technology for a T-cell based immunomodulatory therapeutic in exchange for an approximate 20% interest in Athelos.

The Company further strengthened its breadth in cellular therapies through its October 17, 2011 acquisition of Amorcyte, Inc. Amorcyte is a development stage cell therapy company focusing on novel treatments for cardiovascular disease. Amorcyte's lead product candidate is AMR-001. In January 2012, Amorcyte enrolled its first patient in our PreSERVE Phase 2 trial to investigate AMR-001's ability to preserve heart function after a heart attack.

The Company views the PCT and Amorcyte acquisitions as fundamental to building a foundation in achieving its strategic mission of capturing the paradigm shift to cell therapy.

Through our Regenerative Medicine — China segment, in 2009, we began several China-based, Regenerative Medicine initiatives including: (i) constructing a stem cell research and development laboratory and processing facility in Beijing, (ii) establishing relationships with hospitals to provide cell-based therapies, and (iii) obtaining product licenses covering several adult stem cell therapeutics focused on regenerative medicine. As a result of certain changes in the PRC regulatory environment, the Company has determined to take steps to restrict, and expects to ultimately eliminate, its Regenerative Medicine business in the PRC.

We acquired our Pharmaceutical Manufacturing — China segment when on October 30, 2009, China Biopharmaceuticals Holdings, Inc. ("CBH") merged with a wholly-owned subsidiary of NeoStem (the "Erye Merger"). As a result of the Erye Merger, NeoStem acquired CBH's 51% ownership interest in Erye, a Sino-foreign joint venture with limited liability organized under the laws of the PRC. Erye was

TABLE OF CONTENTS

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. In 2010, Erye began transferring its operations to its newly constructed manufacturing facility, as to which construction is now substantially completed. The relocation and the new production lines have been completed and received cGMP certification. As part of its plan to focus its business on capturing the paradigm shift to cell therapies following the January 2011 acquisition of PCT, the Company is pursuing strategic alternatives with respect to its interest in Erye.

To support our liquidity needs, the Company raised an aggregate of approximately \$21.2 million through the issuance of common stock and warrants through private placements and a public offering in 2011. In February 2012, the Company raised an aggregate of approximately \$2.25 million in a private placement of common stock.

Results of Operations

Year Ended December 31, 2011 Compared to Year Ended December 31, 2010

Revenues

For the year ended December 31, 2011, total revenues were approximately \$73,718,000 compared to \$69,821,300 for the year ended December 31, 2010. Revenues for 2011 and 2010 were comprised of the following (in thousands):

| | Years Ended December 31, | |
|--------------------------------------|---------------------------------|--------------------|
| | 2011 | 2010 |
| Pharmaceutical Manufacturing — China | \$ 63,393.6 | \$ 69,584.3 |
| Cell Therapy — United States | 10,050.1 | 181.1 |
| Regenerative Medicine — China | 274.3 | 55.9 |
| | <u>\$ 73,718.0</u> | <u>\$ 69,821.3</u> |

- Revenues for our Pharmaceutical Manufacturing — China reporting segment were approximately \$63,393,600 for the year ended December 31, 2011 compared to \$69,584,300 for the year ended December 31, 2010, representing a decrease of approximately \$6,190,700 or 9%. The decrease was primarily due to a strategic decision to adjust the product mix, decreasing sales of certain low margin pharmaceutical intermediates to other pharmaceutical manufacturers in order to create capacity for higher margin products in the future, which resulted in 10% reduction in overall sales. As an example, in Q1 2011 Erye introduced two new products, omeprazole and cloxacillin which are expected to contribute to higher margins than the discontinued pharmaceutical intermediates, and we have several other products under development that may be introduced over the next three to four years. Revenues from sales of antibiotics, cephalosporins and other therapeutic products declined approximately 3% compared to the same period for 2010 primarily from the impact of specific policies on volume control for certain drugs, including ongoing restriction on antibiotics, and the average price of antibiotics and cephalosporins, which were offset by increased revenues resulting from changes in foreign exchange rates between the Chinese RMB and United States dollar by approximately 5%. We recognize that there will be continuous price pressure on Erye as over 70% of Erye's manufactured drugs are on China's essential drug list. There has been evidence of such price pressure — i.e., on March 2, 2011 the National Development and Reform Commission issued price cuts for medical insurance drugs which substantially impacts two of Erye's drugs. We anticipate that Piperacillin Sodium and Sulbactam Sodium will experience as much as a 50% price decline while the price of Ligustrazine Phosphate may be reduced by approximately 75%. During 2011, the price reduction experienced by Erye on these products was approximately 24%. During 2011, Piperacillin Sodium and Sulbactam Sodium accounted for approximately 5% of sales and Ligustrazine Phosphate accounted for approximately 1% of sales. Recently, the Ministry of Health issued, for public comment, a draft policy "Administrative Measures on Clinical Use of Antibiotics" to curb their overuse. The proposed guidelines set forth three categories of antibiotics, which include 1) restricted, 2) non-restricted, and 3) special-use only. According to the October 12, 2011 China Healthcare report published by Deutsche Bank, AG (the "China Healthcare report"), it has been

TABLE OF CONTENTS

projected that the limitation of antibiotic usage in China will reduce the historical compound annual growth rate which has been approximately 20%. According to the China Healthcare report, it has been estimated that China's population consumes about ten times the global per capita average of antibiotics. These regulations have not been finalized but issuance of the draft policy has created uncertainty on the part of distributors and has reduced purchases by distributors and in part has contributed to sales reductions in 2011.

- Revenues for our Cell Therapy — United States reporting segment were approximately \$10,050,100 for the year ended December 31, 2011 compared to \$181,100 for the year ended December 31, 2010. The increase was primarily due to revenues generated by PCT which was acquired in January 2011, and whose revenues totaled approximately \$9,685,400.
- The cost of revenue was approximately \$55,974,100 representing an increase of approximately \$6,305,800 compared with 2010. The cost of revenue in the Pharmaceutical Manufacturing — China reporting segment was approximately \$47,186,800 and decreased 5% over 2010. The strategic decision to discontinue manufacturing low margin pharmaceutical intermediates in order to free up capacity for higher margin products in the future decreased the cost of manufacturing by 10%. This reduction in cost was offset by increases in the cost of manufacturing of antibiotics and cephalosporins and other therapeutic products of approximately 5% due to the impact of the increased costs associated with the new plant and an increase in amortization expense associated with intangible assets acquired in the Erye Merger. This increase in manufacturing costs is expected to continue to have a negative impact until an increase in sales of higher margin products is realized. Increases in the exchange rate between the Chinese RMB and the United States dollar increased cost of revenue by 5%.
- The cost of revenue for Cell Therapy — United States reporting segment was \$8,701,300 an increase of approximately \$8,672,400 principally related to the cost of revenue for PCT.

Operating Expenses

For the year ended December 31, 2011 operating expenses totaled \$72,281,000 compared to \$39,031,300 for the year ended December 31, 2010, representing an increase of \$33,249,700 or 85%.

Historically, to minimize our use of cash, we have used a variety of equity and equity-linked instruments to pay for services and to incentivize employees, consultants and other service providers. The use of these instruments has resulted in significant charges to the results of operations. In general, these equity and equity-linked instruments were used to pay for employee and consultant compensation, director fees, marketing services, investor relations and other activities. For the year ended December 31, 2011 the use of equity and equity-linked instruments to pay for such expenses resulted in charges to selling, general, and administrative, and research and development expenses totaling \$9,812,900 representing an increase of \$2,501,500 from the year ended December 31, 2010.

For the year ended December 31, 2011, our selling, general, and administrative expenses were approximately \$41,845,300 compared to approximately \$30,788,600 for the year ended December 31, 2010, representing an increase of approximately \$11,056,700 or 36%. Equity-based compensation included in selling, general and administrative expenses for the year ended December 31, 2011 was approximately \$8,945,200, compared to approximately \$6,387,900 for the year ended December 31, 2010. Overall, the increase in selling, general and administrative expenses was primarily due to the following:

- An increase of approximately \$8,882,200 in the Cell Therapy — United States reporting segment, comprised of (i) an increase of approximately \$2,557,300 related to employee, director and consultant equity compensation, including approximately \$722,900 related to the modification of stock option awards to our CEO in April 2011; (ii) an increase of approximately \$4,469,100 related to new operating expenses as a result of our acquisition of PCT; (iii) an increase of approximately \$1,813,700 in legal, accounting, and other professional fees, including expenses relating to the Company's strategic shift towards cell therapy initiatives; (iv) an increase of approximately \$607,400 due to a one-time contribution paid in equity during the three months ended March 31, 2011 to a foundation for which our CEO is President and Trustee, General Counsel is Secretary and Trustee

TABLE OF CONTENTS

and CFO is Treasurer; and (v) an increase of approximately \$1,662,300 related to other administrative activities. These increases were partially offset by a decrease of approximately \$2,227,500 in selling and marketing expenses in connection with our adult stem cell collection efforts.

- An increase of approximately \$1,163,200 in our Pharmaceutical Manufacturing — China reporting segment, comprised of (i) a \$1,186,100 increase in taxes related to withholding taxes paid on two dividends declared (in January, 2011 and April, 2011) that were retained in the business, (ii) an increase of approximately \$828,000 in selling and marketing expenses, and (iii) a decrease of approximately \$850,900 related to administrative activities.
- An increase of approximately \$1,011,200 in our Regenerative Medicine — China reporting segment, comprised primarily of an increase in administrative activities.

For the year ended December 31, 2011, our research and development expenses were \$11,003,100 compared to \$7,684,500 for the year ended December 31, 2010, representing an increase of approximately \$3,318,600 or 43%. Equity-based compensation included in research and development expenses for the year ended December 31, 2011 was approximately \$867,800, compared to approximately \$923,500 for the year ended December 31, 2010. Overall, the increase in research and development expenses was primarily due to the following:

- An increase of approximately \$1,712,400 in our Cell Therapy — United States reporting segment, comprised primarily of an in-process research and development charge of approximately \$1,150,000 related to the acquisition of certain intellectual properties in the area of T-Cell regulation from Becton, Dickinson and Company in March 2011.
- An increase of approximately \$1,340,200 in our Pharmaceutical Manufacturing — China reporting segment as a result of increased clinical development efforts on products under development.
- An increase of approximately \$266,000 in our Regenerative Medicine — China reporting segment due to costs associated with operating the Beijing laboratory.

For the year ended December 31, 2011, as part of our annual impairment review, we recognized an impairment charge of \$19,432,700 associated with our Pharmaceutical Manufacturing — China reporting segment, due to lower than expected revenue and operating income growth. For the year ended December 31, 2010, as part of our annual impairment review, we recognized an impairment charge of \$558,200 associated with our Cell Therapy — United States reporting segment.

As part of our plan to focus on capturing the paradigm shift to cell therapies following our January 2011 acquisition of PCT, we are pursuing strategic alternatives with respect to our 51% interest in Erye and anticipate we will have monetized our interests in Erye by the close of 2012. Additionally, due to changes in the regulatory environment in the PRC, we also plan to close our Regenerative Medicine business providing autologous orthopedic therapy in China in 2012. In connection with closing our Regenerative Medicine business, we do not expect the exit costs to be material.

Other Income and Expense

For the year ended December 31, 2011 interest expense was \$3,991,200 compared with \$480,900 for the year ended December 31, 2010, an increase of \$3,510,300. The increase was due to (i) an increase in amortization of debt discount related to the Series E Preferred Stock of \$2,440,200, (ii) an increase of \$876,700 in interest expense accrued on loans from related parties, and (iii) interest related to a mortgage on PCT's Allendale facility of \$193,400.

Other income (expense), net for the year ended December 31, 2011 totaled approximately \$2,338,300 of other income. Other income and expense in 2011 was primarily related to the revaluation of derivative liabilities of \$2,096,900 of other income that have been established in connection with the Convertible Redeemable Series E Preferred Stock.

Other income (expense), net for the year ended December 31, 2010 totaled approximately \$513,100 of other income. Included in other income and expense in 2010 was other income of \$656,300 due to a

[TABLE OF CONTENTS](#)

settlement agreement reached with a business partner involved in the development of the platform research organization in China, whereby the business partner relinquished rights to certain shares of our common stock. The Company valued the shares at their fair market value on the day the shares were relinquished. Also included in other income and expense in 2010 was \$138,300 in expense for fair value adjustments on derivative liabilities related to the Company's Series E Preferred Stock issuance in November 2010 and other outstanding warrants. Included in interest expense in 2010 was \$281,200 in amortization of preferred stock discount and issuance costs related to the Company's Series E Preferred Stock.

Provision for Taxes

The income tax provision for the years ended December 31, 2011 and 2010, were \$392,800 and \$550,900, respectively, and were related to foreign taxes for our operations in China.

The provision for income taxes and the realization of deferred tax liability for Pharmaceutical Manufacturing — China is based on, for the year ended December 31, 2011, a statutory rate of 25% and, for the year ended December 31, 2010, a statutory rate of 12.5%.

Non-Controlling Interests

In connection with accounting for the Company's 51% interest in Erye, we account for the 49% minority shareholder share of Erye's net income or loss with a charge to Noncontrolling Interests. For the year ended December 31, 2011 Erye's minority shareholders' share of net loss totaled approximately \$9,148,600. For the year ended December 31, 2010, Erye's minority shareholders' share of net income totaled approximately \$3,908,700. In addition, the Company acquired rights to use patents under licenses from Becton, Dickinson and Company in March 2011, in exchange for an approximately 20% interest in PCT's Athelos subsidiary. Noncontrolling interest also reflects Becton's share of losses incurred by Athelos during the year ended December 31, 2011 of approximately \$299,800.

Preferred Dividends

The Convertible Redeemable Series E Preferred Stock calls for annual dividends of 7% based on the stated value of the preferred stock and for the year ended December 31, 2011 we recorded dividends of approximately \$639,800. In the year ended December 31, 2010 the Company recorded dividends of approximately \$238,000, including \$153,500 on the Convertible Redeemable Series C Preferred Stock which called for an annual dividend of 5% based on the stated value of the preferred stock. The Convertible Redeemable Series C Preferred Stock was converted into NeoStem Common Stock in May 2010.

Analysis of Liquidity and Capital Resources

At December 31, 2011 we had a cash balance of approximately \$12,745,400, working capital of approximately \$2,164,900, and shareholders' equity of approximately \$62,025,600.

During the year ended December 31, 2011, we met our immediate cash requirements through existing cash balances, private placements and a public offering of our common stock and warrants, which in total, raised an aggregate of approximately \$21,152,700, the issuance of notes payable and bank loans providing \$2,160,000 net, for our operations in China and the use of equity and equity-linked instruments to pay for services and compensation.

We incurred a net loss of approximately \$56,582,900 for the year ended December 31, 2011. The following chart represents the net funds provided by or used in operating, financing and investing activities for each period indicated (in thousands):

| | Years Ended December 31, | |
|---|---------------------------------|---------------|
| | 2011 | 2010 |
| Net cash used in operating activities | \$ (20,928.0) | \$ (8,476.7) |
| Net cash used in investing activities | \$ (2,054.6) | \$ (17,105.8) |
| Net cash provided by financing activities | \$ 20,069.4 | \$ 33,855.5 |

TABLE OF CONTENTS

Operating Activities

Our cash used for operating activities in the year ended December 31, 2011 totaled approximately \$20,928,000, which is the sum of (i) our net loss, adjusted for non-cash expenses totaling \$16,209,500 (which includes adjustments for common stock, common stock options and common stock purchase warrants issued for services rendered and charitable contribution in the aggregate amount of approximately \$10,266,000, depreciation and amortization of approximately \$8,978,300, goodwill impairments charges of \$19,432,700, the write-off of in process research and development of approximately \$1,150,000, amortization of Preferred Stock discount and issuance cost of approximately \$2,440,200), and (ii) changes in operating assets and liabilities of approximately \$4,718,500.

Investing Activities

During the years ended December 31, 2011 and 2010, we spent approximately \$5,910,300 and \$16,377,700, respectively, for property and equipment principally related to the construction of Erye's new manufacturing facility.

Financing Activities

The Company raised an aggregate of approximately \$6.3 million in a series of private placements consummated from March 2011 to July 2011 pursuant to which 18 persons and entities acquired an aggregate of 4,938,125 shares of Common Stock (purchase price of \$1.28 per share). The investors included Steven. S. Myers (one of the Company's directors) (who purchased 390,625 shares) and Dr. Andrew L. Pecora (the Chief Medical Officer of the Company's subsidiary PCT, who is now the Chief Medical Officer and a director of NeoStem, and the Chief Scientific Officer of Amorcyte) (who purchased 78,125 shares).

On July 22, 2011, the Company completed an underwritten offering of 13,750,000 units at a purchase price of \$1.20 per unit, with each unit consisting of one share of Common Stock and a five year warrant to purchase 0.75 of a share of Common Stock at an exercise price of \$1.45 per share (the "Offering"). The Company sold securities in the Offering under the Company's previously filed shelf registration statement on Form S-3 (333-173855), which was declared effective by the Securities and Exchange Commission on June 13, 2011. Lazard Capital Markets LLC ("Lazard") and JMP Securities LLC ("JMP") acted as representatives of the underwriters named in an Underwriting Agreement, dated as of July 19, 2011. The Company received gross proceeds of \$16,500,000, prior to deducting underwriting discounts and offering expenses payable by the Company, for net proceeds of approximately \$14,847,000.

For the twelve months ended December 31, 2011, the Company's Erye subsidiary issued approximately \$10,800,900 in notes payable, and repaid approximately \$20,606,800 over the same period. Notes are payable to the banks who issue bank notes to Erye's creditors. Notes payable are interest free and usually mature after a three to six month period.

For the twelve months ended December 31, 2011, the Company's Erye subsidiary borrowed approximately \$20,261,900 in bank loans, repaid approximately \$7,829,400.

Pursuant to the PCT Merger Agreement, NeoStem paid off PCT's credit line with Northern New Jersey Cancer Associates ("NNJCA"), in an amount of \$3,000,000, shortly after the closing of the PCT Merger in January 2011. Dr. Andrew Pecora, who was PCT's Chairman and CEO prior to the PCT Merger, and who became PCT's Chief Medical Officer on January 19, 2011 has served as Managing Partner of NNJCA since 1996.

Liquidity and Capital Requirements Outlook

With our prior acquisition of a controlling interest in Erye and our other activities in China, and our recent acquisitions of PCT and Amorcyte, we operated our business in three distinct segments: (i) Cell Therapy — United States; (ii) Regenerative Medicine — China; and (iii) Pharmaceutical Manufacturing — China. The following is an overview of our collective liquidity and capital requirements.

Capital Requirements and Resources in China

We are pursuing the divestiture of the majority of our China Operations and anticipate they will have been exited by the close of 2012. For so long as we own an interest in Erye, we expect to rely partly on dividends under the Joint Venture Agreement attributable to our 51% ownership interest in Erye, to meet some of our future cash needs with respect to continued operations in China. In addition, pursuant to the Joint Venture Agreement that governs the ownership and management of Erye, for 2011 and approximately the next year: 45% of the net profit after tax due to the Company, in the form of dividends, will be provided to Erye as part of the new facility construction fund, which will be characterized as additional paid-in capital for our 51% interest in Erye; and only 6% of the net profit will be distributed to us directly. To date, we have been paid from the 2010 distribution the amount of approximately \$140,400.

Erye has substantially completed the construction of its new pharmaceutical manufacturing facility. Erye began transferring its operations to its new manufacturing facility in January 2010. The relocation and new production lines have been completed and have received cGMP certification. It was contemplated by the Joint Venture Agreement that the construction would continue for three years. As such, 45% of the dividend we would be entitled to by reason of our 51% ownership would remain in Erye through 2012 to complete the construction while EET would loan back their dividend during the same period at a prevailing bank interest rate. Upon a liquidity event of Erye, as contemplated in the joint venture agreement, the Company will be entitled to the return of its dividend reinvestments to the extent of the proceeds generated by the liquidity event. Repayment of such loans from EET would occur gradually after the construction is completed.

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 the 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 debt on its own behalf 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 interests in China are subject to China's rules and regulations on currency conversion. In particular, the initial capitalization and operating expenses of the VIEs are funded by our WFOE. In China, the State Administration for Foreign Exchange, or the SAFE, regulates the conversion of the Chinese Renminbi into foreign currencies. 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

TABLE OF CONTENTS

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 \$50,000 and are to be used for enterprise reserve, the above documents may be exempted by the bank. This SAFE Notice 142, along with the recent practice of Chinese banks of restricting foreign currency conversion for fear of “hot money” going into China, limits and may continue to limit our ability to channel funds to the VIE entities for their operation.

Neither Erye nor our other activities in China are expected to generate sufficient excess cash flow to support our activities in China in the near term.

We recognize that there will be continuous price pressure on Erye as over 70% of Erye’s manufactured drugs are on the essential drug list. There has recently been evidence of such price pressure — i.e., on March 2, 2011 the National Development and Reform Commission issued price cuts for medical insurance drugs which substantially impacts two of Erye’s drugs. We anticipate that Piperacillin Sodium and Sulbactam Sodium will experience as much as a 50% price decline while the price of Ligustrazine Phosphate may be reduced by approximately 75%. During 2011 the price reductions experienced by Erye on these products was approximately 24%. In 2011 Piperacillin Sodium and Sulbactam Sodium accounted for approximately 5% of sales and Ligustrazine Phosphate accounted for approximately 1% of sales. Recently, the Ministry of Health issued, for public comment, a draft policy “Administrative Measures on Clinical Use of Antibiotic Drugs” to curb their overuse. The proposed guidelines set forth three categories of antibiotics, which include 1) restricted, 2) non-restricted, and 3) special-use only. According to the October 12, 2011 China Healthcare report published by Deutsche Bank, AG (the “China Healthcare report”), it has been projected that the limitation of antibiotic usage in China will reduce the historical compound annual growth rate which has been approximately 20%. It has been estimated that China’s population consumes about ten times the global per capita average of antibiotics. These regulations have not been finalized but issuance of a draft policy has created uncertainty on the part of distributors and has reduced purchases by distributors and in part has contributed to sales reductions in 2011.

Capital Requirements for Recent Expansion

NeoStem, Inc. acquired Progenitor Cell Therapy, LLC (“PCT”), by means of a merger (the “PCT Merger”) of a newly formed wholly-owned subsidiary of NeoStem, with and into PCT pursuant to an Agreement and Plan of Merger, dated September 23, 2010 (the “PCT Agreement and Plan of Merger”).

Pursuant to the terms of the PCT Agreement and Plan of Merger, all of the membership interests of PCT outstanding immediately prior to the effective time of the PCT Merger (the “Effective Time”) were converted into the right to receive, in the aggregate, 10,600,000 shares of the common stock of NeoStem and warrants to purchase 3,000,000 shares of NeoStem Common Stock (the vesting of 1,000,000 of such warrants being subject to the satisfaction of certain conditions). Immediately after the PCT Merger closed, the Company made a payment of \$3,000,000 to repay certain indebtedness owed by PCT.

NeoStem, Inc. acquired Amorcyte, Inc. (“Amorcyte”), in October 2011, by means of a merger (the “Amorcyte Merger”) of a newly formed wholly-owned subsidiary of NeoStem, with and into Amorcyte pursuant to an Agreement and Plan of Merger, dated July 13, 2011 (the “Amorcyte Agreement and Plan of Merger”). Amorcyte is a development stage cell therapy company focusing on novel treatments for cardiovascular disease. Amorcyte’s lead product candidate, AMR-001, commenced enrollment in January 2012 for a Phase 2 study for the treatment of acute myocardial infarction (AMI). Pursuant to the terms of the Amorcyte Agreement and Plan of Merger, all of the outstanding equity interests of Amorcyte outstanding immediately prior to the effective time of the Amorcyte Merger were converted into the right to receive, in the aggregate, 5,843,483 shares of Common Stock (currently being held in escrow for eventual distribution to the former Amorcyte security holders, and subject to further adjustment, including in connection with any indemnification claims of NeoStem), seven year warrants to purchase an aggregate of 1,881,008 shares of Common Stock at \$1.466 per share (the transfer of any shares issued upon exercise of these warrants restricted until one year after the closing date), up to an additional 4,092,768 shares of Common Stock to be issued if and only if specified AMR-001 milestones are achieved, and additional consideration in the form of an earn out based upon net revenues of AMR-001, if AMR-001 is commercialized.

TABLE OF CONTENTS

The Company expects to incur substantial additional costs in connection with its transition to a cell therapy development company. In particular, Amorce is currently recruiting clinical trial sites for an expected 34 site, 160 patient, Phase 2 clinical trial for Amorce's lead product candidate, AMR-001, for the treatment of AMI. The trial began enrollment in January 2012, and is expected to cost approximately \$14 million over the first two years and anticipated to cost up to approximately \$18 million over a five year period, inclusive of manufacturing costs.

Liquidity

We anticipate that we will take further steps to raise additional capital in order to (i) fund the development of advanced cell therapies in the U.S., (ii) expand the PCT business and (iii) build the family banking business. To meet our short and long term liquidity needs, we currently expect to use a variety of means that could include, but not be limited to, the use of existing cash balances, the use of our current or other equity lines, potential additional warrant exercises, option exercises, issuances of other debt or equity securities in public or private financings, sale of assets and/or, ultimately, the growth of our revenue generating activities. In addition, we will continue to seek as appropriate grants for scientific and clinical studies from the National Institutes of Health, Department of Defense, and other governmental agencies and foundations, but there can be no assurance that we will be successful in qualifying for or obtaining such grants. We also review and consider from time to time restructuring activities, including the potential divestiture of assets. In this regard, as part of our plan to focus on capturing the paradigm shift to cell therapies following our January 2011 acquisition of PCT, we are pursuing strategic alternatives with respect to our 51% interest in Erye and anticipate we will have monetized our interests in Erye by the close of 2012, although no assurance can be given as to whether a sale will be consummated or the amount of funding such sale will provide. Additionally, due to changes in the regulatory environment in the PRC, we also plan to close our Regenerative Medicine business providing autologous orthopedic therapy in China in 2012. In connection with closing our Regenerative Medicine business, we do not expect the exit costs to be material.

In connection with the Welman litigation, the Changsha Intermediate Court was applied to for property preservation and it issued a civil decision freezing Erye's bank deposits of up to 50 million RMB, or approximately \$7.8 million, or sealing up or detaining Erye's other properties of equal value. Currently this case is pending. As of December 31, 2011, approximately 15,656,000 RMB (approximately \$2,460,000) of cash had been frozen in six bank accounts, and is classified in Other Assets. As a result of this court action, Erye has been obligated to increase its bank borrowings to offset their reduction in liquidity, and may consider seeking additional bank loans.

We plan to devote our resources and management efforts to cell therapy manufacturing and development, and other related activities, including adult stem cell collection and storage. We believe the October 2011 acquisition of Amorce described elsewhere herein is in keeping with this strategic mission. We also believe that if we could monetize Erye, we would have additional capital needed to pursue the development of cell therapies. To that end, in June 2011, we engaged a financial advisor to lead the effort to pursue the possible divestiture of our 51% interest in Erye. Marketing efforts have led to a few non-binding letters of intent. However, in addition to factors set forth below, it is too early to determine whether these or other proposals will lead to definitive agreements.

Any sale of our interest in Erye would be subject to a right of first refusal held by Suzhou Erye Economy & Co. Ltd. ("EET") pursuant to the terms of the Joint Venture Agreement between a subsidiary of ours and EET. EET owns the remaining 49% interest in Erye. A number of issues have arisen between EET and NeoStem with respect to the operation and financing of Erye. For instance, while pursuant to the terms of the Joint Venture Agreement EET is required to lend back to Erye dividends received by it to finance Erye's move to and construction of its new facilities, Erye has recently reported to us that such arrangement is no longer tax efficient in light of the ratio of Erye's shareholder loans to its registered capital. In connection with exploring ways to remedy the additional tax burden caused by the level of shareholder loans and in preparing for a sale process, other issues have also surfaced, including the issue of us and Erye needing to obtain all Chinese regulatory approvals (and associated registrations) required to reflect the legal title of our interest in Erye as being held by the proper entity within our group which is its current beneficial owner as that term is used under U.S. law. We believe we have now determined what government approvals (and associated registrations) will need to be issued by the Suzhou Municipal Bureau of Foreign Investment and Commerce

TABLE OF CONTENTS

and the Suzhou Administration for Industry and Commerce to remediate these deficiencies and we have had counsel in China prepare these filings. Our management believes these regulatory deficiencies can be remediated and should not delay a sale of the Company's interest in Erye. However, we require the cooperation of the officers of Erye, as to which no assurance can be given, and we could be compelled to seek to replace those officers or to commence legal action to obtain the required consents or otherwise move forward with requisite filings. In addition, even if the filings are made, no assurance can be given that any unremediated regulatory deficiencies would not have an adverse effect on the operating results and liquidity of Erye and the Company and will not impede or delay efforts to divest our interest in Erye. In addition, the remediation process is expected to trigger certain tax liabilities and penalties. At this time the Company does not expect such amounts to be material.

We may not be able to materially enhance our liquidity through a sale of our interest in Erye. The challenging nature of the current China pharmaceutical market makes it a difficult time for us to be pursuing a divestiture of our 51% ownership interest in Erye, and we expect that any sale of this interest will result in our not recouping our original investment. A sale of our interest in Erye, if a sale can be consummated, would have a material effect on our business, results of operations and balance sheet. Factors that may impede a sale may include, but not be limited to, (i) EET's right of first refusal and the significant time and money that exercise of such right could cause a potential purchaser, (ii) the need for any purchaser to negotiate a new Joint Venture Agreement and a shareholder loan repayment schedule with EET if EET does not wish to either sell its interest or exercise its right of first refusal, (iii) recent regulatory changes in China which reduce prices that may be charged for certain of Erye's products and limit use of antibiotics, (iv) recent disappointing financial performance by Erye resulting at least in part from such regulatory changes, including a decrease in revenues in 2011 and a net loss for fourth quarter 2011, (v) tax or regulatory issues affecting Erye, including those described above and which will adversely affect Erye going forward, (vi) availability of financing for a potential purchaser, and (vii) other factors typical of any sale process. There can be no assurance that any sale of our Erye interest will be made, or will be made at a price that provides material additional capital for our cell therapy development efforts.

To support our liquidity needs, the Company raised an aggregate of approximately \$21.2 million through the issuance of common stock and warrants in 2011, including an underwritten offering whereby the Company received gross proceeds of \$16,500,000, prior to deducting underwriting discounts and offering expenses payable by the Company, for net proceeds of approximately \$14,847,000. In August 2011, the Department of Defense (DOD) Peer Reviewed Medical Research Program (PRMRP) of the Office of the Congressionally Directed Medical Research Programs (CDMRP) awarded NeoStem approximately \$1.78 million to be applied towards funding the Company's VSELTM Technology, which award will support an investigation of a unique stem cell population, Very Small Embryonic-Like (VSEL) stem cells, for its bone building and regenerative effects in the treatment of osteoporosis. In addition, in September 2011 we entered into the Purchase Agreement with Aspire Capital which provided that, subject to certain terms and conditions, Aspire Capital is committed to purchase up to \$20 million of shares of the Company's common stock over the 24-month term of that Agreement. Also on September 28, 2011, the Company gave notice to Commerce Court Small Cap Value Fund, Ltd. ("Commerce Court") of termination of the Common Stock Purchase Agreement dated as of May 19, 2010 between the Company and Commerce Court. In February 2012, the Company raised \$2.25 million from the issuance of common stock.

Our "shelf" Registration Statement on Form S-3 was filed on May 2, 2011 pursuant to General Instruction I.B.1 of Form S-3, because the aggregate market value of our common equity held by non-affiliates (our "public float") exceeded \$75 million as of the relevant measuring date. Our public float is now less than \$75 million, so as of the filing of this Annual Report on Form 10-K our Company is now subject to General Instruction I.B.6 of Form S-3, which means that as long as our public float remains below \$75 million, the aggregate market value of securities sold by us or on our behalf pursuant to General Instruction I.B.6 of Form S-3 during any period of 12 calendar months may be no more than one-third of our public float measured as of a date within 60 days prior to each such sale.

While we continue to seek capital through a number of means, there can be no assurance that additional financing will be available on acceptable terms, if at all, and our negotiating position in capital generating efforts may worsen as existing resources are used. Additional equity financing may be dilutive to our

TABLE OF CONTENTS

stockholders; debt financing, if available, may involve significant cash payment obligations and covenants that restrict our ability to operate as a business, our stock price may not reach levels necessary to induce option or warrant exercises, and asset sales may not be possible on terms we consider acceptable. If we are unable to raise the funds necessary to meet our long-term liquidity needs, we may have to delay or discontinue the acquisition and development of cell therapies, and/or the expansion of our business or raise funds on terms that we currently consider unfavorable.

At December 31, 2011, we had cash and cash equivalents of approximately \$12,745,400 million. In addition we have \$2,500,000 recorded in other assets for restricted cash associated with our Series E Preferred Stock, which is held in escrow and not available to meet current cash requirements. The trading volume of our common stock, coupled with our history of operating losses and liquidity challenges, 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. During times of extreme market volatility, capital may not be available on favorable terms, if at all. Our inability to obtain such additional capital on acceptable terms could materially and adversely affect our business operations and ability to continue as a going concern.

Commitments and Contingencies

The following table reflects a summary of NeoStem's significant contractual obligations and commitments as of December 31, 2011 (in thousands):

| | Total | Less than 1 Year | 1 – 3 Years | 3 – 5 Years | More than 5 Years |
|---|--------------------|---------------------|-------------------|-------------------|----------------------|
| Long-Term Debt Obligations | | | | | |
| Series E Preferred Stock ⁽¹⁾ | 7,018.9 | 5,024.3 | 1,994.6 | — | — |
| Mortgages Payable | 3,635.0 | 190.1 | 414.9 | 462.4 | 2,567.6 |
| Operating Lease Obligations | 4,214.9 | 1,407.8 | 1,396.3 | 1,117.6 | 293.2 |
| | <u>\$ 14,868.8</u> | <u>\$ 6,622.2</u> | <u>\$ 3,805.8</u> | <u>\$ 1,580.0</u> | <u>\$ 2,860.8</u> |

(1) Amounts include dividends.

Under an agreement with an external clinical research organization ("CRO"), we will incur expenses relating to our AMR-001 Phase 2 clinical trial for the treatment of AMI. The timing and amount of these disbursements are based on the achievement of certain milestones, patient enrollment, services rendered or as expenses are incurred by the CRO and therefore, we cannot reasonably estimate the timing of these payments.

SEASONALITY

NeoStem does not believe that its operations are seasonal in nature.

OFF-BALANCE SHEET ARRANGEMENTS

NeoStem does not have any off-balance sheet arrangements.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and judgments that affect the amounts reported in the financial statements. On an ongoing basis, the Company evaluates its estimates and assumptions. The Company bases its estimates on historical experience and other assumptions believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results could differ from these estimates.

An accounting policy is considered to be critical if it is important to the Company's financial condition and results of operations and if it requires management's most difficult, subjective and complex judgments in its application. For a summary of all of the Company's significant accounting policies, see Note 2 to the Company's Consolidated Financial Statements.

[TABLE OF CONTENTS](#)

Share-Based Compensation

The Company expenses all share-based payment awards to employees and consultants, including grants of stock options, warrants, and restricted stock, over the requisite service period based on the grant date fair value of the awards. For awards with performance-based vesting criteria, we estimate the probability of achievement of the performance criteria and recognize compensation expense related to those awards expected to vest. The Company determines the fair value of certain share based awards using the Black-Scholes option-pricing model which uses both historical and current market data to estimate the fair value. This method incorporates various assumptions such as the risk-free interest rate, expected volatility, expected dividend yield and expected life of the options or warrants. The fair value of our restricted stock and restricted stock units is based on the closing market price of our common stock on the date of grant.

The Company estimates an expected dividend yield of zero because the Company has never paid cash dividends on its common stock and has no present intention to pay cash dividends. Expected volatility is based on the Company's historical stock prices using a mathematical formula to measure the standard deviation of the change in the natural logarithm of the Company's underlying stock price that is expected over a period of time commensurate with the expected life of the share-based award. The risk-free interest rate is derived from the zero coupon rate on U.S. Treasury instruments for the expected life of the share-based award. The expected life calculation is based on the actual life of historical share-based awards.

Share-based compensation expense recognized in the consolidated statement of operations is based on awards ultimately expected to vest. The guidance requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates with a cumulative catch up adjustment.

The Company evaluates the assumptions used to value share-based awards on a regular basis. If factors change and the Company employs different assumptions, share-based compensation expense may differ significantly from what the Company has recorded in the past. If there are any modifications or cancellations of share-based awards, the Company may be required to accelerate, increase or cancel any remaining, unrecognized share-based compensation expense. To the extent that the Company grants any additional equity securities, its share-based compensation expense will increase by the fair value of the additional grants. Compensation expense is only recognized for those awards that are expected to vest and therefore the Company estimates a forfeiture rate and revises those estimates in subsequent periods if the actual forfeitures differs from the prior estimates. In addition, for awards with performance-based vesting criteria, the Company estimates the probability of achievement of the performance criteria and recognizes compensation expense related to those awards expected to vest. Compensation expense may be significantly impacted in the future to the extent the Company's estimates differ from actual results.

Recognizing and Measuring Assets Acquired and Liabilities Assumed in Business Combinations at Fair Value

We account for acquired businesses using the purchase method of accounting, which requires that assets acquired and liabilities assumed be recorded at date of acquisition at their respective fair values. The consolidated financial statements and results of operations reflect an acquired business after the completion of the acquisition. The fair value of the consideration paid, including contingent consideration, is assigned to the underlying net assets of the acquired business based on their respective fair values. Any excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill. Beginning in 2009, amounts allocated to IPR&D are included on the balance sheet (refer to discussion above in "Goodwill and Intangible Assets with Indefinite Lives"). Intangible assets, including IPR&D assets upon successful completion of the project and approval of the product, are amortized on a straight-line basis to amortization expense over the expected life of the asset. Significant judgments are used in determining the estimated fair values assigned to the assets acquired and liabilities assumed and in determining estimates of useful lives of long-lived assets. Fair value determinations and useful life estimates are based on, among other factors, estimates of expected future net cash flows, estimates of appropriate discount rates used to present value expected future net cash flow streams, the timing of approvals for IPR&D projects and the timing of related product launch dates, the assessment of each asset's life cycle, the impact of competitive trends on each asset's life cycle and other factors. These judgments can materially impact the estimates used to allocate acquisition date fair values to assets acquired and liabilities assumed and the resulting timing and amount of amounts charged to, or recognized in current and future operating results. For these and other reasons, actual results may vary significantly from estimated results.

TABLE OF CONTENTS

The Company determines the acquisition date fair value of contingent consideration obligations based on a probability-weighted income approach derived from revenue estimates, post-tax gross profit levels and a probability assessment with respect to the likelihood of achieving contingent obligations including contingent payments such as milestone obligations, royalty obligations and contract earn-out criteria, where applicable. The fair value measurement is based on significant inputs not observable in the market and thus represents a Level 3 measurement as defined in fair value measurement accounting. The resultant probability-weighted cash flows are discounted using an appropriate effective annual interest rate. At each reporting date, the contingent consideration obligation will be revalued to estimated fair value and changes in fair value will be reflected as income or expense in our consolidated statement of operations. Changes in the fair value of the contingent consideration obligations may result from changes in discount periods and rates, changes in the timing and amount of revenue estimates and changes in probability assumptions with respect to the likelihood of achieving the various contingent payment obligations. Adverse changes in assumptions utilized in our contingent consideration fair value estimates could result in an increase in our contingent consideration obligation and a corresponding charge to operating income.

Impairments of Long-Lived Assets

The Company assesses changes in economic, regulatory and legal conditions and makes assumptions regarding estimated future cash flows in evaluating the value of the Company's property, plant and equipment, goodwill and other intangible assets.

The Company periodically evaluates whether current facts or circumstances indicate that the carrying values of its long-lived assets to be held and used may not be recoverable. If such circumstances are determined to exist, an estimate of the undiscounted future cash flows of these assets, or appropriate asset groupings, is compared to the carrying value to determine whether an impairment exists. If the asset is determined to be impaired, the loss is measured based on the difference between the asset's fair value and its carrying value. If quoted market prices are not available, the Company will estimate fair value using a discounted value of estimated future cash flows approach.

The Company tests its goodwill for impairment at least annually, or more frequently if impairment indicators exist, using a fair value based test. Goodwill represents the excess of the consideration transferred over the fair value of net assets of businesses purchased and is assigned to reporting units. Other acquired intangibles (excluding In process R&D) are recorded at fair value and amortized on a straight-line basis over their estimated useful lives. When events or circumstances warrant a review, the Company will assess recoverability from future operations using pretax undiscounted cash flows derived from the lowest appropriate asset groupings. Impairments are recognized in operating results to the extent that the carrying value of the intangible asset exceeds its fair value, which is determined based on the net present value of estimated cash flows.

The Company tests its indefinite-lived intangibles, including In process R&D, for impairment at least annually, or more frequently if impairment indicators exist, through a one-step test that compares the fair value of the indefinite lived intangible asset with the asset's carrying value. For impairment testing purposes, the Company may combine separately recorded indefinite-lived intangible assets into one unit of accounting based on the relevant facts and circumstances. Generally, the Company will combine indefinite-lived intangible assets for testing purposes if they operate as a single asset and are essentially inseparable. If the fair value is less than the carrying amount, an impairment loss is recognized within the Company's operating results.

Revenue Recognition

Prescription drugs and intermediary pharmaceutical products: The Company recognizes revenue from pharmaceutical and pharmaceutical intermediary products sales when title has passed, the risks and rewards of ownership have been transferred to the customer, the fee is fixed and determinable, and the collection of the related receivable is reasonably assured which is generally at the time of delivery.

Stem cell related service revenues: The Company recognizes revenue for its cell development and manufacturing services based on the terms of individual contracts. Cell development services generally contain multiple stages, which the Company evaluates for multiple elements. Each stage does not have stand-alone value and are dependent upon one another; therefore the Company recognizes revenue on a completed

TABLE OF CONTENTS

contract basis. Manufacturing services represent separate and distinct arrangements, and the Company is paid for time and materials or for fixed monthly amounts and revenue is recognized when efforts are expended or contractual terms have been met. The Company separately charges the customers for reimbursable expenses that are specified in each contract. On a monthly basis, the Company bills customers for reimbursable expenses and immediately recognizes reimbursement revenue, as the revenue is deemed earned as reimbursable expenses are incurred.

The Company recognizes revenue related to the collection and cryopreservation of cord blood and autologous adult stem cells when the cryopreservation process is completed which is approximately twenty four hours after cells have been collected. Revenue related to advance payments of storage fees is recognized ratably over the period covered by the advance payments.

Accounts Receivable

Accounts receivable are carried at original invoice amount less an estimate made for doubtful accounts. The Company applies judgment in connection with establishing the allowance for doubtful accounts. Specifically, the Company analyzes the aging of accounts receivable balances, historical bad debts, customer concentration and credit-worthiness, current economic trends and changes in the Company's customer payment terms. Significant changes in customer concentrations or payment terms, deterioration of customer credit-worthiness or weakening economic trends could have a significant impact on the collectability of the receivables and the Company's operating results. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. Management regularly reviews the aging of receivables and changes in payment trends by its customers, and records a reserve when it believes collection of amounts due are at risk.

Convertible Redeemable Preferred Stock Features

As a result of the November 2010 Series E Preferred Stock Offering, each reporting period we will value the holders' conversion option, forced redemption option, and warrants as derivative liabilities.

To value the holders' conversion option and forced redemption option, the Company used a multi-nomial lattice model that values the compound embedded derivatives based on a probability weighted discounted cash flow model. This model is based on future projections of the various potential outcomes. Based on the embedded derivatives, there are four primary events that can occur; the holder converts the Series E Preferred Stock, the holder redeems the Series E Preferred Stock, the Company redeems the Series E Preferred Stock, or the Company defaults/liquidates. The model analyzed the underlying economic factors that influenced which of these events would occur, when they were likely to occur, and the specific terms that would be in effect at the time (i.e. stock price, conversion price, etc.). Projections were then made on these underlying factors which led to a set of potential scenarios. Probabilities were assigned to each of these scenarios based on stock volatility and management projections regarding default and availability of alternative financing. This led to a cash flow projection and a probability associated with that cash flow. A discounted weighted average cash flow over the various scenarios was completed, and it was compared to the discounted cash flow of a 7% debt instrument without the embedded derivatives, thus determining a value for the compound embedded derivatives.

To value the warrants issued in connection with the Series E Preferred Stock, the Company used a multi-nomial lattice model that values the derivative liability of the warrant based on a probability weighted discounted cash flow model. This model is based on future projections of the various potential outcomes. Based on the features of the warrants, there are two primary events that can occur; the holder exercises the warrants (for scenarios above exercise prices) or the warrants are held to expiration. The model analyzed the underlying economic factors that influenced which of these events would occur, when they were likely to occur, and the specific terms that would be in effect at the time (i.e. stock price, exercise price, volatility, etc.). Projections were then made on these underlying factors which led to a set of potential scenarios. Probabilities were assigned to each of these scenarios based on stock volatility and management assumptions where appropriate. This led to a cash flow projection and a probability associated with that cash flow. A discounted weighted average cash flow over the various scenarios was completed to determine the value of the warrant derivative liability.

[TABLE OF CONTENTS](#)

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Not Applicable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The financial statements and notes thereto required to be filed under this Item are presented commencing on page [104](#) of this Annual Report on Form 10-K.

[TABLE OF CONTENTS](#)

NeoStem, Inc. and Subsidiaries

Table of Contents

| | <u>Page</u> |
|--|---------------------|
| Reports of Independent Registered Public Accounting Firms | 105 |
| Financial Statements: | |
| Consolidated Balance Sheets at December 31, 2011 and 2010 | 107 |
| Consolidated Statements of Operations Years Ended December 31, 2011 and 2010 | 108 |
| Consolidated Statements of Equity Years Ended December 31, 2011 and 2010 | 109 |
| Consolidated Statements of Cash Flows Years Ended December 31, 2011 and 2010 | 110 |
| Notes to Consolidated Financial Statements | 111 |

Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders
NeoStem, Inc. and Subsidiaries

We have audited the accompanying consolidated balance sheet of NeoStem, Inc. and subsidiaries (the "Company") as of December 31, 2011, and the related consolidated statements of operations, equity, and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform an audit of its internal control over financial reporting. Our audit included consideration of internal control as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of NeoStem, Inc. and subsidiaries as of December 31, 2011, and the results of their operations and their cash flows for the year ended December 31, 2011, in conformity with accounting principles generally accepted in the United States of America.

/s/ GRANT THORNTON, LLP

New York, New York
March 20, 2012

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders
NeoStem, Inc. and Subsidiaries

We have audited the accompanying consolidated balance sheet of NeoStem, Inc. and subsidiaries (the "Company") as of December 31, 2010, and the related consolidated statements of operations, equity and cash flows for the year ended December 31, 2010. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of NeoStem, Inc. and subsidiaries as of December 31, 2010, and the results of their operations and their cash flows for the year ended December 31, 2010, in conformity with accounting principles generally accepted in the United States of America.

/s/ DELOITTE & TOUCHE LLP

Parsippany, New Jersey
April 5, 2011

NEOSTEM, INC. AND SUBSIDIARIES
Consolidated Balance Sheets

| | December 31, | |
|---|-----------------------|-----------------------|
| | 2011 | 2010 |
| ASSETS | | |
| Current Assets | | |
| Cash and cash equivalents | \$ 12,745,432 | \$ 15,612,391 |
| Short term investments | 559 | 512 |
| Restricted cash | — | 3,381,369 |
| Accounts receivable trade, net of allowance for doubtful accounts of \$501,841 and \$210,977, respectively | 6,536,176 | 5,871,474 |
| Inventory | 17,153,396 | 21,023,388 |
| Deferred income taxes | 463,689 | — |
| Prepays and other current assets | 1,711,084 | 993,711 |
| Total current assets | 38,610,336 | 46,882,845 |
| Property, plant and equipment, net | 49,363,275 | 36,998,241 |
| Land use rights, net | 4,872,444 | 4,807,834 |
| Goodwill | 19,613,470 | 27,002,044 |
| Intangible assets, net | 36,932,431 | 24,466,597 |
| Other assets | 5,935,824 | 2,867,188 |
| | \$ 155,327,780 | \$ 143,024,749 |
| LIABILITIES AND EQUITY | | |
| Current Liabilities | | |
| Accounts payable | \$ 10,415,342 | \$ 14,286,929 |
| Accrued liabilities | 2,825,836 | 2,772,019 |
| Bank loans | 15,712,000 | 3,034,000 |
| Notes payable | 148,062 | 9,568,398 |
| Mortgages payable | 3,635,061 | — |
| Income taxes payable | 621,553 | 1,242,911 |
| Deferred income taxes | 651,064 | 232,075 |
| Unearned revenues | 2,436,532 | 1,708,280 |
| Total current liabilities | 36,445,450 | 32,844,612 |
| Long-term Liabilities | | |
| Deferred income taxes | 9,300,945 | 5,959,508 |
| Deferred rent liability | 1,194 | 45,489 |
| Unearned revenues | 169,198 | 282,518 |
| Derivative liabilities | 474,463 | 2,571,367 |
| Acquisition-related contingent consideration | 3,130,000 | — |
| Amount due related parties | 20,862,686 | 8,301,361 |
| Total long-term liabilities | 33,938,486 | 17,160,243 |
| Commitments and Contingencies | | |
| Redeemable Securities | | |
| Convertible Redeemable Series E Preferred Stock; 10,582,011 shares designated, liquidation value \$1.00 per share; issued and outstanding 6,662,748 and 10,582,011 shares, at December 31, 2011 and December 31, 2010, respectively | 4,811,326 | 6,532,275 |
| | 4,811,326 | 6,532,275 |
| EQUITY | | |
| Shareholders' Equity | | |
| Preferred stock; authorized, 20,000,000 shares Series B convertible redeemable preferred stock liquidation value, 1 share of common stock, \$.01 par value; 825,000 shares designated; issued and outstanding, 10,000 shares at December 31, 2011 and December 31, 2010 | 100 | 100 |
| Common stock, \$.001 par value, authorized 500,000,000 shares; issued and outstanding, 109,329,587 and 64,221,130 shares, at December 31, 2011 and December 31, 2010, respectively | 109,330 | 63,813 |
| Additional paid-in capital | 200,858,638 | 141,137,522 |
| Accumulated deficit | (143,094,854) | (95,320,620) |
| Accumulated other comprehensive income | 4,152,343 | 2,779,066 |
| Total NeoStem, Inc. shareholders' equity | 62,025,557 | 48,659,881 |
| Noncontrolling interests | 18,106,961 | 37,827,738 |
| Total equity | 80,132,518 | 86,487,619 |
| | \$ 155,327,780 | \$ 143,024,749 |

The accompanying notes are an integral part of these consolidated financial statements

NEOSTEM, INC. AND SUBSIDIARIES

Consolidated Statements of Operations

| | Years Ended December 31, | |
|---|--------------------------|------------------|
| | 2011 | 2010 |
| Revenues | \$ 73,717,980 | \$ 69,821,294 |
| Cost of revenues | 55,974,088 | 49,668,262 |
| Gross profit | 17,743,892 | 20,153,032 |
| Research and development | 11,003,110 | 7,684,537 |
| Selling, general, and administrative | 41,845,255 | 30,788,638 |
| Goodwill impairment | 19,432,667 | 558,168 |
| Operating expenses | 72,281,032 | 39,031,343 |
| Operating loss | (54,537,140) | (18,878,311) |
| Other income (expense): | | |
| Other income (expense), net | 2,338,270 | 513,110 |
| Interest expense | (3,991,220) | (480,903) |
| | (1,652,950) | 32,207 |
| Loss from operations before provision for income taxes and noncontrolling interests | (56,190,090) | (18,846,104) |
| Provision for income taxes | 392,767 | 550,912 |
| Net loss | (56,582,857) | (19,397,016) |
| Less – net (loss) income attributable to noncontrolling interests | (9,448,388) | 3,908,690 |
| Net loss attributable to NeoStem, Inc. | (47,134,469) | (23,305,706) |
| Preferred dividends | 639,765 | 237,963 |
| Net loss attributable to NeoStem, Inc. common shareholders | \$(47,774,234) | \$(23,543,669) |
| Basic and diluted loss per share | \$ (0.54) | \$ (0.46) |
| Weighted average common shares outstanding | 88,598,696 | 51,632,417 |

The accompanying notes are an integral part of these consolidated financial statements

NEOSTEM, INC. AND SUBSIDIARIES

| | Series B Convertible Preferred Stock | | Common Stock | | Additional Paid in Capital | Accumulated Other Comprehensive Income | Accumulated Deficit | Total NeoStem, Inc. Shareholders' Equity | Non-Controlling Interest in Subsidiaries | Total Equity |
|---|--------------------------------------|---------------|--------------------|-------------------|----------------------------|--|------------------------|--|--|----------------------|
| | Shares | Amount | Shares | Amount | | | | | | |
| Balance at December 31, 2009 | 10,000 | \$ 100 | 37,193,491 | \$ 37,193 | \$ 95,709,491 | \$ (56,504) | \$ (71,776,951) | \$ 23,913,329 | \$ 33,919,048 | \$ 57,832,377 |
| Comprehensive income (loss): | | | | | | | | | | |
| Net income (loss) | — | — | — | — | — | — | (23,305,706) | (23,305,706) | 3,908,690 | (19,397,016) |
| Foreign currency translation | — | — | — | — | — | 2,835,570 | — | 2,835,570 | — | 2,835,570 |
| Total comprehensive income (loss) | — | — | — | — | — | — | — | (20,470,136) | 3,908,690 | (16,561,446) |
| Exercise of stock options | — | — | 90,000 | 90 | 140,010 | — | — | 140,100 | — | 140,100 |
| Exercise of warrants | — | — | 2,025,000 | 2,025 | 2,959,725 | — | — | 2,961,750 | — | 2,961,750 |
| Share-based compensation | — | — | 349,517 | 350 | 7,564,643 | — | — | 7,564,993 | — | 7,564,993 |
| Proceeds from issuance of common stock | — | — | 15,326,998 | 15,327 | 21,410,211 | — | — | 21,425,538 | — | 21,425,538 |
| Conversion of Series C Preferred | — | — | 9,086,124 | 9,086 | 13,710,962 | — | — | 13,720,048 | — | 13,720,048 |
| Shares issued for charitable contribution | — | — | 150,000 | 150 | 298,350 | — | — | 298,500 | — | 298,500 |
| Receipt of treasury shares | — | — | — | (408) | (655,870) | — | — | (656,278) | — | (656,278) |
| Dividends on Series C Preferred | — | — | — | — | — | — | (153,469) | (153,469) | — | (153,469) |
| Dividends on Series E Preferred | — | — | — | — | — | — | (84,494) | (84,494) | — | (84,494) |
| Balance at December 31, 2010 | 10,000 | \$ 100 | 64,221,130 | 63,813 | 141,137,522 | 2,779,066 | (95,320,620) | 48,659,881 | 37,827,738 | 86,487,619 |
| Comprehensive loss: | | | | | | | | | | |
| Net loss | — | — | — | — | — | — | (47,134,469) | (47,134,469) | (9,448,388) | (56,582,857) |
| Foreign currency translation | — | — | — | — | — | 1,373,277 | — | 1,373,277 | 1,223,710 | 2,596,987 |
| Total comprehensive loss | — | — | — | — | — | — | — | (45,761,192) | (8,224,678) | (53,985,870) |
| Exercise of stock options | — | — | 5,000 | 5 | 7,095 | — | — | 7,100 | — | 7,100 |
| Share-based compensation | — | — | 3,824,018 | 3,824 | 10,262,199 | — | — | 10,266,023 | — | 10,266,023 |
| Proceeds from issuance of common stock | — | — | 19,678,224 | 19,678 | 21,133,004 | — | — | 21,152,682 | — | 21,152,682 |
| Shares issued for charitable contribution | — | — | — | 408 | 606,955 | — | — | 607,363 | — | 607,363 |
| Repayment of Series E Preferred Principal and Dividends | — | — | 5,157,732 | 5,158 | 4,254,907 | — | (639,765) | 3,620,300 | — | 3,620,300 |
| Dividends to related party | — | — | — | — | — | — | — | — | (11,726,099) | (11,726,099) |
| Technology contributed to Athelos by Non-Controlling Interest | — | — | — | — | 920,000 | — | — | 920,000 | 230,000 | 1,150,000 |
| Shares issued in PCT Merger | — | — | 10,600,000 | 10,600 | 17,189,400 | — | — | 17,200,000 | — | 17,200,000 |
| Shares issued in Amorcycyte Merger | — | — | 5,843,483 | 5,844 | 5,347,556 | — | — | 5,353,400 | — | 5,353,400 |
| Balance at December 31, 2011 | 10,000 | \$ 100 | 109,329,587 | \$ 109,330 | \$ 200,858,638 | \$ 4,152,343 | \$(143,094,854) | \$ 62,025,557 | \$ 18,106,961 | \$ 80,132,518 |

NEOSTEM, INC. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

| | Years Ended December 31, | |
|---|--------------------------|-----------------|
| | 2011 | 2010 |
| Cash flows from operating activities: | | |
| Net loss | \$ (56,582,857) | \$ (19,397,016) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Common stock, stock options and warrants issued as payment for compensation, services rendered and interest expense | 10,266,023 | 7,863,492 |
| Depreciation and amortization | 8,978,317 | 5,136,159 |
| Gain on short term investments | — | (24,934) |
| Amortization of preferred stock discount and issuance cost | 2,440,241 | 281,211 |
| Changes in fair value of derivative liability | (2,096,904) | 138,325 |
| Write off of acquired in-process research and development | 1,150,000 | — |
| (Gain) loss on disposal of assets | (278,920) | 1,355,972 |
| Gain on contract termination | — | (656,278) |
| Non-cash interest expense | 661,058 | 165,567 |
| Contributions paid with common stock | 607,363 | — |
| Bad debt expense (recovery) | (97,739) | (70,829) |
| Goodwill impairment charge | 19,432,667 | 558,168 |
| Deferred income taxes | (688,699) | (830,681) |
| Changes in operating assets and liabilities, net of the effect of acquisitions: | | |
| Prepaid expenses and other current assets | (786,728) | (24,140) |
| Accounts receivable | 116,789 | 98,505 |
| Inventory | 4,640,282 | (7,469,128) |
| Unearned revenues | 590,124 | (336,704) |
| Other assets | (2,386,544) | (127,113) |
| Income tax payable | — | (667,729) |
| Accounts payable, accrued expenses and other current liabilities | (6,892,467) | 5,530,454 |
| Net cash used in operating activities | (20,927,994) | (8,476,699) |
| Cash flows from investing activities: | | |
| Cash received in acquisitions | 320,863 | — |
| Purchase of short-term investments | (28) | (2,424,132) |
| Proceeds from short-term investments | — | 2,742,018 |
| Change in restricted cash used as collateral for notes payable | 3,534,864 | (1,045,955) |
| Acquisition of property and equipment | (5,910,279) | (16,377,722) |
| Net cash used in investing activities | (2,054,580) | (17,105,791) |
| Cash flows from financing activities: | | |
| Net proceeds from the exercise of options and warrants | 7,100 | 3,101,850 |
| Net proceeds from issuance of capital stock | 21,152,682 | 21,212,974 |
| Net proceeds from issuance of preferred stock | — | 8,894,062 |
| Payment from related party | 644,414 | 566,845 |
| Repayment of mortgage loan | (149,542) | — |
| Proceeds of bank loan | 20,261,900 | 3,000,000 |
| Repayment of bank loan | (7,829,400) | (2,203,650) |
| Proceeds from notes payable | 10,950,616 | 20,506,518 |
| Repayment of notes payable | (20,786,909) | (21,000,225) |
| Repayment of debt to related party | (3,531,491) | — |
| Repayment of preferred stock | (650,000) | — |
| Payment of dividend | — | (222,924) |
| Net cash provided by financing activities | 20,069,370 | 33,855,450 |
| Impact of changes of foreign exchange rates | 46,245 | 180,062 |
| Net (decrease)/increase in cash and cash equivalents | (2,866,959) | 8,453,022 |
| Cash and cash equivalents at beginning of year | 15,612,391 | 7,159,369 |
| Cash and cash equivalents at end of period | \$ 12,745,432 | \$ 15,612,391 |
| Supplemental Disclosure of Cash Flow Information: | | |
| Cash paid during the period for: | | |
| Interest | \$ 1,522,700 | \$ 279,596 |
| Taxes | 1,119,500 | 2,056,250 |
| Supplemental Schedule of non-cash investing activities | | |
| Acquisition of property and equipment | — | 2,443,958 |
| Capitalized interest | 384,300 | 391,466 |
| Supplemental schedule of non-cash financing activities | | |
| Common stock, warrants and contingent consideration issued with the acquisition of Amorcyte | 8,483,400 | — |
| Common stock and warrants issued with the acquisition of PCT | 17,200,000 | — |
| Common stock issued pursuant to the redemption of Convertible Redeemable Series E 7% Preferred Stock | 3,511,200 | — |
| Common stock issued in payment of dividends for the Convertible Redeemable Series E 7% Preferred Stock | 748,900 | — |
| Financing costs for capital stock raises | — | 33,355 |
| Conversion of Convertible Redeemable Series C Preferred Stock | — | 13,720,048 |
| Dividend to Related Party reinvested as loan payable | 11,726,100 | — |

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 1 — The Company

NeoStem, Inc. (“NeoStem” or the “Company”) was incorporated under the laws of the State of Delaware in September 1980 under the name Fidelity Medical Services, Inc. The Company’s corporate headquarters are located at 420 Lexington Avenue, Suite 450, New York, NY 10170. The Company’s telephone number is (212) 584-4180 and its website address is www.neostem.com.

NeoStem, Inc. is an international biopharmaceutical company. In 2011, we operated our business in three reportable segments: (i) Cell Therapy — United States; (ii) Regenerative Medicine — China; and (iii) Pharmaceutical Manufacturing — China. We are pursuing the divestiture of the majority of our China operations and anticipate they will have been exited by the close of 2012.

Through the Cell Therapy — United States segment, the Company is focused on the development of proprietary cellular therapies in cardiovascular disease, immunology and regenerative medicine and becoming a single source for collection, storage, manufacturing, therapeutic development and transportation of cells for cell based medicine and regenerative science. Within this segment, the Company is also a provider of adult stem cell collection, processing and storage services in the U.S., enabling healthy individuals to donate and store their stem cells for personal therapeutic use. In addition, the Company collects and stores cord blood cells of newborns which help to ensure a supply of autologous stem cells for the child should they be needed for future medical treatment.

The Company strengthened its expertise in cellular therapies, for its Cell Therapy — United States segment, with its January 19, 2011 acquisition of Progenitor Cell Therapy, LLC, a Delaware limited liability company (“PCT”). PCT is engaged in a wide range of services in the cell therapy market for the treatment of human disease, including, but not limited to contract manufacturing, product and process development, regulatory consulting, product characterization and comparability, and storage, distribution, manufacturing and transportation of cell therapy products. PCT’s legacy business relationships also afford NeoStem introductions to innovative therapeutic programs.

In March 2011, PCT’s wholly owned subsidiary, Athelos, Inc. (Athelos), acquired rights and technology for a T-cell based immunomodulatory therapeutic in exchange for an approximate 20% interest in Athelos.

The Company further strengthened its breadth in cellular therapies through its October 17, 2011 acquisition of Amorcyte, Inc. Amorcyte is a development stage cell therapy company focusing on novel treatments for cardiovascular disease. Amorcyte’s lead product candidate is AMR-001. In January 2012, Amorcyte enrolled its first patient in the PreSERVE Phase 2 trial to investigate AMR-001’s ability to preserve heart function after a heart attack.

The Company views the PCT and Amorcyte acquisitions as fundamental to building a foundation in achieving its strategic mission of capturing the paradigm shift to cell therapy.

Through its Regenerative Medicine — China segment, in 2009, the Company began several China-based, Regenerative Medicine initiatives including: (i) constructing a stem cell research and development laboratory and processing facility in Beijing, (ii) establishing relationships with hospitals to provide cell-based therapies, and (iii) obtaining product licenses covering several adult stem cell therapeutics focused on regenerative medicine. As a result of certain changes in the PRC regulatory environment, the Company has determined to take steps to restrict, and expects to ultimately eliminate, its Regenerative Medicine business in the PRC.

The Company acquired its Pharmaceutical Manufacturing — China segment when on October 30, 2009, China Biopharmaceuticals Holdings, Inc. (“CBH”) merged with a wholly-owned subsidiary of NeoStem (the “Erye Merger”). As a result of the Erye Merger, NeoStem acquired CBH’s 51% ownership interest in Erye, a Sino-foreign joint venture with limited liability organized under the laws of the PRC. 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. In 2010, Erye began transferring its operations to its newly constructed manufacturing facility as to

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 1 — The Company – (continued)

which construction is substantially complete. The relocation and production lines have been completed and received cGMP certification. As part of its plan to focus its business on capturing the paradigm shift to cell therapies following the January 2011 acquisition of PCT, the Company is pursuing strategic alternatives with respect to its interest in Erye.

Note 2 — Summary of Significant Accounting Policies

Principles of Consolidation: The consolidated financial statements include the accounts of NeoStem, Inc. and its wholly owned and partially owned subsidiaries and affiliates as listed below:

| <u>Entity</u> | <u>Percentage of Ownership</u> | <u>Location</u> |
|---|--------------------------------------|----------------------------|
| NeoStem, Inc. | Parent Company | United States of America |
| NeoStem Therapies, Inc. | 100% | United States of America |
| Stem Cell Technologies, Inc. | 100% | United States of America |
| Amorcyte, LLC | 100% | United States of America |
| NeoStem (China) Inc. | 100% | People’s Republic of China |
| Qingdao Niao Bio-Technology Ltd.* | * | People’s Republic of China |
| Beijing Ruijiao Bio-Technology Ltd.* | * | People’s Republic of China |
| Tianjin Niou Bio-Technology Co., Ltd.* | * | People’s Republic of China |
| CBH Acquisition LLC | 100% | United States of America |
| China Biopharmaceuticals Holdings, Inc. (CBH) | 100% owned by CBH Acquisition LLC | United States of America |
| Suzhou Erye Pharmaceuticals Company Ltd. | 51% owned by CBH | People’s Republic of China |
| Progenitor Cell Therapy, LLC (PCT) | 100% | United States of America |
| NeoStem Family Storage, LLC | 100% owned by PCT | United States of America |
| Athelos Corporation | 80.1% owned by PCT | United States of America |
| PCT Allendale, LLC | 100% owned by PCT | United States of America |

* Because certain regulations in the People’s Republic of China (“PRC”) currently restrict or prohibit foreign entities from holding certain licenses and controlling certain businesses in China, the Company created a wholly foreign-owned entity, or WFOE, NeoStem (China), to implement its initiatives in China. To comply with China’s foreign investment regulations with respect to stem cell-related activities, these business initiatives in China are conducted via Chinese domestic entities that are controlled by the WFOE through various contractual arrangements (Variable Interest Entity or “VIE”) and under the principles of consolidation the Company consolidates 100% of their operations.

For as long as the Company owns an interest in Erye and the VIE structure is in place, the Company expects to rely partly on dividends paid to it by the WFOE under the contracts with the VIEs, and under the Joint Venture Agreement attributable to its 51% ownership interest in Erye, to meet some of 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, through 2012: (i) 49% of undistributed profits (after tax) will be distributed to Suzhou Erye Economy and Trading Co Ltd. (“EET”), the owner of the remaining 49% interest in Erye and loaned back to Erye for use in connection with its construction of the new Erye facility (to be repaid gradually after construction is completed); (ii) 45% of the net profit after tax due to the Company will be provided to Erye as part of the new facility construction fund, which will be characterized as paid-in capital for our 51% interest in Erye; and (iii) only 6% of the net profit will be distributed to us directly for our operating expenses. The Company is pursuing the divestiture of Erye.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 2 — Summary of Significant Accounting Policies – (continued)

Basis of Presentation: The accompanying Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“generally accepted accounting principles”) and include the accounts of the Company and its wholly owned and partially owned subsidiaries. In the opinion of management, the accompanying Consolidated Financial Statements of the Company and its subsidiaries, include all normal and recurring adjustments considered necessary to present fairly the Company’s financial position as of December 31, 2011 and 2010, and the results of its operations and its cash flows for the periods presented.

Use of Estimates: The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements. Estimates also affect the reported amounts of revenues and expenses during the reporting period. Accordingly, actual results could differ from those estimates.

Cash and Cash Equivalents: Cash and cash equivalents include short-term, highly liquid, investments with maturities of ninety days or less when purchased. As of December 31, 2011, the Company had approximately \$791,100 in bank deposits covered by the Federal Deposit Insurance Corporation. As of December 31, 2011, cash and short-term investments held by our foreign subsidiaries that are not available to fund domestic operations unless repatriated were \$8,810,800.

Concentration of Risks: For the year ended December 31, 2011, three major suppliers provided approximately 13%, 12% and 10%, respectively, of Erye’s purchases of raw materials. As of December 31, 2011, the total accounts payable to the three major suppliers represented 12% of the total accounts payable balance.

Approximately 85% of Erye’s revenues are derived from products that use penicillin or cephalosporin as the key active ingredient. These products are manufactured on two of the eight production lines in Erye’s manufacturing facility. Any issues or incidents that might disrupt the manufacturing of products requiring penicillin or cephalosporin could have a material impact on the operating results of Erye. Any interruption or cessation in production could impact market sales.

In March 2011, the National Development and Reform Commission in China issued insurance reimbursement price cuts which impacted two of Erye products. The Company recognizes that there will be continuous pressure on Erye product pricing as a result of such actions.

Restricted Cash: Restricted cash represents cash required to be deposited with banks in China as collateral for the balance of bank notes payable and are subject to withdrawal restrictions according to the agreement with the bank. The required deposit rate is approximately 30-50% of the notes payable balance. Such restricted cash associated with these notes payable is reflected within current assets. In addition, the Company has restricted cash associated with its Series E Preferred Stock, which is held in escrow, and is recorded in other assets.

Accounts Receivable: Accounts receivable are carried at original invoice amount less an estimate made for doubtful accounts. The Company applies judgment in connection with establishing the allowance for doubtful accounts. Specifically, the Company analyzes the aging of accounts receivable balances, historical bad debts, customer concentration and credit-worthiness, current economic trends and changes in the Company’s customer payment terms. Significant changes in customer concentrations or payment terms, deterioration of customer credit-worthiness or weakening economic trends could have a significant impact on the collectability of the receivables and the Company’s operating results. If the financial condition of the Company’s customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. Management regularly reviews the aging of receivables and changes in payment trends by its customers, and records a reserve when it believes collection of amounts due are at risk.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 2 — Summary of Significant Accounting Policies – (continued)

Inventories: Inventories are stated at the lower of cost or market using the first-in, first-out basis. The Company also reviews its inventory periodically and will reduce inventory to its net realizable value depending on certain factors, such as product demand, remaining shelf life, future marketing plans, obsolescence and slow-moving inventories. The Company includes in work in process the cost incurred on projects at PCT that have not been completed. The Company reviews these projects periodically to determine that the value of each project is stated at the lower of cost or market.

Inventories consisted of the following (in thousands):

| | December 31, 2011 | December 31, 2010 |
|----------------------------|----------------------|----------------------|
| Raw materials and supplies | \$ 2,974.8 | \$ 8,043.8 |
| Work in process | 5,086.4 | 4,792.4 |
| Finished goods | 9,092.2 | 8,187.2 |
| Total inventory | <u>\$ 17,153.4</u> | <u>\$ 21,023.4</u> |

Property, Plant, and Equipment: The cost of property and equipment is depreciated over the estimated useful lives of the related assets. Depreciation is computed on the straight-line method. Repairs and maintenance expenditures that do not extend original asset lives are charged to expense as incurred.

Property, plant, and equipment consisted of the following (in thousands):

| | Useful Life | December 31, 2011 | December 31, 2010 |
|---------------------------|---------------|----------------------|----------------------|
| Building and improvements | 25 – 30 years | \$ 19,992.4 | \$ 6,091.9 |
| Machinery and equipment | 8 – 12 years | 26,620.7 | 19,387.6 |
| Lab equipment | 5 – 7 years | 2,267.2 | 716.2 |
| Furniture and fixtures | 5 – 12 years | 779.0 | 392.5 |
| Vehicles | 8 years | 388.6 | 273.9 |
| Software | 3 – 5 years | 101.2 | 99.6 |
| Leasehold improvements | 2 – 3 years | 2,780.8 | 2,109.8 |
| Construction in progress | | 4,321.6 | 10,339.2 |
| | | <u>57,251.5</u> | <u>39,410.7</u> |
| Accumulated depreciation | | <u>(7,888.2)</u> | <u>(2,412.5)</u> |
| | | <u>\$ 49,363.3</u> | <u>\$ 36,998.2</u> |

The Company's results included depreciation expense of approximately \$5,469,300 and \$2,277,000 for the years ended December 31, 2011 and 2010, respectively.

Erye has substantially completed the construction of its new pharmaceutical manufacturing facility. The relocation has continued and new production lines have been completed and received cGMP certification. Erye has incurred approximately \$39 million on the new facility. No depreciation is provided for construction-in-progress until such time the assets are completed and placed into service. Interest incurred during the period of construction, if material, is capitalized. The Company capitalized \$384,300 and \$391,500 of interest expense for the years ended December 31, 2011 and 2010, respectively.

Land Use Rights: According to Chinese law, the government owns all the land in China. Companies or individuals are authorized to possess and use the land only through land use rights granted by the Chinese government. Land use rights are being recognized ratably using the straight-line method over the lease term of 50 years.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 2 — Summary of Significant Accounting Policies – (continued)

Income Taxes: The Company recognizes (a) the amount of taxes payable or refundable for the current year and (b) deferred tax liabilities and assets for the future tax consequences of events that have been recognized in the Company's financial statements or tax returns. The Company continues to evaluate the accounting for uncertainty in tax positions. The guidance requires companies to recognize in their financial statements the impact of a tax position if the position is more likely than not of being sustained on audit. The position ascertained inherently requires judgment and estimates by management. As of December 31, 2011, management does not believe the Company has any material uncertain tax positions that would require it to measure and reflect the potential lack of sustainability of a position on audit in its financial statements. The Company will continue to evaluate its uncertain tax positions in future periods to determine if measurement and recognition in its financial statements is necessary. The Company does not believe there will be any material changes in its unrecognized tax positions over the next year.

The Company classifies taxes related to withholding taxes paid on dividends declared by Erye to the Company that are reinvested into Erye as general and administrative expense.

The Company recognizes interest and penalties as a component of income tax expense. Interest and penalties recognized for the year ended December 31, 2011 and 2010 were \$0 and \$251,800, respectively.

Comprehensive Income (Loss): The accumulated other comprehensive income (loss) balance at December 31, 2011 and December 31, 2010 in the amount of \$4,152,300 and \$2,779,100, respectively, is comprised entirely of foreign currency translation adjustments. Comprehensive loss for the years ended December 31, 2011 and 2010 was as follows (in thousands):

| | Years Ended December 31, | |
|--|--------------------------|----------------------|
| | 2011 | 2010 |
| Net loss | \$(56,582.9) | \$ (19,397.0) |
| Other comprehensive (loss)/income | | |
| Foreign currency translation | 2,597.0 | 2,835.6 |
| Total other comprehensive (loss)/income | 2,597.0 | 2,835.6 |
| Comprehensive (loss) | (53,985.9) | (16,561.4) |
| Comprehensive (loss)/income attributable to noncontrolling interests | (8,224.7) | 5,264.6 |
| Comprehensive loss attributable to NeoStem, Inc. | <u>\$(45,761.2)</u> | <u>\$ (21,826.0)</u> |

Recognizing and Measuring Assets Acquired and Liabilities Assumed in Business Combinations at Fair Value

We account for acquired businesses using the purchase method of accounting, which requires that assets acquired and liabilities assumed be recorded at date of acquisition at their respective fair values. The consolidated financial statements and results of operations reflect an acquired business after the completion of the acquisition. The fair value of the consideration paid, including contingent consideration, is assigned to the underlying net assets of the acquired business based on their respective fair values. Any excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill. Beginning in 2009, amounts allocated to IPR&D are included on the balance sheet (refer to discussion above in "Goodwill and Intangible Assets with Indefinite Lives"). Intangible assets, including IPR&D assets upon successful completion of the project and approval of the product, are amortized on a straight-line basis to amortization expense over the expected life of the asset. Significant judgments are used in determining the estimated fair values assigned to the assets acquired and liabilities assumed and in determining estimates of useful lives of long-lived assets. Fair value determinations and useful life estimates are based on, among other factors, estimates of expected future net cash flows, estimates of appropriate discount rates used to present value expected future net cash flow streams, the timing of approvals for IPR&D projects and the timing of related product launch dates, the assessment of each asset's life cycle, the impact of competitive trends on each asset's life cycle and other factors. These judgments can materially impact the estimates used to allocate

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 2 — Summary of Significant Accounting Policies – (continued)

acquisition date fair values to assets acquired and liabilities assumed and the resulting timing and amount of amounts charged to, or recognized in current and future operating results. For these and other reasons, actual results may vary significantly from estimated results.

The Company determines the acquisition date fair value of contingent consideration obligations based on a probability-weighted income approach derived from revenue estimates, post-tax gross profit levels and a probability assessment with respect to the likelihood of achieving contingent obligations including contingent payments such as milestone obligations, royalty obligations and contract earn-out criteria, where applicable. The fair value measurement is based on significant inputs not observable in the market and thus represents a Level 3 measurement as defined in fair value measurement accounting. The resultant probability-weighted cash flows are discounted using an appropriate effective annual interest rate. At each reporting date, the contingent consideration obligation will be revalued to estimated fair value and changes in fair value will be reflected as income or expense in our consolidated statement of operations. Changes in the fair value of the contingent consideration obligations may result from changes in discount periods and rates, changes in the timing and amount of revenue estimates and changes in probability assumptions with respect to the likelihood of achieving the various contingent payment obligations. Adverse changes in assumptions utilized in our contingent consideration fair value estimates could result in an increase in our contingent consideration obligation and a corresponding charge to operating income.

Goodwill and Other Intangible Assets: Goodwill is the excess of purchase price over the fair value of identified net assets of businesses acquired. The Company's intangible assets with an indefinite life are related to in process research and development at Erye, as the Company expects this research and development to provide the Company with substantial benefit for a period that extends beyond the foreseeable horizon. Amortized intangible assets consist of Erye's customer list, manufacturing technology, standard operating procedures, tradename, lease rights and patents, as well as patents and rights associated primarily with the VSELTM Technology. These intangible assets are amortized on a straight line basis over their respective useful lives.

The Company reviews goodwill and indefinite-lived intangible assets at least annually for possible impairment. Goodwill and indefinite-lived intangible assets are reviewed for possible impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of the reporting unit below its carrying value. The Company tests its goodwill and indefinite-lived intangible assets for its Cell Therapy — United States, and its Pharmaceutical Manufacturing — China reporting units on October 31. The Company reviews the carrying value of goodwill and indefinite-lived intangible assets utilizing a discounted cash flow model, and, where appropriate, a market value approach is also utilized to supplement the discounted cash flow model. The Company makes assumptions regarding estimated future cash flows, discount rates, long-term growth rates and market values to determine each reporting unit's estimated fair value. If these estimates or related assumptions change in the future, the Company may be required to record impairment charges.

Derivatives: Derivative instruments, including derivative instruments embedded in other contracts, are recorded on the balance sheet as either an asset or liability measured at its fair value. Changes in the fair value of derivative instruments are recognized currently in results of operations unless specific hedge accounting criteria are met. The Company has not entered into hedging activities to date. As a result of certain financings (see Note 8), derivative instruments were created that are measured at fair value and marked to market at each reporting period. Changes in the derivative value are recorded as other income (expense) on the consolidated statements of operations.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 2 — Summary of Significant Accounting Policies – (continued)

Evaluation of Long-lived Assets: The Company reviews long-lived assets and finite-lived intangibles assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset exceeds the fair value of the asset. If other events or changes in circumstances indicate that the carrying amount of an asset that the Company expects to hold and use may not be recoverable, the Company will estimate the undiscounted future cash flows expected to result from the use of the asset or its eventual disposition, and recognize an impairment loss. The impairment loss, if determined to be necessary, would be measured as the amount by which the carrying amount of the assets exceeds the fair value of the assets.

Share-Based Compensation: The Company expenses all share-based payment awards to employees, directors, advisors and consultants, including grants of stock options, warrants, and restricted stock, over the requisite service period based on the grant date fair value of the awards. Advisor and consultant awards are remeasured each reporting period through vesting. For awards with performance-based vesting criteria, the Company estimates the probability of achievement of the performance criteria and recognizes compensation expense related to those awards expected to vest. The Company determines the fair value of certain share-based awards using the Black-Scholes option-pricing model which uses both historical and current market data to estimate the fair value. This method incorporates various assumptions such as the risk-free interest rate, expected volatility, expected dividend yield and expected life of the options or warrants. The fair value of the Company's restricted stock and restricted stock units is based on the closing market price of the Company's common stock on the date of grant. See Note 9.

Loss Per Share: Basic loss per share is based on the weighted effect of all common shares issued and outstanding, and is calculated by dividing net loss attributable to common shareholders by the weighted average shares outstanding during the period. Diluted loss per share, which is calculated by dividing net loss attributable to common shareholders by the weighted average number of common shares used in the basic loss per share calculation plus the number of common shares that would be issued assuming conversion of all potentially dilutive securities outstanding, is not presented as such potentially dilutive securities are anti-dilutive in all periods presented. For the years ended December 31, 2011 and 2010, the Company incurred net losses and therefore no common stock equivalents were utilized in the calculation of loss per share. At December 31, 2011 and 2010, the Company excluded the following potentially dilutive securities:

| | December 31, | |
|--|--------------|------------|
| | 2011 | 2010 |
| Stock Options | 17,143,505 | 13,032,214 |
| Warrants | 37,389,825 | 21,843,507 |
| Series E Preferred Stock, Common stock equivalents | 3,989,669 | 5,289,948 |
| Restricted Shares | 976,668 | 51,666 |

Revenue Recognition:

Prescription drugs and intermediary pharmaceutical products: The Company recognizes revenue from pharmaceutical and pharmaceutical intermediary products sales when title has passed, the risks and rewards of ownership have been transferred to the customer, the fee is fixed and determinable, and the collection of the related receivable is reasonably assured which is generally at the time of delivery.

Stem cell related service revenues: The Company recognizes revenue for its cell development and manufacturing services based on the terms of individual contracts. Cell development services generally contain multiple stages, which the Company evaluates for multiple elements. Each stage does not have stand-alone value and are dependent upon one another; therefore the Company recognizes revenue on a completed contract basis. Manufacturing services represent separate and distinct arrangements, and the Company is paid for time and materials or for fixed monthly amounts and revenue is recognized when efforts are expended or contractual terms have been met. The Company separately charges the customers for reimbursable expenses

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 2 — Summary of Significant Accounting Policies – (continued)

that are specified in each contract. On a monthly basis, the Company bills customers for reimbursable expenses and immediately recognizes reimbursement revenue, as the revenue is deemed earned as reimbursable expenses are incurred.

The Company recognizes revenue related to the collection and cryopreservation of cord blood and autologous adult stem cells when the cryopreservation process is completed which is approximately twenty four hours after cells have been collected. Revenue related to advance payments of storage fees is recognized ratably over the period covered by the advance payments.

Revenues for the years ended December 31, 2011 and 2010 were comprised of the following (in thousands):

| | Years Ended December 31, | |
|---|--------------------------|--------------------|
| | 2011 | 2010 |
| Revenues | | |
| Prescription drugs and intermediary pharmaceutical products | \$ 63,393.6 | \$ 69,584.3 |
| Stem cell related service revenues | 7,729.6 | 237.0 |
| Stem cell related services – reimbursed expenses | 2,594.8 | — |
| | <u>\$ 73,718.0</u> | <u>\$ 69,821.3</u> |

Fair Value Measurements: Fair value of financial assets and liabilities that are being measured and reported are defined as the exchange price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market at the measurement date (exit price). The Company is required to classify fair value measurements in one of the following categories:

Level 1 inputs which are defined as quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

Level 2 inputs which are defined as inputs other than quoted prices included within Level 1 that are observable for the assets or liabilities, either directly or indirectly.

Level 3 inputs are defined as unobservable inputs for the assets or liabilities. Financial assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement requires judgment, and may affect the valuation of the fair value of assets and liabilities and their placement within the fair value hierarchy levels.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 2 — Summary of Significant Accounting Policies – (continued)

The Company determined the fair value of funds invested in short term investments, which are considered trading securities, to be level 1 inputs measured by quoted prices of the securities in active markets. The Company determined the fair value of funds invested in money market funds to be level 1. The Company determined the fair value of the embedded derivative liabilities and warrant derivative liabilities to be level 3 inputs. These inputs require material subjectivity because value is derived through the use of a lattice model that values the derivatives based on probability weighted discounted cash flows. The following table sets forth by level within the fair value hierarchy the Company's financial assets and liabilities that were accounted for at fair value on a recurring basis as of December 31, 2011, and December 31, 2010 (in thousands):

| | December 31, 2011 | | |
|---------------------------------|---|------------|---------|
| | Fair Value Measurements Using Fair Value Hierarchy | | |
| | Level 1 | Level 2 | Level 3 |
| Money market investments | \$ 2,497.4 | \$ — | \$ — |
| Short term investments | 0.6 | — | — |
| Embedded derivative liabilities | — | — | 391.7 |
| Warrant derivative liabilities | — | — | 82.7 |
| Contingent consideration | — | — | 3,130.0 |
| | December 31, 2010 | | |
| | Fair Value Measurements Using Fair Value Hierarchy | | |
| | Level 1 | Level 2 | Level 3 |
| Money market investments | \$ — | \$ 2,501.0 | \$ — |
| Short term investments | 0.5 | — | — |
| Embedded derivative liabilities | — | — | 2,281.8 |
| Warrant derivative liabilities | — | — | 289.6 |

Subsequent to December 31, 2010 the Company reevaluated the characteristics of the money market savings account, currently recorded as other assets, and determined it is not tied to underlying securities and has been reclassified to level 1.

The fair value measurement of the contingent consideration obligations is determined using Level 3 inputs. The fair value of contingent consideration obligations is based on a probability-weighted income approach. The measurement is based upon unobservable inputs supported by little or no market activity based on our own assumptions. Changes in the fair value of the contingent consideration obligations are recorded in our consolidated statement of operations. Contingent consideration was recognized on October 17, 2011 in connection with the Amorcyte merger. See Note 4. There were no changes in contingent consideration fair value as of December 31, 2011.

For those financial instruments with significant Level 3 inputs, the following table summarizes the activity for the years ended December 31, 2011 and 2010 by type of instrument (in thousands):

| | Embedded Derivatives | Warrants |
|---|-------------------------|----------|
| Beginning liability balance, December 31, 2009 | \$ — | \$ 36.0 |
| Convertible redeemable Series E preferred stock and warrants issued | 2,131.1 | 266.0 |
| Change in fair value recorded in earnings | 150.7 | (12.4) |
| Ending liability balance, December 31, 2010 | \$ 2,281.8 | \$ 289.6 |
| Change in fair value recorded in earnings | (1,890.1) | (206.9) |
| Ending liability balance, December 31, 2011 | \$ 391.7 | \$ 82.7 |

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 2 — Summary of Significant Accounting Policies – (continued)

Some of the Company's financial instruments are not measured at fair value on a recurring basis, but are recorded at amounts that approximate fair value due to their liquid or short-term nature, such as cash and cash equivalents, restricted cash, accounts receivable, accounts payable, notes payable and bank loans.

Foreign Currency Translation: As the Company's Chinese pharmaceutical business is a self-contained and integrated entity, and the Company's Chinese stem cell business' future cash flow is intended to be sufficient to service its additional financing requirements, the Chinese subsidiaries' functional currency is the Renminbi ("RMB"), and the Company's reporting currency is the US dollar. Results of foreign operations are translated at the average exchange rates during the period, and assets and liabilities are translated at the closing rate at the end of each reporting period. Cash flows are also translated at average exchange rates for the period, therefore, amounts reported on the consolidated statement of cash flows will not necessarily agree with changes in the corresponding balances on the consolidated balance sheet.

Translation adjustments resulting from this process are included in accumulated other comprehensive income (loss) and amounted to \$4,152,300 and \$2,779,100 as of December 31, 2011 and December 31, 2010, respectively.

Research and Development Costs: Research and development ("R&D") expenses include salaries, benefits, and other headcount related costs, clinical trial and related clinical manufacturing costs, contract and other outside service fees including sponsored research agreements, and facilities and overhead costs. The Company expenses the costs associated with research and development activities when incurred.

To further drive the Company's cell therapy initiatives, the Company will continue targeting key governmental agencies, congressional committees and not-for-profit organizations to contribute funds for the Company's research and development programs. The Company accounts for government grants as a deduction to the related expense in research and development operating expenses when earned.

Statutory Reserves: Pursuant to laws applicable to entities incorporated in the PRC, the PRC subsidiaries are prohibited from distributing their statutory capital and 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 the 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 the subsidiaries.

The general reserve is used to offset extraordinary losses. Subject to approval by the relevant authorities, a subsidiary may, upon a resolution passed by the shareholders, convert the general reserve into registered capital provided that the remaining general reserve after the conversion shall be at least 25% of the registered capital of the subsidiary before the capital increase as a result of the conversion. The staff welfare and bonus reserve is used for the collective welfare of the employees of the subsidiary. The enterprise expansion reserve is for the expansion of the subsidiary's operations and can also be converted to registered capital upon a resolution passed by the shareholders subject to approval by the relevant authorities. These reserves represent appropriations of the retained earnings determined in accordance with Chinese law, and are not distributable as cash dividends to the parent company, NeoStem. Statutory reserves are \$2,488,000 and \$2,234,600 as of December 31, 2011 and December 31, 2010, respectively.

Relevant PRC statutory laws and regulations permit payment of dividends by the Company's PRC subsidiaries only out of their accumulated earnings, if any, as determined in accordance with PRC accounting standards and regulations. As a result of these PRC laws and regulations, the Company's PRC subsidiaries are restricted in their ability to transfer a portion of their net assets either in the form of dividends, loans or advances. The restricted amount was \$185,000 at December 31, 2011 and \$214,200 at December 31, 2010.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 3 — Recently Adopted Accounting Pronouncements

In September 2011, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update, Testing Goodwill for Impairment (the revised standard). The revised standard is intended to reduce the cost and complexity of the annual goodwill impairment test by providing entities an option to perform a “qualitative” assessment to determine whether further impairment testing is necessary. The revised standard is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. Early adoption is permitted provided that the entity has not yet performed its 2011 annual impairment test or issued its financial statements. An entity has the option to first assess qualitative factors to determine whether it is necessary to perform the current two-step test. If an entity believes, as a result of its qualitative assessment, that it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, the quantitative impairment test is required. Otherwise, no further testing is required. The Company adopted this update in the fourth quarter of fiscal year 2011, and the adoption of this update did not have an impact on its consolidated results of operations and financial condition.

In December 2010, the FASB issued an update which addresses when to perform Step 2 of the goodwill impairment test for reporting units with zero or negative carrying amounts. The update modifies Step 1 of the goodwill impairment test for reporting units with zero or negative carrying amounts. For those reporting units, an entity is required to perform Step 2 of the goodwill impairment test if it is more likely than not that a goodwill impairment exists. In determining whether it is more likely than not that goodwill impairment exists, an entity should consider whether there are any adverse qualitative factors indicating that impairment may exist. The qualitative factors are consistent with the existing guidance, which requires that goodwill of a reporting unit be tested for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2010. The adoption of this guidance did not have a material impact on the consolidated financial statements.

In December 2010, the FASB issued an update which addresses the disclosure of supplementary pro forma information for business combinations. The update requires public entities to disclose pro forma information for business combinations that occurred in the current reporting period, including revenue and earnings of the combined entity for the current reporting period as though the acquisition date for all business combinations that occurred during the year had been as of the beginning of the annual reporting period. If comparative financial statements are presented, the pro forma revenue and earnings of the combined entity for the comparable prior reporting period should be reported as though the acquisition date for all business combinations that occurred during the current year had been as of the beginning of the comparable prior annual reporting period. Amendments in this update are effective prospectively for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010. The adoption of this guidance did not have a material impact on the consolidated financial statements.

Note 4 — Acquisitions

Amorcyte Acquisition

On October 17, 2011 (the “Closing Date”), Amo Acquisition Company I, Inc. (“Subco”), a newly-formed wholly-owned subsidiary of NeoStem, Inc. (“NeoStem” or the “Company”), merged (the “Amorcyte Merger”) with and into Amorcyte, Inc., a Delaware corporation (“Amorcyte”), in accordance with the terms of the Agreement and Plan of Merger, dated as of July 13, 2011 (the “Amorcyte Merger Agreement”), among NeoStem, Amorcyte, Subco, and Amo Acquisition Company II, LLC (“Subco II”). As a result of the consummation of the Amorcyte Merger, Amorcyte is now a wholly-owned subsidiary of NeoStem. Amorcyte is a development stage cell therapy company focusing on novel treatments for cardiovascular disease.

Pursuant to the terms of the Amorcyte Merger Agreement, all of the shares of Amorcyte common stock and Amorcyte Series A Preferred Stock and all options and warrants to acquire equity of Amorcyte, issued and

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 4 — Acquisitions – (continued)

outstanding immediately prior to the effective time of the Amorcyte Merger (the “Effective Time”), were by virtue of the Amorcyte Merger cancelled and converted into the right to receive, in the aggregate:

- (i) 5,843,483 shares of NeoStem Common Stock (reflecting certain adjustments taken at the closing, and subject to further adjustment following the closing in accordance with the Amorcyte Merger Agreement) (the “Base Stock Consideration”);
- (ii) the right to receive 4,092,768 shares of NeoStem Common Stock (the “Contingent Shares”, and together with the Base Stock Consideration, the “Stock Consideration”), which Contingent Shares will be issued only if certain specified business milestones (described below) are accomplished;
- (iii) warrants to purchase 1,881,008 shares of NeoStem Common Stock exercisable over a seven (7) year period at an exercise price of \$1.466 per share (the “Warrants”) (such Warrants are redeemable in certain circumstances, and transfer of any shares of NeoStem Common Stock issued upon exercise of the Warrants will be restricted until one year after the Closing Date); and
- (iv) earn out payments equal to 10% of the net sales of Amorcyte’s lead product candidate AMR-001 (in the event of and following the date of first commercial sale of AMR-001), provided that in the event NeoStem sublicenses AMR-001, the applicable earn out payment will be equal to 30% of any sublicensing fees, and provided further that NeoStem will be entitled to recover direct out-of-pocket clinical development costs not previously paid or reimbursed and any costs, expenses, liabilities and settlement amounts arising out of claims of patent infringement or otherwise challenging Amorcyte’s right to use intellectual property, by reducing any earn out payments due by 50% until such costs have been recouped in full (the “Earn Out Payments”).

In accordance with the Amorcyte Merger Agreement, NeoStem has deposited into an escrow account with the escrow agent (who is initially NeoStem’s transfer agent), 5,843,483 shares of NeoStem Common Stock for eventual distribution to the former Amorcyte stockholders (subject to further adjustment following the closing, including in connection with any indemnification claims of NeoStem, all in accordance with the Amorcyte Merger Agreement).

The Contingent Shares will be issued to the former Amorcyte stockholders only if certain business milestones are achieved, as follows:

- One-third of the Contingent Shares (1,364,256 shares) will be issued upon (a) the completion of Phase 2 clinical trial for Amorcyte’s product candidate AMR-001 and (b) issuance of a statistically significant analysis demonstrating satisfaction of the primary clinical end points from the Phase 2 clinical trial, which primary clinical endpoints are described in the Phase 2 clinical trial protocol submitted by Amorcyte to the FDA on July 5, 2011.
- One-third of the Contingent Shares will be issued following a Type B End of Phase 2/Pre-Phase 3 meeting with the FDA wherein AMR-001 is acknowledged in writing by the FDA to be ready for Phase 3.
- The remaining one-third of the Contingent Shares will be issued upon the first dosing of the first patient in the pivotal Phase 3 clinical study for AMR-001.

The merger consideration described above will be distributed to Amorcyte’s former securityholders consistent with applicable liquidation preferences contained in Amorcyte’s governing documents, all in accordance with the Amorcyte Merger Agreement.

The fair value of the net assets acquired in the Amorcyte Merger was \$4,378,900. The fair value of the consideration paid by NeoStem was valued at \$8,483,400, resulting in the recognition of goodwill in the amount of \$4,104,500. The consideration paid was comprised of equity issued and the earn out payments. The fair value of the equities issued by NeoStem included 5,843,483 shares of NeoStem Common stock valued at

NEOSTEM, INC. AND SUBSIDIARIES**Notes to Consolidated Financial Statements****Note 4 — Acquisitions – (continued)**

\$3,739,800, the right to receive 4,092,768 shares of NeoStem Common Stock valued at \$940,000, and NeoStem warrants to purchase up to 1,881,008 shares valued at \$673,600. The right to receive NeoStem Common Stock and warrants is contingent upon the accomplishment of a certain milestones. Such contingent consideration has been classified as equity and will not be subject to remeasurement. The fair value of the earn out payments was valued at \$3,130,000. The earn out is contingent upon future net sales upon the first commercial sale of AMR-001. Such contingent consideration has been classified as a liability and will be subject to remeasurement. The contingent consideration is based on earn out payments equal to 10% of the net sales of Amorcyte's lead product candidate AMR-001 (in the event of and following the date of first commercial sale of AMR-001). The Company will be entitled to recover direct out-of-pocket clinical development costs not previously paid or reimbursed and any costs, expenses, liabilities and settlement amounts arising out of claims of patent infringement or otherwise challenging Amorcyte's right to use intellectual property, by reducing any earn out payments due by 50% until such costs have been recouped in full (the "Earn Out Payments"). There were no changes in contingent consideration fair value as of December 31, 2011.

The preliminary fair value of assets acquired and liabilities assumed on October 17, 2011 is as follows (in thousands):

| | |
|--|---------|
| Cash | \$ 92.9 |
| Prepaid Expenses | 178.2 |
| In Process R&D | 9,400.0 |
| Goodwill | 4,104.5 |
| Accounts Payable & Accrued Liabilities | 1,177.1 |
| Deferred Tax Liability | 3,774.7 |
| Amount Due Related Party | 340.4 |

The total cost of the acquisition, which is still preliminary, has been allocated to the assets acquired and the liabilities assumed based upon their estimated fair values at the date of the acquisition. The final allocation is pending the receipt of this valuation work and the completion of the Company's internal review, which is expected during fiscal 2012.

For the period since the acquisition (October 17 – December 31, 2011), NeoStem recorded a net loss of approximately \$854,100 or \$0.01 basic and diluted loss per share attributable to Amorcyte.

PCT Acquisition

On January 19, 2011 (the "Closing Date"), NBS Acquisition Company LLC ("Subco"), a newly formed wholly-owned subsidiary of NeoStem, merged (the "PCT Merger") with and into Progenitor Cell Therapy, LLC, a Delaware limited liability company ("PCT"), with PCT as the surviving entity, in accordance with the terms of the Agreement and Plan of Merger, dated September 23, 2010 (the "PCT Merger Agreement"), among NeoStem, PCT and Subco. As a result of the consummation of the PCT Merger, NeoStem acquired all of the membership interests of PCT, and PCT is now a wholly-owned subsidiary of NeoStem.

Pursuant to the terms of the PCT Merger Agreement, all of the membership interests of PCT outstanding immediately prior to the effective time of the PCT Merger were converted into the right to receive, in the aggregate, (i) 10,600,000 shares of the common stock, par value \$0.001 per share, of NeoStem (the "NeoStem Common Stock") (reflecting certain final price adjustments agreed to at the closing) and (ii) warrants to purchase an aggregate 3,000,000 shares of NeoStem Common Stock as follows:

- (i) common stock purchase warrants to purchase one million (1,000,000) shares of NeoStem Common Stock, exercisable over a seven year period at an exercise price of \$7.00 per share (the

NEOSTEM, INC. AND SUBSIDIARIES**Notes to Consolidated Financial Statements****Note 4 — Acquisitions – (continued)**

“\$7.00 Warrants”), and which will vest only if a specified business milestone (described in the PCT Merger Agreement) is accomplished within three (3) years of the Closing Date of the PCT Merger; and

(ii) common stock purchase warrants to purchase one million (1,000,000) shares of NeoStem Common Stock exercisable over a seven year term at an exercise price of \$3.00 per share (the “\$3.00 Warrants”); and

(iii) common stock purchase warrants to purchase one million (1,000,000) shares of NeoStem Common Stock exercisable over a seven year period at an exercise price of \$5.00 per share (the “\$5.00 Warrants” and, collectively with the \$7.00 Warrants and the \$3.00 Warrants, the “Warrants”).

The Warrants are redeemable in certain circumstances. Transfer of the shares issuable upon exercise of the Warrants is restricted until the one year anniversary of the Closing Date.

The fair value of the net assets acquired in the PCT Merger was \$10,186,500. The fair value of the equity issued as consideration by NeoStem was valued at \$17,200,000 resulting in the recognition of goodwill in the amount of \$7,013,500. The fair value of the equities issued by NeoStem included 10,600,000 shares of NeoStem Common stock valued at \$15,900,000 and NeoStem warrants to purchase up to 3,000,000 shares valued at \$1,300,000. A portion of the consideration paid is contingent upon the accomplishment of a certain milestone for the \$7.00 Warrants. Such contingent consideration totaled \$70,000, and was determined using a Black-Scholes valuation and probability of success factor, and has been classified as equity and will not be subject to remeasurement. The goodwill that has been created by this acquisition is reflective of values and opportunities of utilizing PCT’s cell collection, processing and storage (cell banking) resources and production capacities, as mentioned above.

The fair value of assets acquired and liabilities assumed on January 19, 2011 is as follows (in thousands):

| | |
|-----------------------------|----------|
| Cash | \$ 227.9 |
| Accounts Receivable | 451.4 |
| Other Current Assets | 166.2 |
| Property, Plant & Equipment | 11,755.0 |
| Intangibles | 5,700.0 |
| Goodwill | 7,013.5 |
| Other Assets | 581.9 |
| Accounts Payable | 1,370.9 |
| Other Liabilities | 540.5 |
| Amount Due Related Party | 3,000.0 |
| Mortgages Payable | 3,784.6 |

For the period since the acquisition (January 19-December 31, 2011), NeoStem recorded \$9,685,400 in revenues and a net loss of approximately \$3,699,400 or \$0.04 basic and diluted loss per share attributable to PCT.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 4 — Acquisitions – (continued)

Amorcyte and PCT Combined Pro Forma Financial Information

The following supplemental table presents unaudited consolidated pro forma financial information as if the closing of the acquisitions of Amorcyte and PCT had occurred on January 1, 2010 (in thousands, except per share amounts):

| | Year Ended December 31, | | Year Ended December 31, | |
|---|-------------------------|-------------|-------------------------|-------------|
| | 2011 | 2011 | 2010 | 2010 |
| | (As Reported) | (Pro Forma) | (As Reported) | (Pro Forma) |
| Revenues | \$ 73,718 | \$ 73,990 | \$ 69,821 | \$ 82,189 |
| Cost of revenues | 55,974 | 56,249 | 49,668 | 58,407 |
| Gross profit | 17,744 | 17,741 | 20,153 | 23,782 |
| Research and development | 11,003 | 11,246 | 7,685 | 7,881 |
| Selling, general, and administrative | 41,845 | 43,631 | 30,789 | 37,832 |
| Goodwill impairment | 19,433 | 19,433 | 558 | 558 |
| Operating loss | (54,537) | (56,569) | (18,878) | (22,488) |
| Other income (expense), net | (1,653) | (1,640) | 32 | (375) |
| Loss from operations before provision for income taxes and noncontrolling interests | (56,190) | (58,209) | (18,846) | (22,863) |
| Provision for income taxes | 393 | 393 | 551 | 551 |
| Net loss | (56,583) | (58,602) | (19,397) | (23,414) |
| Less – net income attributable to noncontrolling interests | (9,448) | (9,448) | 3,909 | 3,909 |
| Preferred dividends | 640 | 640 | 238 | 238 |
| Net loss attributable to NeoStem, Inc. common shareholders | \$ (47,775) | \$ (49,794) | \$ (23,544) | \$ (27,561) |
| Basic and diluted loss per share | \$ (0.54) | \$ (0.53) | \$ (0.46) | \$ (0.40) |
| Weighted average common shares outstanding | 88,599 | 93,794 | 51,632 | 68,075 |

The unaudited supplemental pro forma financial information should not be considered indicative of the results that would have occurred if the acquisitions of Amorcyte and PCT had been consummated on January 1, 2010, nor are they indicative of future results.

Athelos

Athelos Corporation (“Athelos”) is a subsidiary of PCT pursuing the development of T regulatory cells (TRegs) as a therapeutic to treat disorders of the immune system. Pursuant to a Stock Purchase and Assignment Agreement dated March 28, 2011, Athelos issued approximately 20% of its shares to Becton Dickinson and Company (“BD”) in exchange for the rights to certain intellectual property relating to TRegs that BD owned pursuant to a license agreement between the University of Pennsylvania (“Penn”) and BD dated September 28, 2005 (the “Penn License”), and a license agreement between ExCell Therapeutics, LLC and BD dated September 16, 2005, as amended August 31, 2007 (the “ExCell License”). Pursuant to a Stock Purchase and Assignment Agreement dated March 28, 2011, Athelos took assignment from BD of its rights and obligations under the Penn License and the ExCell License, including, among other things, obligations to pay royalties on net sales of licensed products, maintenance fees and milestones on initiation of clinical trial stages, license application filings and regulatory approvals. As expressly anticipated by the parties, Athelos replaced the assignment of the Penn License with two new direct licenses: The Amended and Restated Patent License Agreement between Penn and Athelos dated September 12, 2011, and the Patent

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 4 — Acquisitions – (continued)

License Agreement between Penn, Athelos and the University of Minnesota dated September 12, 2011. Pursuant to the Stockholders' Agreement dated March 28, 2011, Athelos, PCT and BD have agreed, that, among other things, BD will have certain anti-dilution protection for the first \$5 million of new investment in Athelos and certain board of directors' observer rights. BD has assigned to Athelos, and Athelos assumed, all rights, title, interest and obligations of BD under a consulting agreement dated as of September 16, 2005 between David Horwitz, M.D. and BD, to be paid retroactively beginning as of January 1, 2011, for services rendered in advancing the Athelos TReg research and development platform. PCT had preliminarily valued BD's share of the contributed intellectual properties in the quarter ended March 31, 2011 at \$927,000. The acquisition of contributed intellectual properties did not qualify as a business combination, did not reach technological feasibility, and did not have any future alternative use. As a result, the Company characterized this acquired intangible asset as in-process research and development as expense within research and development expense.

In the quarter ended September 30, 2011, PCT finalized its valuation of the intellectual properties received, and revised the fair value to \$1,150,000, which is recorded as expense within research and development expense for the year ended December 31, 2011.

Note 5 — Goodwill and Other Intangible Assets

As part of the Company's annual impairment review as of December 31, 2011, a \$19,432,700 goodwill impairment charge was recorded within the Company's Pharmaceutical Manufacturing — China reportable segment due to lower than expected revenue and operating income growth. The Company estimated the fair value utilizing a discounted cash flow model.

As part of the Company's annual impairment review as of December 31, 2010, a \$558,200 goodwill impairment charge was recorded within the Company's Cell Therapy — United States reportable segment due to lower than expected revenue and operating income growth of its adult stem cell banking area. The Company estimated the fair value utilizing a discounted cash flow model.

The changes in the carrying amount of goodwill, by reportable segment during 2011 and 2010 were as follows (in thousands):

| | Cell Therapy — United States | Pharmaceutical Manufacturing — China | Total |
|--|---------------------------------|--|--------------------|
| Balance as of December 31, 2009 | \$ 558.2 | \$ 26,076.4 | \$ 26,634.6 |
| Impairment | (558.2) | — | (558.2) |
| Foreign currency exchange rate changes | — | 925.6 | 925.6 |
| Balance as of December 31, 2010 | — | 27,002.0 | 27,002.0 |
| Acquisitions* | 11,117.8 | — | 11,117.8 |
| Impairment | — | (19,432.7) | (19,432.7) |
| Foreign currency exchange rate changes | — | 926.4 | 926.4 |
| Balance as of December 31, 2011 | <u>\$ 11,117.8</u> | <u>\$ 8,495.7</u> | <u>\$ 19,613.5</u> |

* Approximately \$7,013,300 associated with the PCT Merger, and \$4,104,500 associated with Amorcey merger

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 5 — Goodwill and Other Intangible Assets – (continued)

As of December 31, 2011 and 2010, the Company's intangible assets and related accumulated amortization consisted of the following (in thousands):

| | Useful Life | December 31, 2011 | | | December 31, 2010 | | |
|-------------------------------|-------------|--------------------|--------------------------|--------------------|--------------------|--------------------------|--------------------|
| | | Gross | Accumulated Amortization | Net | Gross | Accumulated Amortization | Net |
| Customer list | 10 Years | \$ 19,373.8 | \$ (4,076.1) | \$ 15,297.7 | \$ 17,740.0 | \$ (2,069.7) | \$ 15,670.3 |
| Manufacturing technology | 10 Years | 8,779.9 | (1,368.9) | 7,411.0 | 4,220.6 | (492.4) | 3,728.2 |
| Tradename | 10 Years | 1,819.0 | (296.9) | 1,522.1 | 983.9 | (114.7) | 869.2 |
| In process R&D | Indefinite | 11,190.4 | — | 11,190.4 | 2,219.6 | — | 2,219.6 |
| Standard operating procedures | 10 Years | 1,104.9 | (239.4) | 865.5 | 1,066.8 | (124.5) | 942.3 |
| Lease rights | 2 Years | 846.4 | (846.4) | — | 817.2 | (476.7) | 340.5 |
| VSEL patent rights | 19 Years | 669.0 | (140.8) | 528.2 | 669.0 | (105.6) | 563.4 |
| Patents | 8 Years | 204.3 | (86.8) | 117.5 | 164.3 | (31.2) | 133.1 |
| Total Intangible Assets | | <u>\$ 43,987.7</u> | <u>\$ (7,055.3)</u> | <u>\$ 36,932.4</u> | <u>\$ 27,881.4</u> | <u>\$ (3,414.8)</u> | <u>\$ 24,466.6</u> |

In 2011, Erye commenced sales of two products that were previously accounted for as In Process R&D which has resulted in a reclassification of approximately \$505,500 from In Process R&D to Manufacturing Technology. Certain of the Company's intangible assets are recorded on the books of wholly owned or partially owned subsidiaries and affiliates in China, and denominated in RMB. As a result, the balance reported fluctuates based upon the changes in exchange rates.

In connection with the acquisition of PCT, the following intangible assets were acquired (in thousands):

| | |
|--------------------------|-------------------|
| Customer list | \$ 1,000.0 |
| Manufacturing technology | 3,900.0 |
| Tradename | 800.0 |
| | <u>\$ 5,700.0</u> |

In connection with the acquisition of Amorcyte, an In Process R&D intangible asset of \$9,400,000 was recorded.

Total intangible amortization expense was classified in the operating expense categories for the periods included below as follows (in thousands):

| | Years Ended December 31, | |
|-------------------------------------|--------------------------|-------------------|
| | 2011 | 2010 |
| Cost of revenue | \$ 1,305.3 | \$ 912.5 |
| Research and development | 55.3 | 35.2 |
| Selling, general and administrative | 2,078.2 | 1,842.0 |
| Total | <u>\$ 3,438.8</u> | <u>\$ 2,789.7</u> |

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 5 — Goodwill and Other Intangible Assets – (continued)

Estimated intangible amortization expense on an annual basis for the succeeding five years is as follows (in thousands):

| | |
|------------|--------------------|
| 2012 | \$ 3,168.5 |
| 2013 | 3,168.5 |
| 2014 | 3,168.5 |
| 2015 | 3,168.5 |
| 2016 | 3,158.3 |
| Thereafter | 21,100.1 |
| | <u>\$ 36,932.4</u> |

Note 6 — Accrued Liabilities

Accrued liabilities were as follows (in thousands):

| | December 31, 2011 | December 31, 2010 |
|---|----------------------|----------------------|
| VAT and other taxes | \$ 710.1 | \$ 126.6 |
| Customer Security Deposits | 444.4 | 284.8 |
| Salaries, employee benefits and related taxes | 366.5 | 210.6 |
| Amount due on patent infringement | — | 758.5 |
| Other | 1,304.8 | 1,391.5 |
| | <u>\$ 2,825.8</u> | <u>\$ 2,772.0</u> |

Note 7 — Bank Loans, Notes Payable and Mortgages Payable**Bank Loans**

In June 2011, Erye obtained a bank loan of approximately \$1,571,200 from the Agricultural Bank of China according to People's Bank benchmark interest rates and is due in June 2012.

In October 2011, Erye obtained a bank loan of approximately \$8,641,600 from the CITIC Bank International according to People's Bank benchmark interest rates with additional rate up to 10% and is due in October 2012.

In October 2011, Erye obtained a bank loan of approximately \$1,571,200 from the China Merchants Bank according to People's Bank benchmark interest rates with additional rate up to 10% and is due in July 2012.

In November 2011, Erye obtained a bank loan of approximately \$3,928,000 from Commercial Bank of China according to People's Bank benchmark interest rates and is due in November 2012.

Notes Payable

Erye had approximately \$0 and \$9,451,500 of notes payable outstanding as of December 31, 2011 and December 31, 2010, respectively. Notes are payable to the banks who issue bank notes to Erye's creditors. Notes payable are interest free and usually mature after a three to six month period. In order to issue notes payable on behalf of Erye, the banks require collateral, such as cash deposits which are approximately 30% – 50% of notes to be issued, or properties owned by Erye. Restricted cash pledged as collateral for the balance of notes payable at December 31, 2011 and December 31, 2010, amounted to approximately \$0 and \$3,381,400, respectively. At December 31, 2010, the restricted cash amounted to 35.8% of the notes payable Erye issued, and the remainder of the notes payable is collateralized by pledging the land use right Erye owns, which amounted to approximately \$4,807,800 at December 31, 2010.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 7 — Bank Loans, Notes Payable and Mortgages Payable – (continued)

The Company has financed certain insurance policies and has notes payable at December 31, 2011 of approximately \$148,100 related to these policies. These notes require monthly payments and mature in less than one year.

Mortgages Payable

On October 31, 2007, PCT issued a note to borrow \$3,120,000 (the “Note”) in connection with its \$3,818,500 purchase of condominium units in an existing building in Allendale, New Jersey (the “Property”) that PCT uses as a laboratory and stem cell processing facility. The Note is payable in 239 consecutive monthly payments of principal and interest, based on a 20 year amortization schedule; and one final payment of all outstanding principal plus accrued interest then due. The current monthly installment is \$20,766, which includes interest at an initial rate of 5.00%; the interest rate and monthly installments payments are subject to adjustment on October 1, 2017. On that date, upon prior written notice, the lender has the option to declare the entire outstanding principal balance, together with all outstanding interest, due and payable in full. The Note is secured by substantially all of the assets of PCT, including a first mortgage on the Property and assignment of an amount approximately equal to eighteen months debt service held in escrow. The Note matures on October 1, 2027 if not called by the lender on October 1, 2017. The note is subject to certain debt service coverage and total debt to tangible net worth financial covenant ratios measured semi-annually. PCT was not in compliance with such covenants at the measurement date of December 31, 2011, and obtained a covenant waiver letter from the lender for all periods through December 31, 2011. The outstanding balance was approximately \$2,708,300 at December 31, 2011 of which \$114,200 is payable within twelve months. On December 6, 2010 PCT Allendale, a wholly-owned subsidiary of PCT, entered into a note for a second mortgage in the amount of \$1 million on the Allendale Property with TD Bank, N.A. This loan is guaranteed by PCT, DomaniCell (a wholly-owned subsidiary of PCT, now known as NeoStem Family Storage, LLC), Northern New Jersey Cancer Associates (“NNJCA”) and certain partners of NNJCA and is subject to a financial covenant starting December 31, 2011. PCT was not in compliance with such covenants at the measurement date of December 31, 2011, and obtained a covenant waiver letter from the lender for all periods through December 31, 2011. The loan is for 124 months at a fixed rate of 6% for the first 64 months. The loan is callable for a certain period prior to the interest reset date. The initial four months was interest only. The outstanding balance as of December 31, 2011 is \$926,800 of which \$76,000 is payable within twelve months. Both mortgages are classified as current liabilities as of December 31, 2011.

Note 8 — Preferred Stock

Convertible Redeemable Series E 7% Preferred Stock

On November 19, 2010, the Company sold 10,582,011 Preferred Offering Units consisting of (i) one share (“Preferred Share”) of Series E 7% Senior Convertible Preferred Stock, par value \$0.01 per share, of the Company, (ii) a warrant to purchase 0.25 of a share of Common Stock (consisting of at issuance an aggregate of 1,322,486 warrants, adjusted to an aggregate of 1,452,925 as of December 31, 2011); and (iii) 0.0155 of a share of Common Stock (an aggregate of 164,418 shares). Each Preferred Offering Unit was priced at \$0.945 and total gross and net proceeds received by the Company were \$10,000,000 and \$8,876,700, respectively.

In the event of any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, the holders of the Preferred Shares are entitled to receive, out of the assets of the Company available for distribution to shareholders, prior and in preference to any distribution of any assets of the Company to the holders of any other class or series of equity securities, the amount of \$1.00 per share plus all accrued but unpaid dividends.

Dividends on the Preferred Shares accrue at a rate of 7% per annum and are payable monthly in arrears. The Company is required to redeem 1/27 of the Preferred Shares monthly.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 8 — Preferred Stock – (continued)

Monthly dividend and principal payments began on March 21, 2011 and continue on the 19th of each month thereafter with the final payment due on May 20, 2013. Payments can be made in cash or, upon notification to the holders, in shares of Company common stock, provided certain conditions are satisfied or holders of Preferred Shares agree to waive the conditions for that payment period. If the conditions are not satisfied, the Company must make payments in cash. Payments which are made in stock will be made in shares which are freely tradable. The price of the shares will be calculated based on 92% of the average of the lowest 5 days' volume weighted average prices of the 20 trading days prior to the payment date, and the shares are delivered in tranches beginning in advance of the applicable payment date. As of December 31, 2011, the Company had issued 5,157,732 shares of Company common stock in payment of monthly dividends and principal, including required advanced payments.

The Company 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 November 19, 2011, with notice of not less than thirty days and adequate opportunity to convert. If the Company chooses to pre-pay, the outstanding balance must be paid in cash and the premium may be paid in cash or shares of Company common stock.

Upon issuance, the Preferred Shares were convertible at an initial conversion price of \$2.0004. The conversion price is subject to certain weighted average adjustments upon the occurrence of specific events, including stock dividends, stock splits, combinations and reclassifications of the Company's common stock and if (with certain exceptions) the Company issues or sells any additional shares of common stock or common stock equivalents at a price per share less than the conversion price then in effect, or without consideration. As of December 31, 2011, the conversion price had been adjusted to \$1.67.

An aggregate of \$2,500,000 of the proceeds from the Preferred Offering was placed in escrow for a maximum of 2.5 years as security for the Company's obligations relative to the Preferred Shares, and is included in other assets.

The characteristics of the Series E Preferred Stock: cumulative dividends, mandatory redemption, no voting rights, and callable by the Company, require that this instrument be treated as mezzanine equity. The Company bifurcated the fair value of the embedded conversion options and redemption options from the preferred stock since the conversion options and certain redemption options were determined to not be clearly and closely related to the Series E Preferred Stock. The Company recorded the fair value of the embedded conversion and redemption options as long-term derivative liabilities as the conversion price is not fixed and the forced redemption option contains substantial premiums over the stated dividend rate for the preferred stock. The Company also recorded the fair value of the warrants as a long-term derivative liability as the number of warrant shares and exercise price of the warrants is not fixed. The Series E Preferred Stock was discounted by the fair value of the derivatives liabilities. The fair value of the preferred stock (net of issuance costs and discounts), the embedded derivatives, and warrant derivative were approximately \$4,811,326, \$391,733 and \$82,730, respectively, as of December 31, 2011. The Company will report changes in the fair value of the embedded derivatives and warrant derivative in earnings within other income (expense), net. The discount and issuance costs on the preferred stock will be amortized through May 20, 2013 using the effective interest method and will be reflected within interest expense. For the twelve months ended December 31, 2011, the Company recorded a decrease in the fair value of the embedded derivatives of approximately \$1,890,000 and a decrease in the warrant derivative of approximately \$192,600.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 9 — Shareholders' Equity

Common Stock:

The authorized common stock of the Company is 500 million shares, par value \$0.001 per share.

The Company raised an aggregate of approximately \$6.3 million in a series of private placements consummated from March 2011 to July 2011 pursuant to which 18 persons and entities acquired an aggregate of 4,938,125 shares of Common Stock (purchase price of \$1.28 per share). The investors included Steven. S. Myers (one of the Company's directors) (who purchased 390,625 shares) and Dr. Andrew L. Pecora (the Chief Medical Officer of the Company's subsidiary PCT, who is now the Chief Medical Officer and a director of NeoStem, and the Chief Scientific Officer of Amorcyte) (who purchased 78,125 shares).

On July 22, 2011, the Company completed an underwritten offering of 13,750,000 units at a purchase price of \$1.20 per unit, with each unit consisting of one share of Common Stock and a five year warrant to purchase 0.75 of a share of Common Stock at an exercise price of \$1.45 per share (the "Offering"). The Company sold securities in the Offering under the Company's previously filed shelf registration statement on Form S-3 (333-173855), which was declared effective by the Securities and Exchange Commission on June 13, 2011. Lazard Capital Markets LLC ("Lazard") and JMP Securities LLC ("JMP") acted as representatives of the underwriters named in an Underwriting Agreement, dated as of July 19, 2011, by and among the Company, Lazard, JMP and such underwriters. The Company received gross proceeds of \$16,500,000, prior to deducting underwriting discounts and offering expenses payable by the Company, for net proceeds of approximately \$14,847,000.

On September 28, 2011, the Company entered into a Common Stock Purchase Agreement (the "Purchase Agreement") with Aspire Capital Fund, LLC, an Illinois limited liability company ("Aspire Capital"), which provides that, subject to certain terms and conditions, Aspire Capital is committed to purchase up to an aggregate of \$20.0 million worth of shares of the Company's common stock over the 24-month term of the Purchase Agreement. At the Company's discretion, it may present Aspire Capital with purchase notices under the Purchase Agreement from time to time, to purchase the Company's Common Stock, provided certain price and other requirements are met. The purchase price for the shares of stock will be based upon one of two formulas set forth in the Purchase Agreement depending on the type of purchase notice we submit to Aspire Capital from time to time, and will be based on market prices of the Company's common stock (in the case of regular purchases) or a discount of 5% applied to volume weighted average prices (in the case of VWAP purchases), in each case as determined by parameters defined in the agreement. The Company and Aspire Capital shall not effect any sales under the Purchase Agreement on any date where the closing sales price is less than 75% of the closing sales price on the business day immediately preceding the date of the Purchase Agreement. The Company's net proceeds will depend on the purchase price and the frequency of the Company's sales of shares to Aspire Capital; provided, however, that the maximum aggregate proceeds from sales of shares is \$20.0 million. As of December 31, 2011, the maximum number of shares that may be sold may not exceed 18,747,906 shares unless shareholder approval is obtained. On February 17, 2012, the maximum number of shares that may be sold had been reduced to 15,282,502 pursuant to rules of the NYSE Amex. The Company's delivery of purchase notices will be made subject to market conditions, in light of the Company's capital needs from time to time and under the limitations contained in the Purchase Agreement. As consideration for entering into the Purchase Agreement, effective September 30, 2011, we issued 990,099 shares of our Common Stock to Aspire Capital (the "Commitment Shares"). The issuance of shares of common stock to Aspire Capital pursuant to the Purchase Agreement, including the Commitment Shares, and the sale of those shares from time to time by Aspire Capital to the public, are covered by an effective shelf registration statement on Form S-3.

On February 18, 2010, the Company completed a public offering of its common stock, selling 5,750,000 shares priced at \$1.35 per share. The Company received approximately \$6,821,600 in net proceeds from the offering, after underwriting discounts, commissions and expenses, of approximately \$940,900.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 9 — Shareholders' Equity – (continued)

Effective March 15, 2010, RimAsia exercised a warrant to purchase 1,000,000 shares of restricted Common Stock. This warrant was issued to RimAsia in a private placement completed by the Company in September 2008. The exercise price was \$1.75 per share, resulting in proceeds to the Company of \$1,750,000. In connection therewith, the Company modified certain terms of RimAsia's Series D Warrant to purchase 4,000,000 shares of Common Stock.

On May 17, 2010, RimAsia, the holder of 8,177,512 shares of Series C Preferred Stock issued by the Company in connection with the Erye Merger, at its option, converted its 8,177,512 shares of Series C Preferred Stock into 9,086,124 shares of the Company's common stock at a conversion rate of 0.90 shares of Series C Preferred Stock for 1.0 shares of the Company's common stock.

On May 19, 2010, the Company entered into a Common Stock Purchase Agreement with Commerce Court Small Cap Value Fund, Ltd., which provided that, subject to certain terms and conditions, Commerce Court is committed to purchase up to \$20,000,000 worth of shares of the Company's common stock over a term of approximately 24 months. The Purchase Agreement provided that at the Company's discretion, it may present Commerce Court with draw down notices under this \$20 million equity line of credit arrangement from time to time, to purchase the Company's Common Stock, provided certain price requirements are met and limited to 2.5% of the Company's market capitalization at the time of such draw down, which may be waived or modified. The per share purchase price for these shares will equal the daily volume weighted average price of the Company's common stock on each date during the draw down period on which shares are purchased, less a discount of 5.0%. The Purchase Agreement also provided that the Company in its sole discretion may grant Commerce Court the right to exercise one or more options to purchase additional shares of Common Stock during each draw down period at a price which would be based on a discount calculated in the same manner as it is calculated in the draw down notice. The issuance of shares of common stock to Commerce Court pursuant to the Purchase Agreement, and the sale of those shares from time to time by Commerce Court to the public, were covered by an effective registration statement on Form S-3 filed with the SEC. On September 28, 2011, the Company gave notice to Commerce Court of termination of the Purchase Agreement.

On May 27, 2010, the Company presented Commerce Court with a Draw Down Notice. Pursuant to the Purchase Agreement, the shares were offered at a discount price to Commerce Court mutually agreed upon by the parties under the Purchase Agreement equal to 95.0% of the daily volume weighted average price of the common stock during the Pricing Period or a 5% discount. Pursuant to the Draw Down Notice, the Company also granted Commerce Court the right to exercise one or more options to purchase additional shares of common stock during the Pricing Period, based on the trading price of the common stock. The Company settled with Commerce Court on the purchase of 685,226 shares of common stock under the terms of the Draw Down Notice and the Purchase Agreement at an aggregate purchase price of \$1,800,000, or approximately \$2.63 per share, on June 7, 2010. The Company and Commerce Court agreed to waive the minimum threshold price of \$3.00 per share set forth in the Purchase Agreement. The Company received net proceeds from the sale of these shares of approximately \$1,744,000 after deducting its offering expenses.

On June 1, 2010, Fullbright Finance Limited exercised a warrant to purchase 400,000 shares of restricted Common Stock. This warrant was issued to Fullbright in a private placement of securities by the Company in November 2008. The exercise price was \$1.75 per share, resulting in proceeds to the Company of \$700,000.

On June 25, 2010, the Company entered into definitive securities purchase agreements with investors in a registered direct public offering, pursuant to which such investors agreed to purchase, and the Company agreed to sell, an aggregate of 2,325,582 Units, consisting of an aggregate of 2,325,582 shares of common stock and warrants to purchase an aggregate of 581,394 shares of common stock. The offering closed on June 30, 2010 with gross proceeds of \$5,000,000. Each Unit was priced at \$2.15 and consisted of one share of common stock and a warrant which will allow the investor to purchase 0.25 shares of common stock at a per share price of \$2.75. The warrants may be called by the Company in the event that the common stock

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 9 — Shareholders' Equity – (continued)

trades over \$4.50 per share for 10 consecutive trading days. Subject to certain ownership limitations, the warrants will be exercisable on the date of the closing and will expire 2 years thereafter. The number of shares of common stock issuable upon exercise of the warrants and the exercise price of the warrants are adjustable in the event of stock dividends, splits, recapitalizations, reclassifications, combinations or exchanges of shares, reorganizations, liquidations, consolidation, acquisition of the Company (whether through merger or acquisition of substantially all the assets or stock of the Company) or similar events. The issuance of the securities in this offering was registered on a registration statement on Form S-3 filed with the SEC. Rodman & Renshaw LLC acted as the Company's placement agent in this offering and received a total payment of \$340,000 in fees and expenses and Placement Agent Warrants to purchase up to 93,023 shares of the Company's Common Stock at an exercise price of \$2.6875 per share expiring May 10, 2015. The Placement Agent Warrants are not covered by the Form S-3. The net proceeds to the Company from such offering, after deducting the Placement Agent's fees and expenses, the Company's offering expenses, and excluding the proceeds, if any, from the exercise of the warrants issued in the offering were approximately \$4,497,900.

On July 27, 2010, consistent with the Company's previously disclosed intention to provide support for The Stem for Life Foundation, a Pennsylvania nonprofit corporation classified as a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the "Code") and as a public charity under Section 509(a)(1) and 170(b)(1)(A)(vi) of the Code (the "Foundation"), whose mission is to promote public awareness, fund research and development and subsidize stem cell collection and storage programs, the Company issued to the Foundation 150,000 shares of restricted common stock with a fair value of \$298,500. The issuance of such securities was subject to the approval of the Board of Directors, Audit Committee and the NYSE Amex. On July 2, 2010, the Company also contributed \$75,000 in cash to the Foundation. The Company's CEO and Chairman is President and a Trustee of the Foundation, its General Counsel is Secretary and a Trustee of the Foundation and its Chief Financial Officer is Treasurer of the Foundation.

On September 30, 2010, a warrant holder exercised a warrant to purchase 600,000 shares of Common Stock. The exercise price was \$.78 per share, resulting in proceeds to the Company of \$468,000.

On November 16, 2010, the Company entered into an Underwriting Agreement with Cowen and Company, LLC, relating to a public offering by the Company of 6,337,980 units, consisting of one share of the Company's common stock, and a warrant to purchase 0.50 of a share of Common Stock. The public offering price for each Underwritten Unit was \$1.45 and the net proceeds were \$8,138,500. Each Underwritten 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.

On December 7, 2010, the Company entered into a settlement agreement with a business partner involved in the development of the Company's platform research organization in China, whereby the business partner relinquished rights to 407,626 shares of common stock. As a result of this settlement, the Company recorded other income of \$656,300, which represented the fair market value of the shares on the day the shares were relinquished.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 9 — Shareholders' Equity – (continued)

Warrants

The Company has issued common stock purchase warrants from time to time to investors in private placements and public offerings, and to certain vendors, underwriters, placement agents and consultants of the Company. A total of 37,389,825 shares of common stock are reserved for issuance upon exercise of outstanding warrants as of December 31, 2011 at prices ranging from \$0.56 to \$7.00 and expiring through October 2018.

During the years ended December 31, 2011 and 2010, the Company issued warrants for services as follows (\$ in thousands, except share data):

| | Years Ended December 31, | |
|---|--------------------------|----------|
| | 2011 | 2010 |
| Number of Common Stock Purchase Warrants Issued | 670,000 | 627,000 |
| Value of Common Stock Purchase Warrants Issued | \$ 495.1 | \$ 772.2 |

The weighted average estimated fair value of warrants issued for services in the years ended December 31, 2011 and 2010 was \$0.74 and \$1.23, respectively. The fair value of warrants at the date of grant was estimated using the Black-Scholes option pricing model. The expected volatility is based upon historical volatility of the Company's stock. The expected term is based upon the contractual term of the warrants.

The range of assumptions made in calculating the fair values of warrants issued for services was as follows:

| | Years Ended December 31, | |
|--------------------------|--------------------------|---------------|
| | 2011 | 2010 |
| Expected term (in years) | 3 to 5 | 3 to 5 |
| Expected volatility | 80% – 86% | 86% – 124% |
| Expected dividend yield | 0% | 0% |
| Risk-free interest rate | 0.78% – 2.19% | 0.64% – 2.65% |

Activity related to warrants outstanding for the years ended December 31, 2011 and 2010 was as follows:

| | Number of Shares | Weighted Average Exercise Price | Weighted Average Remaining Contractual Term (years) | Aggregate Intrinsic Value |
|------------------------------|------------------|---------------------------------|---|---------------------------|
| Balance at December 31, 2009 | 19,838,802 | 3.00 | | |
| Granted | 5,792,896 | 1.99 | | |
| Exercised | (2,025,000) | 1.46 | | |
| Expired | (1,613,191) | 6.54 | | |
| Cancelled | (150,000) | 2.78 | | |
| Balance at December 31, 2010 | 21,843,507 | 2.62 | | |
| Granted | 15,993,947 | 2.09 | | |
| Exercised | — | — | | |
| Expired | (447,629) | 6.18 | | |
| Cancelled | — | — | | |
| Balance at December 31, 2011 | 37,389,825 | \$ 2.35 | 3.87 | \$ — |

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 9 — Shareholders' Equity – (continued)

At December 31, 2011, the outstanding warrants by range of exercise prices were as follows:

| Range of Exercise Prices | Warrants Outstanding | | | Warrants Exercisable | | |
|--------------------------|----------------------|---|---------------------------------|----------------------|---|---------------------------------|
| | Shares Outstanding | Weighted Average Remaining Contractual Life (years) | Weighted Average Exercise Price | Shares Exercisable | Weighted Average Remaining Contractual Life (years) | Weighted Average Exercise Price |
| \$0.56 – \$1.45 | 11,263,500 | 4.5 | \$ 1.42 | 10,805,500 | 4.5 | \$ 1.44 |
| \$1.46 – \$2.10 | 7,933,635 | 4.0 | 1.75 | 7,933,635 | 4.0 | 1.75 |
| \$2.11 – \$2.53 | 13,032,512 | 3.3 | 2.50 | 13,032,512 | 3.3 | 2.50 |
| \$2.54 – \$5.99 | 2,929,928 | 4.5 | 3.73 | 2,929,928 | 4.5 | 3.73 |
| \$6.00 – \$7.00 | 2,230,250 | 3.4 | 6.51 | 1,230,250 | 1.2 | 6.11 |
| | <u>37,389,825</u> | <u>3.9</u> | <u>\$ 2.35</u> | <u>35,931,825</u> | <u>3.8</u> | <u>\$ 2.24</u> |

The Company's results include share-based compensation expense of approximately \$282,200 and \$474,900 for the years ended December 31, 2011 and 2010, respectively. The total fair value of shares vested for warrants issued for services during the years ended December 31, 2011 and 2010, was approximately \$269,100 and \$450,800, respectively. As of December 31, 2011, there was approximately \$91,500 of total unrecognized service cost related to unvested warrants of which approximately \$73,900 is related to warrants that vest over a weighted average life of 1.04 years. The remaining balance of unrecognized service cost of \$17,600 is related to warrants that vest based on the accomplishment of business milestones as to which expense begins to be recognized when such milestones become probable of being achieved.

Options

The Company's 2003 Equity Participation Plan (the "2003 Equity Plan") permits the grant of share options and shares to its employees, directors, consultants and advisors for up to 2,500,000 shares of Common Stock as stock-based compensation. The 2009 Equity Compensation Plan (the "2009 Equity Plan") makes up to 23,750,000 shares of Common Stock of the Company (as of December 31, 2011) available for issuance to employees, consultants, advisors and directors of the Company and its subsidiaries pursuant to incentive or non-statutory stock options, restricted and unrestricted stock awards and stock appreciation rights.

All stock options under the 2003 Equity Plan and the 2009 Equity Plan are granted at the fair market value of the Common Stock at the grant date. Stock options vest either on the date of grant, ratably over a period determined at time of grant, or upon the accomplishment of specified business milestones, and generally expire 3, 5 or 10 years from the grant date depending on the status of the recipient as a consultant, advisor, employee or director of the Company.

The 2009 Equity Plan was originally adopted by the shareholders of the Company on May 8, 2009. On October 29, 2009, the shareholders of the Company approved an amendment to the 2009 Equity Plan to increase the number of shares of common stock available for issuance thereunder from 3,800,000 to 9,750,000. At the 2010 Annual Meeting of Shareholders of the Company held on June 2, 2010, the shareholders approved an amendment to increase this number to 13,750,000. At a Special Meeting of Shareholders of the Company held on January 18, 2011, the shareholders approved an amendment to increase this number to 17,750,000. At the 2011 Annual Meeting of Shareholders of the Company held on October 14, 2011, the shareholders approved an amendment to increase this number to 23,750,000.

The 2003 Equity Plan and the 2009 Equity Plan are sometimes collectively referred to as the Company's "U.S. Equity Plan." The Company's 2009 Non-U.S. Based Equity Compensation Plan ("Non-U.S. Plan") makes up to 5,700,000 shares of Common Stock of the Company available for issuance. Persons eligible to receive restricted and unrestricted stock awards, options, stock appreciation rights or other awards under the Non-U.S. Plan are those service providers to the Company and its subsidiaries and affiliates providing services outside of the United States, including employees and consultants of the Company and its subsidiaries and

NEOSTEM, INC. AND SUBSIDIARIES**Notes to Consolidated Financial Statements****Note 9 — Shareholders' Equity – (continued)**

affiliates, who, in the opinion of the Compensation Committee, are in a position to contribute to the Company's success. Options vest either on the date of grant, ratably over a period determined at time of grant, or upon the accomplishment of specified business milestones, and generally expire 3, 5 or 10 years from the grant date depending on the status of the recipient as a consultant, advisor, employee or director of the Company.

The Non-U.S. Plan was originally adopted by the shareholders of the Company on October 29, 2009. At the 2010 Annual Meeting of Shareholders of the Company held on June 2, 2010, the shareholders approved an amendment to increase the number of shares of common stock authorized for issuance thereunder from 4,700,000 to 8,700,000. Effective October 14, 2011, concurrent with shareholder approval to increase the number of shares of common stock authorized for issuance under the 2009 Equity Plan by 6,000,000, the Company's Board of Directors authorized a decrease in the shares available for issuance under the Non-U.S. Plan from 8,700,000 to 5,700,000.

The Company's results include share-based compensation expense of approximately \$6,923,000 and \$6,324,500 for the years ended December 31, 2011 and 2010, respectively. Options vesting on the accomplishment of business milestones will not be recognized for compensation purposes until such milestones are deemed probable of accomplishment. At December 31, 2011 there were options to purchase 605,000 shares outstanding that will vest upon the accomplishment of business milestones and will be accounted for as an operating expense when such business milestones are deemed probable of accomplishment.

On April 4, 2011, the Company entered into an amendment of its May 26, 2006 employment agreement with Dr. Robin L. Smith, pursuant to which, as previously amended (the "Agreement"), Dr. Smith serves as Chairman of the Board and Chief Executive Officer of the Company. Pursuant to the amendment, among other things, Dr. Smith was granted an option to purchase 1,500,000 shares of Common Stock at a per share exercise price equal to the closing price of the Common Stock on the date of the amendment, vesting as to 500,000 shares on each of the date of grant, December 31, 2011 and December 31, 2012, all other unvested options held by Dr. Smith were immediately vested, and any vested options previously or hereafter granted to Dr. Smith during the remainder of the term shall remain exercisable following termination of employment for the full option term until the expiration date. Pursuant to the modification on April 4, 2011 of Dr. Smith's stock options, the Company recognized \$722,900 of incremental compensation cost during the twelve months ended December 31, 2011.

The weighted average estimated fair value of stock options granted in the years ended December 31, 2011 and 2010 was \$1.06 and \$1.59, respectively. The fair value of options at the date of grant was estimated using the Black-Scholes option pricing model. The expected volatility is based upon historical volatility of the Company's stock. The expected term is based upon observation of actual time elapsed between date of grant and exercise of options for all employees.

The range of assumptions made in calculating the fair values of options was as follows:

| | Years Ended December 31, | |
|--------------------------|--------------------------|---------------|
| | 2011 | 2010 |
| Expected term (in years) | 3 to 10 | 2 to 10 |
| Expected volatility | 79% – 85% | 86% – 122% |
| Expected dividend yield | 0% | 0% |
| Risk-free interest rate | 0.40% – 3.45% | 0.34% – 3.80% |

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 9 — Shareholders' Equity — (continued)

Activity related to stock options outstanding under the U.S. Equity Plan was as follows:

| | Number of Shares | Weighted Average Exercise Price | Weighted Average Remaining Contractual Term (years) | Aggregate Intrinsic Value |
|------------------------------|------------------|---------------------------------|---|---------------------------|
| Balance at December 31, 2009 | 8,340,574 | 1.87 | | |
| Granted | 1,955,000 | 1.85 | | |
| Exercised | (90,000) | 1.56 | | |
| Expired | — | — | | |
| Cancelled | (273,360) | 1.86 | | |
| Balance at December 31, 2010 | 9,932,214 | 1.87 | | |
| Granted | 8,047,600 | 1.48 | | |
| Exercised | (5,000) | 1.42 | | |
| Expired | (850,523) | 1.92 | | |
| Cancelled | (2,080,786) | 1.71 | | |
| Balance at December 31, 2011 | 15,043,505 | \$ 1.68 | 7.3 | \$ — |

At December 31, 2011, the outstanding options under the U.S. Equity Plan by range of exercise prices were as follows:

| Range of Exercise Prices | Options Outstanding | | | Options Exercisable | | |
|--------------------------|---------------------|---|---------------------------------|---------------------|---|---------------------------------|
| | Shares Outstanding | Weighted Average Remaining Contractual Life (years) | Weighted Average Exercise Price | Shares Exercisable | Weighted Average Remaining Contractual Life (years) | Weighted Average Exercise Price |
| \$0.52 – \$0.71 | 1,123,000 | 7.7 | 0.67 | 170,002 | 7.2 | \$ 0.69 |
| \$0.72 – \$1.50 | 2,879,700 | 8.6 | 1.46 | 422,500 | 6.1 | 1.36 |
| \$1.51 – \$1.80 | 6,629,000 | 7.9 | 1.71 | 4,826,252 | 7.8 | 1.71 |
| \$1.81 – \$2.00 | 2,874,255 | 4.6 | 1.91 | 2,705,994 | 4.6 | 1.91 |
| \$2.01 – \$15.00 | 1,537,550 | 7.0 | 2.29 | 1,430,883 | 6.9 | 2.30 |
| | 15,043,505 | 7.3 | \$ 1.68 | 9,555,631 | 6.7 | \$ 1.82 |

Activity related to stock options outstanding under the Non-U.S. Plan was as follows:

| | Number of Shares | Weighted Average Exercise Price | Weighted Average Remaining Contractual Term | Aggregate Intrinsic Value |
|------------------------------|------------------|---------------------------------|---|---------------------------|
| Balance at December 31, 2009 | 1,650,000 | 2.04 | | |
| Granted | 2,000,000 | 2.01 | | |
| Exercised | — | — | | |
| Expired | — | — | | |
| Cancelled | (550,000) | 2.04 | | |
| Balance at December 31, 2010 | 3,100,000 | 2.02 | | |
| Granted | 650,000 | 1.74 | | |
| Exercised | — | — | | |
| Expired | (366,666) | 2.04 | | |
| Cancelled | (1,283,334) | 2.00 | | |
| Balance at December 31, 2011 | 2,100,000 | \$ 1.95 | 8.22 | \$ — |

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 9 — Shareholders' Equity – (continued)

At December 31, 2011, the outstanding options under the Non-U.S. Plan by range of exercise prices were as follows:

| Range of Exercise Prices | Options Outstanding | | | Options Exercisable | | |
|--------------------------|---------------------|---|---------------------------------|---------------------|---|---------------------------------|
| | Shares Outstanding | Weighted Average Remaining Contractual Life (years) | Weighted Average Exercise Price | Shares Exercisable | Weighted Average Remaining Contractual Life (years) | Weighted Average Exercise Price |
| \$1.42 – \$1.70 | 700,000 | 8.7 | \$ 1.62 | 200,000 | 8.7 | \$ 1.65 |
| \$1.71 – \$2.08 | 350,000 | 7.3 | 1.74 | 175,000 | 7.3 | 1.74 |
| \$2.09 – \$2.22 | 650,000 | 8.1 | 2.16 | 250,000 | 8.2 | 2.16 |
| \$2.23 – \$2.36 | 400,000 | 8.5 | 2.36 | 300,000 | 8.5 | 2.36 |
| | <u>2,100,000</u> | <u>8.2</u> | <u>\$ 1.95</u> | <u>925,000</u> | <u>8.2</u> | <u>\$ 2.04</u> |

The total fair value of shares vested during the years ended December 31, 2011 and 2010 was approximately \$6,194,100 and \$6,191,800, respectively.

As of December 31, 2011, there was approximately \$4,034,900 of total unrecognized compensation costs related to unvested stock option awards of which approximately \$3,995,600 is related to stock options that vest over a weighted average life of 1.82 years. The remaining balance of unrecognized compensation costs of \$39,300 is related to stock options that vest based on the accomplishment of business milestones which expense begins to be recognized when such milestones become probable of being achieved.

Restricted Stock

During the years ended December 31, 2011 and 2010, the Company issued restricted stock for services as follows (\$ in thousands, except share data):

| | Years Ended December 31, | |
|-----------------------------------|--------------------------|-----------------|
| | 2011 | 2010 |
| Number of Restricted Stock Issued | 3,467,451 | 338,599 |
| Value of Restricted Stock Issued | <u>\$ 3,580.6</u> | <u>\$ 569.5</u> |

The weighted average estimated fair value of restricted stock issued for services in the years ended December 31, 2011 and 2010 was \$1.03 and \$1.68, respectively. The fair value of the restricted stock was determined using the Company's closing stock price on the date of issuance. The vesting terms of restricted stock issuances are generally within one year. The Company's results include share-based compensation expense of approximately \$2,791,100 and \$567,700, for the years ended December 31, 2011 and 2010, respectively. As of December 31, 2011, there was approximately \$339,400 of unrecognized service cost related to unvested restricted stock.

Share Remaining Under Equity Plans

The number of remaining shares authorized to be issued under the various equity plans are as follows:

| | U.S. Equity Plan | Non-U.S. Plan |
|---|-------------------|------------------|
| Shares Authorized for Issuance under 2003 Equity Plan | 2,500,000 | — |
| Shares Authorized for Issuance under 2009 Equity Plan | 23,750,000 | — |
| Shares Authorized for Issuance under Non-U.S. Plan | — | 5,700,000 |
| | <u>26,250,000</u> | <u>5,700,000</u> |
| Outstanding Options – U.S. Equity Plan | (15,043,505) | |
| Exercised Options | (97,500) | — |
| Outstanding Options – Non-U.S. Plan | | (2,100,000) |
| Restricted stock or equity grants issued under Equity Plans | (3,398,573) | (885,000) |
| Total common shares remaining to be issued under the Equity Plans | <u>7,710,422</u> | <u>2,715,000</u> |

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 10 — Income Taxes

Loss from operations before income taxes and non-controlling interest is as follows (in thousands):

| | Years Ended December 31, | |
|---------------|--------------------------|----------------------|
| | 2011 | 2010 |
| United States | \$ (35,310.4) | \$ (25,883.0) |
| Foreign | (20,879.7) | 7,036.9 |
| | <u>\$ (56,190.1)</u> | <u>\$ (18,846.1)</u> |

The provision for income taxes was as follows (in thousands):

| | Years Ended December 31, | |
|-----------------|--------------------------|-------------------|
| | 2011 | 2010 |
| Current | | |
| US Federal | \$ — | \$ — |
| State and local | — | — |
| Foreign | 1,080.8 | 1,381.6 |
| | <u>\$ 1,080.8</u> | <u>\$ 1,381.6</u> |
| Deferred | | |
| US Federal | \$ — | \$ — |
| State and local | — | — |
| Foreign | (688.0) | (830.7) |
| | <u>\$ (688.0)</u> | <u>\$ (830.7)</u> |
| Total | | |
| US Federal | \$ — | \$ — |
| State and local | — | — |
| Foreign | 392.8 | 550.9 |
| | <u>\$ 392.8</u> | <u>\$ 550.9</u> |

The provision for income taxes exceeds the amount of income tax benefit determined by applying the U.S. Federal statutory rate of 34% to income before income taxes as a result of the following:

| | Years Ended December 31, | |
|---|--------------------------|-----------------|
| | 2011 | 2010 |
| U.S. Federal benefit at statutory rate | \$ (19,104.6) | \$ (6,407.7) |
| State and local benefit net of U.S. federal tax | (2,177.0) | (2,509.4) |
| Permanent non deductible expenses for U.S. taxes | 6,661.9 | 1,838.1 |
| Foreign tax rate differential on current income | 1,879.2 | (1,841.7) |
| Reduction in deferred tax assets primarily related to deductibility of certain share-based compensation | (72.4) | 2,938.6 |
| True-up of prior year net operating loss | 1,367.3 | (413.6) |
| Goodwill impairment | 4,858.2 | — |
| Foreign earnings not permanently reinvested | 1,810.3 | — |
| Effect of change in deferred tax rate | 2,852.1 | — |
| Writedown of net operating losses due to Section 382 limitations | — | 1,932.6 |
| Valuation allowance for deferred tax assets | 2,317.8 | 5,014.0 |
| Tax provision | <u>\$ 392.8</u> | <u>\$ 550.9</u> |

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 10 — Income Taxes – (continued)

Deferred income taxes at December 31, 2011 and 2010 consist of the following:

| | December 31, | |
|--|---------------------|---------------------|
| | 2011 | 2010 |
| Deferred Tax Assets: | | |
| Accumulated net operating losses (tax effected) | \$ 17,816.7 | \$ 17,236.0 |
| Deferred revenue | 212.9 | 60.8 |
| Contingent accounts payable | 13.8 | 175.4 |
| Share-based compensation | 3,917.4 | 2,393.0 |
| Damages for patent infringement | — | 189.6 |
| Write off of abandoned assets | 351.6 | 169.7 |
| Inventory reserve | (79.4) | 17.1 |
| Charitable contributions | 408.2 | 176.0 |
| Bad debt provision | 149.2 | 65.8 |
| Goodwill | — | 164.0 |
| Other | 198.1 | — |
| Deferred tax assets prior to tax credit carryovers | <u>22,988.5</u> | <u>20,647.4</u> |
| Deferred Tax Liabilities: | | |
| Accumulated depreciation | (155.1) | (80.0) |
| Intangible and indefinite lived assets | (8,735.2) | (5,857.4) |
| Foreign earnings not permanently reinvested | (2,138.5) | — |
| Lease rights | — | (85.1) |
| Land use rights | (745.1) | (735.5) |
| Deferred tax liabilities | <u>(11,773.9)</u> | <u>(6,758.0)</u> |
| | 11,214.6 | 13,889.4 |
| Valuation reserve | <u>(20,702.9)</u> | <u>(20,081.0)</u> |
| Net deferred tax liability | <u>\$ (9,488.3)</u> | <u>\$ (6,191.6)</u> |

The Tax Reform Act of 1986 enacted a complex set of rules limiting the utilization of net operating loss carryforwards (“NOL”) to offset future taxable income following a corporate ownership change. The Company’s ability to utilize its NOL carryforwards is limited following a change in ownership in excess of fifty percentage points during any three-year period.

Since the year 2000, the Company has had several changes in ownership which has resulted in a limitation on the Company’s ability to apply net operating losses to future taxable income. As of December 31, 2011 the Company has lost \$25,994,800 or \$8,838,200 in tax benefits, of net operating losses applicable to Federal income taxes which expired due to these limitations and expiration of net operating loss carryforwards. At December 31, 2011, the Company had net operating loss carryforwards of approximately \$47,427,300 applicable to future Federal income taxes. The tax loss carryforwards are subject to annual limitations and expire at various dates through 2030. The Company has recorded a full valuation allowance against its net deferred tax asset because it is more likely than not that such deferred tax assets will be realized.

The Company has provided deferred income taxes for the estimated U.S. federal and foreign income tax effects of earnings of subsidiaries expected to be distributed to the Company. Deferred income taxes have been provided on approximately \$5,324,300 of undistributed earnings of certain foreign subsidiaries as such amounts are not considered to be permanently reinvested.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 11 — Segment Information

The Company operates in three reportable segments: (i) Cell Therapy — United States; (ii) Regenerative Medicine — China; and (iii) Pharmaceutical Manufacturing — China. The Company's operating businesses are organized based on the nature of markets and customers. The Company's CEO, as chief operating decision maker, evaluates the results of operations along these reporting segments.

The Company's financial information broken down by reportable segment was as follows (in thousands):

| | Years Ended December 31, | |
|---|--------------------------|----------------------|
| | 2011 | 2010 |
| Revenues | | |
| Pharmaceutical Manufacturing — China (products) | \$ 63,393.6 | \$ 69,584.3 |
| Cell Therapy — United States (services) | 10,050.1 | 181.1 |
| Regenerative Medicine — China (services) | 274.3 | 55.9 |
| | <u>\$ 73,718.0</u> | <u>\$ 69,821.3</u> |
| Loss from operations | | |
| Pharmaceutical Manufacturing — China | \$(17,198.2) | \$ 8,475.9 |
| Cell Therapy — United States | (13,046.7) | (9,690.4) |
| Regenerative Medicine — China | (2,590.4) | (1,427.1) |
| Corporate office | (21,701.8) | (16,236.7) |
| | <u>\$ (54,537.1)</u> | <u>\$ (18,878.3)</u> |
| | <u>December 31,</u> | <u>December 31,</u> |
| | 2011 | 2010 |
| Total assets | | |
| Pharmaceutical Manufacturing — China | \$ 106,284.8 | \$ 125,133.7 |
| Cell Therapy — United States | 40,653.1 | 1,241.2 |
| Regenerative Medicine — China | 1,793.5 | 5,032.9 |
| Corporate office | 6,596.4 | 11,616.9 |
| | <u>\$ 155,327.8</u> | <u>\$ 143,024.7</u> |

Note 12 — Related Party Transactions

At December 31, 2011 and 2010, Erye owed EET, the 49% shareholder of Erye, \$20,862,700 and \$8,301,400, respectively, which represents dividends paid and loaned back to Erye. At December 31, 2011 and 2010 the interest rate on this loan was 6.56% and 5.31%, respectively. In June 2011 Erye paid EET approximately \$875,100 consisting of the net of the following: \$1,115,000 of unpaid accrued interest at June 30, 2011, approximately \$408,700 repayment of a non interest bearing loan due in 2011 and recovery of cash advances to EET of approximately \$648,600. In December 2011 Erye paid EET approximately \$125,100 of unpaid accrued interest with bank draft due in June 2012. In February 2010, Erye made an interest payment of approximately \$198,500 to EET.

Pursuant to the terms and conditions of the October 2009 Erye Joint Venture Agreement, dividend distributions to EET and the Company's subsidiary will be made in proportion to their respective ownership interests in Erye; provided, however, that for the three-year period commencing on the first day of the first fiscal quarter after the Joint Venture Agreement became effective distributions are made as follows: for undistributed profits generated subsequent to the acquisition date: (i) the 49% of undistributed profits (after tax) of the joint venture due EET will be distributed to EET and lent back to Erye to help finance costs in connection with its construction of and relocation to a new facility (to be repaid gradually after construction is completed); and (ii) of the net profit (after tax) of the joint venture due the Company, 45% will be provided to Erye as part of the new facility construction fund and will be characterized as additional paid-in capital for the

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 12 — Related Party Transactions – (continued)

Company's 51% interest in Erye, and 6% will be distributed to the Company. For undistributed profits generated prior to the acquisition date: (i) the 49% of undistributed profits (after tax) of the joint venture due EET will be distributed to EET and lent back to Erye to help finance costs in connection with its construction of and relocation to a new facility (to be repaid gradually after construction is completed); and (ii) of the net profit (after tax) of the joint venture due the Company, 51% will be provided to Erye as part of the new facility construction fund and will be characterized as additional paid-in capital for the Company's 51% interest in Erye. It was contemplated by the Joint Venture Agreement that the construction would continue for three years. As such, 45% of the dividend we would be entitled to by reason of our 51% ownership would remain in Erye through 2012 to complete the construction while EET would loan back their dividend during the same period at a prevailing bank interest rate. Upon a liquidity event of Erye, as contemplated in the joint venture agreement, the Company will be entitled to the return of its dividend reinvestments to the extent of the proceeds generated by the liquidity event. Repayment of such loans from EET would occur gradually after the construction is completed. In January 2011, a dividend totaling approximately \$13,671,100 based on earnings for Fiscal Year 2009 was declared and approximately \$6,698,800 was distributed to EET and lent back to Erye and approximately \$6,972,300 due the Company was reinvested and re-characterized as additional paid-in capital in the business. In April 2011, a dividend totaling \$10,259,700 based on earnings for Fiscal Year 2010 was declared and approximately \$5,027,300 was distributed to EET and lent back to Erye, and approximately \$5,232,400 due the Company was reinvested and re-characterized as additional paid-in capital in the business. A 10% withholding tax was required on dividends payable to the Company. As a result, Erye withheld approximately \$1,220,500 in taxes related to the Company's Fiscal Year 2009 and 2010 dividend amounts, and such amount has been paid to the local Chinese tax authorities as of December 31, 2011.

Pursuant to the PCT Merger Agreement, NeoStem agreed to pay off PCT's credit line with Northern New Jersey Cancer Associates ("NNJCA"), in an amount up to \$3,000,000, shortly after the closing of the PCT Merger. On January 21, 2011, NeoStem paid NNJCA \$3,000,000 in full satisfaction of all of PCT's obligations to NNJCA arising from the underlying line of credit and security agreement. Dr. Andrew Pecora (who was PCT's Chairman and CEO prior to the PCT Merger, and who became PCT's Chief Medical Officer on January 19, 2011 pursuant to an employment agreement effective upon the closing of the PCT Merger), has served as Managing Partner of NNJCA since 1996.

On July 13, 2011, NeoStem entered into the Agreement and Plan of Merger to acquire Amorcyte. Amorcyte had originally been incorporated as a subsidiary of PCT and was spun off to PCT's members prior to NeoStem's January 19, 2011 acquisition of PCT. At the time the Agreement and Plan of Merger was entered into, Dr. Pecora and Mr. Goldberger were officers of both PCT and Amorcyte. The Amorcyte acquisition closed on October 17, 2011.

In order to accelerate Amorcyte's commencement of its Phase 2 clinical trial of AMR-001, NeoStem agreed to provide loans to Amorcyte prior to the closing of the Amorcyte Merger to be used in connection with the Phase 2 trial. Pursuant to a Loan Agreement entered into on September 9, 2011, NeoStem loaned Amorcyte prior to the closing of the Merger an aggregate of \$338,500 which was applied towards the commencement of the Phase 2 trial.

Effective March 10, 2011, Matthew Henninger entered into a consulting agreement with PCT, pursuant to which Mr. Henninger was engaged for a three month term to serve as an advisor to PCT with regard to the development of the "Family Plan," a multi-generational stem cell collection and storage service. In consideration therefor, Mr. Henninger was granted an option to purchase 150,000 shares of NeoStem Common Stock under the 2009 Plan at \$1.60 per share (Black Scholes value \$129,000) vesting over the term of the agreement. Pursuant to an amendment and extension of this agreement in April and May, 2011, respectively, Mr. Henninger's term of service was extended through September 9, 2011, for which he received 75,000 shares of NeoStem Common Stock (market value \$115,000), \$5,000 per month for a three month period and

NEOSTEM, INC. AND SUBSIDIARIES**Notes to Consolidated Financial Statements****Note 12 — Related Party Transactions – (continued)**

reimbursement of health insurance premiums; in September 2011 the PCT management with approval of the Audit Committee extended the term further through December 31, 2011, in connection with which Mr. Henninger received a \$25,000 bonus related to prior performance, a monthly fee of \$10,000 and continued insurance reimbursement. Mr. Henninger is in an exclusive relationship with the CEO of NeoStem.

During the year ended December 31, 2011, the Company contributed to The Stem for Life Foundation, a Pennsylvania nonprofit corporation classified as a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the “Code”) and as a public charity under Section 509(a)(1) and 170(b)(1)(A)(vi) of the Code (the “Foundation”), whose mission is to promote public awareness, fund research and development and subsidize stem cell collection and storage programs, 407,600 shares of previously issued restricted common stock with a fair value of approximately \$607,400. The contribution of such securities was subject to the approval of the Board of Directors and the Audit Committee. The Company’s CEO and Chairman is President and a Trustee of the Foundation, its General Counsel is Secretary and a Trustee of the Foundation and its Chief Financial Officer is Treasurer of the Foundation.

Note 13 — Commitments and Contingencies

The Company leases office and laboratory facilities and certain equipment under certain noncancelable operating leases that expire from time to time through 2017. A summary of future minimum rental payments required under operating leases that have initial or remaining terms in excess of one year as of December 31, 2011 are as follows (in thousands):

Lease Commitments:

| Years ended | Operating Leases |
|------------------------------|---------------------|
| 2012 | 1,407.8 |
| 2013 | 832.7 |
| 2014 | 563.6 |
| 2015 | 553.7 |
| 2016 | 563.9 |
| Thereafter | 293.2 |
| Total minimum lease payments | <u>\$ 4,214.9</u> |

Expense incurred under operating leases was approximately \$2,099,900 and \$889,200, for the years ended December 2011 and 2010, respectively.

Contingencies:

Under license agreements with third parties the Company is typically required to pay maintenance fees, make milestone payments and/or pay other fees and expenses and pay royalties upon commercialization of products. The Company also sponsors research at various academic institutions, which research agreements generally provide us with an option to license new technology discovered during the course of the sponsored research.

In connection with the issuance to investors and service providers of many of the shares of the Company’s common stock and warrants to purchase common stock previously disclosed and described herein, the Company granted the holders registration rights providing for the registration of such shares of common stock and shares of common stock underlying warrants on a registration statement to be filed with the Securities and Exchange Commission (“SEC”) so as to permit the resale of those shares. Certain of the registration rights agreements provided for penalties for failure to file or failure to obtain an effective registration statement. With respect to satisfying its obligations to the holders of these registration rights, the Company has been in various situations. The Company had previously filed a registration statement as

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 13 — Commitments and Contingencies – (continued)

required for some of the holders, and in May 2011 filed a registration statement for all of the holders (except for holders whose shares of Common Stock were currently salable under Rule 144 of the Securities Act or who waived certain rights); such registration statement was declared effective by the SEC on September 30, 2011. The Company has certain obligations to maintain the effectiveness of this registration statement. Certain holders who had outstanding registration rights had previously waived their registration rights or were subject to lock-up agreements. No holder has yet asserted any claim against the Company with respect to a failure to satisfy any registration obligations. Were someone to assert a claim against the Company for breach of registration obligations, the Company believes it has several defenses that would result in relieving it from some or any liability, although no assurances can be given. The Company also notes that damage claims may be limited, as (i) most shares of Common Stock as to which registration rights attached are either now registered or currently salable under Rule 144 of the Securities Act or are otherwise currently subject to other restrictions on sale and (ii) the shares of Common Stock underlying warrants with registration rights are now registered, and during much of the relevant periods the warrants with registration rights generally have been out of the money, were subject to lock-up agreements and/or the underlying shares of Common Stock were otherwise subject to restrictions on resale. Accordingly, were holders to assert claims against the Company based on breach of the Company's obligation to register, the Company believes that the Company's maximum exposure would not be material.

Chinese regulatory approvals — The Company has determined that it did not obtain all Chinese regulatory approvals (and associated registrations) required to reflect the legal title of its interest in Erye as being held by the proper entity within our group which is its current beneficial owner as that term is used under U.S. law. The Company believes it has now determined what governmental approvals (and associated registrations) will need to be issued by the Suzhou Municipal Bureau of Foreign Investment and Commerce and the Suzhou Administration for Industry and Commerce to remediate these deficiencies and the Company has had counsel in China prepare these filings. The Company's management believes these regulatory deficiencies can be remediated and should not delay a possible divestiture of the Company's interests in Erye that is currently under evaluation. However, the Company requires the cooperation of the officers of Erye, as to which no assurance can be given, and we could be compelled to seek to replace those officers or to commence legal action to obtain the required consents or otherwise move forward with requisite filings. In addition, even if the filings are made, no assurance can be given that any unremediated regulatory deficiencies would not have an adverse effect on the operating results and liquidity of Erye and the Company and will not impede or delay efforts to divest the Company's interest in Erye. In addition, the remediation process is expected to trigger certain tax liabilities and penalties, however the ultimate liability will be based on future discussions with the relevant Chinese authorities. The Company cannot reasonably assess the exposure as of December 31, 2011.

Xiangbei Welman Pharmaceutical Co., Ltd. v Suzhou Erye Pharmaceutical Co., Ltd. and Hunan Weichu Pharmacy Co., Ltd. involves a patent infringement dispute with respect to a particular antibiotics complex manufactured by Erye (the "Product"). The Changsha Intermediate Court ruled in Welman's favor at first and Erye appealed the judgment to the Hunan High Court. Meanwhile, the Supreme Court of PRC has recently rendered a final ruling that Welman is not entitled to the patent right disputed under the said case. On that basis, the Hunan High Court awarded on January 16, 2012 that Welman's suit against Erye on that patent infringement is rejected. The initial judgment was rendered on May 13, 2010 in the amount of approximately 5 million RMB (approximately \$778,500), which was fully accrued for at September 30, 2011 and reversed in the fourth quarter of 2011 based on these subsequent rulings.

In 2009, Welman brought a copyright infringement lawsuit against Erye claiming the package inserts with respect to the Product infringed upon their copyright. Erye was enjoined from copying and using the package inserts on the Product and selling the Product with the package inserts and Welman was awarded RMB 50,000. Erye has filed application for a retrial of the previous lawsuit brought by Welman to the Hunan High Court, and the said application has been accepted for filing by the court.

NEOSTEM, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Note 13 — Commitments and Contingencies – (continued)

In July 2011, a new copyright infringement lawsuit was brought by Welman against Erye claiming that Erye was not complying with the earlier judgment enjoining them from copying and using the package inserts for the Product. The Changsha Intermediate Court was applied to for property preservation and it issued a civil decision to freeze Erye's bank deposit of up to RMB 50 million (approximately US \$7.9 million), or to seal up or detain Erye's other properties of equal value. As of December 31, 2011, approximately 15,656,000 RMB (approximately \$2,460,000) of cash had been frozen in six Erye bank accounts, and is classified in Other Assets. Erye has contended that jurisdiction is not proper, and the case is now in review of the Hunan High Court.

A similar copyright infringement lawsuit was recently instituted by Welman against Erye in the Guangzhou Intermediate Court to (i) enjoin Erye from copying and using the package inserts from the Product and selling the drugs with the aforesaid package inserts; and (ii) award Welman economic losses of approximately RMB 2,000,000 (approximately US \$320,000) against Erye and the case is being reviewed by the Court. Welman made an application for preliminary injunction to prohibit Erye from copying and using the package inserts from the Product and selling the drugs with the aforesaid package inserts and Welman's application was denied by the Court on September 6, 2011. Welman subsequently obtained a preliminary injunction from a lower court Guangzhou Haizhu District Court on September 14, 2011. But on October 28, 2011, upon the appeal by Erye, the Haizhu District Court issued a decision withdrawing the preliminary injunction.

Amorcyte line of credit — On May 19, 2006, PCT entered into a line of credit agreement with Amorcyte Inc. ("Amorcyte"), an entity which was spun out of PCT in 2006, whereby PCT agreed to loan Amorcyte up to \$500,000 at an annual interest rate of 5%. The line of credit agreement was a condition to Amorcyte closing a Series A Preferred Stock Financing completed during 2006. The Company has not loaned any amount to Amorcyte under this agreement through September 30, 2011. The line of credit agreement expires on the earlier of (i) the date on which the Company declares the outstanding principal and accrued interest due and payable based on an event of default as defined within the agreement, or (ii) the date of closing of the first debt or equity financing of Amorcyte following the initial borrowing of the principal. These events have not occurred to date. On October 17, 2011, the Company acquired Amorcyte pursuant to the Amorcyte Agreement and Plan of Merger, and this line of credit was cancelled. (See Note 4).

Note 14 — Subsequent Events

In February 2012, the Company raised an aggregate of \$2.25 million in a private placement of common stock.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES.

(a) Disclosure Controls and Procedures

Disclosure controls and procedures are the Company's controls and other procedures that are designed to ensure that information required to be disclosed in the reports that the Company files or submits under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports that the Company files under the Exchange Act is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Due to the inherent limitations of control systems, not all misstatements may be detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. Controls and procedures can only provide reasonable, not absolute, assurance that the above objectives have been met.

As of the end of the Company's fourth fiscal quarter ended December 31, 2011 covered by this report, the Company carried out an evaluation, with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the Company's disclosure controls and procedures pursuant to Rule 13a-15 of the Exchange Act. Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that, because of the material weakness in internal control over financial reporting described below, the Company's disclosure controls and procedures were not effective, at the reasonable assurance level, in ensuring that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms and is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

(b) Management's Annual Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer along with the Company's Chief Financial Officer, the Company conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on the evaluation under the framework in Internal Control — Integrated Framework and the material weakness described below, management concluded that the Company's internal control over financial reporting was not effective as of December 31, 2011.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and

TABLE OF CONTENTS

directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis.

The following material weakness has been identified by management in connection with its assessment as of December 31, 2011. The Company has determined the accounting staff at Eyre does not have sufficient qualified accounting and finance personnel which has resulted in the lack of appropriate segregation of duties in certain areas, appropriate detailed records for long term assets, knowledge of certain complex aspects of Chinese tax code and maintaining appropriate audit trails on certain transactions. During 2011, the Company took steps to strengthen Erye's competency in the area of US GAAP, by hiring a director of international accounting with many years of US GAAP accounting and reporting experience, but now recognize that we need to do more to address the day to day needs of Erye's accounting department. The Company intends to take further steps to add appropriate personnel to the Erye accounting department and also increase the number of qualified staff working in the department.

(c) Attestation Report of Registered Public Accounting Firm

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to an exemption for smaller reporting companies under Section 989G of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

(d) Changes in Internal Control over Financial Reporting

There have been no changes in the Company's internal controls over financial reporting, as such term is defined in Exchange Act Rule 13a-15, that occurred during the Company's last fiscal quarter to which this report relates that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION.

For information with respect to certain recent events involving issuances of equity in unregistered private transactions, see Note 14 — Subsequent Events — in our notes to our audited financial statements and Part II, Item 5.(a), Recent Sales of Unregistered Securities.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information required by this Item is incorporated into this Annual Report on Form 10-K by reference to the definitive Proxy Statement for our 2012 Annual Meeting of Stockholders, to be filed not later than April 30, 2012 (120 days after the close of our fiscal year ended December 31, 2011).

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this Item is incorporated into this Annual Report on Form 10-K by reference to the definitive Proxy Statement for our 2012 Annual Meeting of Shareholders, to be filed not later than April 30, 2012 (120 days after the close of our fiscal year ended December 31, 2011).

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information required by this Item is incorporated into this Annual Report on Form 10-K by reference to the definitive Proxy Statement for our 2012 Annual Meeting of Shareholders, to be filed not later than April 30, 2012 (120 days after the close of our fiscal year ended December 31, 2011).

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information required by this Item is incorporated into this Annual Report on Form 10-K by reference to the definitive Proxy Statement for our 2012 Annual Meeting of Shareholders, to be filed not later than April 30, 2012 (120 days after the close of our fiscal year ended December 31, 2011).

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

The information required by this Item is incorporated into this Annual Report on Form 10-K by reference to the definitive Proxy Statement for our 2012 Annual Meeting of Shareholders, to be filed not later than April 30, 2012 (120 days after the close of our fiscal year ended December 31, 2011).

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES.

The following documents are being filed as part of this Report:

(a)(1) FINANCIAL STATEMENTS:

Reference is made to the Index to Financial Statements and Financial Statement Schedule on Page [104](#).

(a)(2) FINANCIAL STATEMENT SCHEDULE:

Reference is made to the Index to Financial Statements and Financial Statement Schedule on Page [104](#).

All other schedules have been omitted because the required information is not present or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the Financial Statements or Notes thereto.

(a)(3) EXHIBITS:

| <u>Exhibit</u> | <u>Description</u> | <u>Reference</u> |
|----------------|---|------------------|
| 2.1 | Agreement and Plan of Merger, dated as of July 13, 2011, by and among NeoStem, Inc., Amo Acquisition Company I, Inc., Amo Acquisition Company II, LLC and Amorceyte, Inc. ⁽¹⁾ | 2.1 |
| 2.2 | Agreement and Plan of Merger, dated as of September 23, 2010, by and among NeoStem, Inc., NBS Acquisition Company LLC, and Progenitor Cell Therapy, LLC ⁽²⁾ | 2.1 |
| 2.3 | Agreement and Plan of Merger, dated as of November 2, 2008, by and among NeoStem, Inc., China Biopharmaceuticals Holdings, Inc., China Biopharmaceuticals Corp., and CBH Acquisition LLC, as amended by Amendment No. 1 dated as of July 1, 2009 and Amendment No. 2 dated as of August 27, 2009 ⁽³⁾ | Annex A |
| 3.1 | Amended and Restated Certificate of Incorporation, as amended (as certified March 25, 2011) ⁽⁴⁾ | 3.1 |
| 3.2 | Certificate of Amendment to Amended and Restated Certificate of Incorporation, filed with the Secretary of State of the State of Delaware on October 14, 2011 ⁽⁵⁾ | 3.2 |
| 3.3 | Amended and Restated By-Laws dated August 31, 2006 ⁽⁴⁾ | 3.2 |
| 4.1 | Form of Underwriters' Warrant dated August 14, 2007 ⁽⁶⁾ | 10.2 |
| 4.2 | Form of Underwriter Warrant Clarification Agreement among NeoStem, Inc. and certain members of its Underwriting Group ⁽⁷⁾ | 10.4 |
| 4.3 | Form of Class A Warrant Agreement and Certificate from August 2007 ⁽⁸⁾ | 4(b) |
| 4.4 | Form of Warrant Clarification Agreement between NeoStem, Inc. and Continental Stock Transfer and Trust Company ⁽⁷⁾ | 10.3 |
| 4.5 | Restated Warrant Agreement dated August 14, 2007 ⁽⁶⁾ | 10.1 |
| 4.6 | Form of Warrant to Purchase Shares of Common Stock of Phase III Medical, Inc from June 2006 ⁽⁹⁾ | 10.3 |
| 4.7 | Form of Phase III Medical, Inc. Warrant to Purchase Shares of Common Stock from July/August 2006 ⁽¹⁰⁾ | 10.3 |
| 4.8 | Form of Redeemable Warrant to Purchase Shares of Common Stock of NeoStem, Inc. from January/February 2007 ⁽¹¹⁾ | 10.2 |
| 4.9 | Form of Non-Redeemable Warrant to Purchase Shares of Common Stock of NeoStem, Inc. from January/February 2007 ⁽¹¹⁾ | 10.3 |
| 4.10 | Form of Redeemable Warrant to Purchase Shares of Common Stock of NeoStem, Inc. issued to JFS Investments, Inc. ⁽¹²⁾ | 4.15 |

TABLE OF CONTENTS

| Exhibit | Description | Reference |
|----------------|---|------------------|
| 4.11 | Redeemable Warrant to Purchase Shares of Common Stock of NeoStem, Inc. issued to Solutions in Marketing, Inc. ⁽¹²⁾ | 4.16 |
| 4.12 | Warrant to Purchase Shares of Common Stock of NeoStem, Inc. issued to Wall Street Communications Group, Inc. ⁽¹²⁾ | 4.17 |
| 4.13 | Form of Redeemable Service Provider Warrant ⁽¹²⁾ | 4.19 |
| 4.14 | Form of 2011 Redeemable Service Provider Warrant ⁽¹²⁾ | 4.20 |
| 4.15 | Form of Redeemable Service Provider Warrant with cashless exercise rights ⁽¹²⁾ | 4.21 |
| 4.16 | Form of 2010/2011 Redeemable Service Provider Warrant with cashless exercise rights ⁽¹²⁾ | 4.22 |
| 4.17 | Form of Redeemable Warrant to Purchase Shares of Common Stock of NeoStem, Inc. from May 2008 ⁽¹³⁾ | 10.2 |
| 4.18 | Form of Redeemable Finder's Warrant to Purchase Shares of Common Stock of NeoStem, Inc. from May 2008 ⁽¹²⁾ | 4.6 |
| 4.19 | Form of Redeemable Warrant to Purchase Shares of Common Stock of NeoStem, Inc. issued to RimAsia Capital Partners L.P. in September 2008 ⁽¹⁴⁾ | 10.2 |
| 4.20 | Letter Agreement dated December 18, 2008 between NeoStem, Inc. and RimAsia Capital Partners, L.P. ⁽¹⁵⁾ | 4.1 |
| 4.21 | Form of Warrant to Purchase Shares of Common Stock of NeoStem, Inc. from October 2008 ⁽¹⁵⁾ | 4.2 |
| 4.22 | Form of Redeemable Warrant to Purchase Shares of Common Stock of NeoStem, Inc. from November 2008 ⁽¹⁵⁾ | 4.3 |
| 4.23 | Specimen Certificate for Common Stock ⁽¹⁶⁾ | 4.1 |
| 4.24 | Form of Warrant issued in connection with April and July 2009 private placements ⁽¹⁷⁾ | 4.2 |
| 4.25 | Form of Common Stock Purchase Warrant from June 2010 ⁽¹⁸⁾ | 4.1 |
| 4.26 | Form of Placement Agent Warrant from June 2010 ⁽¹⁸⁾ | 4.2 |
| 4.27 | Amended and Restated Warrant, dated March 15, 2010, issued to RimAsia Capital Partners, L.P. ⁽¹⁹⁾ | 4.1 |
| 4.28 | Form of Warrant from the November 2010 Common Stock Offering ⁽²⁰⁾ | 4.1 |
| 4.29 | Form of Warrant from the November 2010 Preferred Stock Offering ⁽²⁰⁾ | 4.2 |
| 4.30 | Warrant Agreement, dated as of January 19, 2011, between NeoStem, Inc. and Continental Stock Transfer & Trust Company, with the forms of \$3.00 Warrant, \$5.00 Warrant and \$7.00 Warrant attached thereto ⁽²¹⁾ | 4.1 |
| 4.31 | Warrant Agreement, dated as of July 22, 2011, between NeoStem, Inc. and Continental Stock Transfer & Trust Company, with the form of Series NA Warrant attached thereto ⁽²²⁾ | 4.1 |
| 4.32 | Registration Rights Agreement, dated as of September 28, 2011, by and between NeoStem, Inc. and Aspire Capital Fund, LLC ⁽²³⁾ | 4.1 |
| 4.33 | Warrant Agreement, dated as of October 17, 2011, between NeoStem, Inc. and Continental Stock Transfer & Trust Company, with the form of Global Series AMO Warrant attached thereto ⁽⁵⁾ | 4.1 |
| 10.1 | License Agreement between Stem Cell Technologies, Inc. and the University of Louisville Research Foundation, Inc. ⁽²⁴⁾ | 10.2 |
| 10.2 | Amendment No. 1 to Exclusive License Agreement between Stem Cell Technologies, Inc. and the University of Louisville Research Foundation, Inc. ⁽²⁵⁾ | 10.2 |

TABLE OF CONTENTS

| Exhibit | Description | Reference |
|----------------|---|------------------|
| 10.3 | Amendment No. 2 to Exclusive License Agreement between University of Louisville Research Foundation, Inc. and Stem Cell Technologies, Inc. ⁽²⁶⁾ | 10.1 |
| 10.4 | Sponsored Research Agreement between NeoStem, Inc. and the University of Louisville Research Foundation, Inc. ⁽²⁴⁾ | 10.3 |
| 10.5 | Amendment No. 1 to Sponsored Research Agreement between NeoStem, Inc. and the University of Louisville Research Foundation, Inc. ⁽²⁵⁾ | 10.1 |
| 10.6 | Stem Cell Collection Services Agreement dated December 15, 2006 between NeoStem and HemaCare Corporation ⁽²⁷⁾ | 10.1 |
| 10.7 | Consigned Management and Technology Service Agreement dated June 1, 2009 among Qingdao Niao Bio-Technology Ltd., NeoStem (China), Inc. and The Shareholder of Qingdao Niao Bio-Technology Ltd. ⁽²⁸⁾ | 10.1 |
| 10.8 | Equity Pledge Agreement dated June 1, 2009 among Qingdao Niao Bio-Technology Ltd., NeoStem (China), Inc. and The Shareholder of Qingdao Niao Bio-Technology Ltd. ⁽²⁸⁾ | 10.2 |
| 10.9 | Exclusive Purchase Option Agreement dated June 1, 2009 among Qingdao Niao Bio-Technology Ltd., NeoStem (China), Inc. and The Shareholder of Qingdao Niao Bio-Technology Ltd. ⁽²⁸⁾ | 10.3 |
| 10.10 | Loan Agreement dated June 1, 2009 between NeoStem (China), Inc. and The Shareholder of Qingdao Niao Bio-Technology Ltd. ⁽²⁸⁾ | 10.4 |
| 10.11 | Consigned Management and Technology Service Agreement dated June 1, 2009 among Beijing Ruijieao Bio-Technology Ltd., NeoStem (China), Inc. and The Shareholder of Beijing Ruijieao Bio-Technology Ltd. ⁽²⁸⁾ | 10.5 |
| 10.12 | Equity Pledge Agreement dated June 1, 2009 among Beijing Ruijieao Bio-Technology Ltd., NeoStem (China), Inc. and The Shareholder of Beijing Ruijieao Bio-Technology Ltd. ⁽²⁸⁾ | 10.6 |
| 10.13 | Exclusive Purchase Option Agreement dated June 1, 2009 among Beijing Ruijieao Bio-Technology Ltd., NeoStem (China), Inc. and The Shareholder of Beijing Ruijieao Bio-Technology Ltd. ⁽²⁸⁾ | 10.7 |
| 10.14 | Loan Agreement dated June 1, 2009 between NeoStem (China), Inc. and The Shareholder of Beijing Ruijieao Bio-Technology Ltd. ⁽²⁸⁾ | 10.8 |
| 10.15 | Equity Pledge Agreement dated August 30, 2010 among Beijing Ruijieao Bio-Technology Ltd., NeoStem (China), Inc. and The Shareholder of Beijing Ruijieao Bio-Technology Ltd. ⁽²⁹⁾ | 10(d) |
| 10.16 | Exclusive Purchase Option Agreement dated June 21, 2010 among Beijing Ruijieao Bio-Technology Ltd., NeoStem (China), Inc. and The Shareholder of Beijing Ruijieao Bio-Technology Ltd. ⁽²⁹⁾ | 10(e) |
| 10.17 | Consigned Management and Technology Service Agreement dated June 21, 2010 among Beijing Ruijieao Bio-Technology Ltd., NeoStem (China), Inc. and The Shareholder of Beijing Ruijieao Bio-Technology Ltd. ⁽²⁹⁾ | 10(f) |
| 10.18 | Loan Transfer Agreement dated June 21, 2010 among NeoStem (China), Inc., the Shareholder of Beijing Ruijieao Bio-Technology Ltd. and Jianhua Sui ⁽²⁹⁾ | 10(g) |
| 10.19 | Consigned Management and Technology Service Agreement dated May 14, 2011 among Tianjin Niou Biotechnology Co., Ltd., NeoStem (China), Inc. and The Shareholder of Tianjin Niou Biotechnology Co., Ltd. ⁽³⁰⁾ | 10.5 |
| 10.20 | Equity Pledge Agreement dated May 14, 2011 among Tianjin Niou Biotechnology Co., Ltd., NeoStem (China), Inc. and The Shareholder of Tianjin Niou Biotechnology Co., Ltd. ⁽³⁰⁾ | 10.6 |

TABLE OF CONTENTS

| Exhibit | Description | Reference |
|----------------|--|------------------|
| 10.21 | Exclusive Purchase Option Agreement dated May 14, 2011 among Tianjin Niou Biotechnology Co., Ltd., NeoStem (China), Inc. and The Shareholder of Tianjin Niou Biotechnology Co., Ltd. ⁽³⁰⁾ | 10.7 |
| 10.22 | Loan Agreement dated May 14, 2011 between NeoStem (China), Inc. and The Shareholder of Tianjin Niou Biotechnology Co., Ltd. ⁽³⁰⁾ | 10.8 |
| 10.23 | October 2009 English translation of Joint Venture Contract of Suzhou Erye Pharmaceutical Co., Ltd. ⁽³¹⁾ | 10(www) |
| 10.24 | English Translation of Amendment Agreement to Joint Venture Contract of Suzhou Erye Pharmaceutical Co., Ltd. dated May 21, 2010 approved August 16, 2010 ⁽³¹⁾ | 10(c) |
| 10.25 | Network Agreement, dated June 15, 2009, between NeoStem, Inc. and Enhance BioMedical Holdings Limited ⁽³⁾ | 10.1 |
| 10.26 | Funding Agreement made as of July 1, 2009 by and between NeoStem, Inc., China Biopharmaceuticals Holdings, Inc., China Biopharmaceuticals Corp., and RimAsia Capital Partners L.P. ⁽³²⁾ | 10.2 |
| 10.27 | Agreement among Progenitor Cell Therapy, LLC, NeoStem, Inc. and NeoStem (China), Inc. dated December 31, 2009 ⁽³³⁾ | 10.1 |
| 10.28 | Confidentiality Agreement dated as of April 30, 2010 between NeoStem, Inc. and Enhance BioMedical Holdings Limited ⁽²⁶⁾ | 10.3 |
| 10.29 | Consulting Agreement, dated as of May 11, 2010 between NeoStem, Inc. and RimAsia Capital Partners, LP ⁽²⁶⁾ | 10.4 |
| 10.30 | Form of Subscription Agreement from May 2008 among NeoStem, Inc. and certain investors listed therein ⁽¹³⁾ | 10.1 |
| 10.31 | Form of Subscription Agreement between NeoStem, Inc. and RimAsia Capital Partners, L.P. dated September 2, 2008 ⁽¹⁴⁾ | 10.1 |
| 10.32 | Form of Subscription Agreement from October 2008 between NeoStem, Inc. and an investor listed therein ⁽¹⁵⁾ | 10.1 |
| 10.33 | Form of Subscription Agreement from November 2008 between NeoStem, Inc. and an investor listed therein ⁽¹⁵⁾ | 10.2 |
| 10.34 | Form of Subscription Agreement from the April 2009 private placement ⁽¹⁷⁾ | 4.3 |
| 10.35 | Form of Subscription Agreement with respect to private placement consummated on April 5, 2011 ⁽¹²⁾ | 4.13 |
| 10.36 | Underwriting Agreement, dated as of February 11, 2010, between NeoStem, Inc. and Roth Capital Partners, LLC ⁽³⁴⁾ | 1.1 |
| 10.37 | Common Stock Purchase Agreement dated as of May 19, 2010 by and between NeoStem, Inc. and Commerce Court Small Cap Value Fund, Ltd. ⁽³⁵⁾ | 10.1 |
| 10.38 | Termination Notice dated September 28, 2011, given by NeoStem, Inc. to Commerce Court Small Cap Value Fund, Ltd.† | 10.38 |
| 10.39 | Placement Agent Agreement, dated June 24, 2010 between NeoStem, Inc. and Rodman & Renshaw ⁽¹⁸⁾ | 1.1 |
| 10.40 | Securities Purchase Agreement, dated as of June 25, 2010 between NeoStem, Inc. and certain purchasers ⁽¹⁸⁾ | 10.1 |
| 10.41 | Underwriting Agreement, dated November 16, 2010, by and between NeoStem, Inc. and Cowen and Company, LLC ⁽²⁰⁾ | 1.1 |
| 10.42 | Placement Agent Agreement, dated November 16, 2010, by and between NeoStem, Inc. and Cowen and Company, LLC (as representative for the placement agents) ⁽²⁰⁾ | 1.2 |

TABLE OF CONTENTS

| Exhibit | Description | Reference |
|----------------|---|------------------|
| 10.43 | Securities Purchase Agreement, dated November 16, 2010, by and among NeoStem, Inc., JGB Management Inc. and certain Purchasers ⁽²⁰⁾ | 10.1 |
| 10.44 | Underwriting Agreement, dated July 19, 2011, by and among NeoStem, Inc. and the underwriters named on Schedule I thereto ⁽³⁶⁾ | 1.1 |
| 10.45 | Common Stock Purchase Agreement, dated as of September 28, 2011, by and between NeoStem, Inc. and Aspire Capital Fund, LLC ⁽²³⁾ | 10.1 |
| 10.46 | Form of Subscription Agreement from February 2012 private placement.† | 10.46 |
| 10.47 | Escrow Agreement by and among NeoStem, Inc., JGB Management Inc., and Wells Fargo Bank, National Association ⁽²⁰⁾ | 10.2 |
| 10.48 | Escrow Agreement, dated as of January 19, 2011, among NeoStem, Inc., Progenitor Cell Therapy, LLC, Andrew Pecora as PCT Representative and Continental Stock Transfer & Trust Company, as Escrow Agent ⁽²¹⁾ | 10.4 |
| 10.49 | Escrow Agreement, dated as of October 17, 2011, among NeoStem, Inc., Amorcyte, Inc., Paul J. Schmitt, as Amorcyte Representative, and Continental Stock Transfer & Trust Company, as Escrow Agent ⁽⁵⁾ | 10.1 |
| 10.50 | Form of Lock Up and Voting Agreement (NeoStem) dated November 2, 2008 by and between NeoStem, Inc., China BioPharmaceutical Holdings, Inc. and the individuals listed therein ⁽¹⁵⁾ | 10.3 |
| 10.51 | Form of Voting and Lock Up Agreement August/September 2010 by and between NeoStem, Inc. and the persons listed therein, with related Form of Amendment No. 1 to Voting and Lock-Up Agreement October 2010 ⁽²⁹⁾ | 10(h) |
| 10.52 | Lease Modification Agreement dated April 13, 2009 between NeoStem, Inc. and SLG Graybar Sublease LLC and Original Agreement of Lease dated as of June 14, 2006, with related Consent and Assignment and Assumption Documents ⁽³⁷⁾ | 10.1 |
| 10.53 | Commercial Lease dated as of September 1, 2009 between NeoStem, Inc. and Rivertech Associates II, LLC, c/o The Abbey Group ⁽³⁸⁾ | 10(www) |
| 10.54 | Sublease dated as of May 5, 2011 between NeoStem, Inc. and Seaside Therapeutics ⁽³⁰⁾ | 10.1 |
| 10.55 | English translations of Supplemental Lease Agreement (Assignment) dated as of February 20, 2010 among NeoStem (China), Inc., Qingdao Niao Bio-Technology Company and Beijing Zhongguancun Life Science Park Development Co., Ltd. and related House Lease Agreement dated May 12, 2009 between Qingdao Niao Bio-Technology Company and Beijing Zhongguancun Life Science Park Development Co., Ltd. ⁽²⁶⁾ | 10.2 |
| 10.56 | Lease dated September 1, 2005 between Vanni Business Park, LLC and Progenitor Cell Therapy, LLC, as amended by First Amendment of Lease effective as of July 1, 2006 ⁽⁴⁾ | 10.48 |
| 10.57 | Second Amendment of Lease, executed July 11, 2011 and effective July 1, 2011, by and between Vanni Business Park, LLC and Progenitor Cell Therapy, LLC ⁽¹⁾ | 10.1 |
| 10.58 | Guaranty of Lease, executed July 11, 2011 and effective as of July 1, 2011, by NeoStem, Inc. for the benefit of Vanni Business Park, LLC ⁽¹⁾ | 10.2 |
| 10.59 | Bond Agreement dated as of October 1, 2007 by and among the New Jersey Economic Development Authority, PCT Allendale, LLC and Commerce Bank/North ⁽⁴⁾ | 10.49 |
| 10.60 | Note dated October 31, 2007, made by PCT Allendale, LLC in favor of the New Jersey Economic Development Authority ⁽⁴⁾ | 10.50 |

TABLE OF CONTENTS

| Exhibit | Description | Reference |
|----------------|---|------------------|
| 10.61 | Mortgage and Security Agreement from PCT Allendale, LLC to New Jersey Economic Development Authority and Commerce Bank/North, dated October 31, 2007 ⁽⁴⁾ | 10.51 |
| 10.62 | Mortgage Loan Note dated November 30, 2010, made by PCT Allendale, LLC in favor of TD Bank, N.A. ⁽⁴⁾ | 10.52 |
| 10.63 | Mortgage, Security Agreement and Fixture Filing made as of the 30th day of November, 2010, between PCT Allendale, LLC and TD Bank, N.A. ⁽⁴⁾ | 10.53 |
| 10.64 | Stock Purchase and Assignment Agreement dated March 28, 2011, by and among Progenitor Cell Therapy, LLC, Athelos Corporation and Becton Dickinson and Company ⁽³⁰⁾ | 10.3 |
| 10.65 | Stockholders' Agreement dated March 28, 2011, by and among Progenitor Cell Therapy, LLC, Athelos Corporation and Becton Dickinson and Company ⁽³⁰⁾ | 10.4 |
| 10.66 | NeoStem, Inc. 2003 Equity Participation Plan, as amended ⁽³⁹⁾ | 10.2 |
| 10.67 | Form of Stock Option Agreement ⁽⁴⁰⁾ | 10.2 |
| 10.68 | Form of Option Agreement dated July 20, 2005 ⁽⁴¹⁾ | 10.5 |
| 10.69 | NeoStem, Inc. 2009 Equity Compensation Plan, as amended ⁽⁵⁾ | 10.2 |
| 10.70 | Form of Stock Option Grant Agreement under NeoStem, Inc. 2009 Equity Compensation Plan ⁽²⁶⁾ | 10(g) |
| 10.71 | NeoStem, Inc. 2009 Non-U.S. Based Equity Compensation Plan, as amended ⁽⁵⁾ | 10.3 |
| 10.72 | Form of Grant Agreement under NeoStem, Inc. 2009 Non-U.S. Based Equity Compensation Plan ⁽²⁶⁾ | 10(h) |
| 10.73 | Description of the NeoStem, Inc. 2012 Board of Directors Compensation Plan ⁽⁴²⁾ | Item 5.02 |
| 10.74 | Employment Agreement between Phase III Medical, Inc. and Dr. Robin L. Smith, dated May 26, 2006 ⁽⁹⁾ | 10.4 |
| 10.75 | January 26, 2007 Amendment to Employment Agreement of Dr. Robin L. Smith ⁽⁴³⁾ | 10.1 |
| 10.76 | September 27, 2007 Amendment to Employment Agreement of Dr. Robin L. Smith ⁽⁴⁴⁾ | 10.1 |
| 10.77 | Letter agreement dated January 9, 2008 with Dr. Robin L. Smith ⁽⁴⁵⁾ | 10.1 |
| 10.78 | Amendment dated July 29, 2009 to Employment Agreement dated May 26, 2006 between NeoStem, Inc. and Dr. Robin L. Smith ⁽⁴⁶⁾ | 10.1 |
| 10.79 | Amendment dated April 4, 2011 to Employment Agreement dated May 26, 2006 between NeoStem, Inc. and Dr. Robin L. Smith ⁽⁴⁾ | 10.66 |
| 10.80 | Employment Agreement between the Company and Larry A. May dated January 19, 2006 ⁽⁴⁷⁾ | 10.1 |
| 10.81 | Letter Agreement between Phase III Medical, Inc. and Larry A. May effective as of June 2, 2006 ⁽⁹⁾ | 10.7 |
| 10.82 | January 26, 2007 Amendment to Employment Agreement of Larry A. May ⁽⁴³⁾ | 10.3 |
| 10.83 | Letter Agreement, dated April 20, 2005, between Phase III Medical, Inc. and Catherine M. Vaczy ⁽⁴⁸⁾ | 10.3 |
| 10.84 | Letter Agreement dated August 12, 2005 with Catherine M. Vaczy ⁽⁴¹⁾ | 10.7 |
| 10.85 | Letter Agreement dated December 22, 2005 between Phase III Medical, Inc. and Catherine M. Vaczy ⁽⁴⁹⁾ | 10(y) |
| 10.86 | Letter Agreement dated January 30, 2006 between Phase III Medical, Inc. and Catherine M. Vaczy ⁽⁴⁹⁾ | 10(cc) |

TABLE OF CONTENTS

| Exhibit | Description | Reference |
|----------------|--|------------------|
| 10.87 | Letter Agreement between Phase III Medical, Inc. and Catherine M. Vaczy effective as of June 2, 2006 ⁽⁹⁾ | 10.6 |
| 10.88 | January 26, 2007 Employment Agreement with Catherine M. Vaczy ⁽⁴³⁾ | 10.4 |
| 10.89 | Letter agreement dated January 9, 2008 with Catherine M. Vaczy ⁽⁴⁵⁾ | 10.2 |
| 10.90 | Letter Agreement dated July 8, 2009 between NeoStem, Inc. and Catherine M. Vaczy, Esq. ⁽⁵⁰⁾ | 10.2 |
| 10.91 | Letter Agreement dated July 7, 2010 between NeoStem, Inc. and Catherine M. Vaczy, Esq. ⁽²⁹⁾ | 10(a) |
| 10.92 | Letter Agreement dated January 6, 2012 between NeoStem, Inc. and Catherine M. Vaczy, Esq. [†] | 10.92 |
| 10.93 | Employment Agreement dated July 6, 2009 between NeoStem, Inc. and Alan Harris, M.D., Ph.D. ⁽⁵⁰⁾ | 10.1 |
| 10.94 | Employment Agreement dated August 17, 2009 between NeoStem, Inc. and Anthony Salerno ⁽⁵¹⁾ | 10(vvv) |
| 10.95 | Amendment No. 1 dated June 9, 2010 to Employment Agreement dated August 17, 2009 by and between NeoStem, Inc. and Anthony M. Salerno ⁽⁵²⁾ | 10.1 |
| 10.96 | Letter Agreement, dated June 9, 2010 between NeoStem, Inc. and Madam Zhang Jian ⁽⁵²⁾ | 10.2 |
| 10.97 | Employment Agreement dated September 1, 2010 between NeoStem (China), Inc. and Ian Zhang ⁽²⁹⁾ | 10(b) |
| 10.98 | Employment Agreement, dated as of September 23, 2010 and effective on January 19, 2011, by and between Progenitor Cell Therapy, LLC, NeoStem, Inc. and Andrew L. Pecora ⁽²¹⁾ | 10.1 |
| 10.99 | Amendment dated August 17, 2011 to Employment Agreement dated September 23, 2010 and effective January 19, 2011 between Progenitor Cell Therapy, LLC, NeoStem, Inc. and Andrew L. Pecora ⁽⁵³⁾ | 10.95 |
| 10.100 | Employment Agreement, dated as of September 23, 2010 and effective on January 19, 2011, by and between Progenitor Cell Therapy, LLC, NeoStem, Inc. and Robert A. Preti ⁽²¹⁾ | 10.2 |
| 10.101 | Employment Agreement, dated as of February 25, 2011 and effective on March 4, 2011, by and between NeoStem, Inc. and Jason Kolbert ⁽⁴⁾ | 10.86 |
| 10.102 | Consulting Agreement, effective March 8, 2011, by and between NeoStem, Inc. and Acute Care Partners ⁽⁴⁾ | 10.87 |
| 10.103 | Form of Indemnification Agreement for directors, officers and certain other employees ⁽³⁾ | 10.2 |
| 10.104 | English translation of Labor Contract (for Urban Employees), effective June 6, 2003, between Suzhou Erye Pharmaceuticals Co., Ltd. and Shi Mingsheng ⁽⁵⁴⁾ | 10.90 |
| 10.105 | English translation of Labor Contract for Full-Time Employees, effective April 1, 2008, between Suzhou Erye Pharmaceuticals Co., Ltd. and Zhang Jian ⁽⁵⁴⁾ | 10.91 |
| 10.106 | Letter Agreement dated June 28, 2011 between NeoStem, Inc. and Joseph Talamo ⁽⁵⁵⁾ | 10.10 |
| 14.1 | Code of Ethics for Senior Financial Officers ⁽⁴⁾ | 14.1 |
| 21.1 | Subsidiaries of NeoStem, Inc. [†] | 21.1 |
| 23.1 | Consent of Grant Thornton LLP [†] | 23.1 |
| 23.2 | Consent of Deloitte & Touche LLP [†] | 23.2 |

TABLE OF CONTENTS

| Exhibit | Description | Reference |
|----------------|---|------------------|
| 31.1 | Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002† | 31.1 |
| 31.2 | Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002† | 31.2 |
| 32.1 | Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002†† | 32.1 |
| 32.2 | Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002†† | 32.2 |
| 101.INS | XBRL Instance Document*** | 101.INS |
| 101.SCH | XBRL Taxonomy Extension Schema*** | 101.SCH |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase*** | 101.CAL |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase*** | 101.DEF |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase*** | 101.LAB |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase*** | 101.PRE |

+ Management contract or compensatory plan, contract or arrangement required to be filed as an exhibit to this Form 10-K pursuant to Item 15(b) of Form 10-K.

***Users of this interactive data file are advised pursuant to Rule 406T of Regulations S-T that this interactive data file is deemed not filed or part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, and otherwise is not subject to liability under these sections.

† Filed herewith.

†† Furnished herewith.

- (1) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K dated July 11, 2011, which exhibit is incorporated here by reference.
- (2) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated September 23, 2010, which exhibit is incorporated here by reference.
- (3) Filed with the SEC as an exhibit, numbered as indicated above, to Pre-Effective Amendment No. 4 to our Registration Statement on Form S-4, File No. 333-160578, which exhibit is incorporated here by reference.
- (4) Filed with the SEC as an exhibit, numbered as indicated above, to our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 (filed with the SEC on April 6, 2011), which exhibit is incorporated here by reference.
- (5) Filed with the SEC on October 17, 2011, as an exhibit, numbered as indicated above, to our current report on Form 8-K dated October 14, 2011, which exhibit is incorporated here by reference.
- (6) Filed with the SEC as an exhibit, numbered as indicated above, to our quarterly report on Form 10-QSB for the quarter ended September 30, 2007, which exhibit is incorporated here by reference.
- (7) Filed with the SEC as an exhibit, numbered as indicated above, to our quarterly report on Form 10-Q for the quarter ended September 30, 2008, which exhibit is incorporated here by reference.
- (8) Filed with the SEC as an exhibit, numbered as indicated above, to Pre-Effective Amendment No. 3 to our Registration Statement on Form SB-2/A, File No. 333-142923, which exhibit is incorporated here by reference.
- (9) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated June 2, 2006, which exhibit is incorporated here by reference.
- (10) Filed with the SEC as an exhibit, numbered as indicated above, to our Registration Statement on Form S-1, File No. 333-137045, which exhibit is incorporated here by reference.
- (11) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated January 26, 2007, which exhibit is incorporated here by reference.

TABLE OF CONTENTS

- (12) Filed with the SEC as an exhibit, numbered as indicated above, to our Registration Statement on Form S-3, File No. 333-173853, which exhibit is incorporated here by reference.
- (13) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated May 20, 2008, which exhibit is incorporated here by reference.
- (14) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated August 28, 2008, which exhibit is incorporated here by reference.
- (15) Filed with the SEC as an exhibit, numbered as indicated above, to our annual report on Form 10-K for the year ended December 31, 2008, which exhibit is incorporated here by reference.
- (16) Filed with the SEC as an exhibit, numbered as indicated above, to our Registration Statement on Form S-3, File No. 333-145988, which exhibit is incorporated here by reference.
- (17) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated April 13, 2009, which exhibit is incorporated here by reference.
- (18) Filed with the SEC on June 28, 2010, as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated June 25, 2010, which exhibit is incorporated here by reference.
- (19) Filed with the SEC on March 18, 2010 as an exhibit, numbered as indicated above, to our current report on Form 8-K dated March 15, 2010, which exhibit is incorporated here by reference.
- (20) Filed with the SEC on November 16, 2010, as an exhibit, numbered as indicated above, to our current report on Form 8-K dated November 16, 2010, which exhibit is incorporated here by reference.
- (21) Filed with the SEC on January 24, 2011, as an exhibit, numbered as indicated above, to our current report on Form 8-K dated January 18, 2011, which exhibit is incorporated here by reference.
- (22) Filed with the SEC as an exhibit, numbered as indicated above, to our quarterly report on Form 10-Q for the quarter ended September 30, 2011, which exhibit is incorporated here by reference.
- (23) Filed as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated September 28, 2011, which exhibit is incorporated here by reference.
- (24) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated November 13, 2007, which exhibit is incorporated here by reference. Certain portions of Exhibits 10.1 and 10.4 (Exhibits 10.2 and 10.3 to the current report, respectively) were omitted based upon a request for confidential treatment, and the omitted portions were filed separately with the SEC on a confidential basis.
- (25) Filed with the SEC as an exhibit, numbered as indicated above, to our quarterly report on Form 10-Q for the quarter ended March 31, 2009, which exhibit is incorporated here by reference.
- (26) Filed with the SEC on August 16, 2010, as an exhibit, numbered as indicated above, to our quarterly report on Form 10-Q for the quarterly period ended June 30, 2010, which exhibit is incorporated here by reference.
- (27) Filed with the SEC as an exhibit, numbered as indicated above, to our annual report on Form 10-K for the year ended December 31, 2006, which exhibit is incorporated here by reference.
- (28) Filed as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated July 2, 2009, which exhibit is incorporated here by reference.
- (29) Filed with the SEC on November 12, 2010 as an exhibit, numbered as indicated above, to our quarterly report on Form 10-Q for the quarterly period ended September 30, 2010, which exhibit is incorporated here by reference.
- (30) Filed with the SEC as an exhibit, numbered as indicated above, to our quarterly report on Form 10-Q for the quarter ended March 31, 2011, which exhibit is incorporated here by reference.
- (31) Filed with the SEC on March 31, 2010, as an exhibit, numbered as indicated above, to our annual report on Form 10-K for the fiscal year ended December 31, 2009, which exhibit is incorporated here by reference.
- (32) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated July 1, 2009, which exhibit is incorporated here by reference.
- (33) Filed with the SEC on January 7, 2010, as an exhibit, numbered as indicated above, to our current report on Form 8-K dated December 31, 2009 (subject to confidential treatment as indicated therein).
- (34) Filed with the SEC on February 12, 2010, as an exhibit, numbered as indicated above, to our current report on Form 8-K dated February 11, 2010, which exhibit is incorporated here by reference.

TABLE OF CONTENTS

- (35) Filed with the SEC on May 19, 2010, as an exhibit, numbered as indicated above, to our current report on Form 8-K dated May 19, 2010, which exhibit is incorporated here by reference.
- (36) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K dated July 19, 2011, which exhibit is incorporated here by reference.
- (37) Filed with the SEC as an exhibit, numbered as indicated above, to our Registration Statement on Form S-4, File No. 333-160578, which exhibit is incorporated here by reference.
- (38) Filed with the SEC as an exhibit, numbered as indicated above, to Pre-Effective Amendment No. 3 to our Registration Statement on Form S-4, File No. 333-160578, which exhibit is incorporated here by reference.
- (39) Filed with the SEC as an exhibit, numbered as indicated above, to Pre-Effective Amendment No. 1 to our Registration Statement on Form S-1, File No. 333-137045, which exhibit is incorporated here by reference.
- (40) Filed with the SEC as an exhibit, numbered as indicated above, to our annual report on Form 10-K for the year ended December 31, 2003, which exhibit is incorporated here by reference.
- (41) Filed with the SEC as an exhibit, numbered as indicated above, to our quarterly report on Form 10-Q for the quarter ended June 30, 2005, which exhibit is incorporated here by reference.
- (42) The first paragraph under Item 5.02 of our Current Report on Form 8-K dated January 4, 2012, which paragraph contains a description of the NeoStem, Inc. 2012 Directors Compensation Plan, is incorporated by reference into this Form 10-K.
- (43) Filed with the SEC as an exhibit, numbered as indicated above, to our second current report on Form 8-K, dated January 26, 2007, which exhibit is incorporated here by reference.
- (44) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated September 27, 2007, which exhibit is incorporated here by reference.
- (45) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated January 9, 2008, which exhibit is incorporated here by reference.
- (46) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K dated July 29, 2009, which exhibit is incorporated here by reference.
- (47) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated January 19, 2006, which exhibit is incorporated here by reference.
- (48) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated April 20, 2005, which exhibit is incorporated here by reference.
- (49) Filed with the SEC as an exhibit, numbered as indicated above, to our annual report on Form 10-K for the year ended December 31, 2005, which exhibit is incorporated here by reference.
- (50) Filed with the SEC as an exhibit, numbered as indicated above, to our current report on Form 8-K, dated July 6, 2009, which exhibit is incorporated here by reference.
- (51) Filed with the SEC as an exhibit, numbered as indicated above, to Pre-Effective Amendment No. 2 to our Registration Statement on S-4, File No. 333-160578, which exhibit is incorporated here by reference.
- (52) Filed with the SEC on June 11, 2010, as an exhibit, numbered as indicated above, to our current report on Form 8-K dated June 9, 2010, which exhibit is incorporated here by reference.
- (53) Filed with the SEC on September 2, 2011, as an exhibit, numbered as indicated above, to our Registration Statement on Form S-4 (File No. 333-176673), which exhibit is incorporated here by reference.
- (54) Filed with the SEC as an exhibit, numbered as indicated above, to Amendment No. 1 (filed with the SEC on May 2, 2011) to our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, which exhibit is incorporated here by reference.
- (55) Filed with the SEC as an exhibit, numbered as indicated above, to our quarterly report on Form 10-Q for the quarter ended June 30, 2011, which exhibit is incorporated here by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on March 20, 2012.

NEOSTEM, INC.By: /s/ Robin L. Smith, M.D.

Name: Robin L. Smith, M.D.

Title: Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|---|---|----------------|
| <u>/s/ Robin L. Smith, M.D.</u> Robin L. Smith, M.D. | Director, Chief Executive Officer and Chairman of the Board (Principal Executive Officer) | March 20, 2012 |
| <u>/s/ Larry A. May</u> Larry A. May | Chief Financial Officer (Principal Financial Officer) | March 20, 2012 |
| <u>/s/ Joseph Talamo</u> Joseph Talamo | Vice President, Corporate Controller and Chief Accounting Officer (Principal Accounting Officer) | March 20, 2012 |
| <u>/s/ Richard Berman</u> Richard Berman | Director | March 20, 2012 |
| <u>/s/ Steven S. Myers</u> Steven S. Myers | Director | March 20, 2012 |
| <u>/s/ Drew Bernstein</u> Drew Bernstein | Director | March 20, 2012 |
| <u>/s/ Eric Wei</u> Eric Wei | Director | March 20, 2012 |
| <u>/s/ Edward C. Geehr, M.D.</u> Edward C. Geehr, M.D. | Director | March 20, 2012 |
| <u>/s/ Shi Mingsheng</u> Shi Mingsheng | Director | March 20, 2012 |
| <u>/s/ Andrew L. Pecora, M.D.</u> Andrew L. Pecora, M.D. | Director | March 20, 2012 |
| <u>/s/ Martyn D. Greenacre</u> Martyn D. Greenacre | Director | March 20, 2012 |



September 28, 2011

VIA FACSIMILE AND FEDEX OVERNIGHT

Commerce Court Small Cap Value Fund, Ltd.
Fiduciary Services (BVI) Limited
Qwomar Complex, 4th Floor
P.O. Box 3170
Road Town, Tortola
British Virgin Islands
Attn: Peter W. Poole
Tel: (284)494-8086
Fax: (284)494-9474

With a copy to:

Greenberg Traurig, LLP
The MetLife Building
200 Park Avenue
New York, NY 10166
Attn: Anthony J. Marsico, Esq.
Tel: (212) 801-9200
Fax: (212) 801-6400

Re: Common Stock Purchase Agreement, dated as of May 19, 2010, by and between NeoStem, Inc. and Commerce Court Small Cap Value Fund, Ltd. (the "Purchase Agreement")

Ladies and Gentlemen:

Pursuant to Section 7.1 of the Purchase Agreement, this letter constitutes formal written notice of termination of the Purchase Agreement, which termination shall be effective October 3, 2011.

We remain open to future endeavors on mutually acceptable terms.

Very truly yours,

NEOSTEM, INC.

By: /s/ Robin L. Smith

Name: Robin L. Smith, M.D.

Title: Chief Executive Officer

420 Lexington Avenue | Suite 450 | NYC | 10170 | Phone: (212) 584-4180 | Fax: (646) 514-7787
www.neostem.com

SUBSCRIPTION AGREEMENT

NeoStem, Inc.
420 Lexington Avenue
Suite 450
New York, New York 10170
Attention: Chief Executive Officer

Ladies and Gentlemen:

The undersigned investor (the “*Investor*”) under the following terms and conditions, offers to subscribe (the “*Offer*”) for the securities of NeoStem, Inc., a Delaware corporation (the “*Company*” or “*NeoStem*”). The Company is offering (the “*Offering*”) shares (the “*Common Shares*”) of Common Stock, \$0.001 par value (the “*Common Stock*”) at a per share purchase price equal to \$0.____.

The Investor understands that the Common Shares are being issued pursuant to an exemption from the registration requirements of the United States Securities Act of 1933, as amended (the “*Securities Act*” or the “*Act*”), in either a private placement pursuant to an exemption from registration under Regulation D promulgated under Section 4(2) and Rule 506 of the Act and/or an exemption from registration under Regulation S promulgated under the Securities Act. As such, the Common Shares are “*restricted securities*” and may not be sold or transferred absent a registration statement declared effective under the Act or an exemption from the registration requirements of the Act.

1. Subscription.

The closing (the “*Closing*”) of the transactions hereunder shall take place at the offices of the Company or at such other location as the Company may determine after the receipt by the Company of subscriptions for Common Shares from Investors from time to time and after it has been determined that all conditions in this Subscription Agreement have been met. At the Closing, funds equal to the Subscription Amount of each Investor shall be delivered to the Company and the Company shall promptly thereafter deliver to each such Investor his, her or its respective Common Shares as provided herein. The Company may close on any number of Common Shares it may choose in its sole determination.

Subject to the terms and conditions hereinafter set forth in this Subscription Agreement, and the Company’s due execution of this Subscription Agreement, the Investor hereby offers to subscribe for Common Shares as set forth in the Investor Signature Page attached hereto and contemporaneously herewith makes payment for the purchase of the Common Shares by wire transfer or bank check.

2. Conditions.

The Offer is made subject to the following conditions: (i) that the Company, acting in good faith, shall have the right to accept or reject this Offer, in whole or in part, for any reason; (ii) that the Investor agrees to comply with the terms of this Subscription Agreement; and (iii) that the Common Shares are accepted for listing on the NYSE-Amex.

Acceptance of this Offer shall be deemed given by the countersigning of this Subscription Agreement by the Company. In the event the Company does not accept the Offer, any and all proceeds for the purchase of the Common Shares by the Investor shall be returned to Investor.

3. Representations and Warranties of the Investor.

The Investor, in order to induce the Company to accept this Offer, hereby warrants and represents as set forth below; provided, that Investor may choose to either make the representations in (b) (Regulation D) or in (c) (Regulation S) by checking the appropriate box.

PLEASE CHECK ONE OR BOTH OF THE TWO BOXES BELOW AS APPROPRIATE:

Investor is purchasing under Regulation D

OR

Investor is purchasing under Regulation S

(a) Organization; Authority. The Investor, if not an individual, is an entity duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization with the requisite power and authority to enter into and to consummate the transactions contemplated by this Subscription Agreement and otherwise to carry out its obligations hereunder. The purchase by Investor of the Common Shares hereunder has been duly authorized by all necessary action on the part of Investor. This Subscription Agreement has been duly executed by Investor, and when delivered by Investor in accordance with the terms hereof, will constitute the valid and legally binding obligation of Investor, enforceable against it in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, and (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

(b) Investor Representation for Purchase under Regulation D.

(i) Restricted Securities. Investor understands that the Common Shares (the "*Securities*") are "restricted securities" and have not been registered under the Securities Act or qualified under any applicable state securities law by reason of their issuance in a transaction that does not require registration or qualification (based in part on the accuracy of the representations and warranties of the Investor contained herein), and that such securities must be held indefinitely unless a subsequent disposition is registered under the Securities Act or any applicable state securities laws or is exempt from such registration. The Investor hereby agrees that the Company may insert the following or similar legend on the face of the certificates evidencing the Common Shares, if required in compliance with federal and state securities laws:

“THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”) NOR UNDER THE SECURITIES LAWS OF ANY STATE. THEY MAY NOT BE SOLD, OFFERED FOR SALE, OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED PURSUANT TO A VALID EXEMPTION THEREFROM UNDER THE SECURITIES ACT.”

The Investor understands and acknowledges that the U.S. Securities and Exchange Commission (the “*Commission*”) currently takes the position that coverage of short sales of shares of the Common Shares “against the box” prior to the effective date of a registration statement registering the re-sale of the Common Shares is a violation of Section 5 of the Securities Act, as set forth in Item 65, Section 5 under Section A, of the Manual of Publicly Available Telephone Interpretations, dated July 1997, compiled by the Office of Chief Counsel, Division of Corporation Finance. Accordingly, without limiting the restrictions set forth herein, the Investor agrees not to use any of the Common Shares to cover any short sales made prior to the effective date of such registration statement.

(ii) No Distribution. Investor is acquiring the Common Shares as principal for its own account, in the ordinary course of its business, and not with a view to or for distributing or reselling such Common Shares or any part thereof. Investor has no present intention of distributing any of such Common Shares, and has no agreement or understanding, directly or indirectly, with any other individual, corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof), or other entity of any kind (each, a “*Person*”) regarding the distribution of such Common Shares (this representation and warranty not limiting such Investor’s right or intent to sell the Common Shares pursuant to a Registration Statement or otherwise in compliance with applicable federal and state securities laws).

(iii) Investor Status. Investor is an “Accredited Investor” as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7), or (a)(8) under the Securities Act. In general, an Accredited Investor is deemed to be an institution with assets in excess of \$5,000,000 or individuals with net worth in excess of \$1,000,000 (excluding the value of the Investor’s home) or annual income exceeding \$200,000, or \$300,000 jointly with their spouse and is defined on Schedule A hereto.

(iv) Experience of Investor. Investor, either alone or together with its representatives, has such knowledge, sophistication, and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Common Shares, and has so evaluated the merits and risks of such investment. The Investor has not authorized any Person to act as his Purchaser Representative (as that term is defined in Regulation D of the General Rules and Regulations under the Act) in connection with this transaction. Investor is able to bear the economic risk of an investment in the Common Shares and, at the present time, is able to afford a complete loss of such investment.

(v) General Solicitation. Investor is not purchasing the Common Shares as a result of any advertisement, article, notice or other communication regarding the Common Shares published in any newspaper, magazine, or similar media or broadcast over television or radio or presented at any seminar or any other general solicitation or general advertisement.

(c) Investor Representations for Purchase under Regulation S.

(i) Restricted Securities. Investor understands that the Common Shares (the “*Securities*”) are “restricted securities” and have not been registered under the Securities Act or qualified under any applicable state securities law by reason of their issuance in a transaction that does not require registration or qualification (based in part on the accuracy of the representations and warranties of the Investor contained herein), and that such securities must be held indefinitely unless a subsequent disposition is registered under the Securities Act or any applicable state securities laws or is exempt from such registration. The Investor hereby agrees that the Company may insert the following or similar legend on the face of the certificates evidencing the Common Shares, if required in compliance with federal and state securities laws:

"THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND MAY NOT BE SOLD, TRANSFERRED OR OTHERWISE DISTRIBUTED, DIRECTLY OR INDIRECTLY, IN THE UNITED STATES, ITS TERRITORIES, POSSESSIONS, OR AREAS SUBJECT TO ITS JURISDICTION, OR TO OR FOR THE ACCOUNT OR BENEFIT OF A "U.S. PERSON" AS THAT TERM IS DEFINED IN RULE 902 OR REGULATION S OF THE ACT, AT ANY TIME PRIOR TO ONE (1) YEAR AFTER THE ISSUANCE OF THIS CERTIFICATE, IN THE ABSENCE OF (i) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE ACT, OR (ii) AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED PURSUANT TO A VALID EXEMPTION THEREFROM FROM UNDER THE ACT. HEDGING TRANSACTIONS INVOLVING THE SHARES REPRESENTED HEREBY MAY NOT BE CONDUCTED UNLESS IN COMPLIANCE WITH THE ACT. ANY SALES, TRANSFERS OR OTHER DISTRIBUTIONS OF THE SECURITIES MUST BE MADE IN ACCORDANCE WITH THE PROVISIONS OF REGULATION S OF THE ACT. THIS CERTIFICATE MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER OR OTHER DISTRIBUTION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE."

The Investor understands and acknowledges that the U.S. Securities and Exchange Commission (the “*Commission*”) currently takes the position that coverage of short sales of shares of the Common Shares “against the box” prior to the effective date of a registration statement registering the re-sale of the Common Shares is a violation of Section 5 of the Securities Act, as set forth in Item 65, Section 5 under Section A, of the Manual of Publicly Available Telephone Interpretations, dated July 1997, compiled by the Office of Chief Counsel, Division of Corporation Finance. Accordingly, without limiting the restrictions set forth herein, Investor agrees not to use any of the Common Shares to cover any short sales made prior to the effective date of such registration statement.

(ii) (a) Non-U.S. Person. The Investor is a Non-U.S. Person (as defined herein). As used herein, the term “United States” means and includes the United States of America, its territories and possessions, any State of the United States, and the District of Columbia, and the term “Non-U.S. Person” means any person who is not a U.S. Person, within the meaning of Regulation S, the definition of which is set forth on Schedule B attached hereto, or is deemed not to be a U.S. Person pursuant to Rule 902(k)(2) of Regulation S, as set forth on Schedule C attached hereto.

(b) The Investor has been advised and acknowledges that:

- (1) the Securities have not been, and when issued, will not be registered pursuant to the Securities Act, the securities laws of any state of the United States or the securities laws of any other country;
- (2) in issuing and selling the Securities to the Investor pursuant hereto, the Company is relying upon the “safe harbor” provided by Regulation S;
- (3) it is a condition to the availability of the Regulation S “safe harbor” that the Securities not be offered or sold in the United States or to a U.S. Person until the expiration of a period of one year following the Closing (the “*Restricted Period*”); and
- (4) notwithstanding the foregoing, prior to the expiration of the Restricted Period the Securities may be offered or sold by the holder thereof if such offer and sale is made in compliance with the terms of this Agreement and either: (A) if the offer or sale is within the United States or to or for the account of a U.S. Person (as such terms are defined in Regulation S), the sale is made pursuant to an effective registration statement or pursuant to an exemption from the registration requirements of the Securities Act; or (B) the offer and sale is outside the United States and to other than a U.S. Person.

(iii) The Investor agrees that with respect to the Securities until the expiration of the Restricted Period:

- (1) the Investor, its agents or its representatives have not and will not solicit offers to buy, offer for sale or sell any of the Securities, or any beneficial interest therein in the United States or to or for the account of a U.S. Person during the Restricted Period; and

- (2) notwithstanding the foregoing, prior to the expiration of the Restricted Period the Securities shall not be offered or sold by the holder thereof unless such offer and sale is made in compliance with the terms of this Agreement and either: (A) if the offer or sale is within the United States or to or for the account of a U.S. Person (as such terms are defined in Regulation S), the sale is made pursuant to an effective registration statement or pursuant to an exemption from the registration requirements of the Securities Act; or (B) the offer and sale is outside the United States and to other than a U.S. Person; and
- (3) the Investor will not engage in hedging transactions with regard to the Securities unless in compliance with the Securities Act.

The foregoing restrictions are binding upon subsequent transferees of the Securities, except for transferees pursuant to an effective registration statement. The Investor agrees that after the Restricted Period, the Securities may be offered or sold within the United States or to or for the account of a U.S. Person only pursuant to applicable securities laws, including, without limitation, Regulation S.

(iv) The Investor is not purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or other general solicitation or advertisement. The Investor has not engaged, nor is it aware that any party has engaged, and the Investor will not engage or cause any third party to engage, in any "directed selling efforts," as such term is defined in Regulation S, in the United States with respect to the Securities.

(v) The Investor: (1) is domiciled and has its principal place of business outside the United States; (2) certifies it is not a U.S. Person and is not acquiring the Securities for the account or benefit of any U.S. Person; and (3) at the time of the Closing, the Investor or persons acting on the Investor's behalf in connection therewith will be located outside the United States.

(vi) At the time of offering to the Investor and communication of the Investor's order to purchase the Securities and at the time of the Investor's execution of this Agreement, the Investor or persons acting on the Investor's behalf in connection therewith were located outside the United States.

(vii) The Investor is not a "distributor" (as defined in Regulation S) or a "dealer" (as defined in the Securities Act).

(viii) The Investor acknowledges that the Company shall make a notation in its stock books regarding the restrictions on transfer set forth in this Agreement and shall transfer such shares on the books of the Company only to the extent consistent therewith. In particular, the Investor acknowledges that the Company shall refuse to register any transfer of the Securities not made in accordance with the provisions of Regulation S, pursuant to registration pursuant to the Securities Act or pursuant to an available exemption from registration.

(ix) The Investor hereby represents that the Investor is satisfied as to the full observance of the laws of the Investor's jurisdiction in connection with any invitation to subscribe for the Securities or any use of the Agreement, including (i) the legal requirements within such Investor's jurisdiction for the purchase of the Securities, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of the Securities. The Investor's subscription and payment for, and the Investor's continued beneficial ownership of, the Securities will not violate any applicable securities or other laws of the Investor's jurisdiction.

(x) The Investor is a resident of a country (an "*International Jurisdiction*") other than Canada or the United States and the decision to subscribe for the Securities was taken in such International Jurisdiction.

(xi) The delivery of this Subscription Agreement, the acceptance of it by the Company and the issuance of the Securities to the Investor complies with all laws applicable to the Investor, including the laws of the Investor's jurisdiction of formation, and all other applicable laws, and will not cause the Company to become subject to, or require it to comply with, any disclosure, prospectus, filing or reporting requirements under any applicable laws of the International Jurisdiction.

(xii) The Investor is knowledgeable of, or has been independently advised as to, the application or jurisdiction of the securities laws of the International Jurisdiction which would apply to the subscription (other than the securities laws of Canada and the United States).

(xiii) The Investor is purchasing the Securities pursuant to exemptions from the prospectus and registration requirements (or their equivalent) under the applicable securities laws of that International Jurisdiction or, if such is not applicable, each is permitted to purchase the Securities under the applicable securities laws of the International Jurisdiction without the need to rely on an exemption.

(xiv) The applicable securities laws do not require the Company to register any of the Securities, file a prospectus or similar document, or make any filings or disclosures or seek any approvals of any kind whatsoever from any regulatory authority of any kind whatsoever in the International Jurisdiction.

(xv) The Investor will not sell, transfer or dispose of the Securities except in accordance with all applicable laws, including, without limitation, applicable securities laws of each of International Jurisdiction, Canada and the United States, and the Investor acknowledges that the Company shall have no obligation to register any such purported sale, transfer or disposition which violates applicable, International Jurisdiction, Canadian or United States or other securities laws.

(xvi) Investor Status. Investor is an “Accredited Investor” as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7), or (a)(8) under the Securities Act. In general, an Accredited Investor is deemed to be an institution with assets in excess of \$5,000,000 or individuals with net worth in excess of \$1,000,000 (excluding the value of an Investor’s home) or annual income exceeding \$200,000, or \$300,000 jointly with their spouse and is defined on Schedule A hereto.

(xvii) Experience of Investor. The Investor, either alone or together with its representatives, has such knowledge, sophistication, and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment. The Investor is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

(d) Access to Information. The Investor has reviewed the SEC Reports (as that term is defined in Section 4(g)). The Investor has also been afforded the opportunity to ask questions of, and receive answers from, the officers and/or directors of the Company concerning the terms and conditions of the Offering and to obtain any additional information, to the extent that the Company possesses such information, which Investor considers necessary and appropriate in order to permit Investor to evaluate the merits and risks of an investment in the Common Shares. It is understood that all documents, records, and books pertaining to this investment have been made available for inspection by the Investor during reasonable business hours at the Company’s principal place of business. Notwithstanding the foregoing, it is understood that the Investor is purchasing the Common Shares without being furnished any prospectus setting forth all of the information that would be required to be furnished under the Securities Act and this Offering has not been passed upon or the merits thereof endorsed or approved by any state or federal authorities.

4. Representations and Warranties of the Company.

The Company hereby makes the following representations and warranties to the Investor:

(a) Organization and Qualification. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware and has the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Each of the Company and its subsidiaries (each, a “*Subsidiary*”) is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, would not have or reasonably be expected to result in (i) a material adverse effect on the legality, validity or enforceability of this Subscription Agreement, (ii) a material adverse effect on the results of operations, assets, business, prospects or financial condition of the Company and the Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company’s ability to perform in any material respect on a timely basis its obligations under this Subscription Agreement (any of (i), (ii), or (iii), a “*Material Adverse Effect*”).

(b) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the Offering, and to issue the Common Shares. The execution and delivery of this Subscription Agreement and the Common Shares by the Company and the consummation by it of the transactions contemplated hereby have been duly authorized by all necessary action on the part of the Company and no further consent or action is required by the Company, other than the Required Approvals (as defined below). This Subscription Agreement, when executed and delivered in accordance with the terms hereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, and other laws of general application affecting enforcement of creditors' rights generally and (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

(c) No Conflicts. The execution, delivery, and performance of this Subscription Agreement by the Company and the consummation by the Company of the Offering and issuance of the Common Shares does not and will not: (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents or (ii) subject to obtaining the Required Approvals, conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of any agreement, credit facility, debt, or other instrument (evidencing the Company's or a Subsidiaries' debt or otherwise) or other understanding to which the Company or either of the Subsidiaries is a party or by which any property or asset of the Company or its Subsidiaries is bound or affected, or (iii) result in a violation of any law, rule, regulation, order, judgment, injunction, decree, or other restriction of any court or governmental authority as currently in effect to which the Company or any of the Subsidiaries is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or either of the Subsidiaries is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not, individually or in the aggregate have a Material Adverse Effect.

(d) Filings, Consents, and Approvals. Neither the Company nor any of the Subsidiaries is required to obtain any consent, waiver, authorization, or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local, or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of this Subscription Agreement, other than: (i) the filing with the Commission of a Form D pursuant to Commission Regulation D (as applicable), (ii) any applicable Blue Sky filings and (iii) listing with the NYSE-Amex (collectively, the "Required Approvals").

(e) Issuance of the Common Shares. The Common Shares are duly authorized and, when issued and paid for in accordance with this Subscription Agreement, will be duly and validly issued, fully paid and nonassessable, free and clear of all liens, and not subject to any preemptive rights.

(f) Capitalization. The number of shares and type of all authorized, issued, and outstanding capital stock of the Company is as set forth in the SEC Reports as of the respective dates set forth therein. No Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the Offering; provided that it is understood that the Company's Series E Preferred Stock (and the warrants issued in connection with such Series E Preferred Stock) have certain anti-dilution rights as described in the SEC Reports. No approval or authorization of any stockholder of the Company, or others is required for the issuance and sale of the Common Shares.

(g) SEC Reports; Financial Statements. The Company has filed all reports required to be filed by it under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the one year preceding the date hereof (or such shorter period as the Company was required by law to file such material) (the foregoing materials being collectively referred to herein as the "SEC Reports"). As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act and the rules and regulations of the Commission promulgated thereunder, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. The Company has advised Investor(s) that a copy of each of the SEC Reports (together with all exhibits and schedules thereto and as amended to date) is available at <http://www.sec.gov>, a website maintained by the Commission where Investor(s) may view the SEC Reports.

(h) Private Placement. Assuming the accuracy of the Investor representations and warranties set forth in Section 3, no registration under the Securities Act is required for the offer and sale of the Common Shares by the Company to the Investor as contemplated hereby.

(i) No General Solicitation. Neither the Company nor any Person acting on behalf of the Company has offered or sold any of the Common Shares by any form of general solicitation or general advertising. The Company has offered the Common Shares for sale only to each investor in the Offering and certain other "accredited investors" within the meaning of Rule 501 under the Securities Act.

5. Other Agreements of the Company and the Investor.

(a) Press Releases. The Company may issue a press release if required upon the final closing of the offering and in its reasonable discretion.

(b) Confidentiality. Each Investor agrees that he, she or it will keep confidential and will not disclose, divulge or use for any purpose any confidential, proprietary or secret information, which such Investor may obtain from the Company pursuant to financial statements, reports and other materials or information submitted by the Company to such Investor pursuant to or in connection with this Subscription Agreement or otherwise (but not including the SEC Reports) ("Confidential Information"), unless such Confidential Information is known, or until such Confidential Information becomes known, to the public (other than as a result of a breach of this section by such Investor); provided, however, that an Investor may disclose Confidential Information (i) to his, her or its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring his, her or its investment in the Company, or (ii) as may otherwise be required by law, provided that the Investor takes reasonable steps to minimize the extent of any such required disclosure and promptly notifies the Company when it becomes aware of such legal requirement.

(c) Registration Rights. If, at any time after the date hereof the Company shall determine to prepare and file with the Securities and Exchange Commission (the "SEC") a registration statement relating to an offering for its own account or the account of others under the Securities Act of 1933, as amended (the "Securities Act") or any of its equity securities (a "Registration Statement"), other than a pre-effective or post-effective amendment to a current registration statement or other than on Form S-4 or Form S-8 (each as promulgated under the Securities Act) or their then equivalents relating to equity securities to be issued solely in connection with any acquisition of any entity or business or equity securities issuable in connection with stock option or other employee benefit plans, then the Company shall provide to Investor with respect to the Shares (hereinafter, the "Registrable Securities") the opportunity to have such Registrable Securities included in such Registration Statement; provided, that the Company shall only be required to provide such opportunity until the earliest of (i) the date all of such Registrable Securities have been sold pursuant to a Registration Statement, (ii) the date all of such Registrable Securities have otherwise been transferred to persons who may trade such shares without restriction under the Securities Act, and the Company has delivered a new certificate or other evidence of ownership for such securities not bearing a restrictive legend, and (iii) the date all of such Registrable Securities may be sold without volume or manner of sale limitations pursuant to Rule 144 (the "Effectiveness Period"). In connection with any registration:

(i) Investor may not participate in any registration hereunder which is underwritten unless Investor (A) agrees to sell its securities on the basis provided in any underwriting arrangements approved by the Company and (B) with respect to any registration, timely completes and executes all questionnaires and other customary documents.

(ii) All fees, disbursements and out-of-pocket expenses and costs incurred by the Company in connection with the preparation and filing of the Registration Statement shall be borne by the Company. Investor shall bear any reasonable cost of underwriting and/or brokerage discounts, fees, and commissions, if any, applicable to the Registrable Securities being registered and sold by an underwriter for the Investor and the fees and expenses of the Investor's counsel. The Company shall use its reasonable best efforts to qualify any of the Registrable Securities for sale in such states as the Investor reasonably designates provided that the Company shall not be required to qualify in any state which will require an escrow or other restriction relating to the Company and/or the sellers, or which will require the Company to qualify to do business in such state or require the Company to file therein any general consent to service of process and the Company shall in no event be required to qualify in greater than five states.

(iii) Notwithstanding any other provisions hereof, with respect to an underwritten public offering by the Company, if the managing underwriter advises the Company that marketing or other factors require a limitation of the number of shares to be underwritten, then there shall be excluded from such registration and underwriting to the extent necessary to satisfy such limitation, Registrable Securities held by the Investor prior to any cutback of shares to be sold for the Company or any other holder of shares with registration rights. Further, the Investor shall agree not to sell any Registrable Securities included in the underwritten public offering for such period as may be reasonably required by the managing underwriter. In connection with filing any Registration Statement; if the SEC limits the amount of securities to be registered, then the Company shall be allowed to exclude the Registrable Securities from the Registration Statement prior to excluding any securities it desires to register on its own account and any securities entitled to registration rights under any other agreement to which the Company is a party.

6. Miscellaneous.

(a) Termination. The Investor agrees that he shall not cancel, terminate, or revoke this Subscription Agreement or any agreement of the Investor made hereunder other than as set forth herein, and that this Subscription Agreement shall survive the death or disability of the Investor. If the Company elects to cancel this Subscription Agreement, provided that it returns to the Investor, without interest and without deduction, all sums paid by the Investor, this Offer shall be null and void and of no further force and effect, and no party shall have any rights against any other party hereunder.

(b) Entire Agreement. This Subscription Agreement, together with the schedules hereto, contains the entire understanding of the Company and the Investor with respect to the subject matter hereof.

(c) Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the second Business Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (b) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be to the Investor at his address set forth on the Investor Signature Page, and to the Company at the addresses set forth in the SEC Reports.

(d) Amendments; Waivers. No provision of this Agreement may be waived or amended except in a written instrument signed, in the case of an amendment, or in the case of a waiver, by the Company and the individual Investor. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of either party to exercise any right hereunder in any manner impair the exercise of any such right.

(e) Construction. The headings herein are for convenience only, do not constitute a part of this Subscription Agreement and shall not be deemed to limit or affect any of the provisions hereof.

(f) Successors and Assigns. This Subscription Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns.

(g) No Third-Party Beneficiaries. This Subscription Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

(h) Governing Law. All questions concerning the construction, validity, enforcement, and interpretation of this Subscription Agreement shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Subscription Agreement (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, employees, or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Subscription Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. The parties hereby waive all rights to a trial by jury. If either party shall commence an action or proceeding to enforce any provisions of this Subscription Agreement, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred with the investigation, preparation, and prosecution of such action or proceeding.

(i) Survival. The representations and warranties contained herein shall survive the closing of the transaction hereunder.

(j) Execution. In the event that any signature is delivered by facsimile transmission, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile signature page were an original thereof. This Agreement may be executed in two or more counterparts each of which shall be deemed an original, but all of which shall together constitute one and the same instrument.

(k) Severability. If any provision of this Subscription Agreement is held to be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Subscription Agreement shall not in any way be affected or impaired thereby and the parties will attempt to agree upon a valid and enforceable provision that is a reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Subscription Agreement.

(l) Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, each of Investor and the Company will be entitled to specific performance under this Subscription Agreement. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations described in the foregoing sentence and hereby agrees to waive in any action for specific performance of any such obligation the defense that a remedy at law would be adequate.

(m) Fees and Expenses. The parties hereto shall be responsible for their own legal and other expenses, if any, in connection with this transaction.

[remainder of page intentionally left blank]

**INVESTOR SIGNATURE PAGE FOR
NEOSTEM, INC. SUBSCRIPTION AGREEMENT
Please print or type, Use ink only. (All Parties Must Sign)**

The undersigned Investor hereby certifies that he (i) has received and relied solely upon the SEC Reports, this Subscription Agreement and their respective exhibits and schedules, (ii) agrees to all the terms and conditions of this Subscription Agreement, (iii) meets the suitability standards set forth herein and (iv) is a resident of the state or foreign jurisdiction indicated below.

Dollar Amount of Common Shares Subscribed for: \$ _____
Number of Common Shares Subscribed for: _____

Name of Investor (Print)

Name of Joint Investor (if any) (Print)

Signature of Investor

Signature of Joint Investor (if any)

Capacity of Signatory (if applicable)

Social Security or Taxpayer Identification Number

Investor Address:

Street Address

City State Zip Code

Telephone: (____) _____

Fax: (____) _____

E-mail: _____

Address for Delivery of Common Shares (if different from above):

City State Zip Code

If other than individual check one and indicate capacity of signatory under the signature :

- Trust
- Estate
- Uniform Gifts to Minors Act
State of _____
- Attorney-in-fact
- Corporation
- Other

If Joint Ownership, Check one:

- Joint Tenants with Right of Survivorship
- Tenants in Common
- Tenants by the Entirety
- Community Property

Backup Withholding Statement:

- Please check this box only if the investor is subject to backup withholding

Foreign Person:

- Please check this box only if the investor is a nonresident alien, foreign partnership, foreign trust, corporation, or foreign estate

Country _____
Passport # _____
ID # _____
ID Type _____

THE SUBSCRIPTION FOR COMMON SHARES OF NEOSTEM, INC. BY THE ABOVE NAMED INVESTOR(S) IS ACCEPTED THIS ____ DAY OF FEBRUARY, 2012

NEOSTEM, INC.

By: _____

Name: Robin Smith

Title: Chairman of the Board and CEO

Schedule A

Accredited Investor

An “accredited Investor” means:

- i. a bank, insurance company, registered investment company, business development company, or small business investment company;
- ii. an employee benefit plan, within the meaning of the Employee Retirement Income Security Act, if a bank, insurance company, or registered investment adviser makes the investment decisions, or if the plan has total assets in excess of \$5 million;
- iii. a charitable organization, corporation, or partnership with assets exceeding \$5 million;
- iv. a director, executive officer, or general partner of the company selling the securities;
- v. a business in which all the equity owners are accredited investors;
- vi. a natural person who has individual net worth, or joint net worth with the person’s spouse, that exceeds \$1 million at the time of the purchase, exclusive of the value of the person’s primary residence;
- vii. a natural person with income exceeding \$200,000 in each of the two most recent years or joint income with a spouse exceeding \$300,000 for those years and a reasonable expectation of the same income level in the current year; or
- viii. a trust with assets in excess of \$5 million, not formed to acquire the securities offered, whose purchases a sophisticated person makes.

Schedule B

U.S. Person

A "U.S. person" means:

- i. Any natural person resident in the United States;
- ii. Any partnership or corporation organized or incorporated under the laws of the United States;
- iii. Any estate of which any executor or administrator is a U.S. person;
- iv. Any trust of which any trustee is a U.S. person;
- v. Any agency or branch of a foreign entity located in the United States;
- vi. Any non-discretionary account or similar account (other than an estate or trust) held by a dealer or other fiduciary for the benefit or account of a U.S. person;
- vii. Any discretionary account or similar account (other than an estate or trust) held by a dealer or other fiduciary organized, incorporated, or (if an individual) resident in the United States; and
- viii. Any partnership or corporation if:
 - A. Organized or incorporated under the laws of any foreign jurisdiction; and
 - B. Formed by a U.S. person principally for the purpose of investing in securities not registered under the Act, unless it is organized or incorporated, and owned, by accredited investors (as defined in Rule 501(a)) who are not natural persons, estates or trusts.

Schedule C

Non-U.S. Person

The following are not "U.S. persons":

- i. Any discretionary account or similar account (other than an estate or trust) held for the benefit or account of a non-U.S. person by a dealer or other professional fiduciary organized, incorporated, or (if an individual) resident in the United States;
- ii. Any estate of which any professional fiduciary acting as executor or administrator is a U.S. person if:
 - A. An executor or administrator of the estate who is not a U.S. person has sole or shared investment discretion with respect to the assets of the estate; and
 - B. The estate is governed by foreign law;
- iii. Any trust of which any professional fiduciary acting as trustee is a U.S. person, if a trustee who is not a U.S. person has sole or shared investment discretion with respect to the trust assets, and no beneficiary of the trust (and no settlor if the trust is revocable) is a U.S. person;
- iv. An employee benefit plan established and administered in accordance with the law of a country other than the United States and customary practices and documentation of such country;
- v. Any agency or branch of a U.S. person located outside the United States if:
 - A. The agency or branch operates for valid business reasons; and
 - B. The agency or branch is engaged in the business of insurance or banking and is subject to substantive insurance or banking regulation, respectively, in the jurisdiction where located; and
- vi. The International Monetary Fund, the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the United Nations, and their agencies, affiliates and pension plans, and any other similar international organizations, their agencies, affiliates and pension plans.



January 6, 2012

Ms. Catherine M. Vaczy
140 East 28th Street
#11C
New York, NY 10021

Dear Catherine:

We are pleased to enter into this extension (the "Extension") of your employment agreement dated as of January 26, 2007 (the "2007 Agreement"), as thereafter amended by amendments on January 9, 2008, August 29, 2008, reinstated and extended on July 8, 2009 and extended on July 7, 2010 (the 2007 Agreement as so amended and extended, the "Original Agreement") with respect to your service to the Company as its Vice President and General Counsel. This Extension shall become effective (the "Effective Date") on the date that it is fully executed by you and the Company and shall modify the Original Agreement with respect to those different and additional terms as set forth below.

1. Your Base Salary shall remain unchanged and shall be increased by 10% on July 7, 2012.
 2. You shall be eligible for annual cash bonuses as determined by the Compensation Committee in its sole discretion. Your cash bonus under the Original Agreement for 2011 was \$60,000 for which \$30,000 remains payable (the "2011 Bonus Due") as of the Effective Date. You agree to accept \$10,000 of the 2011 Bonus Due in shares of the Company's Common Stock issued under and subject to all the terms and conditions of the Company's 2009 Equity Compensation Plan (the "Plan") at a per share value equal to the closing price of the Company's common stock (the "Common Stock") on the Effective Date such that the number of shares received will be equal to the net amount of cash that would have been received. The remainder of the 2011 Bonus Due shall be payable on the Effective Date.
 3. The "Term" as extended shall begin as of the Effective Date and continue through December 31, 2012.
 4. During the Term, the Company will pay annual membership and dues for a club in New York of your choice that can be used for business entertainment, meetings, etc. in an amount not to exceed \$5,000.
 5. You shall be granted on the Effective Date an option (the "Option") under the Plan to purchase 150,000 shares of Common Stock which shall vest and become exercisable in its entirety on the expiration of the Term. The per share exercise price of the Option shall equal the closing price of the Common Stock on the Effective Date and the Option shall be subject to all the terms and conditions of the 2009 Plan and the Original Agreement. Your option to purchase 50,000 shares of Common Stock tied to Nasdaq listing shall immediately vest and become exercisable.
 6. Upon termination or expiration of this Extension, the Company shall pay severance equal to three months of your compensation, including your insurance.
-

Terms not otherwise defined herein shall have the meaning ascribed to them in the Original Agreement. Except as set forth herein the terms of the Original Agreement shall remain unchanged.

Very truly yours,

NeoStem, Inc.

By: /s/ Robin Smith

Name: Robin Smith

Title: CEO

ACKNOWLEDGED AND AGREED

/s/ Catherine M. Vaczy

Catherine M. Vaczy

EXHIBIT 21.1

| Subsidiaries of NeoStem, Inc.⁽¹⁾ | Jurisdiction of Incorporation/Organization |
|---|---|
| NeoStem Therapies, Inc. | Delaware |
| Stem Cell Technologies, Inc. | Florida |
| NeoStem (China), Inc. | People's Republic of China |
| Qingdao Niao Bio-Technology Ltd. ⁽²⁾ | People's Republic of China |
| Beijing Ruijiao Bio-Technology Ltd. ⁽²⁾ | People's Republic of China |
| Tianjin Niou Bio-Technology Ltd. ⁽²⁾ | People's Republic of China |
| CBH Acquisition LLC | Delaware |
| China Biopharmaceuticals Holdings, Inc. ⁽³⁾ | Delaware |
| Suzhou Erye Pharmaceuticals Company Ltd. ⁽³⁾ | People's Republic of China |
| Progenitor Cell Therapy, LLC | Delaware |
| PCT Allendale, LLC ⁽⁴⁾ | New Jersey |
| NeoStem Family Storage, LLC ^{(4) (5)} | Delaware |
| Athelos Corporation ⁽⁶⁾ | Delaware |
| Amorcyte, LLC | Delaware |
| NeoStem Diagnostics, Inc. | Delaware |

(1) Unless otherwise specified, each entity listed in the chart is a wholly-owned direct subsidiary of NeoStem, Inc.

(2) Because certain regulations in the People's Republic of China ("PRC") currently restrict or prohibit foreign entities from holding certain licenses and controlling certain businesses in China, the Company created a wholly foreign-owned entity, or WFOE, NeoStem (China), to implement its initiatives in China. To comply with China's foreign investment regulations with respect to stem cell-related activities, these business initiatives in China are conducted via Chinese domestic entities that are controlled by the WFOE through various contractual arrangements and under the principles of consolidation the Company consolidates 100% of their operations.

(3) China Biopharmaceuticals Holdings, Inc. is a wholly-owned subsidiary of CBH Acquisition LLC and holds the 51% interest in Suzhou Erye Pharmaceutical Company Ltd. ("Erye"). Suzhou Erye Economy and Trading Co. Ltd. owns the remaining 49% interest in Erye.

(4) This entity is a wholly-owned subsidiary of Progenitor Cell Therapy, LLC.

(5) Formerly known as DomaniCell, LLC.

(6) Progenitor Cell Therapy, LLC holds approximately an 80% interest in this entity.

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated March 20, 2012, with respect to the consolidated financial statements of NeoStem, Inc. and subsidiaries included in the Annual Report on Form 10-K of NeoStem, Inc. for the year ended December 31, 2011. We hereby consent to the incorporation by reference of said report in the Registration Statements of NeoStem, Inc. on Forms S-3 (File No. 333-145988, effective September 27, 2007; File No. 333-166169, effective May 11, 2010; File No. 333-173853, effective September 30, 2011; and File No. 333-173855, effective June 13, 2011) and on Forms S-8 (File No. 333-107438, effective May 24, 2007; File No. 333-144265, effective July 2, 2007; File No. 333-159282, effective October 29, 2009; File No. 333-162733, effective October 29, 2009; and File No. 333-173854 effective May 2, 2011).

/s/ GRANT THORNTON LLP

New York, New York
March 20, 2012

EXHIBIT 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-107438, 333-144265, 333-159282, 333-162733 and 333-173854 on Form S-8 and Registration Statement Nos. 333-145988, 333-166169, 333-173853 and 333-173855 on Form S-3 of our report dated April 5, 2011, relating to the consolidated financial statements of NeoStem, Inc. and subsidiaries as of and for the year ended December 31, 2010, appearing in this Annual Report on Form 10-K of NeoStem, Inc. for the year ended December 31, 2011.

/s/ DELOITTE & TOUCHE LLP

Parsippany, New Jersey
March 20, 2012

CERTIFICATIONS

I, Robin L. Smith, certify that:

1. I have reviewed this Annual Report on Form 10-K of NeoStem, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 20, 2012

/s/ Robin L. Smith M.D.

Name: Robin L. Smith M.D.

Title: Chief Executive Officer

(Principal Executive Officer)

A signed original of this written statement required by Section 302 has been provided to the Corporation and will be retained by the Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 31.2

CERTIFICATIONS

I, Larry A. May, certify that:

1. I have reviewed this Annual Report on Form 10-K of NeoStem, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 20, 2012

/s/ Larry A. May

Name: Larry A. May
Title: Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 302 has been provided to the Corporation and will be retained by the Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K (the "Report") of NeoStem, Inc. (the "Corporation") for the year ended December 31, 2011, as filed with the Securities and Exchange Commission on the date hereof, I, Robin L. Smith, Chief Executive Officer of the Corporation, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Dated: March 20, 2012

/s/ Robin L. Smith M.D.
Robin L. Smith M.D.
Chief Executive Officer

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code) and is not being filed as part of the Report or as a separate disclosure document.

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Corporation and will be retained by the Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K (the "Report") of NeoStem, Inc. (the "Corporation") for the year ended December 31, 2011, as filed with the Securities and Exchange Commission on the date hereof, I, Larry A. May, Chief Financial Officer of the Corporation, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Dated: March 20, 2012

/s/ Larry A. May
Larry A. May
Chief Financial Officer

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code) and is not being filed as part of the Report or as a separate disclosure document.

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Corporation and will be retained by the Corporation and furnished to the Securities and Exchange Commission or its staff upon request.
