UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2011

FORM 10-Q

OR

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

For the Transition Period from

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)

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

420 LEXINGTON AVE, SUITE 450 NEW YORK, NEW YORK (Address of principal executive offices) 10170 (zip code)

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

(Former name, former address and former fiscal year, if changed since last report)

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 x No o

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 x No o

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 the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer o Accelerated filer o

Non-accelerated filer o (Do not check if a smaller reporting company) Smaller reporting company x

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

107,324,573 SHARES, \$.001 PAR VALUE, AS OF November 8, 2011

(Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date)

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PART I. FINANCIAL INFORMATION

Item 1. Consolidated Financial Statements

NEOSTEM, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS (Unaudited)

	September 30,	December 31,
	2011	2010
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 11,713,338	\$ 15,612,391
Short term investments	555	512
Restricted cash	1,427,827	3,381,369
Accounts receivable trade, net of allowance for doubtful accounts		
of \$437,443 and \$210,977, respectively	8,944,803	5,871,474
Inventory	20,582,284	21,023,388
Deferred income taxes	621,105	-
Prepaids and other current assets	1,808,695	993,711
Total current assets	45,098,607	46,882,845
Property, plant and equipment, net	49,571,589	36,998,241
Land use rights, net	4,870,549	4,807,834
Goodwill	32,586,656	27,002,044
Intangible assets, net	30,461,547	24,466,597
Other assets	5,625,734	2,867,188
	\$ 168,214,682	\$ 143,024,749
LIABILITIES AND EQUITY		+
Current Liabilities		
Accounts payable	\$ 9,896,278	\$ 14,286,929
Accrued liabilities	5,863,031	2,772,019
Bank loans	7,810,000	3,034,000
Notes payable	3,766,272	9,568,398
Mortgages payable - current	187,935	9,300,390
Income taxes payable	589,230	1,242,911
Deferred income taxes	338,054	232,075
Unearned revenues	3,066,851	1,708,280
Total current liabilities	31,517,651	32,844,612
Long-term Liabilities	E CEE 744	E 0E0 E00
Deferred income taxes	5,655,744	5,959,508
Deferred rent liability	10,743	45,489
Unearned revenues	180,808	282,518
Mortgages payable	3,487,175	2 571 267
Derivative liabilities	910,318	2,571,367
Amount due related parties	20,534,147	8,301,361
Total long-term liabilities	30,778,935	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 7,838,527 and 10,582,011 shares,	E 485 508	C 500 055
at September 30, 2011 and December 31, 2010, respectively	5,475,567	6,532,275
	5,475,567	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,	100	100
10,000 shares at September 30, 2011 and December 31, 2010	100	100
Common stock, \$.001 par value, authorized 500,000,000 shares;		
issued and outstanding, 100,361,443 and 64,221,130 shares,	400.004	CD 040
at September 30, 2011 and December 31, 2010, respectively	100,361	63,813
Additional paid-in capital	192,575,872	141,137,522
Accumulated deficit	(124,116,505)	
Accumulated other comprehensive income	5,001,635	2,779,066
Total NeoStem, Inc. shareholders' equity	73,561,463	48,659,881
Noncontrolling interests	26,881,066	37,827,738
Total equity	100,442,529	86,487,619
	\$ 168,214,682	\$ 143,024,749
		-

NEOSTEM, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

	Three Months Ended September 30,					ne Months End	ed S	ed September 30,		
		2011		2010		2011		2010		
Revenues	\$	17,756,144	\$	16,475,558	\$	55,857,980	\$	51,716,260		
Cost of revenues		13,840,744		11,232,819		41,636,950		35,015,540		
Gross profit		3,915,400		5,242,739		14,221,030		16,700,720		
Research and development		2,483,261		1,679,945		7,766,988		5,113,487		
Selling, general, and administrative		8,812,458		9,306,622		31,828,451		23,442,282		
Operating Expenses		11,295,719		10,986,567		39,595,439		28,555,769		
Operating loss		(7,380,319)		(5,743,828)		(25,374,409)		(11,855,049)		
Other income (expense):										
Other income (expense), net		1,383,826		45,829		1,721,419		31,326		
Interest expense		(1,305,820)		(10,663)		(3,168,118)		(25,380)		
		78,006		35,166		(1,446,699)		5,946		
Loss from operations before provision for										
income taxes and noncontrolling interests		(7,302,313)		(5,708,662)		(26,821,108)		(11,849,103)		
Provision for income taxes		26,151		285,976		907,628		1,191,179		
Net loss		(7,328,464)		(5,994,638)		(27,728,736)		(13,040,282)		
Less - net (loss) income attributable to noncontrolling interests		17,971		1,145,588		559,079		4,085,743		
Net loss attributable to NeoStem, Inc.		(7,346,435)		(7,140,226)		(28,287,815)		(17,126,025)		
Preferred dividends		150,655		-		508,070		153,469		
Net loss attributable to NeoStem, Inc. common shareholders	\$	(7,497,090)	\$	(7,140,226)	\$	(28,795,885)	\$	(17,279,494)		
Basic and diluted loss per share	\$	(0.08)	\$	(0.13)	\$	(0.35)	\$	(0.36)		
Weighted average common shares outstanding		94,102,589		56,777,430		82,775,215		48,599,359		

See accompanying notes to consolidated financial statements.

NEOSTEM, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

	For	Nine Months En	ıded	September 30,
Cash flows from operating activities:				
Net loss	\$	(27,728,736)	\$	(13,040,282)
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		8,164,814		7,399,842
Depreciation and amortization		6,754,953		2,556,994
Loss on short term investments		-		7,215
Amortization of preferred stock discount and issuance cost		1,903,703		-
Changes in fair value of derivative liability		(1,661,049)		-
Write off of acquired in-process research and development		1,150,000		-
Loss on disposal of assets		396,635		-
Non-cash interest expense		328,425		-
Charitable contributions paid with common stock Bad debt expense		607,363 50,024		16,311
Deferred income taxes		(678,211)		(182,417)
Changes in operating assets and liabilities, net of the effect of acquisitions:		(0/0,211)		(102,417)
Prepaid expenses and other current assets		(647,674)		(461,743)
Accounts receivable		(2,489,064)		1,278,573
Inventory		3,136,189		(1,405,838)
Unearned revenues		(1,361,697)		(392,040)
Other assets		(2,014,566)		(128,225)
Accounts payable, accrued expenses and other current liabilities		(3,433,540)		1,175,902
Net cash used in operating activities		(17,522,431)		(3,175,708)
Cash flows from investing activities:				
Cash received in acquisition of PCT		227,942		-
Purchase of short-term investments		(27)		(2,424,132)
Proceeds from short-term investments Change in vertricted each used as calleteral for notes payable.		2 000 114		2,452,015
Change in restricted cash used as collateral for notes payable Change in restricted cash used as collateral for bank loans		2,098,114		1,463,710
Acquisition of property and equipment		(5,453,931)		(12,510,648)
Net cash used in investing activities	_	(3,127,902)		(11,019,055)
Cash flows from financing activities:		(5,127,502)		(11,015,055)
Net proceeds from the exercise of options and warrants		7,100		3,101,850
Net proceeds from issuance of capital stock		21,167,682		13,138,948
Payment from related party		644,414		566,775
Repayment of mortgage loan		(109,492)		-
Proceeds of bank loan		6,149,000		-
Repayment of bank loan		(1,557,000)		(2,203,650)
Proceeds from notes payable		10,950,616		13,256,799
Repayment of notes payable		(17,154,753)		(16,644,465)
Repayment of debt to related party		(3,406,043)		-
Repayment of preferred stock		(175,000)		(222 024)
Payment of dividend Not each provided by financing activities	_	16 516 524	_	(222,924)
Net cash provided by financing activities		16,516,524	_	10,993,333
Impact of changes of foreign exchange rates		234,756		108,754
Net (decrease)/increase in cash and cash equivalents		(3,899,053)		(3,092,676)
Cash and cash equivalents at beginning of year	<u></u>	15,612,391	ф.	7,159,369
Cash and cash equivalents at end of period	\$	11,713,338	\$	4,066,693
Supplemental Disclosure of Cash Flow Information:				
Cash paid during the period for:	¢	1 220 400	¢	210 276
Interest Taxes	\$	1,238,400 1,463,100	\$	219,376 1,784,325
Idxes		1,405,100		1,704,323
Supplemental Schedule of non-cash investing activities				
Acquisition of property and equipment		-		348,488
Capitalized interest		235,700		307,200
Supplemental schedule of non-cash financing activities				
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		2,785,400		-
Common stock issued in payment of dividends for the Convertible Redeemable Series E 7% Preferred Stock		622,500		-
Financing costs for capital stock raises		-		75,466
Conversion of Convertible Redeemable Series C Preferred Stock		11 700 100		13,720,048
Dividend to Related Party reinvested as loan payable		11,726,100		-

NEOSTEM, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED 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 is an international biopharmaceutical company operating in three reportable segments: (i) Cell Therapy – United States; (ii) Regenerative Medicine – China; and (iii) Pharmaceutical Manufacturing – China.

Through the Cell Therapy – United States segment, NeoStem is focused on the development of proprietary cellular therapies in oncology, 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 globally. Within this segment, the Company is 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"), pursuant to which the Company acquired all of the membership interests of PCT, and PCT is now a wholly-owned subsidiary of NeoStem. 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. Athelos expects to initiate Phase 1 studies in autoimmune disorders in 2012.

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, AMR-001, is entering a Phase 2 study for the treatment of acute myocardial infarction (AMI). Amorcyte is currently recruiting trial sites in connection with the launch of this Phase 2 clinical trial which is expected to start enrolling patients by the end of the first quarter of 2012.

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. (See Note 4 and Note 14)

Through its Regenerative Medicine – China segment, in 2009, the Company began several China-based, Regenerative Medicine initiatives including: (i) creating a separate China-based cell therapy operation, (ii) constructing a stem cell research and development laboratory and processing facility in Beijing, (iii) establishing relationships with hospitals to provide cell-based therapies, and (iv) obtaining product licenses covering several adult stem cell therapeutics focused on regenerative medicine.

The Company acquired its Pharmaceutical Manufacturing – China segment on October 30, 2009, when China Biopharmaceuticals Holdings, Inc. ("CBH") merged with and into CBH Acquisition LLC ("Merger Sub"), a wholly-owned subsidiary of NeoStem, with Merger Sub as the surviving entity (the "Erye Merger"). As a result of the Erye Merger, NeoStem acquired CBH's 51% ownership interest in Suzhou Erye Pharmaceutical Company Ltd. ("Erye"), a Sinoforeign joint venture with limited liability organized under the laws of the People's Republic of China. 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. The relocation is continuing as the new production lines are completed and receive 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

Basis of Presentation: The accompanying unaudited Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("generally accepted accounting principles") for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities and Exchange Commission for interim financial information. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, the accompanying Consolidated Financial Statements of the Company and its subsidiaries, which are unaudited, include all normal and recurring adjustments considered necessary to present fairly the Company's financial position as of September 30, 2011 and the results of its operations and its cash flows for the periods presented. The unaudited consolidated financial statements herein should be read together with the historical consolidated financial statements of the Company for the years ended December 31, 2010, 2009 and 2008 included in our Annual Report on Form 10-K for the year ended December 31, 2010. Operating results for the three and nine month periods ended September 30, 2011 are not necessarily indicative of the results that may be expected for the year ending December 31, 2011.

Use of Estimates: The preparation of financial statements in conformity with accounting principles generally accepted 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.

Concentration of Risks: For the three and nine months ended September 30, 2011, three major suppliers provided approximately 29% and 28%, respectively, of Erye's purchases of raw materials. As of September 30, 2011, the total accounts payable to the three major suppliers represented 14% of the total accounts payable balance.

For the three and nine months ended September 30, 2010, two major suppliers provided approximately 17% and 20%, respectively, of Erye's purchases of raw material. As of December 31, 2010, the total accounts payable to the two major suppliers was 18% of the total accounts payable.

Approximately 80% 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 addition, over 70% of these drugs are on China's essential drug list and any policies that might lower the pricing of these drugs and any policies that could reduce the consumption of these drugs could have a material impact on operating results.

Inventories: Inventories are stated at the approximate lower of cost or market using the first-in, first-out basis. The Company 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 multiple deliverables and therefore cannot be recognized as revenue until the project is 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):

	Septem	ber 30, 2011	Decer	mber 31, 2010	
Raw materials and supplies	\$	3,839.8	\$	8,043.8	
Work in process		7,136.5	4,792.4		
Finished goods		9,606.0		8,187.2	
Total inventory	\$	20,582.3	\$ 21,023.4		

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 September 30, 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 witholding 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. There were no interest and penalties recognized for the three and nine months ended September 30, 2011 and 2010, respectively.

The Company files income tax returns with the U.S. Federal government and various state and foreign jurisdictions. The statute of limitations has expired on all consolidated U.S. Federal corporate income tax returns filed through 2006, and the Internal Revenue Service is not currently examining any of the post-2006 returns filed by the Company.

Comprehensive Income (Loss): The accumulated other comprehensive income (loss) balance at September 30, 2011 and December 31, 2010 in the amount of approximately \$5,001,600 and \$2,779,100, respectively, is comprised entirely of foreign currency translation adjustments. Comprehensive loss for the three and nine months ended September 30, 2011 and 2010 was as follows (in thousands):

	Thi	ree Months End	led S	eptember 30,	Ni	ine Months End	ed Se	ptember 30,
		2011		2010		2011		2010
Net loss	\$	(7,328.5)	\$	(5,994.6)	\$	(27,728.7)	\$	(13,040.3)
Other comprehensive (loss)/income								
Foreign currency translation	_	712.1		1,483.4		2,222.6		1,651.1
Total other comprehensive (loss)/income		712.1		1,483.4		2,222.6		1,651.1
Comprehensive (loss)		(6,616.4)		(4,511.2)		(25,506.1)		(11,389.2)
Comprehensive (loss)/income attributable to noncontrolling interests		366.9		1,864.0		1,648.1		4,877.8
Comprehensive loss attributable to NeoStem, Inc.	\$	(6,983.3)	\$	(6,375.2)	\$	(27,154.2)	\$	(16,267.0)

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 VSEL TM 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.

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 three and nine months ended September 30, 2011 and 2010, the Company incurred net losses and therefore no common stock equivalents were utilized in the calculation of loss per share. At September 30, 2011 and 2010, the Company excluded the following potentially dilutive securities:

	Septembe	r 30,
	2011	2010
Stock Options	17,749,895	13,558,214
Warrants	35,208,817	17,352,028
Series E Preferred Stock, Common stock equivalents	4,693,730	-

Revenue Recognition: The Company recognizes revenue from pharmaceutical and pharmaceutical intermediary product 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 at the time of delivery. The Company recognizes revenue for its cell development and manufacturing services based on the terms of individual contracts. In certain cases, there are multiple elements that cannot be considered separate deliverables and therefore the Company recognizes revenue on a completed contract basis for these arrangements. In other cases, 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 recognizes revenue related to the collection and cryopreservation of cord blood and autologous adult stem cells when the cryopreservation process is completed which is 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. The Company earns revenue, in the form of license fees, from physicians seeking to establish autologous adult stem cell collection centers. These license fees are typically billed upon signing of the collection center agreement and qualification of the physician by the Company's credentialing committee and at various times during the term of license agreements based on the terms of the specific agreement. These fees are recognized as revenue ratably over the appropriate period of time to which the revenue element relates. The Company also receives licensing fees from a licensee for use of its technology and knowledge to operate an adult stem cell banking operation in China, which licensing fees are recognized as revenues ratably over the appropriate period of time to which the revenue element relates. In addition, the Company earns r

Revenues for the three and nine months ended September 30, 2011 and 2010 were comprised of the following (in thousands):

	Τ	Three Months E	nded	September 30,	N	line Months End	led S	eptember 30,
		2011		2010		2011	2010	
Revenues								
Prescription drugs and intermediary pharmaceutical products	\$	15,513.0	\$	16,384.5	\$	49,806.0	\$	51,528.7
Stem cell related service revenues		1,529.1		91.1		4,266.9		187.6
Stem cell related services - reimbursed expenses		714.0		-		1,785.1		-
	\$	17,756.1	\$	\$ 16,475.6		\$ 55,858.0		51,716.3

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.

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 September 30, 2011, and December 31, 2010 (in thousands):

	September 30, 2011										
	Fair Value Meas	Value	Hierarchy								
	 Level 1		Level 2		Level 3						
Money market investments	\$ 2,500.8	\$	-	\$	-						
Short term investments	0.6		-		-						
Embedded derivative liabilities	-		-		783.4						
Warrant derivative liabilities	-		-		126.9						
		De	cember 31, 2010								
	Fair Value Meas	uren	ents Using Fair `	Value	e 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.

For those financial instruments with significant Level 3 inputs, the following table summarizes the activity for the three and nine months ended September 30, 2011 by type of instrument (in thousands):

	Fo	or the Three I September		F	or the Nine I Septembe	_		
	Embedded					mbedded		
	Derivatives			Warrants	Derivatives			Warrants
Beginning liability balance	\$	\$ 1,933.7		342.3	\$	2,281.8	\$	289.6
Change in fair value recorded in earnings		(1,150.3)		(215.4)		(1,498.4)		(162.7)
Ending liability balance	\$	783.4	\$	\$ 126.9		783.4	\$	126.9

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.

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 \$2,300,900 and \$2,234,600 as of September 30, 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 \$184,500 at September 30, 2011 and \$214,200 at December 31, 2010.

Note 3 - Recently Adopted Accounting Pronouncements

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

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.

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

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

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

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 "\$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.

In accordance with the PCT Merger Agreement, NeoStem has deposited into an escrow account with the escrow agent (who is initially NeoStem's transfer agent), 10,600,000 shares of NeoStem Common Stock for eventual distribution to the former members of PCT (subject to downward adjustment to satisfy any indemnification claims of NeoStem, all as described in the PCT Merger Agreement). As of September 30, 2011, approximately 974,000 shares have been distributed to the former members of PCT.

The issuance of NeoStem securities in the PCT Merger was approved at a special meeting of shareholders of NeoStem held on January 18, 2011 (the "NeoStem Special Meeting"), on which date the PCT Merger was also approved at a special meeting of members of PCT.

The fair value of the net assets acquired in the PCT Merger was \$12,416,200. 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 \$4,783,600. 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 \$1,966,200. A portion of the consideration paid is contingent upon the accomplishment of a certain milestone for the \$7.00 Warrants. Such contingent consideration 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 preliminary fair value of assets acquired and liabilities assumed on January 19, 2011 is as follows:

Cash	\$ 227,900
Accounts Receivable	442,400
Other Current Assets	166,200
Property, Plant & Equipment	11,769,000
Intangibles	8,100,000
Goodwill	4,783,600
Other Assets	654,100
Accounts Payable	1,370,900
Other Liabilities	540,500
Deferred Revenues	247,400
Amount Due Related Party	3,000,000
Mortgages Payable	3,784,600

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. It is expected the goodwill will be deductible for income tax purposes. As of September 30, 2011, the preliminary fair values of the deferred tax liabilities were reduced to zero, from an initial estimate of \$4.3 million, due to the finalization of the tax treatment of the transaction. As a result, the tax provision for the nine months ended September 30, 2011 reflects a \$178,000 adjustment related to the portion of deferred tax liability recognized in the first and second quarters of fiscal 2011. In addition, the fair value of the equity issued as consideration by NeoStem was reduced by \$666,200. The net effect of the updated values reduced the preliminary goodwill by \$4.9 million. This estimated purchase price allocation continues to be subject to revision based on additional valuation work that is being conducted. 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 2011.

For the period since the acquisition (January 19-September 30, 2011), NeoStem recorded \$5,571,500 in revenues and a net loss of approximately \$4,043,300 or \$0.05 basic and diluted loss per share attributable to PCT.

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

	Nine M	Nine Months Ended September 30,				ree Months End	eptember 30,	Ni	ne Months End	eptember 30,		
	20	11		2011		2010	2010			2010		2010
	(As Re	(As Reported)		(Proforma)		(As Reported)		(Proforma)	(As Reported)		\equiv	Proforma)
Revenues	\$	55,858	\$	56,240	\$	16,476	\$	18,883	\$	51,716	\$	57,575
Cost of revenues		41,637	_	41,961		11,233		12,996		35,016		39,561
Gross profit		14,221		14,279		5,243		5,887		16,701		18,014
Research and development		7,767		7,767		1,680		1,679		5,114		5,111
Selling, general, and administrative		31,829		32,218		9,307		10,905		23,442		28,120
Operating loss		(25,375)		(25,706)		(5,744)		(6,696)		(11,855)		(15,217)
Other income (expense), net		(1,447)		(1,482)		35		(47)		6		(208)
Loss from operations before provision for income taxes and												
noncontrolling interests		(26,821)		(27,187)		(5,709)		(6,743)		(11,849)		(15,425)
Provision for income taxes		908		908		286		286		1,191		1,191
Net loss		(27,729)		(28,905)		(5,995)		(7,029)		(13,040)		(16,616)
Less – net income attributable to noncontrolling interests		559		559		1,146		1,146		4,086		4,086
Preferred dividends		508		508		<u> </u>		-		154		154
Net loss attributable to NeoStem, Inc. common shareholders	\$	(28,796)	\$	(29,162)	\$	(7,140)	\$	(8,175)	\$	(17,280)	\$	(20,855)
Basic and diluted loss per share	\$	(0.35)	\$	(0.35)	\$	(0.13)	\$	(0.12)	\$	(0.36)	\$	(0.35)
Weighted average common shares outstanding		82,775		83,513		56,777		67,377		48,599		59,199

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

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 License Agreement between Penn, Athelos and the University of Minnesota dated September 12, 2011. Athelos and ExCell are in the process of negotiating a direct license that would replace the existing assigned ExCell License. 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 and characterized this acquired intangible asset as in-process research and development which has been recorded 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 nine months ended September 30, 2011.

Note 5 - Goodwill and Other Intangible Assets

The changes in the carrying amount of goodwill by reportable segment during nine months ended September 30, 2011 were as follows (in thousands):

	Pharmaceutical Manufacturing					
		Cell Therapy - Manufacturing - United States China		Total		
Balance as of December 31, 2010	\$	-	\$	27,002.0	\$	27,002.0
Acquisitions*	Ψ	4,783.6	Ψ		Ψ	4,783.6
Foreign currency exchange rate changes		-		801.1		801.1
Balance as of September 30, 2011	\$	4,783.6	\$	27,803.1	\$	32,586.7
*Goodwill associated with the PCT Merger			-			<u> </u>

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As of September 30, 2011 and December 31, 2010, the Company's intangible assets and related accumulated amortization consisted of the following (in thousands):

		September 30, 2011				December 31, 2010							
					Accumulated			Accumulated					
	Useful Life		Gross		Amortization	Net			Gross	A	mortization		Net
Customer list	10 Years	\$	19,666.3	\$	(3,598.6)	\$	16,067.7	\$	17,740.0	\$	(2,069.7)	\$	15,670.3
Manufacturing technology	10 Years		10,251.3		(1,247.4)		9,003.9		4,220.6		(492.4)		3,728.2
Tradename	10 Years		2,313.0		(284.8)		2,028.2		983.9		(114.8)		869.1
In process R&D	Indefinite		1,779.9		· -		1,779.9		2,219.6		· -		2,219.6
Standard operating procedures	10 Years		1,098.4		(210.5)		887.9		1,066.8		(124.5)		942.3
Lease rights	2 Years		841.4		(806.4)		35.0		817.2		(476.7)		340.5
VSEL patent rights	19 Years		669.0		(132.0)		537.0		669.0		(105.6)		563.4
Patents	8 Years		203.1		(81.2)		121.9		164.4		(31.2)		133.2
Total Intangible Assets		\$	36,822.4	\$	(6,360.9)	\$	30,461.5	\$	27,881.5	\$	(3,414.9)	\$	24,466.6

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	\$ 1,400.0
Manufacturing technology	5,400.0
Tradename	 1,300.0
	\$ 8,100.0

Total intangible amortization expense was classified in the operating expense categories for the periods included below as follows (in thousands):

	Thre	Three Months Ended September 30,			Nine Months Ended September 30,			
		2011		2010		2011		2010
Cost of revenue	\$	388.1	\$	87.1	\$	1,126.4	\$	259.8
Research and development		13.8		401.3		41.4		1,185.6
Selling, general and administrative		547.9		<u>-</u>		1,611.4		8.8
Total	\$	949.8	\$	488.4	\$	2,779.2	\$	1,454.2

Estimated intangible amortization expense on an annual basis for the succeeding five years is as follows (in thousands):

2011	\$ 880.1
2012	3,380.0
2013	3,380.0
2014	3,380.0
2015	3,380.0
Thereafter	16,061.4
	\$ 30,461.5

Note 6- Accrued Liabilities

Accrued liabilities are as follows (in thousands):

	September 30, 2011		Decer	mber 31, 2010
VAT and other taxes	\$	2,081.1	\$	126.6
Salaries, employee benefits and related taxes		911.8		210.6
Amount due on patent infringement		770.3		758.5
Other		2,099.8		1,676.3
	\$	5,863.0	\$	2,772.0

Note 7 - Bank Loans, Notes Payable and Mortgages Payable

Bank Loans

In November 2010, Erye obtained a bank loan of approximately \$3,124,000 from the CITIC Bank International with a variable interest rate that is currently 6.06% and is due in November 2011.

In May 2011, Erye obtained a bank loan of approximately \$3,124,000 from Commercial Bank of China with a variable interest rate that is currently 7.02% and is due in November 2011.

In July 2011, Erye obtained a bank loan of approximately \$1,562,000 from the Agricultural Bank of China with a variable interest rate that is currently 6.56% and is due in May 2012.

Notes Payable

Erye has approximately \$3,571,000 of notes payable outstanding as of September 30, 2011. 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 September 30, 2011 and December 31, 2010, amounted to approximately \$1,428,000 and \$3,381,400, respectively. At September 30, 2011 and December 31, 2010, the restricted cash amounted to 40% and 35.8%, respectively, 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 \$4,870,500 and \$4,807,800 at September 30, 2011 and December 31, 2010, respectively.

The Company has financed certain insurance policies and has notes payable at September 30, 2011 of approximately \$38,700 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. The next measurement date for compliance with financial covenants is December 31, 2011. PCT was not in compliance with such covenants at the measurement date of June 30, 2011, and obtained a covenant waiver letter from the lender for all periods through June 30, 2011. The outstanding balance was approximately \$2,736,100 at September 30, 2011 of which \$112,700 is payable within twelve months. On December 6, 2010 PCT Allendale, a whollyowned 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. 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 September 30, 2011 is \$939,000 of which \$75,200 is payable within twelve months.

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 September 30, 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.

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 September 30, 2011, the Company had issued 3,462,559 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 September 30, 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 \$5,475,600, \$783,400 and \$126,900, respectively, as of September 30, 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 nine months ended September 30, 2011, the Company recorded a decrease in the fair value of the embedded derivatives of approximately \$1,498,400 and a decrease in the warrant derivative of approximately \$1,498,400 and a decrease in the embedded derivatives of approximately \$1,150,300 and a decrease in the warrant derivative of approximately \$1,150,300 and a decrease in the warrant derivative of approximately \$1,150,300 and a decrease in the warrant derivative of approxim

Note 9 – Shareholders' Equity

Common Stock:

The authorized common stock of the Company is 500 million shares, par value \$0.001 per share.

On March 3, 2011, the Company consummated a private placement pursuant to which five persons and entities acquired an aggregate of 2,343,750 shares of Common Stock for an aggregate consideration of \$3,000,000 (purchase price \$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 also now the Chief Medical Officer of NeoStem, and the Chief Scientific Officer of Amorcyte) (who purchased 78,125 shares). On April 5, 2011, the Company consummated a private placement pursuant to which nine persons and entities acquired an aggregate of 1,244,375 shares of Common Stock for an aggregate consideration of approximately \$1,592,800 (purchase price \$1.28 per share). On June 13, 2011 the Company consummated a private placement pursuant to which one entity acquired 781,250 shares of Common Stock for an aggregate consideration of \$1,000,000 (purchase price \$1.28 per share). On July 6, 2011, three then key Amorcyte stockholders (including a fund managed by a then Amorcyte director) invested an aggregate of \$728,000 in a private placement of 568,750 shares of Common Stock (purchase price \$1.28 per share).

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 \$14,667,000.

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, and the maximum number of shares that may be sold may not exceed 18,747,906 shares unless shareholder approval is obtained. 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.

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 35,208,817 shares of common stock are reserved for issuance upon exercise of outstanding warrants as of September 30, 2011 at prices ranging from \$0.50 to \$7.00 and expiring through January 2018.

During the three and nine months ended September 30, 2011 and 2010, the Company issued warrants for services as follows (\$ in thousands, except share data):

	Three Months En	ded September 30,	Nine Months Ended September 30,			
	2011	2010	2011	2010		
Number of Common Stock Purchase Warrants Issued		25,000	370,000	627,000		
Value of Common Stock Purchase Warrants Issued	\$ -	\$ 32.9	\$ 289.5	\$ 772.2		

The weighted average estimated fair value of warrants issued for services in the three and nine months ended September 30, 2011 was \$0 and \$0.78, 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 used in calculating the fair values of warrants issued for services during the three and nine months ended September 30, 2011 and 2010, respectively, were as follows:

	Three Months End	ded September 30,	Nine Months Ended September 30		
	2011	2010	2011	2010	
Expected term (in years)	3 to 5	5	3 to 5	4 to 5	
Expected volatility	81% - 83%	91% - 96%	80% - 86%	91% - 99%	
Expected dividend yield	0%	0%	0%	0%	
Risk-free interest rate	0.42% - 1.53%	1.27% - 1.60%	0.42% - 2.24%	1.27% - 2.04%	

Activity related to warrants outstanding was as follows:

			Weighted	
			Average	
		Weighted	Remaining	
	Number of	Average	Contractual	Aggregate
	Shares	Exercise Price	Term (years)	Intrinsic Value
Balance at December 31, 2010	21,843,507	\$ 2.62		
Granted	13,812,939*	2.23		
Exercised	-	-		
Expired	(447,629)	6.18		
Cancelled	<u>-</u> _	<u>-</u> _		
Balance at September 30, 2011	35,208,817	2.41	2.9	\$ 3,600
Warrants Exercisable at September 30, 2011	33,933,317	2.29	2.7	

^{*} Includes 3 million warrants issued pursuant to the PCT Merger Agreement - See Note 4, and 10,312,500 warrants issued in the July 22, 2011 offering

The Company's results include share-based compensation expense of approximately \$5,600 and a benefit of \$147,300 for the three months ended September 30, 2011 and 2010, respectively, and an expense of approximately \$247,500 and \$417,300 for the nine months ended September 30, 2011 and 2010, respectively. The total fair value of shares vested for warrants issued for services during the three and nine months ended September 30, 2011 was approximately \$60,100 and \$235,800, respectively. As of September 30, 2011, there was approximately \$93,300 of total unrecognized service cost related to unvested warrants of which approximately \$49,500 is related to warrants that vest over a weighted average life of 0.25 years. The remaining balance of unrecognized service cost of \$43,800 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:

At the 2011 Annual Meeting of Shareholders of the Company held on October 14, 2011, the shareholders approved an amendment to increase the number of shares of common stock authorized for issuance under the 2009 Equity Compensation Plan (the "2009 Equity Plan") from 17,750,000 to 23,750,000. 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, Equity Plan from 8,700,000 to 5,700,000.

The Company's results include share-based compensation expense of approximately \$831,400 and \$2,453,100 for the three months ended September 30, 2011 and 2010, respectively, and approximately \$5,631,400 and \$5,982,500 for the nine months ended September 30, 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 September 30, 2011 there were options to purchase 654,928 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, (i) the term of the Agreement was extended from December 31, 2011 to December 31, 2012; (ii) Dr. Smith will receive cash bonuses on October 1, 2011 and 2012 in the minimum amount of 110% of the prior year's bonus; (iii) a failure to renew the Agreement at the end of the term regardless of reason shall be treated as a termination by the Company without cause; (iv) the Company shall pay Dr. Smith her base salary and COBRA premiums (a) for one year in the event of a termination of the agreement by Dr. Smith for other than good reason and (b) during any period during which she is bound by non-competition, non-solicitation or similar covenants with the Company (such payments shall not be made during the time Dr. Smith is also receiving payments under (iii) or (iv)(a)); (v) 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; (vi) all other unvested options held by Dr. Smith were immediately vested; (vii) 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; (viii) the Company agreed that, with the exception of the period of time during which Dr. Smith is a Company affiliate and for 90 days thereafter (during which time any shares owned by or issued to Dr. Smith will bear the Company's standard affiliate legend), the Company will not place legends on shares on Common Stock owned by Dr. Smith restricting the transfer of such shares so long as such shares are sold under an effective registration statement, pursuant to Rule 144 or are eligible for sale under Rule 144 without volume limitations; and (ix) if Dr. Smith ceases to be employed by the Company and for so long as she continues to own shares of Common Stock the sale of which would require that the current public information requirement of Rule 144 be met, the Company will use its reasonable best efforts to timely meet those requirements or obtain appropriate extensions or otherwise make available such information as is required. Except as set forth in the amendment, the Agreement remains unchanged. Pursuant to the modification on April 4, 2011 of Dr. Smith's stock options, the Company recognized \$723,000 of incremental compensation cost during the nine months ended September 30, 2011.

The weighted average estimated fair value of stock options granted in the three and nine months ended September 30, 2011 was \$0.50 and \$1.10, 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 used in calculating the fair values of options granted during the three and nine months ended September 30, 2011 and 2010, respectively, were as follows:

	Three Months End	ded September 30,	Nine Months Ended September 3		
	2011	2010	2011	2010	
Expected term (in years)	1 to 6	2 to 10	1 to 10	2 to 10	
Expected volatility	76% - 84%	91% - 99%	75% - 85%	91% - 122%	
Expected dividend yield	0%	0%	0%	0%	
Risk-free interest rate	0.13% - 1.82%	0.42% - 3.00%	0.13% - 3.45%	0.42% - 3.58%	

Activity related to stock options outstanding under the U.S. Equity Plans was as follows:

			Weighted	
			Average	
		Weighted	Remaining	
	Number of	Average	Contractual	Aggregate
	Shares	Exercise Price	Term (years)	Intrinsic Value
Balance at December 31, 2010	9,932,214	\$ 1.87		
Granted	7,544,600	1.54		
Exercised	(5,000)	1.42		
Expired	-	-		
Cancelled	(2,071,919)	1.74		
Balance at September 30, 2011	15,399,895	1.73	7.5	\$ -
Options Exercisable at September 30, 2011	8,812,002	1.84	6.7	

Activity related to stock options outstanding under the Non U.S. Equity Plan was as follows:

			Weighted	
		Weighted	Average Remaining	
	Number of	Average	Contractual	Aggregate
	Shares	Exercise Price	Term (years)	Intrinsic Value
Balance at December 31, 2010	3,100,000	\$ 2.02		
Granted	650,000	1.74		
Exercised	-	-		
Expired	-	-		
Cancelled	(1,400,000)	2.02		
Balance at September 30, 2011	2,350,000	1.94	8.6	\$ -
Options Exercisable at September 30, 2011	950,000	2.07	8.3	

The total fair value of shares vested during the three and nine months ended September 30, 2011 was approximately \$1,169,300 and \$3,973,800, respectively.

The number of remaining shares authorized to be issued under the various equity plans at September 30, 2011 are as follows:

		Non US Equity
	US Equity Plan	Plan
Shares Authorized for Issuance under 2003 Equity Plan	2,500,000	-
Shares Authorized for Issuance under 2009 Equity Plan	17,750,000	-
Shares Authorized for Issuance under Non US Equity Plan	<u>-</u> _	8,700,000
	20,250,000	8,700,000
Outstanding Options - US Equity Plan	(15,399,895)	-
Exercised Options	(97,500)	-
Outstanding Options - Non US Equity Plan	-	(2,350,000)
Restricted stock or equity grants issued under Equity Plans	(2,479,085)	(885,000)
Total common shares remaining to be issued under the Equity Plans	2,273,520	5,465,000

As of September 30, 2011, there was approximately \$6,515,400 of total unrecognized compensation costs related to unvested stock option awards of which approximately \$5,776,100 is related to stock options that vest over a weighted average life of 1.9 years. The remaining balance of unrecognized compensation costs of \$739,300 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. 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, Equity Plan from 8,700,000 to 5,700,000.

Changes in Stockholders Equity:

The changes in Stockholders Equity for the nine months ended September 30, 2011 were as follows:

	Series B C Preferre			Common Stock									
	Shares An		ount	Shares Amount			ditional Paid in Capital	ccumulated Other mprehensive Income	Deficit	Non- Controlling Interest in Subsidiary		Total	
Balance at January 1, 2011	10,000	\$	100	64,221,130	\$	63,813	\$	141,137,522	\$ 2,779,066	\$ (95,320,620)	\$ 37,827,738	\$	86,487,619
Exercise of stock options	-		-	5,000		5		7,095	-	-	-		7,100
Share-based compensation	-		-	2,394,530		2,395		8,162,419	-	-	-		8,164,814
Proceeds from issuance of common stock	-		-	19,678,224		19,678		21,148,004	-	-	-		21,167,682
Shares issued for charitable contribution	-		-	-		408		606,955	-	-	-		607,363
Repayment of Series E Preferred Principal													
and Dividends	-		-	3,462,559		3,462		3,404,477	-	(508,070)	-		2,899,869
Foreign currency translation	-		-	-		-		-	2,222,569	<u>-</u>	(9,652)		2,212,917
Net income attributable to non-controlling													
interest	-		-	-		_		-	-	-	559,079		559,079
Dividends to related party	-		-	-		-		-	-	-	(11,726,099)		(11,726,099)
Technology contributed to Athelos by Non-													
Controlling Interest	-		-	-		_		920,000	-	-	230,000		1,150,000
Net loss attributable to NeoStem, Inc.	-		-	-		-		-	-	(28,287,815)	-		(28,287,815)
Shares issued in PCT Merger				10,600,000		10,600		17,189,400		<u></u>			17,200,000
Balance at September 30, 2011	10,000	\$	100	100,361,443	\$	100,361	\$	192,575,872	\$ 5,001,635	\$ (124,116,505)	\$ 26,881,066	\$ 1	100,442,529

Note 10 - Income Taxes

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 and future ownership changes could result in additional limitations. At December 31, 2010, the Company had net operating loss carryforwards of approximately \$39,590,500 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 not be realized.

The income tax provision for the three and nine months ended September 30, 2011 and 2010 is related to foreign taxes for our operations in China.

Note 11 - Segment Information

The Company's financial information broken down by reportable segment was as follows (in thousands):

	Three Months Ended September 30,				Nine Months Ended September 30,				
		2011		2010	2011			2010	
Revenues									
Pharmaceutical Manufacturing - China	\$	15,513.0	\$	16,384.5	\$	49,806.0	\$	51,528.7	
Cell Therapy - United States		2,177.0		61.1		5,837.0		157.6	
Regenerative Medicine - China		66.1		30.0		215.0		30.0	
	\$	17,756.1	\$	16,475.6	\$	55,858.0	\$	51,716.3	
Loss from operations									
Pharmaceutical Manufacturing - China	\$	717.9	\$	2,552.6	\$	3,480.1	\$	9,302.3	
Cell Therapy - United States		(2,996.1)		(2,304.6)		(9,957.7)		(6,917.2)	
Regenerative Medicine - China		(681.8)		(321.9)		(1,847.1)		(1,058.7)	
Corporate office		(4,420.3)		(5,669.9)		(17,049.7		(13,181.4)	
	\$	(7,380.3)	\$	(5,743.8)	\$	(25,374.4)	\$	(11,855.0)	
Total assets	Sept	tember 30, 2011	Dec	cember 31, 2010					
Pharmaceutical Manufacturing - China	\$	124,045.0	\$	125,458.1					
Cell Therapy - United States		28,445.4		1,101.9					
Regenerative Medicine - China		2,640.0		4,949.8					
Corporate office		13,084.3		11,514.9					
	\$	168,214.7	\$	143,024.7					

Note 12 - Related Party Transactions

At September 30, 2011, Erye owed EET, the 49% shareholder of Erye, \$20,534,100 which represents dividends paid and loaned back to Erye. At September 30, 2011 the interest rate on this loan was 6.56%. 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.

Pursuant to the terms and conditions of the 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; 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 Company's 51% interest in Erye, and 6% will be distributed to the Company which has not been paid from the 2010 distribution and is in the amount of approximately \$130,000. 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; 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 October 2012 to complete the relocation 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 relocation 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, of which approximately \$526,600 has not been paid to the local Chinese tax authorities as of September 30, 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 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 nine months ended September 30, 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 2015. A summary of future minimum rental payments required under operating leases that have initial or remaining terms in excess of one year as of September 30, 2011 are as follows (in thousands):

Lease Commitments:

Years ended	Oper	ating Leases
2011	\$	383.8
2012		1259.1
2013		898.3
2014		629.5
2015		587.0
Thereafter		857.2
Total minimum lease		
payments	\$	4,614.9

Expense incurred under operating leases was approximately \$535,300 and \$1,672,600 for the three and nine months ended September 30, 2011, respectively, and \$522,800 and \$1,139,400 for the three and nine months ended September 30, 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 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.

Xianqbei 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 People's Court in Hunan Province, PRC in the foregoing case rendered a judgment on May 13, 2010 against Erye as follows: (i) awarding plaintiff Xiangbei Welman damages and costs of approximately 5 million RMB (approximately \$778,500) against Erye which was fully accrued for at September 30, 2011; and (ii) enjoining Erye from manufacturing, marketing and selling the Product. On March 21, 2011, Changsha Intermediate Court issued a civil decision suspending the execution of the Preliminary Injunction. Therefore, Erye is currently free to produce, sell or offer to sell the product. Following the filing of the patent infringement dispute, in 2009 Xiangbei Welman brought a copyright infringement lawsuit against Erve claiming the package inserts with respect to the Product infringed upon their copyright and Erye was enjoined from copying and using the package inserts on the Product and selling the Product with the package inserts and Xiangbei Welman was awarded 50,000 RMB, or approximately \$7,800. In July 2011, a new copyright infringement lawsuit was brought by Xiangbei 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 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 September 30, 2011, approximately 13,744,700 RMB (approximately \$2,140,000) of cash had been frozen in six bank accounts, and is classified in Other Assets. Erye is working with their counsel to respond. Erye has contended that jurisdiction is not proper. A similar action 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 2,000,000 RMB (approximately \$312,400) 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 People's Court in Guangzhou Province, PRC (the "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. The Company cannot reasonably assess the possibility of additional exposure above the amounts previously accrued as of September 30, 2011.

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 within a reasonable period of time 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 September 30, 2011.

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 14).

Note 14 - Subsequent Events

The Amorcyte Merger

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. Amorcyte's lead product candidate, AMR-001, is entering a Phase 2 study for the treatment of acute myocardial infarction (AMI). We are currently recruiting trial sites in connection with the launch of this Phase 2 clinical trial which is expected to start enrolling patients by the end of first quarter of 2012.

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 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
- 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 issuance of NeoStem securities pursuant to the Amorcyte Merger Agreement was approved at the 2011 Annual Meeting of Stockholders of NeoStem held on October 14, 2011 (the "NeoStem 2011 Annual Meeting"), on which date the Amorcyte Merger also was approved at a special meeting of stockholders of Amorcyte.

The description of the Amorcyte Merger contained in this Note 14 does not purport to be complete and is qualified in its entirety by reference to the Amorcyte Merger Agreement, which is attached to NeoStem's Joint Proxy Statement/Prospectus dated and filed with the Securities and Exchange Commission on September 16, 2011 (the "Joint Proxy Statement/Prospectus"), the Warrant Agreement between NeoStem and Continental Stock Transfer & Trust Company, and the form of Global Series AMO Warrant attached thereto, which is filed as Exhibit 4.1 to the Company's Current Report on Form 8-K dated October 14, 2011 (the "Form 8-K") and the escrow agreement, which is filed as Exhibit 10.1 to the Form 8-K, respectively.

Amendment to the 2009 Plan and 2009 Non-U.S. Plan

At the NeoStem 2011 Annual Meeting, the shareholders of NeoStem duly approved an amendment to the NeoStem, Inc. 2009 Equity Compensation Plan (the "2009 Plan") to increase the number of shares of NeoStem Common Stock authorized for issuance thereunder by 6,000,000 shares (that is, from 17,750,000 shares to 23,750,000 shares), and NeoStem thereupon effected such amendment to the 2009 Plan. Persons eligible to receive restricted and unrestricted stock awards, options, stock appreciation rights or other awards under the 2009 Plan are those employees, consultants and directors of NeoStem and its subsidiaries who, in the opinion of the Compensation Committee of NeoStem's Board of Directors, are in a position to contribute to NeoStem's success. Concurrently therewith, NeoStem decreased the number of shares authorized for issuance under the NeoStem, Inc. 2009 Non-U.S. Based Equity Compensation Plan by 3,000,000 (that is, from 8,700,000 to 5,700,000). The reduction in shares available for issuance under the 2009 Non-U.S. Plan was effected in light of the Company's plan to focus its business on cell therapy manufacturing and development and other related activities in the United States, and the Company's consideration of the possible divestiture of its 51% interest in Erye. Persons eligible to receive warrants, stock appreciation rights or other awards under the 2009 Non-U.S. Plan are those service providers of NeoStem and its subsidiaries and affiliates providing services outside of the United States, including employees and consultants of NeoStem and its subsidiaries and affiliates, who, in the opinion of the Compensation Committee, are in a position to contribute to NeoStem's success.

ITEM 2. 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" herein and under "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2010. The following discussion should be read in conjunction with our consolidated financial statements and related notes thereto included elsewhere in this quarterly report and in our Annual Report on Form 10-K for the year ended December 31, 2010.

The Overview

NeoStem, Inc. is an international biopharmaceutical company operating in three reportable segments: (i) Cell Therapy — United States; (ii) Regenerative Medicine — China; and (iii) Pharmaceutical Manufacturing — China.

Through the Cell Therapy — United States segment, we are focused on the development of proprietary cellular therapies in oncology, 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 globally. 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"), pursuant to which the Company acquired all of the membership interests of PCT, and PCT is now a wholly-owned subsidiary of NeoStem. 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. Athelos expects to initiate Phase I studies in autoimmune disorders in 2012.

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, AMR-001, is entering a Phase 2 study for the treatment of acute myocardial infarction (AMI). Amorcyte is currently recruiting trial sites in connection with the launch of this Phase 2 clinical trial which is expected to begin enrolling patients by the end of the first quarter of 2012.

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) creating a separate China-based cell therapy operation, (ii) constructing a stem cell research and development laboratory and processing facility in Beijing, (iii) establishing relationships with hospitals to provide cell-based therapies, and (iv) obtaining product licenses covering several adult stem cell therapeutics focused on regenerative medicine.

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 People's Republic of China. 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. The relocation is continuing as the new production lines are completed and receive 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 \$5.6 million in private placements of Common Stock from March 2011 to June 2011. In addition, on July 6, 2011, three then key Amorcyte stockholders (including a fund managed by a then Amorcyte director) invested an aggregate of \$728,000 in a private placement of 568,750 shares of Common Stock (purchase price \$1.28 per share) and 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 received gross proceeds of \$16,500,000 prior to deducting underwriting discounts and offering expenses payable by the Company, for net proceeds of approximately \$14,667,000.

Results of Operations

Three and Nine Months Ended September 30, 2011 Compared to the Three and Nine Months Ended September 30, 2010

Revenue and Cost of Revenue

Three Months Ended September 30, 2011 Compared to Three Months Ended September 30, 2010

For the three months ended September 30, 2011, total revenues were approximately \$17,756,100 compared to approximately \$16,475,600 for the three months ended September 30, 2010. Revenues for the three months ended September 30, 2011 and 2010, respectively, were comprised of the following (in thousands):

	Three Months Ended September 30,				
		2011	2010		
Pharmaceutical Manufacturing - China	\$	15,513.0	\$	16,384.5	
Cell Therapy - United States		2,177.0		61.1	
Regenerative Medicine - China		66.1		30.0	
	\$	17,756.1	\$	16,475.6	

- Revenues for our Pharmaceutical Manufacturing China reporting segment were approximately \$15,513,000 representing a decrease of approximately \$871,500 or 5%. The decrease was primarily due to a strategic decision to adjust the product mix, decreasing sales of certain pharmaceutical intermediates to other pharmaceutical manufacturers in order to create capacity for higher margin products in the future, which resulted in 5% 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 8% compared to the same period for 2010 due 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 decreased revenues by approximately 2%, which were offset by increased revenues resulting from changes in foreign exchange rates between the Chinese RMB and United States dollar by approximately 6%. 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%. As of September 30, 2011, the price reduction experienced by Erye on these products was approximately 20%. During the three months ended September 30, 2011 Piperacillin Sodium and Sulbactum Sodium accounted for approximately 4% 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. 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 Q3, 2011.
- * Derived from the October 12, 2011 China Healthcare report, published by Deutsche Bank, AG.

- The increase in revenue for our Cell Therapy United States reporting segment is due to revenues generated by PCT which was acquired in January 2011, and whose revenues totaled approximately \$2,151,200.
- The cost of revenue was approximately \$13,840,700 representing an increase of approximately \$2,607,900 compared with the prior year period. The cost of revenue in the Pharmaceutical Manufacturing China reporting segment was approximately \$11,905,100 and increased 6% over the same period in 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 2%. This reduction in cost was offset by increases in the cost of manufacturing of antibiotics and cephalosporins and other therapeutic products of approximately 2% 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 6%. The cost of revenue for Cell Therapy United States reporting segment was \$1,891,300 an increase of approximately \$1,870,200 principally related to the cost of revenue for PCT and the cost of revenue for Regenerative Medicine China reporting segment constituted the remaining balance.

Nine Months Ended September 30, 2011 Compared to Nine Months Ended September 30, 2010

For the nine months ended September 30, 2011, total revenues were approximately \$55,858,000 compared to approximately \$51,716,300 for the nine months ended September 30, 2010. Revenues for the nine months ended September 30, 2011 and 2010, respectively, were comprised of the following (in thousands):

	Nir	Nine Months Ended September 30,				
		2011		2010		
Pharmaceutical Manufacturing - China	\$	49,806.0	\$	51,528.7		
Cell Therapy - United States		5,837.0		157.6		
Regenerative Medicine - China		215.0		30.0		
	\$	55,858.0	\$	51,716.3		

- Revenues for our Pharmaceutical Manufacturing China reporting segment were approximately \$49,806,000 representing a decrease of approximately \$1,722,700 or 3%. This decrease was primarily due to a strategic decision by management to discontinue selling certain pharmaceutical intermediates to other pharmaceutical manufacturers, in order to create capacity within the existing production lines for higher margin products in the future, this reduced Erye's sales approximately 11%. Revenues from sales of antibiotics, cephalosporins and other therapeutic products increased approximately 3%. The balance of the change in revenue year over year is due to increases in the exchange rate between the Chinese RMB and the United States dollar which increased sales volume 5%. Overall the average price of products sold for the nine months ended September 30, 2011 increased approximately 1% in comparison to products sold in the same period last year. However, 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%. As of September 30, 2011 the price reduction experienced by Erye on these products was approximately 20%. During the nine months ended September 30, 2011 Piperacillin Sodium and Sulbactum Sodium accounted for approximately 1% of sales and Ligustrazine Phosphate accounted for approximately 4% 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. 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. The increase in revenue for our Cell Therapy - United States reporting segment is due to revenues generated by PCT which was acquired in January 2011, and whose revenues totaled approximately \$5,571,500.
- The cost of revenue was approximately \$41,637,000 representing an increase of approximately \$6,621,400 compared with the prior year period. The cost of revenue for Pharmaceutical Manufacturing China reporting segment was approximately \$36,207,100 representing an increase of 4% over the same period in 2010. The strategic decision to discontinue low margin pharmaceutical intermediates and free up capacity for higher margin products in the future decreased the cost of manufacturing by 12%; however, this reduction in cost was significantly offset by increases in the cost of manufacturing of antibiotics and cephalosporins and other therapeutic products resulting from 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 approximately \$5,336,100 and the cost of revenue for Regenerative Medicine China reporting segment constituted the remaining balance.
- * Derived from the October 12, 2011 China Healthcare report, published by Deutsche Bank, AG.

Operating Expenses

Three Months Ended September 30, 2011 Compared to Three Months Ended September 30, 2010

For the three months ended September 30, 2011 operating expenses totaled approximately \$11,295,700 compared to approximately \$10,986,600 for the three months ended September 30, 2010, representing an increase of approximately \$309,100 or 3%.

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 three months ended September 30, 2011, the use of equity and equity-linked instruments to pay for such expenses resulted in charges to selling, general, administrative, and research expenses of approximately \$1,530,700 representing a decrease of approximately \$1,205,672 over the three months ended September 30, 2010.

For the three months ended September 30, 2011, our selling, general, and administrative expenses were approximately \$8,812,500 compared to approximately \$9,306,600 for the three months ended September 30, 2010, representing a decrease of approximately \$494,100 or 5%. Equity-based compensation included in selling, general and administrative expenses for the three months ended September 30, 2011 was approximately \$1,647,500, compared to approximately \$2,750,300 for the three months ended September 30, 2010. Overall, the increase in selling, general and administrative expenses was primarily due to the following:

- · A decrease of approximately \$451,800 in the Cell Therapy United States reporting segment, comprised of (i) a decrease of approximately \$1,102,800 related to employee, director and consultant equity compensation; and (ii) a decrease of approximately \$576,100 in selling and marketing expenses in connection with our adult stem cell collection efforts. These decreases were partially offset by an increase of approximately \$1,119,300 related to new operating expenses as a result of our acquisition of PCT in January 2011.
- · A decrease of approximately \$287,300 in our Pharmaceutical Manufacturing China reporting segment.
- · An increase of approximately \$244,900 in our Regenerative Medicine China reporting segment.

For the three months ended September 30, 2011, our research and development expenses were approximately \$2,483,300 compared to approximately \$1,679,900 for the three months ended September 30, 2010, representing an increase of approximately \$803,300 or 48%. Equity-based compensation included in research and development expenses for the three months ended September 30, 2011 reflected a credit of approximately \$116,800, compared to a credit of approximately \$14,000 for the three months ended September 30, 2010, which is primarily due to the fair value remeasurement of consultant equity awards. Overall, the increase in research and development expenses was primarily due to the following:

- · A decrease of approximately \$139,400 in the Cell Therapy United States reporting segment as a result of reduced internal research activities in our VSELTM Technology, subletting a portion of the VSEL laboratory and focusing on supporting VSEL research activities with our external research collaborators.
- · An increase of approximately \$536,900 in our Pharmaceutical Manufacturing China reporting segment as a result of increased clinical development efforts on products under development.
- · An increase of approximately \$127,000 in our Regenerative Medicine China reporting segment due to the recovery of certain expenses incurred in prior years that were refunded to us during the quarter, offset by increased costs of operating the Beijing laboratory.

For the nine months ended September 30, 2011 operating expenses totaled approximately \$39,595,400 compared to approximately \$28,555,800 for the nine months ended September 30, 2010, representing an increase of approximately \$11,039,600 or 39%. For the nine months ended September 30, 2011, the use of equity and equity-linked instruments to pay for such expenses resulted in charges to selling, general, administrative, and research expenses of \$7,985,800, representing an increase of approximately \$1,135,400 over the nine months ended September 30, 2010.

For the nine months ended September 30, 2011, our selling, general, and administrative expenses were approximately \$31,828,400 compared to approximately \$23,442,300 for the nine months ended September 30, 2010, representing an increase of approximately \$8,386,200 or 36%. Equity-based compensation included in selling, general and administrative expenses for the nine months ended September 30, 2011 were approximately \$7,485,100, compared to approximately \$6,123,200 for the nine months ended September 30, 2010. Overall, the increase in selling, general and administrative expenses was primarily due to the following:

- An increase of approximately \$5,968,100 in the Cell Therapy United States reporting segment, comprised of (i) an increase of approximately \$1,361,900 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 \$3,022,800 related to new operating expenses as a result of our acquisition of PCT; (iii) an increase of approximately \$1,562,200 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 charitable 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 and CFO is Treasurer; and (v) an increase of approximately \$1,240,100 related to administrative activities. These increases were partially offset by a decrease of approximately \$1,219,000 in selling and marketing expenses in connection with our adult stem cell collection efforts.
- · An increase of approximately \$1,672,000 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 \$518,800 in selling and marketing expenses, and (iii) an increase of approximately \$1,153,100 related to administrative activities.
- · An increase of approximately \$746,100 in our Regenerative Medicine China reporting segment, comprised primarily of an increase of approximately \$732,300 related to administrative activities.

For the nine months ended September 30, 2011, our research and development expenses were approximately \$7,767,000 compared to approximately \$5,113,300 for the nine months ended September 30, 2010, representing an increase of approximately \$2,653,700 or 52%. Equity-based compensation included in research and development expenses for the nine months ended September 30, 2011 was approximately \$500,800, compared to approximately \$727,300 for the nine months ended September 30, 2010. Overall, the increase in research and development expenses was primarily due to the following:

- · An increase of approximately \$1,347,400 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 \$1,152,200 in our Pharmaceutical Manufacturing China reporting segment as a result of increased clinical development efforts on products under development.
- · An increase of approximately \$154,000 in our Regenerative Medicine China reporting segment due to the recovery of certain expenses incurred in prior years that were refunded to us during the quarter, offset by increased costs of operating the Beijing laboratory.

Other Income and Expense

For the three and nine months ended September 30, 2011, the Company recognized interest expense of approximately \$1,305,800 and \$3,168,100, respectively, compared with approximately \$10,700 and \$25,400 for the three and nine months ended September 30, 2010. The increase is primarily related to amortization of debt discount of approximately \$574,500 and \$1,903,700 for the three and nine months ended September 30, 2011, respectively, associated with the Convertible Redeemable Series E Preferred Stock that was issued in November 2010, which is being accounted for as mezzanine equity. For the three and nine months ended September 30, 2011, interest expense of approximately \$329,500 and \$855,700 respectively was recorded as a result of a loan to Erye from its minority shareholder of which approximately \$0 and \$235,700, respectively was capitalized as part of the cost of construction of Erye's new manufacturing plant. For the three and nine months ended September 30, 2011, interest of approximately \$343,500 and \$474,300 respectively was interest expense associated with bank loans obtained by Erye totaling approximately \$7,810,000 at September 30, 2011. In addition, interest expense includes, for the three and nine months ended September 30, 2011, interest of approximately \$7,810,000 at September 30, 2011. In addition, interest expense includes, for the three and nine months ended September 30, 2011, interest of approximately \$49,800 and \$144,500 respectively for mortgage loans for PCT's Allendale facility.

Other income for the three and nine months ended September 30, 2011 net totaled approximately \$1,383,800 and \$1,721,400 respectively which primarily related to the revaluation of derivative liabilities that have been established in connection with the Convertible Redeemable Series E Preferred Stock. Other income for the three and nine months ended September 30, 2010 net totaled approximately \$45,800 and \$31,300, respectively.

Provision for Taxes

The income tax provision for the three and nine months ended September 30, 2011 and 2010 is 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 three and nine months ended September 30, 2011, a statutory rate of 25% and, for the three and nine months ended September 30, 2010, a statutory rate of 12.5%.

Dividends on Preferred Stock

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 three and nine months ended September 30, 2011 we recorded dividends of approximately \$150,700 and \$508,100, respectively. In the nine months ended September 30, 2010 the Company recorded dividends of approximately \$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.

Noncontrolling 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 with a charge to Noncontrolling Interests. For the three months ended September 30, 2011 Erye's minority shareholders' share of net loss totaled approximately \$53,200. For the nine months ended September 30, 2011, Erye's minority shareholders' share of net income totaled approximately \$796,200. 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 three and nine months ended September 30, 2011 of approximately \$35,000 and \$237,100 respectively.

Liquidity and Capital Resources

At September 30, 2011 we had a cash balance of approximately \$11,713,300, working capital of approximately \$13,581,000, and shareholders' equity of approximately \$73,561,500.

During the nine months ended September 30, 2011, we met our immediate cash requirements through existing cash balances, private placements and a public offering of our common stock which raised an aggregate of approximately \$21,167,700, the issuance of notes payable 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 \$7,497,100 and approximately \$28,795,900 for the three and nine months ended September 30, 2011, respectively. The following chart represents the net funds provided by or used in operating, financing and investing activities for each period indicated:

	Nin	Nine Months Ended September 30,				
		2011	2010			
Net cash used in operating activities	\$	(17,522.4) \$	(3,175.7)			
Net cash used in investing activities	\$	(3,127.9) \$	(11,019.1)			
Net cash provided by financing activities	\$	16,516.5 \$	10,993.3			

Operating Activities

Our cash used for operating activities in the nine months ended September 30, 2011 totaled approximately \$17,522,400, which is the sum of (i) our net loss, adjusted for non-cash expenses totaling \$9,481,800 which includes, principally, common stock, common stock options and common stock purchase warrants issued for services rendered and charitable contribution in the aggregate amount of approximately \$8,772,200, depreciation and amortization of approximately \$6,755,000, the write-off of in process research and development of approximately \$1,150,000, amortization of Preferred Stock discount and issuance cost of approximately \$1,903,700, and (ii) changes in operating assets and liabilities of approximately \$6,810,400.

Investing Activities

During the nine months ended September 30, 2011, we spent approximately \$5,453,900 for property and equipment principally related to the construction of Erye's new manufacturing facility.

During the nine months ended September 30, 2010, we spent approximately \$12,510,600 for property and equipment. Erye was building a new production facility and during the nine months ended September 30, 2010, \$10,821,400 was spent on construction. In March 2010, we initiated construction of our stem cell laboratory in Beijing and spent \$852,200 for the nine months ended September 30, 2010. The balance of our capital expenditures was spent on equipping our laboratory in Boston and other Company stem cell operations in China.

Financing Activities

On March 3, 2011, the Company consummated a private placement pursuant to which five persons and entities acquired an aggregate of 2,343,750 shares of Common Stock for an aggregate consideration of \$3,000,000 (purchase price \$1.28 per share). On April 5, 2011, the Company consummated a private placement pursuant to which nine persons and entities acquired an aggregate of 1,244,375 shares of Common Stock for an aggregate consideration of \$1,592,800 (purchase price \$1.28 per share). On June 13, 2011, the Company consummated a private placement pursuant to which one entity acquired 781,250 shares of Common Stock for an aggregate consideration of \$1,000,000 (purchase price \$1.28 per share). On July 6, 2011, three then key Amorcyte stockholders (including a fund managed by a then Amorcyte director) invested an aggregate of \$728,000 in a private placement of 568,750 shares of Common Stock (purchase price \$1.28 per share).

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 \$14,667,000.

For the nine months ended September 30, 2011, the Company's Erye subsidiary borrowed approximately \$10,801,000 in notes payable, and repaid approximately \$17,021,900 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 nine months ended September 30, 2011, the Company's Erye subsidiary borrowed approximately \$6,149,000 in bank loans, repaid approximately \$1,557,000 over the same period.

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.

Liquidity and Capital Requirements Outlook

With our acquisition of a controlling interest in Erye and expansion into China, and our acquisition of PCT and Amorcyte, we have transitioned from being a one-dimensional U.S. service provider with nominal revenues to being a multi-dimensional international biopharmaceutical company with current revenues and operations 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

Erye has substantially completed the construction of its new pharmaceutical manufacturing facility and began transferring its operations in January 2010. The relocation is continuing as the new production lines are completed and receive cGMP certification. Further, an additional two production lines are believed to be needed for growth at a cost of approximately 40 million RMB (approximately \$6,305,900). In January 2010, Suzhou Erye received notification that the SFDA has approved Suzhou Erye's application for cGMP certification to manufacture solvent crystallization sterile penicillin and freeze dried raw sterile penicillin at the new facility. In June 2010, Suzhou Erye passed the government inspection by the SFDA to manufacture penicillin and cephalosporin powder for injection at the new facility. In May 2011, Suzhou Erye received cGMP production certification for freeze dried powder for injection issued by SFDA at the new facility. The facility is fully operational with respect to these lines. The combined production lines now certified by the SFDA were responsible for approximately 99% of Erye's 2010 revenues with two of them responsible for over 90% of Erye's 2010 revenues. Eyre has incurred approximately \$39 million on the new facility, and is substantially complete at September 30, 2011. 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 October 2012 to complete the relocation 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 relocation is completed. We have agreed for a period of approximately another year to reinvest in Erye approximately 90% of the net earnings, in the form of dividends, we would be entitled to receive under the Joint Venture Agreement by reason of our 51% interest in Erye and EET has agreed for a period of approximately another year to loan back to Erye all dividends it is entitled to for use in connection with its construction of the new Erye facility.

We are also engaged in other initiatives that would expand our operations into China including with respect to technology licensing, establishment of stem cell processing and storage capabilities and research and clinical development. In June 2009 we established NeoStem (China) as our wholly foreign-owned subsidiary or WFOE. To comply with PRC's foreign investment regulations regarding stem cell research and development, clinical trials and related activities, we conduct our current stem cell business in the PRC through domestic variable interest entities ("VIEs"). We have incurred and expect to continue to incur substantial expenses in connection with our China activities; provided, however, that the continuation of these activities is being reviewed periodically. Based on, among other things, the changing regulatory environment in China we could conclude that it would be in our best interest to discontinue them.

We expect to rely partly on dividends paid to us by the WFOE under the contracts with the VIEs, and under the Joint Venture Agreement attributable to our 51% ownership interest in Erye, to meet some of our future cash needs with respect to continued operations in China. However, there can be no assurance that the WFOE in China will receive payments uninterrupted or at all as arranged under the contracts with the VIEs. In addition, pursuant to the Joint Venture Agreement that governs the ownership and management of Erye, for 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 (iii) only 6% of the net profit will be distributed to us directly for our operating expenses which has not been paid to date from the 2010 distribution and is in the amount of approximately \$130,000.

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 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

Neither Erye nor our other expansion activities into China are expected to generate sufficient excess cash flow to support our initiatives 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'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%. As of September 30, 2011 the price reduction experienced by Erye on these products was approximately 20%. In 2011 Piperacillin Sodium and Sulbactum Sodium accounted for approximately 1% of sales and Ligustrazine Phosphate accounted for approximately 4% 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. 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") 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, is entering a Phase 2 study for the treatment of acute myocardial infarction (AMI). We are currently recruiting clinical trial sites and expect to start enrolling patients by the end of first quarter 2012. 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.

The Company expects to incur substantial additional costs in connection with its transition to a cell therapy development company. In particular, Amorcyte is currently recruiting clinical trial sites for an expected 34 site, 160 patient, Phase 2 clinical trial for Amorcyte's lead product candidate, AMR-001, for the treatment of AMI. The trial is expected to start enrolling patients by end of the first quarter of 2012 and to cost approximately \$12 million over the first two years and anticipated to cost up to approximately \$17 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. and China, (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 fund the anticipated expansion of our operating activities through 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, the 6% of net profits to which we are entitled from Erye but have not yet received, 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 obtaining such grants. As the Company grows, it may not be eligible for SBIR 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. 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 Amorcyte 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 multiple cell therapies. To that end, in June 2011, we engaged a financial advisor to lead the effort to pursue the possible divesture of our 51% interest in Erye. Marketing efforts are underway which have generated interest from both financial and strategic buyers; however, in addition to the factors set forth below, it is too early to determine whether this will lead to a proposal to purchase at a price and on terms that the Company would consider acceptable or whether, in the event a proposal or proposals on prices and terms acceptable to the Company are received, whether a transaction would be completed.

* Derived from the October 12, 2011 China Healthcare report, published by Deutsche Bank, AG.

Any sale of our interest in Erve would also be subject to a right of first refusal held by Suzhou Erve 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 EET is required to lend back to Erye dividends received by it to finance Erye's move to its new facilities, Erye has recently reported to 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 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 within a reasonable period of time 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 have not yet determined to sell our interest in Erye, and we 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. 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, EET's right of first refusal and the significant time and money that exercise of such right could cause a potential purchaser, the need for any purchaser to negotiate a new Joint Venture Agreement and a shareholder loan repayment schedule with EET if EET does not wish to either sell its interest or exercise its right of first refusal, recent regulatory changes in China which reduce prices that may be charged for certain of Erye's products and limit use of antibiotics, tax or regulatory issues affecting Erye, including those described above and other tax increases described in our filings which will adversely affect Erye going forward, availability of financing for a potential purchaser, and other factors typical of any sale process.

To support our liquidity needs, the Company raised an aggregate of approximately \$5.6 million in private placements of Common Stock from March 2011 to June 2011. In addition, on July 6, 2011, three then key Amorcyte stockholders (including a fund managed by a then Amorcyte director) invested an aggregate of \$728,000 in a private placement of 568,750 shares of Common Stock (purchase price \$1.28 per share) and 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 Company received gross proceeds of \$16,500,000, prior to deducting underwriting discounts and offering expenses payable by the Company, for net proceeds of \$14,667,000. 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 VSEL™ 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.

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 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 September 30, 2011, we had cash and cash equivalents of approximately \$11,713,300 and restricted cash totaling approximately \$1,427,800. 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.

The following table reflects a summary of NeoStem's contractual cash obligations and commitments as of September 30, 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⁾	8,326.6	5,107.7	3,218.9	-	-
Mortgages					
Payable	3,373.4	187.9	410.3	456.4	2,318.8
Operating					
Lease					
Obligations	4,614.9	1,363.6	1,649.7	1,165.4	436.2
	\$ 16,314.9	\$ 6,659.2	\$ 5,278.9	\$ 1,621.8	\$ 2,755.0
(1) Amounts					

(1) Amounts include dividends.

Other significant commitments and contingencies include the following:

- · 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.
- At September 30, 2011, Erye owed EET, the 49% shareholder of Erye, \$20,468,400 which represents dividends paid and loaned back to Erye. At September 30, 2011 the interest rate on this loan was 6.56%. 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. The repayment terms are not specified regarding this loan.

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.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q 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 Quarterly Report on Form 10-Q, 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 at home and abroad, 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 VSELTM 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 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 and the successful 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 in the United States and China 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 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 outcome, timing, enrollment and/or results of any clinical trials; (xii) factors regarding our business and initiatives in China and, generally, regarding doing business in China, including through our variable interest entity structure, including (a) costs related to funding these initiatives, (b) the successful application under Chinese law of the variable interest entity structure to the Company's business, which structure the Company is relying on to conduct its business in China, (c) the ability to integrate the Company and the business operations in China successfully and grow such integrated businesses as anticipated, (d) the need for outside financing to meet capital requirements; and (e) the ability of the Company to realize on its investment in Erye through distributions, divestiture or other strategic alternatives; and (xiii) the other factors discussed elsewhere in this Quarterly Report on Form 10-Q, and the other factors discussed in "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 under the heading "Part I – Item 1A. Risk Factors", our definitive proxy statement filed September 16, 2011 and in other periodic Company filings with the Securities and Exchange Commission (the "SEC"). The Company's filings with the Securities and Exchange Commission 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.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Not applicable to smaller reporting companies.

ITEM 4. 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 quarter ended September 30, 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 the Company's disclosure controls and procedures were 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 Securities 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.

The following material weakness had been identified by management in connection with its assessment as of December 31, 2010, which as of March 31, 2011 the Company had concluded had been fully remediated. The Company had determined that it had a material weakness in its accounting for share-based payment arrangements as a result of errors identified with respect to the Company's accounting for awards to employees and non-employees. Such errors were the result of ineffective controls primarily related to the application of accounting principles generally accepted in the United States. With respect to both employee and non-employee awards, the Company did not timely evaluate the impact of modifications to certain awards and the effect such modifications had, if any, on recognized compensation expense. With respect to non-employee awards, the Company was not consistently subjecting such awards to remeasurement at each reporting period consistent with the guidance in ASC 505-50, *Equity-Based Payments to Non-Employees*. With respect to awards to employees, the expected life used in valuing such awards previously was based on the contractual term of the options rather than through the use of the "simplified" method, as prescribed by the SEC under Staff Accounting Bulletin No. 110, which the Company had determined to be more appropriately evaluated and accounted for in determining whether or not the underlying performance conditions were probable of being achieved. Expense associated with certain awards was initially recognized on a graded vesting basis rather than a straight-line basis consistent with the Company's accounting policy.

The Company had taken steps during 2010 to remediate this weakness, including (1) the adoption of the "simplified" method for estimating the expected term of share-based awards issued to employees; (2) undertaking a complete review of all share-based payment transactions with non-employees to ensure that the appropriate re-measurement considerations were taken into account and were reflected in the financial statements appropriately; (3) the organization of an internal management committee which meets at least quarterly and consists of senior members of the accounting and legal departments, as well as the CEO, to review share-based awards with performance conditions to assess the probability of the performance conditions being achieved; and (4) the implementation of a new share-based management system which will integrate the administration and accounting for the Company's share-based payment arrangements, which is expected to be fully implemented in 2011. The adjustments that were recorded to correct the Company's share-based compensation charges for the weaknesses noted above were not material to its financial position or results of operations for any period during 2010 and 2009.

In its assessment of internal control over financial reporting as of March 31, 2011, the Company had concluded that the above material weakness has been fully remediated.

(b) 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.

NEOSTEM, INC.

PART II

OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

There are no material changes to the disclosures provided in the Company's Annual Report on Form 10-K for the year ended December 31, 2010, except as set forth in Note 13, Commitments and Contingencies, of the Notes to the financial statements included elsewhere herein.

ITEM 1A. RISK FACTORS

As previously reported in the Company's definitive joint proxy statement / prospectus filed with the SEC on September 16, 2011 under the heading "Risk Factors", and as follows:

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 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.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

As previously disclosed, and as follows:

The Company has agreed to issue equity to certain consultants for services. Effective August 16, 2011, pursuant to a three month agreement for consulting services in corporate development and investor communications related activities, the Company agreed to issue 170,000 shares of Restricted Common Stock, vesting as to one-half upon NYSE Amex approval and one half six months after the agreement effective date. Effective October 17, 2011, in connection with the Company's acquisition of Amorcyte, Inc., pursuant to a two year agreement for advisory services as Amorcyte's Chief Medical Officer and in connection with Amorcyte's Phase 2 Clinical Trial for AMR-001, the Company agreed to issue a four year warrant (the "Warrant") to purchase up to 200,000 shares of restricted Common Stock (the "Warrant Shares") at \$0.64 per share (the closing price of the Common Stock on October 17, 2011, the Commencement Date), to vest over the term of the agreement as to 25,000 Warrant Shares on October 17, 2011 and each third monthly anniversary of the Commencement Date through and including July 17, 2013. The issuance of all such securities to consultants was subject to the approval of the NYSE Amex.

The offer and sale of the securities described above were made in reliance upon the exemption from registration provided by Section 4 (2) of 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.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None

ITEM 4. (REMOVED AND RESERVED)

ITEM 5. OTHER INFORMATION

For information with respect to certain recent issuances of equity in unregistered private transactions, see Part II – Item 2, Unregistered Sales of Equity Securities and Use of Proceeds.

ITEM 6. EXHIBITS

(a) Exhibits

Exhibit	Description	Reference
2.1	Agreement and Plan of Merger, dated as of July 13, 2011, by and among NeoStem, Inc., Amorcyte, Inc., Amo Acquisition Company I, Inc. and Amo Acquisition Company II, LLC (1)+	2.1
3.1	Registrant's Amended and Restated Certificate of Incorporation, as amended (as certified March 25, 2011)*	3.1
3.2	Certificate of Amendment to Registrant's Amended and Restated Certificate of Incorporation, filed with the Secretary of State of the State of Delaware on October 14, 2011*	3.2
4.1	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*	4.1

4.2	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 (2)	4.1
4.3	Registration Rights Agreement, dated as of September 28, 2011, by and between the Company and Aspire Capital Fund, LLC (3)	4.1
10.1	Underwriting Agreement, dated July 19, 2011, by and among NeoStem, Inc. and the underwriters named on Schedule I thereto (4)	1.1
10.2	Second Amendment of Lease, executed July 11, 2011 and effective as of July 1, 2011, by and between Vanni Business Park, LLC and Progenitor Cell Therapy, LLC (1)	10.1
10.3	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
10.4	Common Stock Purchase Agreement, dated as of September 28, 2011, by and between the Company and Aspire Capital Fund, LLC (3)	10.1
10.5	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 (2)	10.1
10.6	NeoStem, Inc. 2009 Equity Compensation Plan, as amended (2)	10.2
10.7	NeoStem, Inc. 2009 Non-U.S. Based Equity Compensation Plan, as amended (2)	10.3
10.8	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 (5)	10.95
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 Section 906 of the Sarbanes-Oxley Act of 2002.**	32.1
32.2	Certification of Chief Financial Officer 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 101.LAB	XBRL Taxonomy Extension Definition Linkbase*** XBRL Taxonomy Extension Label Linkbase***	101.DEF 101.LAE
101.PRE	XBRL Taxonomy Extension Presentation Linkbase***	101.PRE

^{*}Filed herewith

^{**}Furnished herewith

^{***}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.

+The schedules to this agreement were omitted from this filing pursuant to Item 601(b)(2) of Regulation S-K. NeoStem will furnish copies of any schedules to the SEC upon request.

- (1) Filed with the SEC on July 14, 2011, 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 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.
- (3) Filed with the SEC on September 30, 2011, 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.
- (4) Filed with the SEC on July 20, 2011, 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.
- (5) 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.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

NEOSTEM, INC. (Registrant)

By: /s/ Robin Smith M.D.

Robin Smith M.D., Chief Executive Officer

Date: November 10, 2011

By: /s/ Larry A. May

Larry A. May, Chief Financial Officer

Date: November 10, 2011

By: /s/ Joseph Talamo

Joseph Talamo, Chief Accounting Officer

Date: November 10, 2011

Delaware

The first State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS FILED FROM AND INCLUDING THE RESTATED CERTIFICATE OR A MERGER WITH A RESTATED CERTIFICATE ATTACHED OF "NEOSTEM, INC." AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

RESTATED CERTIFICATE, CHANGING ITS NAME FROM "PHASE III MEDICAL INC." TO "NEOSTEM, INC.", FILED THE TWENTY-NINTH DAY OF AUGUST, A.D. 2006, AT 5:49 O'CLOCK P.M.

CERTIFICATE OF AMENDMENT, FILED THE EIGHTH DAY OF AUGUST, A.D. 2007, AT 11:08 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF AMENDMENT IS THE NINTH DAY OF AUGUST, A.D. 2007, AT 10 O'CLOCK A.M.

CERTIFICATE OF DESIGNATION, FILED THE FIFTEENTH DAY OF APRIL, A.D. 2009, AT 5:05 O'CLOCK P.M.

CERTIFICATE OF AMENDMENT, FILED THE THIRTIETH DAY OF OCTOBER, A.D. 2009, AT 8:01 O'CLOCK A.M.

CERTIFICATE OF AMENDMENT, FILED THE THIRTIETH DAY OF OCTOBER, A.D. 2009, AT 8:02 O'CLOCK A.M.

/s/ Jeffrey W. Bullock

Jeffrey W. Bullock, Secretary of State

AUTHENTICATION: 8650602

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You may verify this certificate online at corp.delaware.gov/authver.shtml

DATE: 03-25-11

Delaware

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CERTIFICATE OF DESIGNATION, FILED THE THIRTIETH DAY OF OCTOBER, A.D. 2009, AT 8:03 O'CLOCK A.M.

CERTIFICATE OF CORRECTION, FILED THE NINTH DAY OF DECEMBER, A.D. 2009, AT 2:24 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE EIGHTEENTH DAY OF NOVEMBER, A.D. 2010, AT 10:30 O'CLOCK A.M.

CERTIFICATE OF DESIGNATION, FILED THE EIGHTEENTH DAY OF NOVEMBER, A.D. 2010, AT 10:31 O'CLOCK A.M.

CERTIFICATE OF DESIGNATION, FILED THE EIGHTEENTH DAY OF NOVEMBER, A.D. 2010, AT 10:32 O'CLOCK A.M.

/s/ Jeffrey W. Bullock

Jeffrey W. Bullock, Secretary of State

DATE: 03-25-11

AUTHENTICATION: 8650602

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You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware Secretary of State Division of Corporations Delivered 05:49 PM 08/29/2006 FILED 05:49 PM 08/29/2006 SRV 060805812 - 0899444 FILE

AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

PHASE III MEDICAL INC.

Phase III Medical Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Corporation"), does hereby certify as follows:

- 1. The name of the Corporation is Phase III Medical Inc. The date of filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware was September 18, 1980, under the name of Fidelity Medical Services, Inc. The name of the Corporation was changed to Phase III Medical Inc. by filing a Certificate of Amendment to the Certificate of Incorporation with the Secretary of State of Delaware on July 24, 2003. The name of the Corporation is being changed to NeoStem, Inc. in connection with the filing of this Amended and Restated Certificate of Incorporation.
- 2. This Amended and Restated Certificate of Incorporation of Phase III Medical Inc., in the form attached hereto as <u>Exhibit A</u>, has been duly adopted by the directors and the stockholders of the Corporation in accordance with the provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware.
- 3. The Amended and Restated Certificate of Incorporation so adopted reads in its entirety as set forth in Exhibit A attached hereto and is incorporated herein by reference.
 - 4. This Amended and Restated Certificate of Incorporation shall be effective on the date of filing with the Secretary of State of Delaware.

IN WITNESS WHEREOF, the Corporation has caused this Amended and Restated Certificate of Incorporation to be executed by its CEO on this 29th day of August, 2006.

Phase III Medical Inc.

By: /s/ Robin L. Smith

Robin L. Smith Chief Executive Officer

EXHIBIT A

AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

NEOSTEM, INC.

FIRST: The name of the corporation is NeoStem, Inc. (hereinafter sometimes referred to as the "Corporation").

SECOND: The registered office of the Corporation is located at 2711 Centerville Road, Suite 400, Wilmington, New Castle County, Delaware, 19808. The name of its registered agent at such address is The Prentice-Hall Corporation System, Inc.

THIRD: The nature of the business and the objects and purposes to be transacted, promoted and carried on are to do any or all of the things herein mentioned as fully and to the same extent as natural persons might or could do, and in any part of the world, viz:

To purchase, take, own, hold, deal in, mortgage or otherwise lien and to lease, sell, exchange, convey, transfer or in any manner whatever dispose of real property, within or without the State of Delaware.

To manufacture, purchase or otherwise acquire and to hold, own, mortgage or otherwise lien, pledge, lease, sell, assign, exchange, transfer or in any manner dispose of, and to invest, deal and trade in and with goods, wares, merchandise and personal property of any and every class and description, within or without the State of Delaware.

To acquire the good will, rights and property and to undertake the whole or any part of the assets and liabilities of any person, firm, association or corporation; to pay for the same in cash, the stock of this company, bonds or otherwise; to hold or in any manner to dispose of the whole or any part of the property so purchased; to conduct in any lawful manner the whole or any part of any business so acquired and to exercise all the powers necessary or convenient in and about the conduct and management of such business.

To guarantee, purchase or otherwise acquire, hold, sell, assign, transfer, mortgage, pledge or otherwise dispose of shares of the capital stock, bonds or other evidences of indebtedness created by other corporations and while the holder of such stock to exercise all the rights and privileges of ownership, including the right to vote thereon, to the same extend as a natural person might or could do.

To purchase or otherwise acquire, apply for, register, hold, use, sell or in any manner dispose of and to grant licenses or other rights in and in any manner deal with patents, inventions, improvements, processes, formulas, trademarks, trade names, rights and licenses secured under letters patent, copyrights or otherwise.

To enter into, make and perform contracts of every kind for any lawful purpose, with any person, firm, association or corporation, town, city, county, body politic, state, territory, government or colony or dependency thereof.

To borrow money for any of the purposes of the corporation and to draw, make, accept, endorse, discount, execute, issue, sell, pledge or otherwise dispose of promissory notes, drafts, bills of exchange, warrants, bonds, debentures and other negotiable or non-negotiable, transferable or non-transferable instruments and evidences of indebtedness and to secure the payment thereof and the interest thereon by mortgage or pledge, conveyance or assignment in trust of the whole or any part of the property of the corporation at the time owned or thereafter acquired.

To purchase, hold, sell and transfer the shares of its capital stock.

To have one or more offices and to conduct any or all of its operations and business and to promote its object, within or without the State of Delaware, without restriction as to place or amount.

To carry on any other business in connection therewith.

To do any or all of the things herein set forth as principal, agent, contractor, trustee or otherwise, alone or in company with others.

The objects and purposes specified herein shall be regarded as independent objects and purposes and, except where otherwise expressed, shall be in no way limited or restricted by reference to or inference from the terms of any other clause or paragraph of this certificate of incorporation.

FOURTH:

- A. The total number of shares of stock which the Corporation shall have authority to issue is 505,000,000 shares, of which 500,000,000 shares are designated as common stock, having a par value of \$.001 per share ("Common Stock") and 5,000,000 shares are designated as preferred stock, \$.01 par value per share ("Preferred Stock").
- B. <u>Preferred Stock</u>. The designations and the powers, preferences and rights, and the qualifications, limitations or restrictions thereof of the Preferred Stock are as follows:

The Board of Directors is authorized, subject to limitations prescribed by law and the provisions of this Article FOURTH, to provide for the issuance of the Preferred Stock in series and by filing a Certificate pursuant to the Delaware General Corporation Law to establish the number of shares to be included in each such series. The Preferred Stock may be issued either as a class without series, or as so determined from time to time by the Board of Directors, either in whole or in part in one or more series, each series to be appropriately designated by a distinguishing number, letter or title prior to the issue of any shares thereof. Whenever the term "Preferred Stock" is used in this Article FOURTH, it shall be deemed to mean and include Preferred Stock issued as a class without series, or one or more series thereof, or both, unless the context shall otherwise require. There is hereby expressly granted to the Board of Directors of the Corporation authority, subject to the limitations provided by law, to fix the voting power, the designations, and the relative preferences, powers, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the shares of each series of said Preferred Stock and the variations in the relative powers, rights, preferences and limitations as between series, and to increase the number of shares constituting each series, and to decrease such number of shares (but not to less than the number of outstanding shares of the series), in the resolution or resolutions adopted by the Board of Directors providing for the issue of said Preferred stock.

The authority of the Board of Directors of the corporation with respect to each series shall include, but shall not be limited to, the authority to determine the following:

- 1. The designation of the series;
- 2. The number of shares initially constituting such series;
- 3. The increase, and the decrease to a number not less than the number of the outstanding shares of such series, of the number of shares constituting such series theretofore fixed;
- 4. The rate or rates and the times and conditions under which dividends on the shares of such series shall be paid, and, (i) if such dividends are payable in preference to, or in relation to, the dividends payable on any other class or classes of stock, the terms and conditions of such payment, and (ii) if such dividends shall be cumulative, the date or dates from and after which they shall accumulate;
- 5. Whether or not the shares of such series shall be redeemable, and, if such shares shall be redeemable, the terms and conditions of such redemption, including, but not limited to, the date or dates upon or after which such shares shall be redeemable and the amount per share which shall be payable upon such redemption, which amount may vary under conditions and at different redemption dates;
- 6. The amount payable on the shares of such series in the event of the dissolution of, or upon any distribution of the assets of, the Corporation;
- 7. Whether or not the shares of such series may be convertible into, or exchangeable for, shares of any other class or series and the price or prices and the rates of exchange and the terms of any adjustments to be made in connection with such conversion or exchange;
- 8. Whether or not the shares of such series shall have voting rights in addition to the voting rights provided by law, and, if such shares shall have such voting rights, the terms and conditions thereof, including but not limited to, the right of the holders of such shares to vote as a separate class either alone or with the holders of shares of one or more other series of Preferred Stock and the right to have more or less than one vote per share;
- 9. Whether or not a purchase fund shall be provided for the shares of such series, and, if such a purchase fund shall be provided, the terms and conditions thereof;

- 10. "Whether or not a sinking fund shall be provided for the redemption of the shares of such series and if such a sinking fund shall be provided, the terms and conditions thereof; and
- 11. Any other powers, preferences and relative, participating, optional, or other special rights, and qualifications, limitations or restrictions thereof, as shall not be inconsistent with the provisions of this Article FOURTH or the limitations provided by law.
- C. <u>Common Stock</u>. The designations and the powers, preferences and rights, and the qualifications, limitations or restrictions thereof of the Common Stock are as follows:
 - 1. Subject to the rights of the Preferred stockholders, the holders of the Common Stock shall be entitled to receive such dividends as may be declared thereon by the Board of Directors of the Corporation in its discretion, from time to time, out of any funds or assets of the Corporation lawfully available for the payment of such dividends.
 - 2. In the event of any liquidation, dissolution or winding up of the Corporation, or any reduction of its capital, resulting in a distribution of its assets to its stockholders, whether voluntary or involuntary, then, after there shall have been paid or set apart for the holders of the Preferred Stock the full preferential amounts to which they are entitled, the holders of the Common Stock shall be entitled to receive as a class, pro rata, the remaining assets of the Corporation available for distribution to its stockholders.
 - 3. For any and all purposes of this Certificate of Incorporation, neither the merger or consolidation of the Corporation into or with any other corporation, nor the merger or consolidation of any other corporation into or with the Corporation, nor a sale, transfer or lease of all or substantially all of the assets of the Corporation, or any other transaction or series of transactions having the effect of a reorganization shall be deemed to be a liquidation, dissolution or winding-up of the Corporation.
 - 4. Except as otherwise expressly provided by, law or in a resolution of the Board of Directors providing voting rights to the holders of the Preferred Stock, the holders of the Common Stock shall possess exclusive voting power for the election of directors and for all other purposes and each holder thereof shall be entitled to one vote for each share thereof.
- D. The Corporation is hereby reducing the number of shares of Common Stock issued and outstanding by means of a reverse stock split. Effective at 9:00 a.m. (the "Effective Time") on August 31, 2006 (the "Effective Date"), each ten (10) shares of authorized Common Stock issued and outstanding or held in the treasury of the Corporation immediately prior to the Effective Time shall automatically be reclassified and changed into one (1) validly issued, fully paid and nonassessable share of Common Stock (a "New Share"). Each holder of record of shares of Common Stock so reclassified and changed shall at the Effective Time automatically become the record owner of the number of New Shares as shall result from such reclassification and change. Each such record holder shall be entitled to receive, upon the surrender of the certificate or certificates representing the shares of Common Stock so reclassified and changed at the office of the transfer agent of the Corporation in such form and accompanied by such documents, if any, as may be prescribed by the transfer agent of the Corporation, a new certificate or certificates representing the number of New Shares of which he or she is the record owner after giving effect to the provisions of this Article FOURTH. The Corporation shall not issue fractional New Shares. Stockholders entitled to receive fractional New Shares shall, in lieu thereof, be rounded up to the next whole share of Common Stock held by such holder immediately prior to the Effective Time which have not been classified into a whole New Share.

FIFTH: Whenever a compromise or arrangement is proposed between this corporation and its creditors or any class of them and/or between this corporation and its stockholders or any class of them, any Court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this corporation or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for this corporation under the provisions of Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this corporation under the provisions of Section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this corporation, as the case may be, to be summoned in such a manner as the Court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this corporation as a consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if made, be binding upon all of the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this corporation, as the case may be, and also on this corporation.

SIXTH: The corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that he is or was a director, officer, employee, or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceedings, had no reasonable cause to believe his conduct was unlawful. The termination of any action, upon a plea of nolo contendere or equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was lawful.

SEVENTH: The Board of Directors shall have the power to make, alter or repeal the By-laws.

EIGHTH: The corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation in the manner now or hereafter prescribed by law and all rights conferred on officers, directors and stockholders herein are granted subject to this reservation.

NINTH: The personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director is hereby eliminated, provided that this Article shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders; (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (iii) under section 174 of Title 8 of the Delaware Code, or (iv) for any transaction from which the director derived an improper personal benefit. This article shall not eliminate or limit the liability of a director for any act or omission occurring prior to the date this Article first became effective.

TENTH: The Series B Convertible Redeemable Preferred Stock, shall be designated the following relative rights, preferences and limitations as follows:

Section 1. <u>Designation and Amount; Rank</u>

There is hereby established a series of preferred stock which is designated "Series B Convertible Redeemable Preferred Stock" (referred to herein as "Series B Convertible Redeemable Preferred Stock"). The number of shares which will constitute such series shall be Eight Hundred Twenty-Five Thousand (825,000). The Series B Convertible Redeemable Preferred Stock shall rank pari passu with the Common Stock with respect to the payment of dividends and to the distribution of assets upon liquidation, dissolution or winding up.

Section 2. <u>Dividends</u>.

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

Section 3. <u>General, Class and Series Voting Rights.</u>

Except as otherwise provided by law, each share of the Series B Convertible Redeemable Preferred Stock shall have the same voting rights as ten (10) shares of Common Stock and the holders of the Series B Convertible Redeemable Preferred Stock and the Common Stock shall vote together as one class on all matters.

The foregoing voting provisions shall not apply if, at or prior to the time when the act with respect to which such vote would otherwise be required shall be effected, all outstanding shares of Series B Convertible Redeemable Preferred Stock shall have been converted into Common Stock or shall have been redeemed or sufficient funds shall have been deposited in trust to effect such redemption.

Section 4. Redemption.

- (A) The shares of Series B Convertible Redeemable Preferred Stock are not redeemable prior to March 31, 2000. At any time on or after such date through June 30, 2000, the shares of Series B Convertible Redeemable Preferred Stock are redeemable, in whole or in part, at the option of the "Special Director" of the corporation, at the redemption price per share of \$.10, if the "Trigger Conditions" have not been met.
 - (B) For purposes of this paragraph, the "Trigger Condition" shall mean that:
 - (a) the closing bid prices of the Common Stock of the corporation as reported by Nasdaq (or otherwise as set forth below) is greater than \$2.00 per share during a period of any ten (10) consecutive trading days and
 - (b) either
 - (i) the corporation's net revenues for any fiscal quarter through the fiscal quarter ended March 31, 2000 are \$1 million or more (as computed by the corporation's regular independent public accountants); or
 - (ii) the corporation has received net receipts of not less than \$2.5 million from the sale of its Common Stock from the date hereof through March 31, 2000.

For the purpose of any computation under the foregoing paragraph, the closing price per share of Common Stock on any date shall be the reported last sale price, regular way, or, in case no such reported sale takes place on such day, the average of the reported closing bid and asked prices, regular way, in either case as reported on the New York Stock Exchange Composite Tape or, if the Common Stock is not listed or admitted to trading on the New York Stock Exchange at such time, on the principal national securities exchange on which the Common Stock is listed or admitted to trading, or, if not listed or admitted to trading on any national securities exchange, on the Nasdaq National Market or, if the Common Stock is not quoted on the Nasdaq National Market, the average of the closing bid prices on such day in the over-the-counter market as reported by Nasdaq or, if bid prices for the Common Stock on each such day shall not have been reported through Nasdaq, the average of the bid prices for such date as furnished by any New York Stock Exchange member firm regularly making a market in the Common Stock selected from time to time by the Board of Directors of the corporation for such purpose or, if no such quotations are available, the fair market value of the Common Stock as determined by a New York Stock

Exchange member firm regularly making a market in the Common Stock selected from time to time by the Board of Directors of the corporation for such purpose.

- (C) For purposes of this paragraph, the "Special Director" mean James Fyfe or his successor as director of the corporation if such successor has been approved by Fyfe. So long as any shares of the Class B Preferred Stock are outstanding, through June 30, 2000, the corporation shall nominate to the Board of Directors Fyfe or, if Fyfe so determines, Fyfe's designee.
- (D) In the event the corporation shall elect to redeem the shares of Series B Convertible Redeemable Preferred Stock following the Trigger Condition, the corporation shall give notice to the holders of record of shares of the Series B Convertible Redeemable Preferred Stock being so redeemed, not less than 30 nor more than 60 days prior to such redemption, by first class mail, postage prepaid, at their addresses as shown on the stock registry books of the corporation, that said shares are being redeemed, provided that without limiting the obligation of the corporation hereunder to give the notice provided in this Section 5(D), the failure of the corporation to give such notice shall not invalidate any corporate action by the corporation. Each such notice shall state: (i) the redemption date; (ii) that all of the shares of Series B Convertible Redeemable Preferred Stock are to be redeemed; (iii) that the redemption price is \$.10 per share; (iv) the place or places where certificates for such shares are to be surrendered for payment of the redemption price; and (v) that such holder does not have the right to convert such shares into Common Stock.
- (E) Notice having been mailed as aforesaid, from and after the applicable redemption date (unless default shall be made by the corporation in providing money for the payment of the redemption price), said shares shall no longer be deemed to be outstanding, and all rights of the holders thereof as stockholders of the corporation (except the right to receive from the corporation the redemption price) shall cease. Upon surrender of the certificates for any shares so redeemed (properly endorsed or assigned for transfer, if the Board of Directors of the corporation shall so require and the notice shall so state), such shares shall be redeemed by the corporation at the redemption price aforesaid.
- (F) Any shares of Series B Convertible Redeemable Preferred Stock which shall at any time have been redeemed shall, after such redemption, have the status of authorized but unissued shares of Preferred Stock, without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors of the corporation.

Section 5. Conversion.

(A) The holder of any share of Series B Convertible Redeemable Preferred Stock shall have the right, at such holder's option (but not if such share is called for redemption), exercisable on or after September 30, 2000, to convert such share into ten (10) fully paid and non-assessable shares of Common Stock (the "Conversion Rate"). The Conversion Rate shall be subject to adjustment as set forth below.

- In order to exercise the conversion privilege, the holder of shares of Series B Convertible Redeemable Preferred Stock shall surrender the (B) certificates representing such shares, accompanied by transfer instruments satisfactory to the corporation and sufficient to transfer the Series B Convertible Redeemable Preferred Stock being converted to the corporation free of any adverse interest, at any of the offices or agencies maintained for such purpose by the corporation ("Conversion Agent") and shall give written notice to the corporation at such Conversion Agent that the holder elects to convert such shares. Such notice shall also state the names, together with addresses, in which the certificates for shares of Common Stock which shall be issuable on such conversion shall be issued. As promptly as practicable after the surrender of such shares of Series B Convertible Redeemable Preferred Stock as aforesaid, the corporation shall issue and shall deliver at such Conversion Agent to such holder, or on his written order, a certificate for the number of full shares of Common Stock issuable upon the conversion of such shares in accordance with the provisions hereof. Balance certificates will be issued for the remaining shares of Series B Convertible Redeemable Preferred Stock in any case in which fewer than all of the shares of Series B Convertible Redeemable Preferred Stock represented by a certificate are converted. Each conversion shall be deemed to have been effected immediately prior to the close of business on the date on which shares of Series B Convertible Redeemable Preferred Stock shall have been so surrendered and such notice received by the corporation as aforesaid, and the persons in whose names any certificates for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holders of record of the Common Stock represented thereby at such time, unless the stock transfer books of the corporation shall be closed on the date on which shares of Series B Convertible Redeemable Preferred Stock are so surrendered for conversion, in which event such conversion shall be deemed to have been effected immediately prior to the close of business on the next succeeding day on which such stock transfer books are open, and such persons shall be deemed to have become such holders of record of the Common Stock at the close of business on such later day. In either circumstance, such conversion shall be at the Conversion Rate in effect on the date upon which such share shall have been surrendered and such notice received by the corporation.
- (C) In the case of any share of Series B Convertible Redeemable Preferred Stock which is converted after any record date with respect to the payment of a dividend on the Series B Convertible Redeemable Preferred Stock and on or prior to the Dividend Payment Date related to such record date, the dividend due on such Dividend Payment Date shall be payable on such Dividend Payment Date to the holder of record of such share as of such preceding record date notwithstanding such conversion.

- (D) No fractional shares or scrip representing fractions of shares of Common Stock shall be issued upon conversion of any shares of Series B Preferred Stock. Instead of any fractional interest in a share of Common Stock which would otherwise be deliverable upon the conversion of a share of Series B Convertible Redeemable Preferred Stock, the corporation shall pay to the holder of such share of Series B Convertible Redeemable Preferred Stock an amount in cash (computed to the nearest cent, with one-half cent being rounded upward) equal to such fraction multiplied by the reported closing price (as defined above) of the Common Stock at the close of business on the day on which such share or shares of Series B Convertible Redeemable Preferred Stock are surrendered for conversion in the manner set forth above, or if such date is not a trading date, on the next succeeding trading date. If more than one certificate representing shares of Series B Convertible Redeemable Preferred Stock shall be surrendered for conversion at one time by the same holder, the number of full shares issuable upon conversion thereof shall be computed on the basis of the aggregate number of shares of Series B Convertible Redeemable Preferred Stock represented by such certificates, or the specified portions thereof to be converted, so surrendered.
 - (E) The Conversion Rate shall be adjusted from time to time as follows:
- (i) In case outstanding shares of Common Stock shall be subdivided into a greater number of shares of Common Stock and the Series B Convertible Redeemable Preferred Stock is not similarly subdivided, the Conversion Rate in effect at the opening of business on the day following the day upon which such subdivision becomes effective shall be proportionately increased, and, conversely, in case outstanding shares of Common Stock shall each be combined into a smaller number of shares of Common Stock and the Series B Convertible Redeemable Preferred Stock is not similarly subdivided, the Conversion Rate in effect at the opening of business on the day following the day upon which such combination becomes effective shall be proportionately decreased, such reduction or increase, as the case may be, to become effective immediately after the opening of business on the day following the day upon which such subdivision or combination becomes effective.
- (ii) Whenever the Conversion Rate is adjusted as herein provided, (x) the corporation shall promptly file with any Conversion Agent a certificate of a firm of independent public accountants setting forth the Conversion Rate after such adjustment and setting forth a brief statement of the facts requiring such adjustment, and the manner of computing the same, which certificate shall be conclusive evidence of the correctness of such adjustment, and (y) a notice stating that the Conversion Rate has been adjusted and setting forth the adjusted Conversion Rate shall forthwith be given by the corporation to any Conversion Agent and mailed by the corporation to each holder of shares of Series B Convertible Redeemable Preferred Stock at their last address as the same appears on the books of the corporation.
- (F) In case of any consolidation of the corporation with, or merger of the corporation into, any other entity (other than a merger or consolidation in which the corporation is the continuing corporation) or any sale or conveyance to another corporation of the property of the corporation as an entirety or substantially as an entirety, or in the case of a statutory exchange of securities with another corporation, or any reclassification of shares, the Conversion Rate shall not be adjusted but each holder of a share of Series B Convertible Redeemable Preferred Stock then outstanding shall have the right thereafter to convert such share only into the kind and amount of securities, cash and other property which such holder would have owned or have been entitled to receive immediately after such consolidation, merger, sale, conveyance, exchange or reclassification had such share of Series B Convertible Redeemable Preferred Stock been converted immediately prior to such consolidation, merger, sale, conveyance, exchange or reclassification. Provision shall be made in any such consolidation, merger, sale, conveyance, exchange or reclassification Rate which shall be as nearly equivalent as may be practicable to the adjustments provided for in Section (E). The above provisions shall similarly apply to successive consolidations, mergers, sales, conveyances, exchange or reclassification.

For purposes of this Section 5, "Common Stock" includes any stock of any class of the corporation which has no preference in respect of dividends or of amounts payable in the event of any voluntary or involuntary liquidation, dissolution or winding up of the corporation and which is not subject to redemption by the corporation. However, subject to the provisions of paragraph (F) above, shares issuable on conversion of shares of Series B Convertible Redeemable Preferred Stock shall include only shares of the class designated as Common Stock of the corporation on the date of the initial issuance of Series B Convertible Redeemable Preferred Stock by the corporation, or shares of any class or classes resulting from any reclassification or reclassifications thereof and which have no preference in respect of dividends or of amounts payable in the event of any voluntary or involuntary liquidation, dissolution or winding up of the corporation and which are not subject to redemption by the corporation.

In case:

- (i) the corporation shall declare a stocks split, stock dividend (or any other distribution) on its Common Stock that would cause an adjustment to the Conversion Rate of the Series B Convertible Redeemable Preferred Stock pursuant to the terms of subparagraph (i) of Paragraph (E) above: or
- (ii) of any reclassification of the Common Stock of the corporation (other than a subdivision or combination of its outstanding shares of Common Stock), or of any consolidation, merger or share exchange to which the corporation is a party and for which approval of any stockholders of the corporation is required, or of the sale or conveyance, of the property of the corporation as an entirety or substantially as an entirety; or
 - (iii) of the voluntary or involuntary dissolution, liquidation or winding up of the corporation;

then the corporation shall cause to be filed with any Conversion Agent, and shall cause to be mailed to all holders of shares of Series B Convertible Redeemable Preferred Stock at each such holder's last address as the same appears on the books of the corporation, at least 20 days (or 10 days in any case specified in clause (i) above) prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, rights or warrants, or, if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distribution, rights or warrants are to be determined, or (y) the date on which such reclassification, consolidation, merger, share exchange, sale, conveyance, dissolution, liquidation or winding up is expected to become effective, and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, share exchange, sale, conveyance, dissolution, liquidation or winding up. Neither the failure to give such notice nor any defect therein shall affect the legality or validity of the proceedings described in clauses (i) through (iii) above.

The corporation will pay any and all documentary stamp or similar issue or transfer taxes payable in respect of the issue or delivery of shares of Common Stock on conversions of shares of Series B Convertible Redeemable Preferred Stock pursuant hereto; provided, however, that the corporation shall not be required to pay any tax which may be payable in respect of any transfer involved in the issue or delivery of shares of Common Stock in a name other than that of the holder of the shares of Series B Convertible Redeemable Preferred Stock to be converted and no such issue or delivery shall be made unless and until the person requesting such issue or delivery has paid to the corporation the amount of any such tax or has established, to the satisfaction of the corporation, that such tax has been paid.

The corporation covenants that all shares of Common Stock which may be delivered upon conversions of shares of Series B Convertible Redeemable Preferred Stock will upon delivery be duly and validly issued and fully paid and non-assessable, free of all liens and charges and not subject to any pre-emptive rights. The corporation further covenants that, if necessary, it shall reduce the par value of the Common Stock so that all shares of Common Stock delivered upon conversion of shares of Series B Convertible Redeemable Preferred Stock are fully paid and non-assessable.

The corporation covenants that it will at all times reserve and keep available, free from pre-emptive rights, out of its authorized but unissued shares of Common Stock or its issued shares of Common; Stock held in its treasury, or both, for the purpose of effecting conversions of shares of Series B Preferred Stock, the full number of shares of Common Stock deliverable upon the conversion of all outstanding shares of Series B Convertible Redeemable Preferred Stock not theretofore converted. For purposes of this reservation of Common Stock, the number of shares of Common Stock which shall be deliverable upon the conversion of all outstanding shares of Series B Convertible Redeemable Preferred Stock shall be computed as if at the time of computation all outstanding shares of Series B Convertible Redeemable Preferred Stock were held by a single holder. The issuance of shares of Common Stock upon conversion of shares of Series B Convertible Redeemable Preferred Stock is authorized in all respects.

Section 6. <u>Liquidation</u>.

In the event of any voluntary or involuntary dissolution, liquidation or winding up of the corporation (for the purposes of this Section 6, a "Liquidation"), after any distribution of assets is made to the holders of any other class or series of stock that ranks prior to the Series B Convertible Redeemable Preferred Stock in respect of distributions upon the Liquidation of the corporation, the holder of each share of Series B Convertible Redeemable Preferred Stock then outstanding shall be entitled to be paid out of the assets of the corporation available for distribution to its stockholders, an amount on a pari passu basis equal to ten times the amount per share distributed to the holders of the Common Stock.

The voluntary sale, conveyance, lease, exchange or transfer of the property of the corporation as an entirety or substantially as an entirety, or the merger or consolidation of the corporation into or with any other corporation, or the merger of any other corporation into the corporation, or any purchase or redemption of some or all of the shares of any class or series of stock of the corporation, shall not be deemed to be a Liquidation of the corporation for the purposes of the Section 6 (unless in connection therewith the Liquidation of the corporation is specifically approved).

The holder of any shares of Series B Convertible Redeemable Preferred Stock shall not be entitled to receive any payment owed for such shares under this Section 6 until such holder shall cause to be delivered to the corporation (i) the certificate or certificates representing such shares of Series B Convertible Redeemable Preferred Stock and (ii) transfer instrument or instruments satisfactory to the corporation and sufficient to transfer such shares of Series B Convertible Redeemable Preferred Stock to the corporation free of any adverse interest. As in the case of the redemption price, no interest shall accrue on any payment upon Liquidation after the due date thereof.

After payment of the full amount of the liquidating distribution to which they are entitled, the holders of shares of the Series B Convertible Redeemable Preferred Stock will not be entitled to any further participation in any distribution of assets by the corporation.

Section 7. <u>Payments.</u>

The corporation may provide funds for any payment of the redemption price for any shares of Series B Convertible Redeemable Preferred Stock or any amount distributable with respect to any Series B Convertible Redeemable Preferred Stock under Section 6 hereof by depositing such funds with a bank or trust company selected by the corporation having a net worth of at least \$50,000,000 and organized under the laws of the United States or any state thereof, in trust for the benefit of the holder of such shares of Series B Convertible Redeemable Preferred Stock under arrangements providing irrevocably for payment upon satisfaction of any conditions to such payment by the holder of such shares of Series B Convertible Redeemable Preferred Stock which shall reasonably be required by the corporation. The corporation shall be entitled to make any deposit of funds contemplated by this section 7 under arrangements designated to permit such funds to generate interest or other income for the corporation, and the corporation shall be entitled to receive all interest and other income earned by any funds while they shall be deposited as contemplated by this section 7, provided that the corporation shall maintain on deposit funds sufficient to satisfy all payments which the deposit arrangement shall have been established to satisfy if the conditions precedent to the disbursement of any funds deposited by the corporation pursuant to this Section 7 shall not have been satisfied within two years after the establishment of the trust for such funds, then (i) such funds shall be returned to the corporation upon its request; (ii) after such return, such funds shall be free of any trust which shall have been impressed upon them; (iii) the person entitled to the payment for which been originally intended shall have the right to look only to the corporation for such payment, subject to applicable escheat laws; and (iv) the trustee which shall have held such funds shall be relieved of any responsibility for such of such funds to the corporat

Any payment which may be owed for the payment of the redemption price for any shares of Series B Convertible Redeemable Preferred Stock pursuant to Section 4 or the payment of any amount distributable with respect to the shares of Series B Convertible Redeemable Preferred Stock under Section 6 shall be deemed to have been "paid or properly provided for" upon the earlier to occur of: (i) the date upon which funds sufficient to make such payment shall be deposited in a manner contemplated by the preceding paragraph or (ii) the date upon which a check payable to the person entitled to receive such payment shall be delivered to such person or mailed to such person at the address of such person then appearing on the books of the corporation.

Section 8. <u>Status of Reacquired Shares.</u>

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

Section 9. <u>Preemptive Rights</u>.

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

Section 10. <u>Legal Holidays</u>.

In any case where any Dividend Payment Date, redemption date or the last date on which a holder of Series B Convertible Redeemable Preferred Stock has the right to convert such holder's shares of Series B Convertible Redeemable Preferred Stock shall not be a Business Day (as defined below), then (notwithstanding any other provision of this Certificate of Designation of the Series B Preferred Stock) payment of a dividend due or a redemption price or conversion of the shares of Series B Convertible Redeemable Preferred Stock need not be made on such date, but may be made on the next succeeding Business Day with the same force and effect as if made on the Dividend Payment Date or redemption date or the last day for conversion, provided that, for purposes of computing such payment, no interest shall accrue for the period from and after such Dividend Payment Date or redemption date, as the case may be. As used in this Section 10, "Business Day" means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in the City of New York or the State of New Jersey are authorized or obligated by law or executive order to close.

State of Delaware Secretary of State Division of Corporations Delivered 11:09 AM 08/08/2007 FILED 11:08 AM 08/08/2007 SRV 070900970 - 0899444 FILE

CERTIFICATE OF AMENDMENT

OF

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

NEOSTEM, INC.

Pursuant to Section 242 of the General Corporation Law of the State of Delaware, NeoStem, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), does hereby certify as follows:

- 1. The name of the Corporation is NeoStem, Inc. The date of filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware was September 18, 1980, under the name of Fidelity Medical Services, Inc. The name of the Corporation was changed to Corniche Group Incorporated by filing a Certificate of Amendment to the Certificate of Incorporation with the Secretary of State of Delaware on September 28, 1995. The name of the Corporation was changed to Phase III Medical Inc. by filing a Certificate of Amendment to the Certificate of Incorporation with the Secretary of State of Delaware on July 24, 2003. The name of the Corporation was changed to NeoStem, Inc. by filing an Amended and Restated Certificate of Incorporation with the Secretary of State of Delaware on August 29, 2006.
- 2. The Board of Directors of the Corporation has duly adopted a resolution pursuant to Section 242 of the General Corporation Law of the State of Delaware setting forth a proposed amendment to the Amended and Restated Certificate of Incorporation of the Corporation and declaring said amendment to be advisable. The requisite stockholders of the Corporation have duly approved said proposed amendment in accordance with Section 242 of the General Corporation Law of the State of Delaware. The amendment amends the Amended and Restated Certificate of Incorporation of the Corporation as follows:

Article FOURTH is hereby amended by adding a Section E which reads as follows:

"1. Effective upon the filing of this Certificate of Amendment of the Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware (the "Effective Time"), the shares of Common Stock issued and outstanding immediately prior to the Effective Time and the shares of Common Stock issued and held in the treasury of the Corporation immediately prior to the Effective Time are reclassified into a smaller number of shares such that each ten (10) shares of issued Common Stock immediately prior to the Effective Time is reclassified into one (1) share of Common Stock. Notwithstanding the immediately preceding sentence, no fractional shares shall be issued and, in lieu thereof, any person who would otherwise be entitled to a fractional share of Common Stock as a result of the reclassification shall be entitled to be rounded up to the next whole share of Common Stock.

- 2. Each stock certificate that, immediately prior to the Effective Time, represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent that number of whole shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate shall have been reclassified (as well as the right to receive a whole share in lieu of a fractional share of Common Stock), provided, however, that each person of record holding a certificate that represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall receive, upon surrender of such certificate, a new certificate evidencing and representing the number of whole shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate shall have been reclassified (including the right to receive a whole share in lieu of a fractional share of Common Stock)."
 - 3. This Certificate of Amendment shall be effective August 9, 2007 at 10:00 a.m.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its President on this 8th day of August,

2007:

By: /s/ Robin L. Smith

Name: Robin L. Smith Title: President

State of Delaware Secretary of State Division of Corporations Delivered 05:19 PM 04/15/2009 FILED 05:05 PM 04/15/2009 SRV 090366790 - 0899444 FILE

CERTIFICATE OF DESIGNATION of SERIES D CONVERTIBLE REDEEMABLE PREFERRED STOCK of NEOSTEM, INC. (Pursuant to Section 151(g) of the Delaware General Corporation Law)

It is hereby certified that:

- 1. The name of the corporation is NeoStem, Inc. (hereinafter called the "Corporation").
- 2. The Certificate of Incorporation of the Corporation, as amended (the "<u>Certificate of Incorporation</u>") authorizes the issuance of 5,000,000 shares of Preferred Stock, par value \$.01 per share, and expressly vests in the Board of Directors of the Corporation the authority to issue any or all of said shares in one or more series and by resolution to fix the designation and number of shares of the class and series acted upon, the full or limited voting powers or the denial of voting powers, and the relative rights, preferences and limitations and other distinguishing characteristics of each such class and series to be issued.
- 3. Pursuant to such authority, the following resolutions were duly adopted by the Board of Directors of the Corporation as required by Subsection 151(g) of the Delaware General Corporation Law on March 13, 2009 and March 29, 2009 creating a series of Series D Convertible Redeemable Preferred Stock.

RESOLVED, that pursuant to the authority granted to and vested in the Board of Directors of this Corporation in accordance with the provisions of the Certificate of Incorporation, the Board of Directors hereby creates a series of Preferred Stock, par value \$.01 per share, of the Corporation and hereby states the designation and number of shares, and fixes the relative rights, preferences, and limitations thereof (in addition to the provisions set forth in the Certificate of Incorporation, which are applicable to the Preferred Stock of all series) as follows:

ARTICLE THIRTEENTH SERIES D CONVERTIBLE REDEEMABLE PREFERRED STOCK, PAR VALUE \$.01 PER SHARE

Section 1. Designation and Amount; Rank

There is hereby established a series of preferred stock which is designated "Series D Convertible Redeemable Preferred Stock" (referred to herein as "Series D Preferred Stock"). The number of shares which will constitute such series shall be one million six hundred thousand (1,600,000). The Series D Preferred Stock shall rank senior to all of the Corporation's capital stock with respect to the payment of dividends and to the distribution of assets upon liquidation, dissolution or winding up.

Section 2. Dividends.

From and after the date of the issuance of any shares of Series D Preferred Stock, dividends at the rate per annum of \$1.25 per share shall accrue on such shares of Series D Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D Preferred Stock) (the "Accruing Dividends"). Accruing Dividends shall accrue from day to day, whether or not declared, and shall be cumulative; provided however, that except as set forth in the following sentence of this Section 2 or Section 6, such Accruing Dividends shall be payable in cash on April 9th of each year beginning on April 9, 2010 provided that such shares of Series D Preferred Stock remain issued and outstanding on each such date. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series D Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series D Preferred Stock in an amount at least equal to the greater of (i) the amount of the aggregate Accruing Dividends then accrued on such share of Series D Preferred Stock and not previously paid and (ii) (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series D Preferred Stock as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of Series D Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series D Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Series D Original Issue Price (as defined below); provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series D Preferred Stock pursuant to this Section 2 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series D Preferred Stock dividend. The "Series D Original Issue Price" shall mean \$32.50 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D Preferred Stock.

Section 3. General, Class and Series Voting Rights.

Except as otherwise provided by law, each share of the Series D Preferred Stock shall not have any voting rights.

Section 4. Redemption.

(A) If by October 31, 2009 the affirmative vote of the number of holders of the Corporation's stock required pursuant to the Amended and Restated By-Laws of the Corporation and subject to the rules of the NYSE Amex to convert the shares of Series D Preferred Stock into Common Stock pursuant to Section 5(A) has not been achieved, the Company shall automatically redeem all shares of Series D Preferred Stock at the redemption price per share of \$12.50 plus the Accruing Dividends as of such date.

- (B) In the event of a redemption of the shares of Series D Preferred Stock, the Corporation shall give notice to the holders of record of shares of the Series D Preferred Stock being so redeemed by first class mail, postage prepaid, at their addresses as shown on the stock registry books of the Corporation, that said shares have been redeemed, provided that without limiting the obligation of the Corporation hereunder to give the notice provided in this Section 4(B), the failure of the Corporation to give such notice shall not invalidate any corporate action by the Corporation. Each such notice shall state: (i) the redemption date; (ii) that all of the shares of Series D Preferred Stock have been redeemed; (iii) that the redemption price is \$12.50 plus the Accruing Dividends as of such date per share; and (iv) the place or places where certificates for such shares are to be surrendered for payment of the redemption price.
- (C) Notice having been mailed as aforesaid, from and after the redemption date, said shares shall no longer be deemed to be outstanding, and all rights of the holders thereof as stockholders of the Corporation (except the right to receive from the Corporation the redemption price) shall cease. Upon surrender of the certificates for any shares so redeemed (properly endorsed or assigned for transfer, if the Board of Directors of the Corporation shall so require and the notice shall so state), such shares shall be redeemed by the Corporation at the redemption price aforesaid.
- (D) Any shares of Series D Preferred Stock which shall at any time have been redeemed shall, after such redemption, have the status of authorized but unissued shares of Preferred Stock, without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors of the Corporation.

Section 5. Conversion.

- (A) Upon the affirmative vote of the number of holders of the Corporation's stock required pursuant to the Amended and Restated By-Laws of the Corporation and subject to the rules of the NYSE Amex (such date, the "Conversion Date"), each share of Series D Preferred Stock shall automatically convert into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing (i) the Series D Original Issue Price by (ii) \$1.25 (the "Conversion Rate"). The Conversion Rate shall be subject to adjustment as provided below.
- (B) Each holder of shares of Series D Preferred Stock shall surrender the certificates representing such shares, accompanied by transfer instruments satisfactory to the Corporation and sufficient to transfer the Series D Preferred Stock being converted to the Corporation free of any adverse interest, at any of the offices or agencies maintained for such purpose by the Corporation ("Conversion Agent"), together with a written notice to the Corporation at such Conversion Agent stating the names, together with addresses, in which the certificates for shares of Common Stock which shall be issuable on such conversion shall be issued. As promptly as practicable after the surrender of such shares of Series D Preferred Stock as aforesaid, the Corporation shall issue and shall deliver at such Conversion Agent to such holder a certificate for the number of full shares of Common Stock issuable upon the conversion of such shares in accordance with the provisions hereof. Each conversion shall be deemed to have been effected immediately prior to the close of business on the Conversion Date, and the persons in whose names any certificates for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holders of record of the Common Stock represented thereby at such time. Any such conversion shall be at the Conversion Rate in effect on the Conversion Date.
- (C) In the case of any share of Series D Preferred Stock which is converted after any record date with respect to the payment of a dividend on the Series D Preferred Stock and on or prior to the Dividend Payment Date related to such record date, the dividend due on such Dividend Payment Date shall be payable on such Dividend Payment Date to the holder of record of such share as of such preceding record date notwithstanding such conversion.

- (D) No fractional shares or scrip representing fractions of shares of Common Stock shall be issued upon conversion of any shares of Series D Preferred Stock. Instead of any fractional interest in a share of Common Stock which would otherwise be deliverable upon the conversion of a share of Series D Preferred Stock, the Corporation shall round the number of shares of Common Stock down to the nearest whole share. If more than one certificate representing shares of Series D Preferred Stock shall be surrendered for conversion at one time by the same holder, the number of full shares issuable upon conversion thereof shall be computed on the basis of the aggregate number of shares of Series D Preferred Stock represented by such certificates, or the specified portions thereof to be converted, so surrendered.
 - (E) The Conversion Rate shall be adjusted from time to time as follows:
- (i) In case outstanding shares of Common Stock shall be subdivided into a greater number of shares of Common Stock and the Series D Preferred Stock is not similarly subdivided, the Conversion Rate in effect at the opening of business on the day following the day upon which such subdivision becomes effective shall be proportionately increased, and, conversely, in case outstanding shares of Common Stock shall each be combined into a smaller number of shares of Common Stock and the Series D Preferred Stock is not similarly subdivided, the Conversion Rate in effect at the opening of business on the day following the day upon which such combination becomes effective shall be proportionately decreased, such reduction or increase, as the case may be, to become effective immediately after the opening of business on the day following the day upon which such subdivision or combination becomes effective.
- (ii) Whenever the Conversion Rate is adjusted as herein provided, (x) the Corporation shall promptly file with any Conversion Agent a certificate of a firm of independent public accountants setting forth the Conversion Rate after such adjustment and setting forth a brief statement of the facts requiring such adjustment, and the manner of computing the same, which certificate shall be conclusive evidence of the correctness of such adjustment, and (y) a notice stating that the Conversion Rate has been adjusted and setting forth the adjusted Conversion Rate shall forthwith be given by the Corporation to any Conversion Agent and mailed by the Corporation to each holder of shares of Series D Preferred Stock at their last address as the same appears on the books of the Corporation.
- (F) In case of any consolidation of the Corporation with, or merger of the Corporation into, any other entity (other than a merger or consolidation in which the Corporation is the continuing Corporation) or any sale or conveyance to another Corporation of the property of the Corporation as an entirety or substantially as an entirety, or in the case of a statutory exchange of securities with another Corporation, or any reclassification of shares, the Conversion Rate shall not be adjusted but each holder of a share of Series D Preferred Stock then outstanding shall have the right thereafter to convert such share only into the kind and amount of securities, cash and other property which such holder would have owned or have been entitled to receive immediately after such consolidation, merger, sale, conveyance, exchange or reclassification had such share of Series D Preferred Stock been converted immediately prior to such consolidation, merger, sale, conveyance, exchange or reclassification. Provision shall be made in any such consolidation, merger, sale, conveyance, exchange or reclassification for adjustments in the Conversion Rate which shall be as nearly equivalent as may be practicable to the adjustments provided for in Section (E). The above provisions shall similarly apply to successive consolidations, mergers, sales, conveyances, exchange or reclassification.

For purposes of this Section 5, "Common Stock" includes any stock of any class of the Corporation which has no preference in respect of dividends or of amounts payable in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation and which is not subject to redemption by the Corporation. However, subject to the provisions of paragraph (F) above, shares issuable on conversion of shares of Series D Preferred Stock shall include only shares of the class designated as Common Stock of the Corporation on the date of the initial issuance of Series D Preferred Stock by the Corporation, or shares of any class or classes resulting from any reclassification or reclassifications thereof and which have no preference in respect of dividends or of amounts payable in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation and which are not subject to redemption by the Corporation.

In case:

- (i) the Corporation shall declare a stocks split, stock dividend (or any other distribution) on its Common Stock that would cause an adjustment to the Conversion Rate of the Series D Preferred Stock pursuant to the terms of subparagraph (i) of Paragraph (E) above; or
- (ii) of any reclassification of the Common Stock of the Corporation (other than a subdivision or combination of its outstanding shares of Common Stock), or of any consolidation, merger or share exchange to which the Corporation is a party and for which approval of any stockholders of the Corporation is required, or of the sale or conveyance, of the property of the Corporation as an entirety or substantially as an entirety; or
 - (iii) of the voluntary or involuntary dissolution, liquidation or winding up of the Corporation;

then the Corporation shall cause to be filed with any Conversion Agent, and shall cause to be mailed to all holders of shares of Series D Preferred Stock at each such holder's last address as the same appears on the books of the Corporation, at least 20 days (or 10 days in any case specified in clause (i) above) prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, rights or warrants, or, if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distribution, rights or warrants are to be determined, or (y) the date on which such reclassification, consolidation, merger, share exchange, sale, conveyance, dissolution, liquidation or winding up is expected to become effective, and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, share exchange, safe, conveyance, dissolution, liquidation or winding up. Neither the failure to give such notice nor any defect therein shall affect the legality or validity of the proceedings described in clauses (i) through (iii) above.

The Corporation will pay any and all documentary stamp or similar issue or transfer taxes payable in respect of the issue or delivery of shares of Common Stock on conversions of shares of Series D Preferred Stock pursuant hereto; provided, however, that the Corporation shall not be required to pay any tax which may be payable in respect of any transfer involved in the issue or delivery of shares of Common Stock in a name other than that of the holder of the shares of Series D Preferred Stock to be converted and no such issue or delivery shall be made unless and until the person requesting such issue or delivery has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

The Corporation covenants that all shares of Common Stock which may be delivered upon conversions of shares of Series D Preferred Stock will upon delivery be duly and validly issued and fully paid and non-assessable, free of all liens and charges and not subject to any pre-emptive rights. The Corporation further covenants that, if necessary, it shall reduce the par value of the Common Stock so that all shares of Common Stock delivered upon conversion of shares of Series D Preferred Stock are fully paid and non-assessable.

The Corporation covenants that it will at all times reserve and keep available, free from pre-emptive rights, out of its authorized but unissued shares of Common Stock or its issued shares of Common; Stock held in its treasury, or both, for the purpose of effecting conversions of shares of Series D Preferred Stock, the full number of shares of Common Stock deliverable upon the conversion of all outstanding shares of Series D Preferred Stock not theretofore converted. For purposes of this reservation of Common Stock, the number of shares of Common Stock which shall be deliverable upon the conversion of all outstanding shares of Series D Preferred Stock shall be computed as if at the time of computation all outstanding shares of Series D Preferred Stock were held by a single holder. The issuance of shares of Common Stock upon conversion of shares of Series D Preferred Stock is authorized in all respects.

Section 6. Liquidation.

In the event of any voluntary or involuntary dissolution, liquidation or winding up of the Corporation (for the purposes of this Section 6, a "Liquidation"), prior to any distribution of assets to the holders of the Series B Preferred Stock and any other class or series of stock of the Corporation, the holder of each share of Series D Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders an amount per share equal to \$12.50 plus the Accruing Dividends (the "Series D Preference"). Following the payment of the Series D Preference and the payment of any distributions required to be made to the holders of the Series B Preferred Stock in respect of distributions upon the Liquidation of the Corporation, the holder of each share of Series D Preferred Stock then outstanding shall be entitled to be paid out of the remaining assets of the Corporation available for distribution an amount on a pari passu basis equal to ten (10) times the amount per share distributed to the holders of the Common Stock.

The voluntary sale, conveyance, lease, exchange or transfer of the property of the Corporation as an entirety or substantially as an entirety, or the merger or consolidation of the Corporation into or with any other Corporation, or the merger of any other Corporation into the Corporation, or any purchase or redemption of some or all of the shares of any class or series of stock of the Corporation, shall not be deemed to be a Liquidation of the Corporation for the purposes of the Section 6 (unless in connection therewith the Liquidation of the Corporation is specifically approved).

The holder of any shares of Series D Preferred Stock shall not be entitled to receive any payment owed for such shares under this Section 6 until such holder shall cause to be delivered to the Corporation (i) the certificate or certificates representing such shares of Series D Preferred Stock and (ii) transfer instrument or instruments satisfactory to the Corporation and sufficient to transfer such shares of Series D Preferred Stock to the Corporation free of any adverse interest. As in the case of the redemption price, no interest shall accrue on any payment upon Liquidation after the due date thereof.

After payment of the full amount of the liquidating distribution to which they are entitled, the holders of shares of the Series D Preferred Stock will not be entitled to any further participation in any distribution of assets by the Corporation.

Section 7. Status of Reacquired Shares.

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

Section 8. Preemptive Rights.

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

Section 9. Legal Holidays.

In any case where any Dividend Payment Date, redemption dale or the last date on which a holder of Series D Preferred Stock has the right to convert such holder's shares of Series D Preferred Stock shall not be a Business Day (as defined below), then (notwithstanding any other provision of this Certificate of Designation of the Series D Preferred Stock) payment of a dividend due or a redemption price or conversion of the shares of Series D Preferred Stock need not be made on such date, but may be made on the next succeeding Business Day with the same force and effect as if made on the Dividend Payment Date or the last day for conversion, provided that, for purposes of computing such payment, no interest shall accrue for the period from and after such Dividend Payment Date or redemption date, as the case may be. As used in this Section 9, "Business Day" means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in the City of New York or the State of New Jersey are authorized or obligated by law or executive order to close.

FURTHER RESOLVED, that the statements contained in the foregoing resolutions creating and designating the said Series D issue of Preferred Stock and fixing the number, voting rights, powers, preferences and relative, optional, participating, and other special rights and the qualifications, limitations, restrictions, and other distinguishing characteristics thereof shall, upon the effective date of said series, be deemed to be included in and be a part of the Certificate of incorporation of the Corporation pursuant to the provisions of Sections 104 and 151 of the General Corporation Law of the State of Delaware.

FURTHER RESOLVED, that the effective time and date of the series herein certified shall be April 9, 2009.

IN WITNESS WHEREOF, NEOSTEM, INC. has caused this certificate to be signed by its President, this 9th day of April 2009.

NEOSTEM, INC.

By: /s/ Robin Smith

Name: Robin Smith

Title: Chief Executive Officer

State of Delaware Secretary of State Division of Corporations Delivered 08:01 AM 10/30/2009 FILED 08:01 AM 10/30/2009 SRV 090977299 - 0899444 FILE

CERTIFICATE OF AMENDMENT

OF

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

NEOSTEM, INC.

Pursuant to Section 242 of the General Corporation Law of the State of Delaware, NeoStem, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), does hereby certify as follows:

- 1. The name of the Corporation is NeoStem, Inc. The date of filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware was September 18, 1980, under the name of Fidelity Medical Services, Inc. The name of the Corporation was changed to Corniche Group Incorporated by filing a Certificate of Amendment to the Certificate of Incorporation with the Secretary of State of the State of Delaware on September 28, 1995. The name of the Corporation was changed to Phase III Medical Inc. by filing a Certificate of Amendment to the Certificate of Incorporation with the Secretary of State of Delaware on July 24, 2003. The name of the Corporation was changed to NeoStem, Inc. by filing an Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware on August 29, 2006.
- 2. The Board of Directors of the Corporation has duly adopted a resolution pursuant to Section 242 of the General Corporation Law of the State of Delaware setting forth a proposed amendment to the Amended and Restated Certificate of Incorporation of the Corporation and declaring said amendment to be advisable. The requisite stockholders of the Corporation have duly approved said proposed amendment in accordance with Section 242 of the General Corporation Law of the State of Delaware. The amendment amends the Amended and Restated Certificate of Incorporation of the Corporation as follows:

Section A of Article FOURTH is hereby deleted in its entirety and the following language is hereby inserted in its stead.

"A. The total number of shares of stock which the Corporation shall have authority to issue is 520,000,000 shares, of which 500,000,000 shares are designated as common stock, having a par value of \$0.001 per share ("Common Stock") and 20,000,000 share are designated as preferred stock, \$0.01 par value per share ("Preferred Stock")."

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its Chief Executive Officer on this 29th day of October, 2009

NEOSTEM, INC.

By: /s/ Robin L. Smith

Name: Robin L. Smith Title: Chief Executive Officer

State of Delaware Secretary of State Division of Corporations Delivered 08:01 AM 10/30/2009 FILED 08:02 AM 10/30/2009 SRV 090977300 - 0899444 FILE

CERTIFICATE OF AMENDMENT

OF

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

NEOSTEM, INC.

Pursuant to Section 242 of the General Corporation Law of the State of Delaware, NeoStem, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), does hereby certify as follows:

- 1. The name of the Corporation is NeoStem, Inc. The date of filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware was September 18, 1980, under the name of Fidelity Medical Services, Inc. The name of the Corporation was changed to Corniche Group Incorporated by filing a Certificate of Amendment to the Certificate of Incorporation with the Secretary of State of the State of Delaware on September 28, 1995. The name of the Corporation was changed to Phase III Medical Inc. by filing a Certificate of Amendment to the Certificate of Incorporation with the Secretary of State of Delaware on July 24, 2003. The name of the Corporation was changed to NeoStem, Inc. by filing an Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware on August 29, 2006.
- 2. The Board of Directors of the Corporation has duly adopted a resolution pursuant to Section 242 of the General Corporation Law of the State of Delaware setting forth a proposed amendment to the Amended and Restated Certificate of Incorporation of the Corporation and declaring said amendment to be advisable. The requisite stockholders of the Corporation have duly approved said proposed amendment in accordance with Section 242 of the General Corporation Law of the State of Delaware. The amendment amends the Amended and Restated Certificate of Incorporation of the Corporation as follows:

The following text is hereby added to the Corporation's Amended and Restated Certificate of Incorporation as Article ELEVENTH:

"ELEVENTH: For the management of the business and for the conduct of the affairs of the Corporation, and for further definition, limitation and regulation of the powers of the Corporation and its Directors and stockholders:

"A. The number of Directors constituting the Corporations' Board of Directors shall be determined by the Board of Directors, from time to time. The Directors constituting the Corporation's Board of Directors, other than those who may be elected by the holders of any classes or series of stock having a preference over the Common Stock as to dividends or upon liquidation, shall be classified, with respect to the time for which they severally hold office, into three classes, as nearly equal in number as possible, as shall be determined by the Board of Directors consistent with the terms of this Article ELEVENTH. The Board shall have the authority to assign members of the board already in office to such classes at the time the amendment becomes effective. One class shall be assigned a term expiring at the annual meeting of stockholders to be held in 2011, and another class shall be assigned a term expiring at the annual meeting of stockholders to be held in 2011, with each class to hold office until its successor is elected and qualified. At each annual meeting of the stockholders of the Corporation commencing with the election in 2010, the successors of the class of Directors whose term expires at that meeting shall be elected to hold office for a term expiring at the annual meeting of stockholders held in the third year following the year of their election.

"B. Except as otherwise fixed by or pursuant to provisions hereof relating to the rights of the holders of any class or series of stock having a preference over Common Stock as to dividends or upon liquidation to elect additional Directors under specified circumstances, newly created directorships resulting from any increase in the number of Directors and any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other cause shall be filled by the affirmative vote of a majority of the remaining Directors then in office, even though less than a quorum of the Board of Directors, or by a sole remaining Director. Any Director appointed by the Board of Directors in accordance with the preceding sentence shall hold office and shall be elected for the remainder of the full term of the class of Directors in which the new directorship was created or the vacancy occurred and until such Director's successor shall have been elected and qualified."

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its Chief Executive Officer on this 29th day of October, 2009.

NEOSTEM, INC.

By: /s/ Robin L. Smith

Name: Robin L. Smith Title: Chief Executive Officer

State of Delaware Secretary of State Division of Corporations Delivered 08:01 AM 10/30/2009 FILED 08:03 AM 10/30/2009 SRV 090977301 – 0899444 FILE

CERTIFICATE OF DESIGNATIONS

of

SERIES C CONVERTIBLE PREFERRED STOCK

of

NEOSTEM, INC.

Pursuant to Section 151(g) of the General Corporation Law of the State of Delaware

NEOSTEM, INC., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), does hereby certify that, pursuant to the authority conferred on the Board of Directors of the Corporation by the Certificate of Incorporation, as amended and restated to date (the "Certificate of Incorporation"), of the Corporation and in accordance with Section 151(g) of the General Corporation Law of the State of Delaware, the Board of Directors of the Corporation adopted the following resolution establishing a series of 8,177,512 shares of Preferred Stock of the Corporation designated as "Series C Convertible Preferred Stock:"

RESOLVED, that pursuant to the authority conferred on the Board of Directors of this Corporation by the Certificate of Incorporation, a series of Preferred Stock, par value \$0.01 per share, of the Corporation is hereby established and created, and that the designation and number of shares thereof and the voting and other powers, preferences and relative, participating, optional or other rights of the shares of such series and the qualifications, limitations and restrictions thereof are as follows:

1. **Designation and Amount.** The shares of such series created hereby shall be designated as Series C Convertible Preferred Stock (the "Series C Preferred Stock") and the authorized number of shares constituting such series shall be 8,177,512. The agreed stated value of each of the Series C Preferred Stock shall be \$1.00 per share (the "Agreed Stated Value"). The Series C Preferred Stock shall, with respect to dividend rights, have the entitlements set forth herein and shall, with respect to rights on liquidation, dissolution and winding up of the affairs of the Corporation, rank senior to all classes of Common Stock of the Corporation and, subject to the rights of any series of Preferred Stock outstanding or that may from time to time come into existence providing that the Series C Preferred Stock shall rank junior or senior thereto, other equity securities of the Corporation. Such number of shares may be decreased by resolution of the Board of Directors of the Corporation; provided, however, that no decrease shall reduce the number of shares of Series C Preferred Stock to less than the number of shares then issued and outstanding.

2. Dividends and Distributions.

(a) *Amount*. The holders of shares of Series C Preferred Stock shall be entitled to receive an annual dividend of 5% of the Agreed Stated Value (the "Annual Dividend"), payable annually on the first day of January (the "Annual Dividend Payment Date"). Payment of the Annual Dividend may be either in cash or in kind as determined by the Board of Director. In the event that the Annual Dividend Payment Date shall fall due on a Saturday, Sunday or legal holiday in the State of Delaware, the dividend due on such date shall be paid on the next day thereafter that is not a Saturday, Sunday or legal holiday in the State of Delaware. The Annual Dividend shall be cumulative and shall begin to accrue on outstanding shares of Series C Preferred Stock from and after ______, 2009 (the "Series C Issuance Date") on a daily basis computed on the basis of a 365-day year and compounded annually whether or not the Corporation shall have assets legally available therefore.

- (b) Limitation on Other Dividends. So long as any shares of Series C Preferred Stock shall be outstanding, no dividend shall be declared or paid or set apart for payment on any Junior Stock, unless there shall also have been declared and paid or set apart for payment on the shares of Series C Preferred Stock, all accrued and unpaid Annual Dividends. In the event that full cumulative dividends on the shares of Series C Preferred Stock have not been declared and paid or set apart for payment when due, the Corporation shall not declare or pay or set apart for payment any dividends or make any other distributions on or make payment on account of the purchase, redemption or other retirement of any Junior Stock, until full cumulative dividends on the shares of Series C Preferred Stock shall have been paid or declared and set apart for payment; provided, however, that the foregoing shall not apply to (i) any dividend payable solely in shares of any class or series of Junior Stock or (ii) the purchase, redemption or conversion of shares of any Junior Stock, in exchange solely for shares of Junior Stock.
- (c) *Timing.* Accrued but unpaid Annual Dividends shall cumulate as of each Annual Dividend Payment Date on which they first become payable whether or not the Corporation shall have assets legally available for the payment thereof, and shall be payable as provided in this Section 2.1 and/or as further provided herein.
- (d) *Waiver.* To the fullest extent permitted by law and notwithstanding anything contained herein to the contrary, the holders of the outstanding shares of Series C Preferred Stock may waive any Annual Dividend that such holders shall be entitled to receive under this Section 2 by the affirmative vote or written consent of the holders of at least a majority of the shares of Series C Preferred Stock then outstanding.
- (e) Form of Payment. Dividends shall be payable at the option of the Corporation either in cash or in kind in shares of Series C Preferred Stock or in kind in shares of Common Stock. Any payment in shares of Series C Preferred Stock shall be based on the Agreed Stated Value. Any payment in kind in shares of Common Stock shall be made at the Market Value on the dividend payment date. "Market Value," on a given date, shall mean the average of the closing sales price of a share of the Company's Common Stock on the American Stock Exchange, or on its principal securities exchange or trading market if other than the American Stock Exchange, on each trading day (excluding each day on which there is no closing price) for a period of ten (10) consecutive trading days (excluding each day on which there is no closing price) immediately prior to such date.
- (f) Junior Stock. "Junior Stock" shall mean (i) the Corporation's common stock ("Common Stock"), and (ii) each other class or series of the Corporation's capital stock, whether common, preferred or otherwise, the terms of which do not provide that shares of such class or series shall rank senior to or on a parity with shares of the Series C Preferred Stock as to distributions of dividends and distributions upon the liquidation, winding-up and dissolution of the Corporation.

3. Liquidation Preference.

- (a) In the event of a (i) liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, (ii) a sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation of all or substantially all the assets of the Corporation for cash or (iii) voluntary or involuntary bankruptcy of the Corporation (subparagraphs (i), (ii) and (iii) being collectively referred to as a "Liquidation Event"), after payment or provision for payment of debts and other liabilities of the Corporation, the holders of the Series C Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, whether such assets are capital, surplus, or earnings, before and in preference to any payment or declaration and setting apart for payment of any amount shall be made in respect of any Junior Stock, an amount equal to \$1.125 per share plus an amount equal to all accrued dividends unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon. In the case of property or in the event that any such securities are restricted, the value of such property or securities shall be determined by agreement between the Corporation and the holders of a majority of the shares of Series C Preferred Stock then outstanding. If upon any Liquidation Event, whether voluntary or involuntary, the assets to be distributed to the holders of the Series C Preferred Stock shall be insufficient to permit the payment to such stockholders of the full preferential amounts aforesaid, then all of the assets of the Corporation to be distributed shall be so distributed ratably to the holders of the Series C Preferred Stock held. All shares of Series C Preferred Stock shall rank as to payment upon the occurrence of any Liquidation Event senior to the Common Stock as provided herein and, unless the terms of such other series shall provide otherwise, senior to all oth
- (b) The holder of any shares of Series C Preferred Stock shall not be entitled to receive any payment owed for such shares under this Section 3 until such holder shall cause to be delivered to the Corporation (i) the certificate or certificates representing such shares of Series C Preferred Stock (or a lost stock affidavit and indemnity agreement in form reasonably acceptable to the Corporation with respect to such shares) and (ii) transfer instrument or instruments satisfactory to the Corporation and sufficient to transfer such shares of Series C Preferred Stock to the Corporation free of any adverse interest. No interest shall accrue on any payment upon a Liquidation Event after the due date thereof. After payment of the full amount of the liquidating distribution to which they are entitled, the holders of shares of the Series C Preferred Stock will not be entitled to any further participation in any distribution of assets by the Corporation.
- (c) Upon the completion of the distribution required by subparagraph (a) of this Section 3 and subject to any other distribution that may be required with respect to any series of Preferred Stock that may from time to time come into existence, the remaining assets of the Corporation available for distribution to stockholders shall be distributed among the holders of the Common Stock, pro rata based on the number of shares held by each such holder.

4. Conversion Rights.

- (a) Conversion, Per Share Conversion Price. Each share of the Series C Preferred Stock shall be convertible, at the option of the holder thereof upon exercise in accordance with Section 4(b), without the payment of additional consideration, into such number of fully paid and nonassessable shares of the Corporation's Common Stock equal to the quotient obtained by dividing the Agreed Stated Value plus all accrued dividends unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, by \$0.90 (the "Conversion Price") (as such amount may be adjusted from time to time pursuant to this Certificate of Designations, the "Per Share Conversion Price").
- (b) Conversion Procedures. The optional conversion of shares of Series C Preferred Stock in accordance with Section 4(a) may be effected by a holder of record thereof by making written demand for such conversion (a "Conversion Demand") upon the Corporation at its principal executive offices setting forth therein: (i) the number of shares to be converted; (ii) the certificate or certificates representing such shares; and (iii) the proposed date of such conversion, which shall be a business day not less than five (5) nor more than thirty (30) days after the date of such Conversion Demand (the "Conversion Date"). Within five days of receipt of the Conversion Demand, the Corporation shall give written notice (a "Conversion Notice") to such holder setting forth therein: (i) the address of the place or places at which the certificate or certificates representing the shares so to be converted are to be surrendered; and (ii) whether the certificate or certificates to be surrendered are required to be indorsed for transfer or accompanied by a duly executed stock power or other appropriate instrument of assignment and, if so, the form of such endorsement or power or other instrument of assignment, including a medallion seal. The Conversion Notice shall be sent by first class mail, postage prepaid, to such holder at such holder's address as may be set forth in the Conversion Demand. On or before the Conversion Date, the holder of Series C Preferred Stock to be converted shall surrender the certificate or certificates representing such shares, duly indorsed for transfer accompanied by a duly executed stock power or other instrument of assignment, including a medallion seal if the Conversion Notice so provides, to the Corporation at any place set forth in such notice or, if no such place is so set forth, at the principal executive offices of the Corporation. As soon as practicable after the Conversion Date and the surrender of the certificate or certificates representing such shares, the Corporation shall issue and deliver to such holder, or its nominee, a certificate or certificates for the number of whole shares of Common Stock issuable upon such conversion in accordance with the provisions hereof. Upon surrender of certificates of Series C Preferred Stock to be converted in part, the Corporation shall issue a balance certificate representing the number of full shares of Series C Preferred Stock not so converted.
- (c) Effect of Conversion. All outstanding shares of Series C Preferred Stock to be converted pursuant to the Conversion Notice shall, on the Conversion Date, be converted into Common Stock for all purposes, notwithstanding the failure of the holder thereof to surrender any certificate representing such shares on or prior to such date. On and after the Conversion Date, (i) no such share of Series C Preferred Stock shall be deemed to be outstanding or be transferable on the books of the Corporation or the stock transfer agent, if any, for the Series C Preferred Stock, and (ii) the holder of such shares, as such, shall not be entitled to receive any dividends or other distributions (other than any accrued dividends unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon), to receive notices or to vote such shares or to exercise or to enjoy any other powers, preferences or rights in respect thereof, other than the right, upon surrender of the certificate or certificates representing such shares, to receive a certificate or certificates for the number of shares of Common Stock into which such shares shall have been converted. On the Conversion Date, all such shares of Series C Preferred Stock shall be retired and canceled and shall not be reissued.

- (d) Adjustments to Conversion Price.
- (A) The Conversion Price shall be adjusted from time to time as follows:
- (i) In case the Corporation shall pay or make a dividend or other distribution on any class of capital stock of the Corporation in Common Stock, the Conversion Price in effect at the opening of business on the day following the date fixed for the determination of stockholders entitled to receive such dividend or other distribution shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the number of shares of Common Stock outstanding immediately prior to any Common Stock dividend or distribution and the denominator shall be the sum of such number of shares of Common Stock outstanding immediately prior to any Common Stock dividend or distribution plus the total number of shares constituting such Common Stock dividend or other distribution, such reduction to become effective immediately after the opening of business on the day following the date fixed for such determination. For the purposes of this subparagraph (i), the number of shares of Common Stock at any time outstanding shall not include shares held in the treasury of the Corporation. The Corporation will not pay any dividend or make any distribution on shares of Common Stock held in the treasury of the Corporation.
- (ii) In case outstanding shares of Common Stock shall be subdivided into a greater number of shares of Common Stock and the Series C Preferred Stock is not similarly subdivided, the Conversion Price in effect at the opening of business on the day following the day upon which such subdivision becomes effective shall be proportionately reduced, and, conversely, in case outstanding shares of Common Stock shall each be combined into a smaller number of shares of Common Stock and the Series C Preferred Stock is not similarly combined, the Conversion Price in effect at the opening of business on the day following the day upon which such combination becomes effective shall be proportionately increased, such reduction or increase, as the case may be, to become effective immediately after the opening of business on the day following the day upon which such subdivision or combination becomes effective.
- (iii) No adjustment in the Conversion Price shall be required unless such adjustment would require an increase or decrease of at least 1% of such price; provided, however, that any adjustments which by reason of this subparagraph (iii) are not required to be made shall be carried forward and taken into account in any subsequent adjustment.

- (iv) Whenever the Conversion Price is adjusted as herein provided, (x) the Corporation shall promptly file with any Conversion Agent a certificate of a firm of independent public accountants setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment, and the manner of computing the same, which certificate shall be conclusive evidence of the correctness of such adjustment, and (y) a notice stating that the Conversion Price has been adjusted and setting forth the adjusted Conversion Price shall forthwith be given by the Corporation to any Conversion Agent and mailed by the Corporation to each holder of shares of Series C Preferred Stock at their last address as the same appears on the books of the Corporation.
- (B) In case of any consolidation of the Corporation with, or merger of the Corporation into, any other entity (other than a merger or consolidation in which the Corporation is the continuing corporation) or any sale or conveyance to another corporation of the property of the Corporation as an entirety or substantially as an entirety, or in the case of a statutory exchange of securities with another corporation, or any reclassification of shares, the Conversion Price shall not be adjusted but each holder of a share of Series C Preferred Stock then outstanding shall have the right thereafter to convert such share only into the kind and amount of securities, cash and other property which such holder would have owned or have been entitled to receive immediately after such consolidation, merger, sale, conveyance, exchange or reclassification had such share of Series C Preferred Stock been converted immediately prior to such consolidation, merger, sale, conveyance, exchange or reclassification. Provision shall be made in any such consolidation, merger, sale, conveyance, exchange or reclassification for adjustments in the Conversion Price which shall be as nearly equivalent as may be practicable to the adjustments provided for in Section (A). The above provisions shall similarly apply to successive consolidations, mergers, sales, conveyances, exchange or reclassification.

For purposes of this Section 4, "Common Stock" includes any stock of any class of the Corporation which has no preference in respect of dividends or of amounts payable in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation and which is not subject to redemption by the Corporation. However, subject to the provisions of paragraph (B) above, shares issuable on conversion of shares of Series C Preferred Stock shall include only shares of the class designated as Common Stock of the Corporation on the date of the initial issuance of Series C Preferred Stock by the Corporation, or shares of any class or classes resulting from any reclassification or reclassifications thereof and which have no preference in respect of dividends or of amounts payable in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation and which are not subject to redemption by the Corporation

In case;

- (i) the Corporation shall declare a stock split, stock dividend (or any other distribution) on its Common Stock that would cause an adjustment to the Conversion Price of the Series C Preferred Stock pursuant to the terms of subparagraph (i) of Paragraph (A) above; or
- (ii) the Corporation shall authorize the granting to the holders of its Common Stock of rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any other rights; or

- (iii) of any reclassification of the Common Stock of the Corporation (other than a subdivision or combination of its outstanding shares of Common Stock), or of any consolidation, merger or share exchange to which the Corporation is a party and for which approval of any stockholders of the Corporation is required, or of the sale or conveyance, of the property of the Corporation as an entirety or substantially as an entirety; or
 - (iv) of the voluntary or involuntary dissolution, liquidation or winding up of the Corporation;

then the Corporation shall cause to be filed with any Conversion Agent, and shall cause to be mailed to all holders of shares of Series C Preferred Stock at each such holder's last address as the same appears on the books of the Corporation, at least 20 days (or 10 days in any case specified in clause (i) or (ii) above) prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, rights or warrants, or, if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distribution, rights or warrants are to be determined, or (y) the date on which such reclassification, consolidation, merger, share exchange, sale, conveyance, dissolution, liquidation or winding up is expected to become effective, and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, share exchange, sale, conveyance, dissolution, liquidation or winding up. Neither the failure to give such notice nor any defect therein shall affect the legality or validity of the proceedings described in clauses (i) through (iv) above.

(C) All shares of Series C Preferred Stock converted as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares, including the rights, if any, to receive notices, to vote and to further accrual of dividends, if any, shall immediately cease and terminate upon such conversion (except only the right of the holder, thereof to receive shares of the Common Stock and cash in lieu of actual shares in exchange therefor pursuant to the term hereof).

5. Mandatory Conversion.

(a) *Trigger Events*. Beginning any time after the Series C Issuance Date, if the closing price of the sale of shares of Common Stock on the NYSE Amex (or the Corporation's principal securities exchange, if other than the NYSE Amex) exceed \$2.50 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), for a period of twenty (20) out of thirty (30) consecutive trading days, and if the dollar value of the trading volume of the Common Stock for each day during such twenty (20) out of thirty (30) consecutive trading days equals or exceeds \$250,000, the Corporation may require the holders of Series C Preferred Stock to convert the Preferred Stock to Common Stock, on ten (10) days notice (the "Mandatory Conversion Time"), based on the Conversion Price.

(b) Procedural Requirements. All holders of record of shares of Series C Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Series C Preferred Stock pursuant to this Section 5. Upon receipt of such notice, each holder of shares of Series C Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, including medallion seal, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series C Preferred Stock converted pursuant to Section 5, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Section 5(b). As soon as practicable after the Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Series C Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Section 11 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Series C Preferred Stock converted. Such converted Series C Preferred Stock shall be retired and canceled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series C Preferred Stock accordingly.

6. Redemption.

(a) Optional Redemption. Prior to the seventh anniversary of the Series C Issuance Date, the Corporation may at any time it may lawfully do so, at the option of the Board of Directors and after giving the holders of shares Series C Preferred Stock written notice of Directors and after giving the holders of shares of Series C Preferred Stock written notice thereof containing the redemption date (which date shall not be less than 20 days from the date of such notice) (the "Redemption Date") and offering the holders of the shares of Series C Preferred Stock at least such 20 days to convert all such shares into shares of Common Stock pursuant to Section 4, redeem in whole, but not in part, all the shares of Series C Preferred Stock then outstanding by paying in cash, for each share, an amount equal to the sum of (i) the Original Series C Issue Price and (ii) all accrued but unpaid Annual Dividends on such share (such sum, as adjusted for any stock splits, dividends combinations, subdivisions, recapitalizations, reclassifications or the like, the "Optional Redemption Price").

- (b) Mandatory Redemption. At any time following the seventh anniversary of the Series C Issuance Date, within sixty (60) days after the receipt by the Corporation of the written request of the holders of not less than a majority of the shares of Series C Preferred Stock then outstanding, the Corporation shall redeem all of the shares of Series C Preferred Stock (or, if less, the maximum amount it may lawfully redeem) by paying in cash, for each share, an amount equal to the sum of (i) the Original Series C Issue Price, and (ii) all accrued but unpaid Annual Dividends on such share (such sum, as adjusted for any stock splits, dividends combinations, subdivisions, recapitalizations, reclassifications or the like, the "Mandatory Redemption Price").
- 7. **Voting Rights**. Holders of shares of Series C Preferred Stock shall not be entitled to vote, as a separate class or otherwise on any matter, and their consent shall not be required for any corporate action, except as otherwise required by law or as expressly provided in this Certificate of Designations or the Certificate of Incorporation.
- 8. **Amendments**. For so long as any shares of Series C Preferred Stock remain outstanding, consent of the holders of at least a majority of the then outstanding shares of the Series C Preferred Stock voting together as a class shall be required for any amendment to this Certificate of Designations or any waivers of the rights of the holders of shares of Series C Preferred Stock or under any other agreement to which all of the holders of shares of Series C Preferred Stock are a party.
- 9. **Restrictions on Transfer**. Each certificate representing shares of Series C Preferred Stock and each certificate representing shares of Common Stock issuable upon conversion of any shares of Series C Preferred Stock shall be stamped or otherwise imprinted with a legend in substantially the following form:

"THE SHARES REPRESENTED BY THIS CERTIFICATE AND ANY SHARES ACQUIRED UPON THE CONVERSION OF THE SHARES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN EXEMPTION THEREFROM UNDER SUCH ACT, EXCEPT UNDER CIRCUMSTANCES WHERE NEITHER SUCH REGISTRATION NOR SUCH AN EXEMPTION IS REQUIRED BY LAW."

10. **Reservation of Shares**. The Corporation shall at all times reserve and keep available, out of its authorized and un-issued shares of Common Stock, solely for the purpose of effecting the conversion of the Series C Preferred Stock, including shares of Series C Preferred Stock issued as payment of dividends, such number of shares of its Common Stock as shall be sufficient to effect the conversion of all shares of Series C Preferred Stock from time to time outstanding.

- 11. **Fractional Shares**. No fractional shares of Common Stock shall be issued upon conversion of the Series C Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation, or it may round to the nearest number of whole shares, in the Board's sole discretion. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Series C Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.
- 12. **Severability of Provisions.** Whenever possible, each provision hereof shall be interpreted in a manner as to be effective and valid under applicable law, but if any provision hereof is held to be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating or otherwise adversely affecting the remaining provisions hereof. If a court of competent jurisdiction should determine that a provision hereof would be valid or enforceable if a period of time were extended or shortened or a particular percentage were increased or decreased, then such court may make such change as shall be necessary to render the provision in question effective and valid under applicable law.
- 13. **Status of Reacquired Shares.** Shares of Series C Preferred Stock issued and reacquired by the Corporation (including, without limitation, shares of Series C Preferred Stock which have been converted into Common Stock) shall have the status of authorized and unissued shares of Preferred Stock, undesignated as to series, subject to later issuance.
- 14. **Preemptive Rights.** Holders of shares of Series C Preferred Stock are not entitled to any preemptive or subscription rights in respect to any securities of the Corporation.

FURTHER RESOLVED, that the statements contained in the foregoing resolutions creating and designating the said Series C issue of Preferred Stock and fixing the number, voting tights, powers, preferences and relative, optional, participating, and other special rights and the qualifications, limitations, restrictions, and other distinguishing characteristics thereof shall, upon the effective date of said series, be deemed to be included in and be a part of the Certificate of Incorporation of the Corporation pursuant to the provisions of Sections 104 and 151 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, NeoStem Inc. has caused this Certificate to be signed on its behalf by its Chief Executive Officer, this 29th day of October, 2009.

NEOSTEM, INC.

By: /s/ Robin L. Smith

Name: Robin L. Smith Title: Chief Executive Officer

State of Delaware Secretary of State Division of Corporations Delivered 02:26 PM 12/09/2009 FILED 02:24 PM 12/09/2009 SRV 091083008 - 0899444 FILE

STATE OF DELAWARE CERTIFICATE OF CORRECTION

Neostem, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware.

DOES HEREBY CERTIFY:

- 1. The name of the corporation is Neostem, Inc.
- 2. That a Certificate of Designation of Series C Convertible Preferred Stock

(Title of Certificate Being Corrected)

was filed by the Secretary of State of Delaware on October 30, 2009 and that said Certificate requires correction as permitted by Section 103 of the General Corporation Law of the State of Delaware.

- 3. The inaccuracy or defect of said Certificate is: (must be specific)
 - in Article 2 Dividends and Distributions section (a) Amount on page 2 there is a date missing in the paragraph.
- Article 2(a) of the Certificate is corrected to read as follows:

Please see Rider 1 attached hereto.

IN WITNESS WHEREOF, said corporation has caused this Certificate of Correction this 12 day of November, A.D. 2009.

By: /s/ Catherine M. Vaczy

Authorized Officer
Name: Catherine M. Vaczy

Print or Type

Title: Vice President and General Counsel

Rider 1 to Certificate of Correction.

Article 2. Dividends and Distributions

(a) Amount. The holders of shares of Series C Preferred Stock shall be entitled to receive an annual dividend of 5% of the Agreed Stated Value (the "Annual Dividend"), payable annually on the first day of January (the "Annual Dividend Payment Date"). Payment of the Annual Dividend may be either in cash or in kind as determined by the Board of Director. In the event that the Annual Dividend Payment Date shall fall due on a Saturday, Sunday or legal holiday in the State of Delaware, the dividend due on such date shall be paid on the next day thereafter that is not a Saturday, Sunday or legal holiday in the State of Delaware. The Annual Dividend shall be cumulative and shall begin to accrue on outstanding shares of Series C Preferred Stock from and after October 30, 2009 (the "Series C Issuance Date") on a daily basis computed on the basis of a 365-day year and compounded annually whether or not the Corporation shall have assets legally available therefore.

State of Delaware Secretary of State Division of Corporations Delivered 10:30 AM 11/18/2010 FILED 10:30 AM 11/18/2010 SRV 101100631 - 0899444 FILE

Stock."

CERTIFICATE OF ELIMINATION

OF THE

SERIES C CONVERTIBLE PREFERRED STOCK

OF

NEOSTEM, INC.

Pursuant to the provisions of Section 151(g) of the General Corporation Law of the State of Delaware, it is hereby certified that:

- 1. The name of the corporation is NeoStem, Inc. (hereinafter referred to as the "Corporation").
- 2. The designation of the series of shares of stock of the Corporation to which this certificate relates is "Series C Convertible Preferred
- 3. Pursuant to Section 151 of the General Corporation Law of the State of Delaware and authority granted in the certificate of incorporation of the Corporation (the "Certificate of Incorporation"), the Board of Directors of the Corporation previously designated 8,177,512 shares of preferred stock as Series C Convertible Preferred Stock, par value \$0.01 per share (the "Series C Convertible Preferred Stock"), and established the voting powers, designations, preferences, and the relative, participating, optional, or other rights, and the qualifications, limitations, and restrictions of such series as set forth in the Certificate of Designations of Series C Convertible Preferred Stock of NeoStem, Inc. (the "Series C Certificate of Designations"), with respect to such Series C Convertible Preferred Stock, which Series C Certificate of Designations has been heretofore filed with the Secretary of State of the State of Delaware. None of the authorized shares of Series C Convertible Preferred Stock are outstanding and none will be issued subject to the Series C Certificate of Designations.
- 4. The Board of Directors of the Corporation has duly adopted the following resolutions, which resolutions remain in full force and effect as of the date hereof:

RESOLVED, that none of the authorized shares of Series C Convertible Preferred Stock are outstanding, and that none will be issued subject to the Series C Certificate of Designations, and

FURTHER RESOLVED, that pursuant to the authority conferred on the Board of Directors by the provisions of Section 151 of the General Corporation Law of the State of Delaware, the Board of Directors hereby eliminates the Series C Convertible Preferred Stock, and

FURTHER RESOLVED, that the appropriate officers of the Corporation, or any one or more of them, are hereby authorized, in the name and on behalf of the Corporation, pursuant to Section 151(g) of the General Corporation Law of the State of Delaware, to execute and file a Certificate of Elimination of the Series C Convertible Preferred Stock of NeoStem, Inc. with the Secretary of State of the State of Delaware, which shall have the effect when filed with the Secretary of State of the State of Delaware of eliminating from the Certificate of Incorporation all matters set forth in the Series C Certificate of Designations with respect to such Series C Convertible Preferred Stock, and

FURTHER RESOLVED, that in accordance with the provisions of Section 151 of the General Corporation Law of the State of Delaware, the Certificate of Incorporation is hereby amended to eliminate all references to the Series C Convertible Preferred Stock, and the shares that were designated to such series hereby are returned to the status of authorized but unissued shares of the preferred stock of the Corporation, without designation as to series.

Signed on November 18, 2010

NEOSTEM, INC.

By: /s/ Robin Smith

Name: Robin Smith

Title: CEO

State of Delaware Secretary of State Division of Corporations Delivered 10:30 AM 11/18/2010 FILED 10:31 AM 11/18/2010 SRV 101100633 - 0899444 FILE

CERTIFICATE OF ELIMINATION

OF THE

SERIES D CONVERTIBLE REDEEMABLE PREFERRED STOCK

OF

NEOSTEM, INC.

Pursuant to the provisions of Section 151(g) of the General Corporation Law of the State of Delaware, it is hereby certified that:

- 1. The name of the corporation is NeoStem, Inc. (hereinafter sometimes referred to as the "Corporation").
- 2. The designation of the series of shares of stock of the Corporation to which this certificate relates is "Series D Convertible Redeemable Preferred Stock."
- 3. Pursuant to Section 151 of the General Corporation Law of the Stale of Delaware and authority granted in the certificate of incorporation of the Corporation (the "Certificate of Incorporation"), the Board of Directors of the Corporation previously designated 1,600,000 shares of preferred stock as Series D Convertible Redeemable Preferred Stock, par value \$0.01 per share (the "Series D Convertible Redeemable Preferred Stock"), and established the voting powers, designations, preferences, and the relative, participating, optional, or other rights, and the qualifications, limitations, and restrictions of such series as set forth in the Certificate of Designation of Series D Convertible Redeemable Preferred Stock of NeoStem, Inc. (the "Series D Certificate of Designations"), with respect to such Series D Convertible Redeemable Preferred Stock, which Series D Certificate of Designations has been heretofore filed with the Secretary of State of the State of Delaware. None of the authorized shares of Series D Convertible Redeemable Preferred Stock are outstanding and none will be issued subject to the Series D Certificate of Designations.
- of the date hereof:

RESOLVED, that none of the authorized shares of Series D Convertible Redeemable Preferred Stock are outstanding, and that none will be issued subject to the Series D Certificate of Designations, and

4. The Board of Directors of the Corporation has duly adopted the following resolutions, which resolutions remain in full force and effect as

FURTHER RESOLVED, that pursuant to the authority conferred on the Board of Directors by the provisions of Section 151 of the General Corporation Law of the State of Delaware, the Board of Directors hereby eliminates the Series D Convertible Redeemable Preferred Stock, and

FURTHER RESOLVED, that the appropriate officers of the Corporation, or any one or more of them, are hereby authorized, in the name and on behalf of the Corporation, pursuant to Section 151(g) of the General Corporation Law of the State of Delaware, to execute and file a Certificate of Elimination of the Series D Convertible Redeemable Preferred Stock of NeoStem, Inc. with the Secretary of State of the State of Delaware, which shall have the effect when filed with the Secretary of State of the State of Delaware of eliminating from the Certificate of Incorporation all matters set forth in the Series D Certificate of Designations with respect to such Series D Convertible Redeemable Preferred Stock, and

FURTHER RESOLVED, that in accordance with the provisions of Section 151 of the General Corporation Law of the State of Delaware, the Certificate of Incorporation is hereby amended to eliminate all references to the Series D Convertible Redeemable Preferred Stock, and the shares that were designated to such series hereby are returned to the status of authorized but unissued shares of the preferred stock of the Corporation, without designation as to series.

Signed on November 18, 2010

NEOSTEM, INC.

By: /s/ Robin Smith

Name: Robin Smith Title: CEO

State of Delaware Secretary of State Division of Corporations Delivered 10:30 AM 11/18/2010 FILED 10:31 AM 11/18/2010 SRV 101100633 - 0899444 FILE

CERTIFICATE OF DESIGNATIONS OF THE POWERS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL AND OTHER SPECIAL RIGHTS OF PREFERRED STOCK AND QUALIFICATIONS, LIMITATIONS AND RESTRICTIONS THEREOF

of
SERIES E 7% SENIOR CONVERTIBLE PREFERRED STOCK
for
NEOSTEM, INC.

NEOSTEM, INC., a Delaware corporation (the "Corporation"), pursuant to the provisions of Section 151 of the General Corporation Law of the State of Delaware, does hereby make this Certificate of Designations and does hereby state and certify that pursuant to the authority expressly vested in the Board of Directors of the Corporation by the Certificate of Incorporation of the Corporation, the Board of Directors duly adopted the following resolutions, which resolutions remain in full force and effect as of the date hereof:

RESOLVED, that, pursuant to Article Fourth of the Certificate of incorporation of the Corporation, the Board of Directors hereby authorizes the issuance of, and fixes the designation and preferences and relative, participating, optional and other special rights, and qualifications, limitations and restrictions, of a series of Preferred Stock consisting of 10,582,011 shares, par value \$0.01 per share, to be designated "Series E 7% Senior Convertible Preferred Stock" (the "Preferred Shares").

RESOLVED, that each of the Preferred Shares shall rank equally in all respects and shall be subject to the following terms and provisions:

- 1. Certain Defined Terms. For purposes of this Certificate of Designations, the following terms shall have the following meanings:
 - (a) "Bloomberg" means Bloomberg Financial Markets.
- (b) "Business Day" means any day other than Saturday, Sunday or other day on which commercial banks in the City of New York are authorized or required by law to remain closed.
 - (c) "Common Stock" means the common stock, par value \$0,001 per share, of the Corporation.
 - (d) "Common Shares" means fully paid, validly issued and non-assessable shares of Common Stock.
- (e) "Dollar Volume Limitation" means fifteen percent (15%) of the aggregate dollar trading volume of the Common Stock on the NYSE Amex Equities (or other applicable Trading Market) over the twenty-two (22) consecutive Trading Day period ending on the Trading Day immediately preceding the date of the Mandatory Redemption Notice (as defined below) or Optional Redemption Notice (as defined below), as applicable. For the purposes of this section the term "dollar trading volume" for any Trading Day shall be determined by multiplying the Daily VWAP by the volume as reported on Bloomberg for such Trading Day.

(f) "Daily VWAP" means, for any date, (i) the daily volume weighted average price of the Common Stock for such date on the NYSE Amex Equities as reported by Bloomberg (based on a Trading Day from 9:30 a.m. New York City Time to 3:59 p.m. New York City Time); (ii) if the Common Stock is not then listed on the NYSE Amex Equities, the daily volume weighted average price of the Common Stock for such date on such other Trading Market where the Common Stock is then listed as reported by Bloomberg (based on a Trading Day from 9:30 a.m. New York City Time to 3:59 p.m. New York City Time); (iii) if the foregoing do not apply, the volume weighted average price of the Common Stock in the over-the-counter market on the electronic bulletin board for the Common Stock as reported by Bloomberg, or, if no volume weighted average price is reported for such security by Bloomberg, the highest bid as reported on the "pink Sheets" by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.) at the close of trading; or (iv) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Required Holders and reasonably acceptable to the Corporation.

(g) "Equity Conditions" means each of the following: (i) on each day during the Equity Conditions Measuring Period, all Common Shares to be issued on the applicable Mandatory Redemption Date (or such other date on or event for which the Equity Conditions are required to be satisfied) shall be eligible for resale by the Holder without restriction and without need for additional registration under any applicable federal or state securities laws, and the Corporation shall have no knowledge of any fact that would cause any Common Shares not to be so eligible for resale by the Holder without restriction and without need for additional registration under any applicable federal or state securities laws; (ii) on each day during the Equity Conditions Measuring Period, the Common Shares arc designated for listing on a Trading Market and shall not have been suspended from trading on such Trading Market nor shall delisting or suspension by such exchange or market have been threatened or pending in writing by such exchange nor shall there be any Securities and Exchange Commission ("SEC") or judicial stop trade order or trading suspension stop order; (iii) any Common Shares to be issued in connection with the applicable Mandatory Redemption Date (or such other date on or event for which the Equity Conditions are required to be satisfied) may be issued in full without violating the rules or regulations of the Trading Market or any applicable laws; (iv) on each day during the Equity Conditions Measuring Period, there shall not have occurred and be continuing, unless waived by the Holder, either (A) a Trigger Event (as defined below) or (B) an event that with the passage of time or giving of notice would constitute a Trigger Event; (v) on each day during the Equity Conditions Measuring Period, the Corporation has not provided any Holder with any non-public information in breach of Section 3.8 of the Purchase Agreement; (vi) on each day during the Equity Conditions Measuring Period, neither the Registration Statement (as defined in the Purchase Agreement) nor the Prospectus (as defined in the Purchase Agreement) nor any Prospectus Supplements (as defined in the Purchase Agreement) contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading and such Registration Statement, such Prospectus and such Prospectus Supplements comply with all applicable securities laws as to form and substance (unless all Common Shares issuable on the applicable Mandatory Redemption Date (or such other date requiring payment in Common Shares) may be resold by the Holder pursuant to Rule 144 under the Securities Act of 1933, as amended (the "Securities Act") without volume limitations or any public information requirements or such other exemption from registration that would permit the Holder to resell such Common Shares without restriction and without need for additional registration under any securities laws); (vii) the Corporation's transfer agent for the Common Shares is participating in the Depository Trust Company ("DTC") Fast Automated Securities Transfer Program; and (ix) all Common Shares to be issued in connection with the applicable Mandatory Redemption Date (or such other date on or event for which the Equity Conditions are required to be satisfied) are duly authorized and will be validly issued, fully paid and non-assessable upon issuance, free and clear of all liens, claims or encumbrances, and the issuance thereof will not require any further approvals of the Corporation's Board of Directors or stockholders. All references to the "Registration Statement" or "Prospectus" shall include any amendments or supplements thereto, as filed from time to time, including, without limitation, any Exchange Act (as defined below) filings incorporated by reference.

- (h) "Equity Conditions Measuring Period" means the period beginning twenty (20) Trading Days prior to the applicable Mandatory Redemption Date (or such other date on or event for which the Equity Conditions are required to be satisfied) and ending on and including such Mandatory Redemption Date. For the avoidance of doubt, the Equity Conditions Measuring Period for each Mandatory Redemption Date shall include the Stock Payment Pricing Period and such Mandatory Redemption Date.
- (i) "Equity Line" means (i) the Common Stock Purchase Agreement, dated May 19, 2010, by and between the Corporation and Commerce Court Small Cap Value Fund, Ltd. and the transactions contemplated thereby and/or (ii) any other similar agreement, contract, arrangement or understanding commonly known as an "equity line" between the Corporation and any person.
- (j) "Excluded Securities" means (a) Common Shares or Common Stock Equivalents issued pursuant to a stock option plan that has been approved by the Board of Directors and stockholders of the Corporation, pursuant to which the Corporation's securities may be issued only to a person eligible for award under such plan, (b) Common Shares or Common Stock Equivalents issued to employees or consultants (including in connection with investor relations activities) for compensatory purposes, (c) Common Shares or Common Stock Equivalents issued upon the exercise or conversion of Common Stock Equivalents outstanding on the date hereof, (d) Common Shares or Common Stock Equivalents issued to investors in the common stock and warrant offering contemplated by Section 4.2(i) of the Purchase Agreement, (e) Common Shares or Common Stock Equivalents issued in the pending transaction with Progenitor Cell Therapy, LLC ("Progenitor") as currently contemplated by that certain Agreement and Plan of Merger, dated September 23, 2010, by and among the Corporation, NBS Acquisition Company LLC and Progenitor (the "Merger Agreement"), (f) Common Shares or Common Stock Equivalents issued in the transactions contemplated by the Purchase Agreement, including pursuant to the Certificate of Designations or the Warrants, and (g) Common Shares or Common Stock Equivalents issued or deemed to be issued in connection with any acquisition by the Corporation, whether through a merger, an acquisition of stock or an acquisition of assets, or a license, of any business, product, assets or technologies, or any strategic partnership, strategic investment or joint venture involving any technology or product, or any other transaction the primary purpose of which is not to raise capital; provided however, that the number of Common Shares which may be issued pursuant to this clause (g) in any transaction, or series of related transactions, shall not exceed 33% of the number of Common Shares outstanding immediately prior to any such transaction.

- (k) "Holder" means each holder of the Preferred Shares.
- (l) "Initial Issuance Date" means November 19, 2010.
- (m) "Mandatory Redemption Shares" means, with respect to (a) any Mandatory Redemption Date (other than the Maturity Date) an amount equal to 1/27th of the Preferred Shares initially issued pursuant to the Purchase Agreement (regardless of whether any Holder has converted any shares of Preferred Stock pursuant to Section 7 or the Corporation has optionally redeemed any shares of Preferred Stock pursuant to Section 8) and (b) the Maturity Date, all outstanding Preferred Shares.
- (n) "Mandatory Redemption Date" means March 19, 2011, and the 19th day of each calendar month thereafter (or the next Trading Day thereafter) and ending on and including the Maturity Date. Notwithstanding anything contained herein to the contrary and for all purposes hereunder, the Maturity Date shall be deemed to be a Mandatory Redemption Date.
 - (o) "Maturity Date" means May 20, 2013.
- (p) "Purchase Agreement" means the Securities Purchase Agreement, of even date herewith, by and among the Corporation and the initial purchasers of Preferred Shares thereunder.
- (q) "Required Holders" means the Holders of Preferred Shares representing at least a majority of the aggregate Preferred Shares then outstanding.
- (r) "Stock Payment Price" means, with respect to any date when any amount hereunder is due and payable, that price which shall be computed as 92% of the arithmetic average of the five lowest Daily VWAPs of the Common Shares during the Stock Payment Pricing Period. All such determinations will be appropriately adjusted for any stock split, stock dividend, stock combination or other similar transaction.
- (s) "Stock Payment Pricing Period" means, with respect to any Mandatory Redemption Date or any other date when any amount hereunder is due and payable, the twenty (20) Trading Days immediately prior to such date. For the avoidance of doubt, the Stock Payment Pricing Period does not include the Mandatory Redemption Date or such other date when any amount hereunder is due and payable.
 - (t) "Subsidiaries" shall have the meaning as set forth in the Purchase Agreement.

- (u) "Trading Day" means 9:30AM to 3:59PM on any day on which the Common Shares are traded on a Trading Market, or, if the Common Shares are not so traded, a Business Day.
- (v) "Trading Market" means the NYSE Amex Equities, the New York Stock Exchange or the NASDAQ Global Select Market, the NASDAQ Global Market or the NASDAQ Capital Market.
 - (w) "Tax" means any tax, levy, impost, duty or other charge or withholding of a similar nature (including any related penalty or interest).
 - (x) "Tax Deduction" means a deduction or withholding for or on account of Tax from a payment under this Certificate of Designations.
- (y) "Transfer Agent" means Continental Stock Transfer or such other person designated by the Corporation as the transfer agent for the Common Shares.
 - (z) "Warrants" shall have the meaning as set forth in the Purchase Agreement.
- **2.** <u>Designation</u>. There is hereby created out of the authorized and unissued shares of preferred stock of the Corporation a series of preferred stock designated as the "Series E 7% Senior Convertible Preferred Stock" (the "Preferred Stock"). The number of shares constituting such series shall be 10,582,011.
- 3. <u>Cumulative Dividends</u>. The Holders of the Preferred Shares shall be entitled to receive dividends payable in cash (or, at the Corporation's option in Common Shares pursuant to Section 6) on the Liquidation Preference (as defined below) of such Preferred Share at the per share rate of seven percent (7%) per annum, which shall be cumulative. Dividends on the Preferred Shares shall commence accruing on the Initial Issuance Date and shall be computed on the basis of a 360-day year of twelve 30-day months. Dividends shall be payable in arrears on each Mandatory Redemption Date.
- 4. <u>Liquidation Preference</u>. In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary (a "Liquidation Event"), the Holders of the Preferred Shares shall be entitled to receive, out of the assets of the Corporation available for distribution to stockholders ("Liquidation Funds"), prior and in preference to any distribution of any assets of the Corporation to the holders of any other class or series of equity securities, the amount of one dollar (\$1.00) per share plus all accrued but unpaid dividends (the "Liquidation Preference"). After payment of the full amount of the Liquidation Preference, in the case of a Liquidation Event, the Holders will not be entitled to any further participation in any distribution of assets of the Corporation; provided that the foregoing shall not affect any rights which Holders may have with respect to any requirement that the Corporation repurchase the Preferred Shares or for any right to monetary damages. All the preferential amounts to be paid to the Holders of the Preferred Shares under this Section 4 shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any Liquidation Funds of the Corporation to the holders of shares of other classes or series of preferred stock of the Corporation junior in rank to the Preferred Shares in connection with a Liquidation Event. A Change of Control (as defined below) shall not, *ipso facto*, be deemed a Liquidation Event.

5. <u>Issuance of Preferred Shares</u>. The Preferred Shares shall be issued by the Corporation pursuant to the Purchase Agreement.

6. Mandatory Monthly Redemption.

- (a) *General.* On each applicable Mandatory Redemption Date, the Corporation shall redeem the Mandatory Redemption Shares at an aggregate redemption price equal to the sum of (x) the product of (A) the Liquidation Preference and (B) the number of Mandatory Redemption Shares required to be redeemed on such Mandatory Redemption Date plus (y) any and all accrued but unpaid dividends on all of the outstanding Preferred Shares (the "Mandatory Redemption Price"). Subject to Section 6(g), the Mandatory Redemption Price shall be payable, at the Corporation's option, in cash or Common Shares or any combination of cash and Common Shares, subject to the provisions of this Section 6; provided, however, that no portion of the Mandatory Redemption Price may be paid in Common Shares unless the Equity Conditions are satisfied or waived by the Required Holders in writing prior to delivery of the applicable Mandatory Redemption Notice (as defined below); provided, further, however, that the portion of the applicable Mandatory Redemption Price that the Corporation elects to pay in Common Shares (if any) shall not exceed the Dollar Volume Limitation (unless waived by the Required Holders in writing).
- (b) Mandatory Redemption Notice. On a date not less than twenty-two (22) Trading Days, but in no event more than twenty-five (25) Trading Days, prior to each Mandatory Redemption Date (the "Mandatory Redemption Notice Date"), the Corporation shall deliver a written notice (a "Mandatory Redemption Notice") to the Holders, which shall either: (i) confirm that the entire applicable Mandatory Redemption Price shall be paid in cash; or (ii) (A) state that the Corporation elects to pay all or a portion of the Mandatory Redemption Price in Common Shares, (B) specify the portion that the Corporation elects to pay in cash (expressed in dollars) (such amount, the "Cash Payment Amount") and the portion that the Corporation elects to pay in Common Shares (expressed in dollars) (such portion a "Stock Payment Amount"), which amounts when added together must equal the applicable Mandatory Redemption Price, (C) certify that the Equity Conditions are then satisfied (or waived by the Required Holders), (D) state the Dollar Volume Limitation (expressed in dollars) and certify that the Stock Payment Amount does not exceed such Dollar Volume Limitation and (E) certify that the Maximum Share Amount (as defined below) has not been exceeded. If (x) the Corporation does not timely deliver a Mandatory Redemption Notice in accordance with this Section 6(b) or (y) the Equity Conditions are not satisfied (unless waived by the Required Holders), then the Corporation shall be deemed to have delivered, a Mandatory Redemption Notice electing to pay the entire Mandatory Redemption Price in cash. Any Cash Payment Amount shall be paid in accordance with Section 6(c) and any Stock Payment Amount shall be paid in accordance with Section 6(d).

Each Mandatory Redemption Notice, whether actually given or deemed given, shall be irrevocable.

(c) *Mechanics of Cash Payment*. On each Mandatory Redemption Date, to the extent that the Corporation elects to pay all or any portion of the Mandatory Redemption Price in cash, then the Corporation shall pay all or such portion of the Mandatory Redemption Price, as applicable, by wire transfer of immediately available funds in accordance with the wire instructions of each Holder provided to the Corporation in writing. If the Corporation fails to pay such portion of the Mandatory Redemption Price ("Cash Payment Failure") to be paid in cash on the applicable Mandatory Redemption Date (the "Applicable Cash Payment"), then the Corporation shall pay damages to the Holder for each day after such Mandatory Redemption Date in an amount in equal to two percent (2%) of such Applicable Cash Payment, but in no event in excess of twenty-four percent (24%) ("Cash Payment Liquidated Damages"). Notwithstanding the foregoing, the Corporation shall only be liable for Cash Payment Liquidated Damages to the extent that there is more than one (1) Cash Payment Failure in any twelve (12) month period. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely pay any Applicable Cash Payment as required pursuant to the terms hereof.

(d) Mechanics of Stock Payment.

- (i) To the extent that the Corporation elects (or is required pursuant to Section 6(g)) to pay all or any portion of the applicable Mandatory Redemption Price in Common Shares, the applicable Stock Payment Amount shall be paid as follows:
 - (A) twenty-one (21) Trading Days prior to the applicable Mandatory Redemption Date (the "First Advance Date"), the Corporation shall deliver to the Holders a number of Common Shares determined by dividing (x) the Stock Payment Amount for such Mandatory Redemption Date by (y) ninety-two percent (92%) of the Daily VWAP on the Trading Day immediately preceding such Advance Date (the "First Advance Shares");
 - (B) eleven (11) Trading Days prior to the applicable Mandatory Redemption Date (the "Second Advance Date" and together with the First Advance Date, the "Advance Dates" and each, an "Advance Date"), the Corporation shall deliver to the Holders a number of Common Shares equal to the positive difference (if any) between (x) the quotient of (1) the Stock Payment Amount and (2) ninety-two percent (92%) of the average of the five lowest Daily VWAPs during the first (10) ten Trading Days of the applicable Stock Payment Pricing Period and (y) the number of First Advance Shares delivered to the Holders pursuant to 6(d)(i)(B) in connection with such Mandatory Redemption Date (the "Second Advance Shares" and together with the First Advance Shares, the "Advance Shares"). For the avoidance of doubt, to the extent that the difference between clauses (x) and (y) is a negative number the Corporation shall not be required to deliver any Common Shares to the Holders pursuant to this Section 6(d)(i)(B); and

(C) not later than three (3) Trading Days after the applicable Mandatory Redemption Date, the Corporation shall deliver an additional number of Common Shares (the "True-Up Shares"), if any, to the Holders equal to the positive difference between (a) the Stock Payment Amount divided by the Stock Payment Price for such Mandatory Redemption Date and (b) the Advance Shares; provided; however, that if clause (b) exceeds clause (a), then each Holder shall return its pro rata portion of such excess number of Common Shares to the Corporation, and such excess shares shall immediately be deemed cancelled effective as of the applicable Mandatory Redemption Date, For the avoidance of doubt, no Holder shall have any liability to the Corporation to the extent that any Advance Shares that are returned to the Corporation pursuant to the immediately preceding sentence decrease in value following the applicable Advance Date.

(ii) Notwithstanding any other provision of this Section 6(d), to the extent that the Corporation elects to pay all or any portion of the applicable Mandatory Redemption Price in Common Shares:

(A) to the extent that the aggregate number of Advance Shares or True-Up Shares to be delivered to a Holder pursuant to this Section 6(d) in respect of any individual Stock Payment Amount would cause such Holder to exceed the Beneficial Ownership Limitation (as defined below), then, (I) the Holder shall provide written notice to the Corporation that such delivery of all or a portion of the Advance Shares or True-Up Shares would cause such Holder to exceed the Beneficial Ownership Limitation, and (II) in addition to delivery of the number of Advance Shares or True-Up Shares that would not cause such Holder to exceed the Beneficial Ownership Limitation, the Corporation shall pay to such Holder in lieu of such number of Advance Shares or True-Up Shares that would cause such Holder to exceed the Beneficial Ownership Limitation (such excess number of shares, the "Excess Shares"), not more than the later of three (3) Trading Days after the Mandatory Redemption Date or ten (10) Trading Days after the date of such Holder's written notice, an amount in cash equal to the portion of the Stock Payment Amount that would otherwise be payable in respect of the Excess Shares;

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

(C) if the Equity Conditions are neither (x) satisfied nor (y) waived in accordance with the terms hereof, as applicable, on the Trading Day immediately preceding the First Advance Date and/or on the First Advance Date, or if the Daily VWAP cannot be determined on the Trading Day immediately preceding the First Advance Date, or if the Corporation fails to deliver the First Advance Shares to the Holders on the First Advance Date, then the Holder may, at its option upon written notice to the Corporation, require the Corporation to pay to such Holder, not later than three (3) Trading Days after the Mandatory Redemption Date, an amount of cash equal to the Stock Replacement Payment in lieu of such Stock Payment Amount; or

(D) if subsequent to the delivery of the First Advance Shares (A) the Equity Conditions are neither (x) satisfied nor (y) waived in accordance with the terms hereof, as applicable, on any day of the Stock Payment Pricing Period or (B) if the Daily VWAP cannot be determined on any day of the Stock Payment Pricing Period, then each Holder may, at its option, elect in a written notice to the Corporation to redeliver ail or any portion of the Advance Shares to the Corporation and the Corporation shall pay to such Holder, not later than three (3) Trading Days after the Mandatory Redemption Date, an amount of cash equal to the Stock Replacement Payment in lieu of such portion of the Stock Payment Amount for which such Holder has elected in writing to redeliver Advance Shares to the Corporation. For the avoidance of doubt, to the extent this Section 6(d)(ii)(D) applies, then by the third (3rd) Trading Day after the Mandatory Redemption Date the Corporation must pay to the Holder an amount of cash and Advance Shares equal in value to at least the product of (x) a fraction the numerator of which is the average Daily VWAP of the Common Shares for the applicable Stock Payment Pricing Period and the denominator of which is the Stock Payment Price for such Stock Payment Pricing Period and (y) the entire Stock Payment Amount.

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

$$SRP = (X/Y) * S$$

For the purposes of the foregoing formula:

SRP = Stock Replacement Payment

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

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

- S = the Stock Payment Amount (or, (A) in the case that either or both of Maximum Share Amount and/or Beneficial Ownership Limitation is exceeded as provided above, only that portion of such Stock Payment Amount that would exceed the Maximum Share Amount and/or Beneficial Ownership Limitation, as applicable, and/or (B) in the case of Section 6(d)(ii)(D) that portion of the Stock Payment Amount for which the Holder has elected in its written notice to redeliver Advance Shares to the Corporation).
 - (iii) Any Common Shares required to be delivered by the Corporation to a Holder under this Section 6 shall be credited to such Holder's or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system ("DWAC"). In addition, the provisions of Section 7(c) and Section 7(g) shall apply to the delivery of Common Shares under this Section 6 *mutatis mutandis* as if each date when Common Shares are required to be delivered under this Section 6 was a Share Delivery Date. Notwithstanding the foregoing, the Corporation shall only be liable for Stock Payment Liquidated Damages (as defined below) with respect to any Advance Date or Mandatory Redemption Date to the extent that the Corporation fails to deliver Common Shares when due more than once (I) in any twelve month period.
- (e) Each mandatory redemption pursuant to this Section 6 (and the related payment of the Mandatory Redemption Price) shall be made pro rata among the Holder's relative percentage ownership of the outstanding Preferred Shares.
- (f) Notwithstanding the delivery of a Mandatory Redemption Notice or any provision of this Section 6 to the contrary, the Holder may deliver a Conversion Notice with respect to all or any portion of the specific Mandatory Redemption Shares to be redeemed on the applicable Mandatory Redemption Date at any time prior to such Mandatory Redemption Date. Any Advance Shares delivered to such Holder in connection with such Mandatory Redemption Date shall count towards the number of Common Shares that Corporation shall be obligated to deliver on the applicable Share Delivery Date (as defined below), and to the extent that the Advance Shares exceeds the number of Common Shares that the Corporation would be required to deliver on the applicable Share Delivery Date, the Holder shall return such excess to the Corporation.

(g) Each and every time that the Corporation sells any Common Shares pursuant to any Equity Line, the Corporation shall immediately deliver a written notice to each Holder (an "Equity Line Draw Notice"), which Equity Line Draw Notice shall state the aggregate purchase price for such Common Shares (the "Equity Line Aggregate Purchase Price"), Each Holder may, at its option, by delivering a written notice to the Corporation, require the Corporation to pay the Mandatory Redemption Price (or the appropriate portion thereof) on the next succeeding Mandatory Redemption Date (or to the extent that the date of such Equity Line Draw notice is subsequent to the date of the Mandatory Redemption Notice for such Mandatory Redemption Date, then the next succeeding Mandatory Redemption Date) in Common Shares in an amount equal to its "pro rata portion" of the Equity Line Aggregate Purchase Price. To the extent that the Equity Line Aggregate Purchase Price exceeds the aggregate amount of the entire Mandatory Redemption Price for such Mandatory Redemption Date, then on each succeeding Mandatory Redemption Date the Holder may, at its option, by delivering a written notice to the Corporation, require the Corporation to pay its "pro rata portion" of the applicable Mandatory Redemption Price in Common Shares until the Corporation has made aggregate payments in Common Shares equal to its "pro rata portion" of the entire Equity Line Aggregate Purchase Price. Notwithstanding anything contained in this Section 6(g) to the contrary, all payments of Mandatory Redemption Price made in Common Shares shall be subject to Section 6(d) and upon the occurrence of any of the events described in Sections 6(d)(ii)(A) – (D) the Corporation shall make the appropriate Stock Replacement Payment as required by Section 6(d)(ii). For purposes of this Section 6(g), "pro rata portion" means, with respect to each Holder, the number of Preferred Shares then held by such Holder divided by the aggregate number of outstanding Preferred Shares.

7. Optional Conversion by the Holders. Each Holder shall have the right at any time and from time to time, at the option of such Holder, to convert all or any portion of the Preferred Shares held by such Holder, for such number of Common Shares, free and clear of any liens, claims or encumbrances, as is determined by dividing (i) the Liquidation Preference times the number of Preferred Shares being converted, by (ii) the Conversion Price (as defined below) in effect on the Conversion Date (as defined below). Immediately following such conversion, the persons entitled to receive the Common Shares upon the conversion of Preferred Shares shall be treated for all purposes as having become the owners of such Common Shares, subject to the rights provided herein to Holders. The term "Conversion Price" means \$2.0004, subject to adjustment as provided herein.

(a) *Delivery of Conversion Notice*. To convert Preferred Shares into Common Shares on any date (a "Conversion Date"), the Holder shall give written notice (a "Conversion Notice") to the Corporation in the form of page 1 of Exhibit A hereto (which Conversion Notice will be given by facsimile transmission, e-mail or other electronic means no later than 11:59 p.m. New York City Time on such date, and sent via overnight delivery no later than one (1) Trading Day (as defined below) after such date) stating that such Holder elects to convert the same and shall state therein the number of Preferred Shares to be converted and the name or names in which such Holder wishes the certificate or certificates for Common Shams to be issued. If required by Section 14, as soon as possible after delivery of the Conversion Notice, such Holder shall surrender the certificate or certificates representing the Preferred Shares being converted, duly endorsed, at the office of the Corporation.

(b) *Mechanics of Conversion*. The Corporation shall, promptly upon receipt of a Conversion Notice (but in any event not less than one (1) Trading Day after receipt of such Conversion Notice), (I) send, via facsimile, e-mail or other electronic means a confirmation of receipt of such Conversion Notice to such Holder and the Transfer Agent (as defined below), which confirmation shall constitute an instruction to the Transfer Agent to process such Conversion Notice in accordance with the terms herein and (II) on or before the third (3rd) Trading Day following the date of receipt by the Corporation of such Conversion Notice (the "Share Delivery Date"), credit such aggregate number of Common Shares to which the Holder shall be entitled to such Holder's or its designee's balance account with DTC via DWAC. If the number of Preferred Shares represented by the Preferred Stock certificate(s) delivered to the Corporation in connection with a Conversion Notice, to the extent required by Section 14 or to the extent otherwise requested by the Holder, is greater than the number of Preferred Shares being converted, then the Corporation shall, as soon as practicable and in no event later than three (3) Business Days after receipt of such Preferred Stock certificate(s) (the "Preferred Stock Delivery Date") and at its own expense, issue and deliver to the Holder a new Preferred Stock certificate representing the number of Preferred Shares not converted. The person or persons entitled to receive the Common Shares issuable upon a conversion of Preferred Shares shall be treated for all purposes as the record holder or holders of such Common Shares on the Conversion Date.

The Corporation's obligation to issue Common Shares upon conversion of Preferred Shares shall, except as set forth below, be absolute, is independent of any covenant of any Holder, and shall not be subject to: (i) any offset or defense; or (ii) any claims against the Holders of Preferred Shares whether pursuant to this Certificate, the Purchase Agreement, the Warrant or otherwise, including, without limitation, any claims arising out of any selling or short-selling activity by Holders.

(c) Corporation's Failure to Timely Convert. If within three (3) Trading Days after the Corporation's receipt of the facsimile copy of a Conversion Notice the Corporation shall fail to credit a Holder's balance account with DTC for the number of shares of Common Stock to which such Holder is entitled upon such Holder's conversion of Preferred Shares, then in addition to all other available remedies which such Holder may pursue hereunder and under the Purchase Agreement (including indemnification pursuant to Article 5 thereof), the Corporation shall pay additional damages to such Holder for each day after the Share Delivery Date that such conversion is not timely effected in an amount equal to two percent (2.0%) of the product of (I) the sum of the number of Common Shares not issued to the Holder on or prior to the Share Delivery Date and to which such Holder is entitled pursuant to the applicable Conversion Notice and the terms of this Certificate of Designations, and (II) the Closing Sale Price (as defined below) of the Common Stock on the Share Delivery Date, but in no event in excess of twenty- four percent (24.0%) ("Stock Payment Liquidated Damages"). In addition to the foregoing, if on the Share Delivery Date, the Corporation shall fail to credit such Holder's balance account with DTC for the number of Common Shares to which such Holder is entitled upon such Holder's conversion of Preferred Shares, and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) Common Shares to deliver in satisfaction of a sale by the Holder of the Common Shares issuable upon such conversion that the Holder anticipated receiving from the Corporation (a "Buy-In"), then the Corporation shall, within three (3) Trading Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and out-of-pocket expenses, if any) for the Common Shares so purchased (the "Buy-In Price"), at which point the Corporation's obligation to deliver such certificate (and to issue such Common Shares) shall terminate, or (it) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Common Shares and pay cash to the Holder in an amount equal to the difference between (if any) of the Buy-In Price and the product of (A) such number of Common Shares, times (B) the Closing Sale Price on the Conversion Date. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance ane/or injunctive relief with respect to the Corporation's failure to timely deliver certificates representing Common Shares upon conversion of the Preferred Shares as required pursuant to the terms hereof.

The terms "Closing Sale Price" means the last closing trade price for the Common Shares on the NYSE Amex Equities, as reported by Bloomberg, or, if the NYSE Amex Equities begins to operate on an extended hours basis and does not designate the closing trade price then the last trade price, respectively, of such security prior to 3:59 p.m., New York City Time, as reported by Bloomberg, or, if the foregoing do not apply, the last trade price, respectively, of the Common Shares in the over-the-counter market on the electronic bulletin board for the Common Shares as reported by Bloomberg, or, if no last trade price is reported for such security by Bloomberg, the highest bid price as reported on the "pink sheets" by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.) at the close of trading. If the Closing Sale Price cannot be calculated for the Common Shares on a particular date on any of the foregoing bases, the Closing Sale Price of the Common Shares on such date shall be the fair market value as mutually determined by the Corporation and the Holder. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

(d) Adjustments to the Conversion Price.

- (i) Adjustments for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Closing Date effect a stock split of the outstanding Common Stock, the applicable Conversion Price in effect immediately prior to the stock split shall be proportionately decreased. If the Corporation shall at any time or from time to time after the Closing Date, combine the outstanding shares of Common Stock, the applicable Conversion Price in effect immediately prior to the combination shall be proportionately increased. Any adjustments under this Section 7(d)(i) shall be effective at the close of business on the date the stock split or combination occurs.
- (ii) Adjustments for Certain Dividends and Distributions. If the Corporation shall at any time or from time to time on or after the Initial Issuance Date make or issue or set a record date for the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in Common Shares then, and in each event, the applicable Conversion Price in effect immediately prior to such event shall be decreased as of the time of such issuance or, in the event such record date shall have been fixed, as of the close of business on such record date, by multiplying the applicable Conversion Price then in effect by a fraction:

- (A) the numerator of which shall be the total number of Common Shares issued and outstanding immediately prior to the time of such issuance or the close of business on such record date; and
- (B) the denominator of which shall be the total number of Common Shares issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of Common Shares issuable in payment of such dividend or distribution.
- (iii) Adjustment for Other Dividends and Distributions. If the Corporation shall at any time or from time to time on or after the Initial Issuance Date make or issue or set a record date for the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in securities or property other than Common Shares, then, and in each event, an appropriate revision to the applicable Conversion price shall be made and provision shall be made (by adjustments of the Conversion Price or otherwise) so that the Holders of Preferred Shares shall receive upon conversions thereof, in addition to the number of Common Shares receivable thereon, the number of securities of the Corporation or other issuer (as applicable) or other property that they would have received had the Preferred Shares been converted into Common Shares on the date of such event.
- (iv) Adjustments for Issuance of Additional Shares of Common Stock. In the event the Corporation shall issue or sell any Common Shares (otherwise than as provided in the foregoing subsections (i) through (iii) of this Section 7 or upon the exercise or conversion of Common Stock Equivalents (as defined below) that were outstanding on or prior to the Initial Issuance Date (for the avoidance of doubt, this Section 7(d)(iv) shall apply to the issuance and sale of Common Shares under the Equity Line) (the "Additional Shares"), at a price per share less than the Conversion Price, or without consideration, the Conversion Price then in effect upon each such issuance shall be adjusted to that price (rounded to the nearest cent) determined by multiplying the Conversion Price by a fraction:
 - (A) the numerator of which shall be equal to the sum of (A) the number of Common Shares outstanding immediately prior to the issuance of such Additional Shares plus (B) the number of Common Shares (rounded to the nearest whole share) which the aggregate consideration for the total number of such Additional Shares so issued would purchase at a price per share equal to the men Conversion Price, and

(B) the denominator of which shall be equal to the number of Common Shares outstanding immediately after the issuance of such Additional Shares.

No adjustment shall be made under this Section 7(d)(iv) upon the issuance of any Additional Shares which are issued pursuant to the exercise, conversion or exchange rights under any Common Stock Equivalents (as defined below), if any such adjustment shall previously have been made upon the issuance of such Common Stock Equivalents (or upon the issuance of any warrant or other rights therefore) pursuant to Section 7(d)(v).

(v) Issuance of Common Stock Equivalents. In the event the Corporation shall issue or sell any Common Stock Equivalents (other than the Preferred Shares and the Warrants) and the price per share for which Additional Shares may be issued pursuant to any such Common Stock Equivalent shall be less than the applicable Conversion Price then in effect, or if, after any such issuance of Common Stock Equivalents, the price per share for which Additional Shares of Common Stock may be issued thereafter is amended or adjusted, and such price as so amended shall be less than the applicable Conversion Price in effect at the time of such amendment or adjustment, then the applicable Conversion Price upon each such issuance or amendment shall be adjusted as provided in Section 7(d)(iv). For purposes of the foregoing, in the case of the sale of issuance of any Common Stock Equivalents or in that case that any Common Stock Equivalents are amended and adjusted as provided in this Section 7(d)(v), the maximum number of Additional Shares issuable upon conversion, exchange or exercise of such Common Stock Equivalent shall be deemed to be outstanding at the time of such sale or issuance or amendment or adjustment, as the case may be, and no further adjustment shall be made to the Conversion Price upon the actual issuance of Additional Shares pursuant to the exercise, conversion or exchange of such Common Stock Equivalents. The term "Common Stock Equivalent" means any rights, warrants or options to purchase or other securities convertible into or exchangeable or exercisable for, directly or indirectly, Common Shares or Common Stock Equivalents.

(vi) *Certain Issues Excepted.* There shall be no adjustment to the Conversion Price pursuant to Section 7(d)(iv) or Section 7(d)(v) with respect to the sale or issuance of Excluded Securities.

(vii) Calculation of Consideration Received. In case any Common Stock Equivalents are issued in connection with the issue or sale of other securities of the Corporation, together comprising one integrated transaction in which no specific consideration is allocated to such Common Stock Equivalents by the parties thereto, the Common Stock Equivalents will be deemed to have been issued for a consideration of \$.01. If any Common Shares or Common Stock Equivalents are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount received by the Corporation therefor. If any Common Stock or Common Stock Equivalents are issued or sold for a consideration other than cash, the amount of the consideration other than cash received by the Corporation will be the fair market value of such consideration. If any Common Stock or Common Stock Equivalents are issued to the owners of the non surviving entity in connection with any merger in which the Corporation is the surviving entity, the amount of consideration therefor will be deemed to be the fair market value of such portion of the net assets and business of the non surviving entity as is attributable to such Common Stock or Common Stock Equivalents, as the case may be. The fair market value of any consideration other than cash or securities will be determined jointly by the Corporation and the Holders of the Preferred Shares. If such parties are unable to reach agreement within 10 days after the occurrence of an event requiring valuation (the "Valuation Event"), the fair market value of such consideration will be determined within five (5) Business Days after the tenth (10th) day following the Valuation Event by an independent, reputable appraiser jointly selected by the Corporation and the Required Holders. The determination of such appraiser shall be deemed binding upon all parries absent manifest error or fraud and the fees and expenses of such appraiser shall be borne by the Corporation.

(e) *Notice of Record Date.* In the event of any taking by the Corporation of a record date of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, any security or right convertible into or entitling the holder thereof to receive additional Common Shares, or any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, the Corporation shall deliver to each Holder at least twenty (20) days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend, distribution, security or right and the amount and character of such dividend, distribution, security or right.

(f) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued Common Stock, solely for the purposes of effecting the conversion and/or redemption of the Preferred Shares, an amount of Common Shares equal to 200% of the number of shares issuable upon conversion of the Preferred Shares at the current Conversion Price (the "Required Reserve Amount"). If at any time while any of the Preferred Shares remain outstanding the Corporation does not have a sufficient number of authorized and unreserved Common Shares to satisfy its obligation to reserve for issuance upon conversion and/or redemption of the Preferred Shares at least a number of Common Shares equal to the Required Reserve Amount (an "Authorized Share Failure"), then the Corporation shall promptly take all action necessary to increase the Corporation's authorized Common Shares to an amount sufficient to allow the Corporation to reserve the Required Reserve Amount for the Preferred Shares then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days (or the lesser of (i) ninety (90) days if the proxy statement is reviewed by the staff of the SEC or (ii) ten (10) days after the staff of the SEC indicates that it has no further comments to such proxy statement) after the occurrence of such Authorized Share Failure (the "Meeting Outside Date"), the Corporation shall hold a meeting of its stockholders for the approval of an increase in the number of authorized Shares of Common Stock. In connection with such meeting, the Corporation shall provide each stockholder with a proxy statement and shall use its reasonable best efforts to solicit its stockholders' approval of such increase in authorized Common Shares and to cause its Board of Directors to recommend to the stockholders that they approve such proposal. Notwithstanding the foregoing, if at such time of an Authorized Share Failure, the Corporation is able to obtain the written consent of a majority of the shares of its issued and outstanding Common Stock to approve the increase in the number of authorized shares of Common Stock, the Corporation shall satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C.

- (g) Fractional Shares. No fractional shares shall be issued upon the conversion of any Preferred Shares. All Common Shares (including fractions thereof) issuable upon conversion of more than one Preferred Share by a Holder thereof and all Preferred Shares issuable upon the purchase thereof shall be aggregated for purposes of determining whether the conversion and/or purchase would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion and/or purchase would result in the issuance of a share of Common Stock, the Corporation shall, in lieu of issuing any fractional share, either round up the number of shares to the next highest whole number or, at the Corporation's option, pay the Holder otherwise entitled to such fraction a sum in cash equal to the fair market value of such fraction on the Conversion Date (as determined in good faith by the Board of Directors of the Corporation).
- (h) Reorganization, Merger or Going Private. In case of any reorganization or any reclassification of the capital stock of the Corporation or any consolidation or merger of the Corporation with or into any other corporation or corporations or a sale or transfer of all or substantially all of the assets of the Corporation to any other person or a "going private" transaction under Rule 13e-3 promulgated pursuant to the Securities Exchange Act of 1934 (the "Exchange Act"), as amended, then, as part of such reorganization, consolidation, merger, or transfer if the holders of Common Shares receive any publicly traded securities as part or all of the consideration for such reorganization, reclassification, consolidation, merger or sale, then it shall be a condition precedent of any such event or transaction that provision shall be made such that each Preferred Share shall thereafter be convertible into such new securities at a conversion price and pricing formula which places the Holders of Preferred Shares in an economically equivalent position as they would have been if not for such event. The Corporation shall give each holder written notice at least ten (10) Trading Days prior to the consummation of any such reorganization, reclassification, consolidation, merger or sale. Notwithstanding anything contained herein to the contrary, nothing contained in this Section 7(h) shall be deemed to limit the Holder's right to require the Corporation to repurchase the Preferred Shares in accordance with Section 9.
- (i) *Certificate for Conversion Price Adjustment.* The Corporation shall promptly furnish or cause to be furnished to each Holder a certificate prepared by the Corporation setting forth any adjustments or readjustments of the Conversion Price pursuant to this Section 7.

(j) Failure to Redeliver. If a Holder fails to re-deliver shares of Common Stock to the Corporation within ten (10) Trading Days of being required to do so pursuant to Section 6(d)(i)(C) in connection with a Mandatory Redemption or Section 8 in connection with an optional redemption by the Corporation, then, unless such Common Shares have been cancelled by the Corporation, the Corporation may, at its option, redeem a number of Preferred Share having a Liquidation Preference equal in value to the product of (x) such number of Common Shares and (y) the Stock Payment Price for such Mandatory Redemption Date or Optional Redemption Date, as the case may be, in lieu of requiring such Holder to return such Common Shares.

(k) Cash Settlement. Notwithstanding anything contained herein to the contrary, to the extent that the effectiveness of the Registration Statement or the ability to use the Prospectus has lapsed or such Registration Statement or Prospectus is unavailable for the issuance of Common Shares pursuant to this Section 7, then, unless such Common Shares may be resold by the Holder pursuant to Rule 144 under the Securities Act without volume limitations or any public information requirements or such other exemption from registration that would permit the Holder to resell such Common Shares without restriction and without need for additional registration under any securities laws, at the option of the Holder, any conversion of Preferred Shares into Common Shares shall be "cash settled" and the Corporation shall pay to such Holder an amount in cash equal to the sum of (x) the Liquidation Preference for each Preferred Share being converted and (y) the Conversion Premium. The "Conversion Premium" means the product of (v) the difference between (A) the Daily VWAP on the Conversion Date and (B) the Conversion Price in effect on such Conversion Date and (w) the quotient of (I) the Liquidation Preference times the number of Preferred Shares being converted and (II) the Conversion Price in effect on such Conversion Date, no later than three (3) Trading Days after the date of the applicable Conversion Notice.

8. Optional Redemption by the Corporation. The Corporation may, at its option, redeem the Preferred Stock, at any time and from time to time, in whole or in part (but not less than 1,000,000 Preferred Shares at any one time) for an amount equal to (a) the Liquidation Preference per Preferred Share plus any accrued and unpaid dividends through the Optional Redemption Date (as defined below) (the "Base Redemption Price") plus (b) (i) if such prepayment occurs on or before the twelve (12) month anniversary of the Initial Issuance Date, an amount equal to 15% of the Base Redemption Price or (ii) if such prepayment occurs at any time after the twelve (12) month anniversary of the Initial Issuance Date, an amount equal to 10% of the Base Redemption Price (the additional amount under clause (b) being referred to as the "Additional Redemption Price"). The Base Redemption Price shall be paid in cash and the Additional Redemption Price shall be paid in cash or, at the Corporation's option and provided (w) the Equity Conditions are satisfied (unless waived by the Required Holders), (x) the portion of the Additional Redemption Price to be paid in Common Shares does not exceed the Dollar Volume Limitation (unless waived by the Required Holders), (v) the Maximum Share Amount is not exceeded and (z) the Daily VWAP is available on the Trading Day immediately preceding the First Optional Redemption Advance Date (as defined below) and on each day of the Stock Payment Pricing Period, in Common Shares. The Corporation shall deliver written notice of optional redemption (an "Optional Redemption Notice") to the Holders thirty (30) Trading Days prior to the date set by the Corporation for such optional redemption (the "Optional Redemption Date"), which Optional Redemption Date may not be a Mandatory Redemption Date or any day of a Stock Payment Pricing Period with respect to any Mandatory Redemption Date. For the avoidance of doubt, each Holder may submit a Conversion Notice for the specific Optional Redemption Shares (as defined below) to be redeemed on such Optional Redemption Date at any time prior to the Optional Redemption Date notwithstanding the delivery of an Optional Redemption Notice by the Corporation. Such Optional Redemption Notice shall specify the number of preferred shares to be redeemed (the "Optional Redemption Shares") and what portion of the Additional Redemption Price will be paid in Common Shares (expressed in dollars), what portion of the Additional Redemption Price will be paid in cash (expressed in dollars) and (A) certify that the Equity Conditions are satisfied, (B) state the Dollar Volume Limitation (expressed in dollars) and certify that the portion of the Additional Redemption Price to be paid in Common Shares does not exceeded such Dollar Volume Limitation and (C) certify that the Maximum Share Amount has not been exceeded. Such Optional Redemption Notice shall be irrevocable. To the extent that any portion of the Additional Redemption Price will be paid in Common Shares, twenty-one (21) Trading Days prior to the Optional Redemption Date (the "First Optional Redemption Advance Date"), the Corporation shall advance to the Holder a number of Common Shares determined by dividing (x) that portion of the Additional Redemption Price to be paid in Common Shares by (y) 92% of the Daily VWAP on the Trading Day immediately preceding the First Optional Redemption Advance Date (the "First Optional Redemption Advance Shares"). In addition, eleven (11) Trading Days prior to the applicable Optional Redemption Date (the "Second Optional Redemption Advance Date" and together with the First Optional Redemption Advance Date, the "Optional Redemption Advance Dates" and each, an "Optional Redemption Advance Date"), the Corporation shall advance to the Holders and an additional number of Common Shares equal to the positive difference (if any) between (x) the quotient of (1) the portion of the Additional Redemption Price to be paid in Common Shares and (2) the average of the five lowest Daily VWAPs during the first ten (10) Trading Days of the applicable Stock Payment Pricing Period and (y) the number of First Optional Redemption Advance Shares delivered to the Holders pursuant to the immediately preceding sentence in connection with such Optional Redemption Date (the "Second Optional Redemption Advance Shares" and together with the First Optional Redemption Advance Shares, the "Optional Redemption Advance Shares"). Not later than three (3) Trading Days after the Optional Redemption Date, the Corporation shall deliver an additional number of Common Shares, if any, to the Holder equal to the positive difference between (I) that portion of the Additional Redemption Price to be paid in Common Shares divided by the Stock Payment Price and (2) the Optional Redemption Advance Shares. If clause (2) of the immediately preceding sentence exceeds clause (1) of the immediately preceding sentence, then each Holder shall return to the Corporation its pro rata portion of such excess number of Common Shares. For the avoidance of doubt, no Holder shall have any liability to the Corporation to the extent that any Optional Redemption Advance Shares that are returned to the Corporation pursuant to the immediately preceding sentence decrease in value following the applicable Optional Redemption Advance Date. The provisions of Section 6(d)(ii), Section 6(d)(iii), Section 6(e) and Section 6(f) shall apply to this Section 8 mutatis mutandis.

- **9. Mandatory Repurchase**. Each Holder shall have the unilateral option and right to compel the Corporation to repurchase for cash any or all of such Holder's Preferred Shares within three (3) days of a written notice requiring such repurchase (provided that no such written notice shall be required for clauses (v) and (vi) and such demand for repurchase shall be deemed automatically made upon the occurrence of any of the events set forth in such clauses (v) and (vi)), at a price per Preferred Share equal to the sum of (a) the Liquidation Preference plus (b) any and all accrued and unpaid dividends on the Preferred Shares (the sum of (a) and (b), the "Base Mandatory Repurchase Price") plus (c) (i) if such demand for repurchase occurs on or before the twelve (12) month anniversary of the Initial Issuance Date, an amount equal to 15% of the Base Mandatory Repurchase Price, or (ii) if such demand for repurchase occurs at any time after the twelve (12) month anniversary of the Initial Issuance Date, an amount equal to 10% of the Base Mandatory Repurchase Price, if any of the following events shall have occurred or are continuing:
 - (i) A Change in Control Transaction (as defined below);
 - (ii) A "going private" transaction under Rule 13e-3 promulgated pursuant to the Exchange Act;
 - (iii) A tender offer by the Corporation under Rule 13e-4 promulgated pursuant to the Exchange Act;
 - (iv) the suspension from trading or the failure of the Common Shares to be listed on a Trading Market for a period of five (5) consecutive Trading Days or for more than an aggregate of ten (10) trading days in any 365-day period;
 - (v) the entry by a court having jurisdiction in the premises of (i) a decree or order for relief in respect of the Corporation or any Subsidiary of a voluntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law or (ii) a decree or order adjudging the Corporation or any Subsidiary as bankrupt or insolvent, or approving as properly filed a petition seeking reorganization, arrangement, adjustment or composition of or in respect of the Corporation or any Subsidiary under any applicable federal or state law or (iii) appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Corporation or any Subsidiary or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree or order for relief or any such other decree or order unstayed and in effect for a period of 60 consecutive days;
 - (vi) the commencement by the Corporation or any Subsidiary of a voluntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree or order for relief in respect of the Corporation or any Subsidiary in an involuntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable federal or state law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Corporation or any Subsidiary or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the admission by it in writing of its inability to pay its debts generally as they become due, or the taking of corporate action by the Corporation or any Subsidiary in furtherance of any such action;

(vii) following an Authorized Share Failure, the Corporation fails to receive stockholder approval or the written consent of a majority of the issued and outstanding Common Shares to approve the required increase in the number of Common Shares within five (5) days after the Meeting Outside Date; or

(viii) the Corporation's failure to deliver Common Shares on any Share Delivery Date, Advance Date, Mandatory Redemption Date or Optional Redemption Date, if such failure continues for two (2) Trading Days after the date that delivery of such Common Shares is due;

- (ix) the Corporation's failure to pay any amounts when and as due pursuant to this Certificate of Designations or any other Transaction Document, if such failure continues for two (2) Trading Days after the date that such payment is due;
- (x) the Corporation breaches any covenants and agreements contained in Section 13 of this Certificate of Designations, Section 3.10 of the Purchase Agreement, Section 3.11, Section 3.12 of the Purchase Agreement and/or Section 3.14 of the Purchase Agreement;
- (xi) the Corporation or any of its Subsidiaries shall (A) default in any payment of any amount or amounts of principal of or interest on any Indebtedness (as defined the Purchase Agreement) the aggregate principal amount of which Indebtedness is in excess of \$1,000,000 or (B) default in the observance or performance of any other agreement or condition relating to any such Indebtedness or contained in any instrument or agreement evidencing, securing or relating thereto, or any other event shall occur or condition exist, as a result of which default or other event or condition the holder or holders or beneficiaries of such Indebtedness or a trustee on their behalf have declared such Indebtedness to be due prior to its stated maturity;
- (xii) the effectiveness of the Registration Statement or the ability to use the Prospectus lapses for any reason (including, without limitation, the issuance of a stop order) or such Registration Statement or Prospectus is unavailable for the issuance of Common Shares hereunder, and such lapse or unavailability continues for a period of ten (10) consecutive days or for more than an aggregate of twenty (20) days in any 365-day period;

(xiii) the Corporation breaches any representation, warranty, covenant or other term or condition of any this Certificate of Designations, the Purchase Agreement or the Warrant, except to the extent that such breach, or the event that gave rise to such breach, would not have a Material Adverse Effect (as defined in the Purchase Agreement), and except in the case of a breach of a covenant which is curable, only if such breach remains uncured for a period of at least ten (10) calendar days (the events described in clauses (v), (vi), (viii), (ix), (xi), (xii) and this (xiii) of this Section 9, collectively, the "Trigger Events" and each a "Trigger Event").

A "Change in Control Transaction" will be deemed to exist if (i) there occurs any consolidation or merger of the Corporation with or into any other corporation or other entity or person (whether or not the Corporation is the surviving corporation), or any other corporate reorganization or transaction or series of related transactions in which in excess of 50% of the Corporation's voting power is transferred through a merger, consolidation, tender offer or similar transaction, (ii) any person (as defined in Section 13(d) of the Exchange Act), together with its affiliates and associates (as such terms are defined in Rule 405 under the Securities Act), beneficially owns or is deemed to beneficially own (as described in Rule 13d-3 under the Exchange Act without regard to the 60-day exercise period) in excess of 50% of the Corporation's voting power (provided, however, that if any person is immediately prior to he Initial Issuance Date a Beneficial Owner of 40% or more of the Corporation's Common Stock, it shall not be deemed to be a Change of Control Transaction if such person increases its Beneficial Ownership percentage by not more than 10 percentage points), (iii) there is a replacement of more than one-half of the members of the Corporation's Board of Directors which is not approved by those individuals who are members of the Corporation's Board of Directors on the date thereof, in one or a series of related transactions or (iv) a sale or transfer of all or substantially all of the assets of the Corporation, determined on a consolidated basis; provided, however that a Change in Control Transaction will not be deemed to have occurred pursuant to clause (iv) if such sale or transfer is the sale or transfer of not more than one business segment during the period from the Initial Issuance Date through the Maturity Date and the Corporation remains a publicly traded corporation and if, on the effective date of the sale or transfer described therein, the Corporation deposits funds in the Escrow Account (as defined in

10. Voting Rights. Except as otherwise set forth herein, the Preferred Shares shall not have any voting rights.

11. Rank. All shares of Common Stock shall be of junior rank to all Preferred Shares with respect to the preferences as to dividends, distributions and payments upon a Liquidation Event. The rights of the shares of Common Stock shall be subject to the preferences and relative rights of the Preferred Shares. Without the prior express written consent of the Required Holders, the Corporation shall not hereafter authorize or issue additional or other capital stock that is of senior or pari-passu rank to the Preferred Shares in respect of the preferences as to dividends and other distributions, amortization and redemption payments upon Liquidation Event. The Corporation shall be permitted to issue preferred stock that is junior in rank to the Preferred Shares in respect of the preferences as to dividends and other distributions, amortization and redemption payments and payments upon Liquidation Event, provided, that the maturity date (or any other date requiring redemption, repayment or any other payment, including, without limitation, dividends in respect of any such preferred shares) of any such junior preferred shares is not on or before ninety-one (91) days after the Maturity Date. In the event of the merger or consolidation of the Corporation with or into another corporation, the Preferred Shares shall maintain their relative powers, designations and preferences provided for herein (except that the Preferred Shares may not be pari passu with, or junior to, any capital stock of the successor entity) and no merger shall have a result inconsistent therewith.

- 12. <u>Participation</u>. The Holders of the Preferred Shares shall be entitled to such dividends paid and distributions made to the holders of Common Stock to the same extent as if such Holders of the Preferred Shares had converted the Preferred Shares into Common Shares (without regard to any limitations on conversion herein or elsewhere) and had held such Common Shares on the record date for such dividends and distributions. Payments under the preceding sentence shall be made concurrently with the dividend or distribution to the holders of Common Stock.
- 13. Vote to Change the Terms of or Issue Preferred Shares. In addition to any other rights provided by law, except where the vote or written consent of the Holders of a greater number of shares is required by law or by another provision of the Certificate of Incorporation, the affirmative vote at a meeting duly called for such purpose or the written consent without a meeting of the Required Holders, voting together as a single class, shall be required before the Corporation may: (a) amend or repeal any provision of, or add any provision to, this Certificate of Designations, the Certificate of Incorporation or bylaws, or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of preferred stock, if such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the Preferred Shares, regardless of whether any such action shall be by means of amendment to the Certificate of Incorporation or by merger, consolidation or otherwise; (b) increase or decrease (other than by conversion) the authorized number of shares of Preferred Shares (for the avoidance of doubt, the Corporation may increase or decrease the number of authorized shares of undesignated "blank check" preferred stock); (c) create or authorize (by reclassification or otherwise) any new class or series of shares that has a preference over or is on a parity with the Preferred Shares with respect to dividends or the distribution of assets on a Liquidation Event; (d) purchase, repurchase or redeem any Common Shares or other shares of capital stock of the Corporation; (e) pay dividends or make any other distribution on the Common Stock or any other capital stock of the Corporation or (f) whether or not prohibited by the terms of the Preferred Shares, circumvent a right of the Preferred Shares.

14. <u>Book-Entry</u>. Notwithstanding anything to the contrary set forth herein, upon conversion or redemption of Preferred Shares in accordance with the terms hereof, the Holder thereof shall not be required to physically surrender the certificate representing the Preferred Shares to the Corporation unless (A) the full or remaining number of Preferred Shares represented by the certificate are being converted or redeemed or (B) such Holder has provided the Corporation with prior written notice requesting reissuance of Preferred Shares upon physical surrender of any Preferred Shares. Each Holder and the Corporation shall maintain records showing the number of Preferred Shares so converted or redeemed and the dates of such conversions or redemptions. Notwithstanding the foregoing, if Preferred Shares represented by a certificate are converted or redeemed as aforesaid, a Holder may not transfer the certificate representing the Preferred Shares unless such Holder first physically surrenders the certificate representing the Preferred Shares to the Corporation, whereupon the Corporation will forthwith issue and deliver upon the order of such Holder a new certificate of like tenor, registered as such Holder may request, representing in the aggregate the remaining number of Preferred Shares represented by such certificate. A Holder and any assignee, by acceptance of a certificate, acknowledges and agrees that, by reason of the provisions of this paragraph, following conversion or redemption of any Preferred Shares, the number of Preferred Shares represented by such certificate will be less than the number of Preferred Shares stated on the face thereof. Each certificate for Preferred Shares shall bear the following legend:

ANY TRANSFEREE OF THIS CERTIFICATE SHOULD CAREFULLY REVIEW THE TERMS OF THE CORPORATION'S CERTIFICATE OF DESIGNATIONS RELATING TO THE PREFERRED SHARES REPRESENTED BY THIS CERTIFICATE. THE NUMBER OF PREFERRED SHARES REPRESENTED BY THIS CERTIFICATE MAY BE LESS THAN THE NUMBER OF PREFERRED SHARES STATED ON THE FACE HEREOF PURSUANT TO THE CERTIFICATE OF DESIGNATIONS RELATING TO THE PREFERRED SHARES REPRESENTED BY THIS CERTIFICATE.

15. Taxes.

(a) Any and all payments made by the Corporation hereunder, including any amounts received on a conversion or redemption of the Preferred Shares and any amounts on account of dividends or deemed dividends, must be made by it without any Tax Deduction, unless a Tax Deduction is required by law. If the Corporation is aware that it must make a Tax Deduction (or that there is a change in the rate or the basis of a Tax Deduction) in respect of any payment to any Holder, it must notify such Holders promptly.

(b) If a Tax Deduction for Taxes other than Excluded Taxes (as defined below) is required to be made by the Corporation with respect to any payment to any Holder, the amount of the payment made by the Corporation will be increased to an amount which (after making the Tax Deduction, including any Tax Deduction applicable to additional sums payable pursuant to this Section 15(b)) results in the receipt by such Holder of an amount equal to the payment which would have been due if no Tax Deduction had been required. If the Corporation is required to make a Tax Deduction, it must make any payment required in connection with that Tax Deduction within the time allowed by law. As soon as practicable after making a Tax Deduction or a payment required in connection with a Tax Deduction, the Corporation must deliver to the Holder any official receipt or form, if any, provided by or required by the taxing authority to whom the Tax Deduction was paid, "Excluded Taxes" means (a) Taxes imposed on or measured by the Holder's net income (however denominated), and franchise Taxes imposed on the Holder (in lieu of net income Taxes), by the jurisdiction (or any political subdivision thereof) under the taws of which such Holder is a citizen or resident, under the laws of which such Holder is organized, in which the Holder's principal office is located, or in which the Holder is otherwise doing business, (b) any branch profits Taxes imposed by the United States of America or any similar Tax imposed by any other jurisdiction in which the Corporation is located, (c) in the case of a non-US Holder, any withholding Tax that is imposed on amounts payable to such non-US Holder at the time such non-US Holder becomes a Holder (or at such time that such Holder changes its citizenship, residence, place of organization, principal office, or location where doing business) or is attributable to such non-US Holder's failure or inability to comply with any applicable documentation requirements or to provide any documents or certifications that are reasonably requested by the Corporation, and (d) in the case of any Holder, any withholding Tax (including any backup withholding tax) that is imposed on amounts payable to such Holder that is attributable to such Holder's failure or inability to comply with any applicable documentation requirements or to provide any documents or certifications that arc reasonably requested by the Corporation.

- (c) In addition, the Corporation agrees to pay in accordance with applicable law any present or future stamp or documentary taxes or any other excise or property taxes, charges or similar levies that arise from any payment made hereunder or in connection with the execution, delivery, registration or performance of, or otherwise with respect to, the Preferred Shares other than income taxes ("Other Taxes"). As soon as practicable after making a payment of Other Taxes, the Corporation must deliver to such Holder any official receipt or form, if any, provided by or required by the taxing authority to whom such Other Taxes were paid.
- (d) The obligations of the Corporation under this Section 15 shall survive the Maturity Date of the Preferred Shares and the payment for the Preferred Shares and all other amounts payable hereunder.
- 16. <u>Issuance Limitations.</u> The total number of Common Shares issued or issuable hereunder shall not (when aggregated with any Common Shares already issued in respect of all of the Preferred Shares) exceed the maximum number of Common Shares which the Corporation can so issue pursuant to any rule or regulation of the NYSE Amex Equities (or any other Trading Market on which the Common Shares trade) (the "Maximum Share Amount"), subject to equitable adjustments from time to time for stock splits, stock dividends, combinations, capital reorganizations and similar events relating to the Common Shares occurring after the Initial Issuance Date. For the avoidance of doubt, each and every provision of this Certificate of Designations shall remain in full force and effect and the Corporation shall be required to perform its obligations in accordance with the terms hereof notwithstanding the fact that the number of Common Shares issued hereunder may exceed the Maximum Share Amount. Notwithstanding any other provision hereof, no shares of Common Stock in excess of 4,962,000 shares shall be issued by the Corporation hereunder, whether by reason of conversion, redemption or otherwise, and no voting rights may be exercised, until after approval of the shareholders of the Corporation as contemplated by Section 3.14 of the Purchase Agreement.

- 17. Ownership Cap. Notwithstanding anything to the contrary set forth herein, at no time may the Corporation issue to a Holder, Common Shares if the number of Common Shares to be issued pursuant to such issuance would exceed, when aggregated with all other Common Shares beneficially owned by such Holder at such time (as determined in accordance with Section 13(d) of the Exchange Act and the rules thereunder, including without limitation, Common Shares that would be aggregated with the Holder's beneficial ownership for purpose of determining a group under Section 13(d) of the Exchange Act and the rules thereunder, including without limitation, Common Shares that would be aggregated with the Holder's beneficial ownership for purpose of determining a group under Section 13(d) of the Exchange Act and the rules thereunder, including without limitation, Common Shares that would be aggregated with the Holder's beneficial ownership for purpose of determining a group under Section 13(d) of the Exchange Act) more than 4.9% (the "Beneficial Ownership Limitation") of the then issued and outstanding Common Shares. Each Holder shall have the right (with respect to itself only) to waive the provisions of this Section 17 upon not less than sixty-five (65) days' prior notice to the Corporation. Notwithstanding the foregoing, the Holder shall have the right to: (A) at any time and from time to time immediately reduce the Beneficial Ownership Limitation and (B) (subject to waiver) at any time and from time to time, increase the Beneficial Ownership Limitation immediately in the event of the announcement as pending or planned, of a Change in Control Transaction.
- **18.** Notices. The Corporation shall distribute to the Holders of Preferred Shares copies of all notices, materials, annual and quarterly reports, proxy statements, information statements and any other documents distributed generally to the holders of shares of Common Stock of the Corporation, at such times and by such method as such documents are distributed to such holders of such Common Stock.
- 19. <u>Replacement Certificates</u>. The certificate(s) representing the Preferred Shares held by any Holder may be exchanged by such Holder at any time and from time to time for certificates with different denominations representing an equal aggregate number of Preferred Shares, as reasonably requested by such Holder, upon surrendering the same. No service charge will be made for such registration or transfer or exchange.
- **20.** <u>Attorneys' Fees</u>. In connection with enforcement by a Holder of any obligation of the Corporation hereunder, the prevailing party shall be entitled to recovery of reasonable attorneys' fees and expenses incurred.
- **21.** <u>No Reissuance</u>. No Preferred Shares acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be reissued. Preferred Shares issued and reacquired by the Corporation, whether upon redemption, conversion or otherwise, shall have the status of authorized and unissued undesignated shares of "blank check" preferred stock.
- 22. <u>Severability of Provisions</u>. If any right, preference or limitation of the Preferred Shares set forth in this Certificate of Designations (as this Certificate of Designations may be amended from time to time) is invalid, unlawful or incapable of being enforced by reason of any rule or law or public policy, all other rights, preferences and limitations set forth in this Certificate of Designations, which can be given effect without the invalid, unlawful or unenforceable right, preference or limitation shall nevertheless remain in full force and effect, and no right, preference or limitation herein set forth be deemed dependent upon any such other right, preference or limitation unless so expressed herein.

- **23.** <u>Limitations</u>. Except as may otherwise be required by law and as are set forth in the Purchase Agreement, the Preferred Shares shall not have any powers, preference or relative participating, optional or other special rights other than those specifically set forth in this Certificate of Designation (as may be amended from time to time) or otherwise in the Certificate of Incorporation of the Corporation.
 - 24. <u>Payments</u>. Any payments required to be made to the Holders in cash hereunder, shall be made by wire transfer of immediately available funds.

Signed on November 18, 2010

NEOSTEM, INC.

By: /s/ Robin Smith

Name: Robin Smith

Title: CEO

EXHIBIT A

(To be Executed by Holder in order to Convert Preferred Shares)

CONVERSION NOTICE FOR SERIES E 7% SENIOR CONVERTIBLE PREFERRED STOCK

nereby irrevocably elects to obtook"), of the Corporation andersigned hereby requests DWAC to, the undersigned of	("Holder") of shares of Series E 7% Senior Convertible Preferred Stock ("Preferred Shares") of Neostem, Inc. (the "Corporation"), convert Preferred Shares for shares ("Common Shares") of common stock, par value \$0.01 per share (the "Common according to the terms and conditions of the Certificate of Designations for the Preferred Shares as of the date written below. The the Common Shares to be issued to the undersigned pursuant to this Conversion Notice be issued in the name of, and delivered via r its designee as indicated below. No fee will be charged to the Holder of Preferred Shares for any conversion. Capitalized terms a defined shall have the meanings ascribed thereto in the Certificate of Designations.		
Conversion Date:			
Conversion Information:	NAME OF HOLDER:		
	By: Print Name Print Title:		
	Print Address of Holder:		
	DWAC Instructions:		
f Common Shares are to be i Holder's signature must be gi	ssued to a person other than Holder, paranteed below:		
SIGNATURE GUARANTEE			
THE COMPUTATION OF N	UMBER OF COMMON SHARES TO BE RECEIVED IS SET FORTH ON PAGE 2 OF THE CONVERSION NOTICE.		
Page 1 of Conversion Notice			

Page 2 to Conversion Notice dated		for:	
	(Conversion Date)	(Name of Holo	ler)
	COMPUTATION OF NUMBER OF COMM	MON SHARES TO BE RECEIVED	
Number of Preferred Shares converted:	shares		
Number of Preferred Shares co	onverted x Liquidation Preference	\$	
Total dollar amount converted		\$	
Conversion Price		\$	
Number of Common Shares	= <u>Total dollar amou</u> Conversion		
Number of Common	n Shares =		
Please issue and deliver cer	tificate(s) for Common Shares in the followin	g amount(s):	
	29		

CERTIFICATE OF AMENDMENT TO THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF NEOSTEM, INC.

Pursuant to Section 242 of the General Corporation Law of the State of Delaware

NeoStem, Inc., a corporation duly organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), does hereby certify that:

1. The Amended and Restated Certificate of Incorporation of the Corporation is hereby amended by deleting ARTICLE ELEVENTH thereof and inserting the following in lieu thereof:

"ELEVENTH: For the management of the business and for the conduct of the affairs of the Corporation, and for further definition, limitation and regulation of the powers of the Corporation and its Directors and stockholders:

- "A. The number of Directors constituting the Corporation's Board of Directors shall be determined by the Board of Directors, from time to time. The term of office of all Directors shall expire at the 2011 annual meeting of stockholders of the Corporation. Commencing with the 2011 annual meeting of stockholders, the Directors constituting the Corporation's Board of Directors shall not be classified and, other than those who may be elected by the holders of any classes or series of stock having a preference over the Common Stock as to dividends or upon liquidation, shall be elected annually at each annual meeting of stockholders of the Corporation, to hold office for a term expiring at the next annual meeting of stockholders, with each director to hold office until his or her successor shall have been duly elected and qualified. Any Director, other than those who may be elected by the holders of any classes or series of stock having a preference over the Common Stock as to dividends or upon liquidation, may be removed from office at any time, with or without cause by the affirmative vote of at least a majority of the voting power of then outstanding capital stock entitled to vote on the matter, voting together as a single class.
- "B. Except as otherwise fixed by or pursuant to provisions hereof relating to the rights of the holders of any class or series of stock having a preference over Common Stock as to dividends or upon liquidation to elect additional Directors under specified circumstances, newly created directorships resulting from any increase in the number of Directors and any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other cause shall be filled by the affirmative vote of a majority of the remaining Directors then in office, even though less than a quorum of the Board of Directors, or by a sole remaining Director. Any Director appointed by the Board of Directors in accordance with the preceding sentence shall hold office and shall be elected for the remainder of the full term of the class of Directors in which the new directorship was created or the vacancy occurred and until such Director's successor shall have been elected and qualified."

[Signature Page Follows]

IN WITNESS WHEREOF, we have set our hands on this 14^{th} day of October, 2011.

NEOSTEM, INC.

By: /s/ Robin L. Smith, M.D.

Name: Robin L. Smith, M.D. Title: Chief Executive Officer

WARRANT AGREEMENT

SERIES NA WARRANTS

THIS WARRANT AGREEMENT (this "Agreement"), dated as of July 22, 2011, is entered into by and between NeoStem, Inc., a Delaware corporation ("NeoStem" or the "Company"), and Continental Stock Transfer & Trust Company, a New York corporation (the "Warrant Agent").

WHEREAS, on July 22, 2011 in connection with a registered offering of units (the "<u>Units</u>") consisting of common stock and warrants, with each Unit consisting of one share of common stock and a warrant to purchase 0.75 shares of common stock, the Company agreed to issue warrants to purchase ten million three hundred twelve thousand five hundred (10,312,500) shares of the Company's common stock, par value \$0.001 per share, (the "<u>Common Stock</u>") exercisable over a five-year period at an exercise price of \$1.45 per share (the "<u>Warrants</u>");

WHEREAS, the Company filed with the Securities and Exchange Commission (the "<u>Commission</u>"), a Registration Statement on Form S-3, Registration No. 333-173855 (the "<u>Registration Statement</u>"), for the registration, under the Securities Act of 1933, as amended (the "<u>Act</u>") of, among other securities, the Warrants and the shares of Common Stock issuable upon exercise of the Warrants (the "<u>Warrant Shares</u>"), and such Registration Statement was declared effective on June 13, 2011; and

WHEREAS, the Company desires the Warrant Agent to act on behalf of the Company, and the Warrant Agent is willing to so act, in connection with the issuance, transfer, exchange and exercise of the Warrants; and

WHEREAS, the Company desires to provide for the form and provisions of the Warrants, the terms upon which they shall be issued and exercised, and the respective rights, limitation of rights, and immunities of the Company, the Warrant Agent, and the holders of the Warrants.

NOW, THEREFORE, in consideration of the mutual agreements herein contained, the parties hereto agree as follows:

1. <u>Appointment of Warrant Agent</u>. The Company hereby appoints the Warrant Agent to act as agent for the Company for the Warrants, and the Warrant Agent hereby accepts such appointment and agrees to perform the same in accordance with the terms and conditions set forth in this Agreement. The Warrant Agent shall have the powers and authority granted to and conferred upon it hereunder and in the Warrant Certificates (as hereinafter defined), and such further powers and authority as the Company may hereafter grant to or confer upon it. Notwithstanding anything to the contrary herein, all of the terms and provisions contained in the Warrant Certificates are subject to and governed by the terms and provisions of this Agreement.

2. Warrants.

- 2.1 Form of Warrant. Each Warrant shall be issued in registered form only, shall be in substantially the form of Exhibit A hereto, the provisions of which are incorporated herein, and shall be signed by, or bear the facsimile signature of, the Chairman of the Board, the Chief Executive Officer, the Chief Financial Officer, the Secretary or any vice president of the Company and shall bear a facsimile of the Company's seal. In the event the person whose facsimile signature has been placed upon any Warrant shall have ceased to serve in the capacity in which such person signed the Warrant before such Warrant is issued, it may be issued with the same effect as if he or she had not ceased to be such at the date of issuance. All of the Warrants may be represented by one or more book-entry certificates (each a "Book-Entry Warrant Certificate").
- 2.2. <u>Effect of Countersignature</u>. Unless and until countersigned by the Warrant Agent pursuant to this Warrant Agreement, a Warrant shall be invalid and of no effect and may not be exercised by the holder thereof.

2.3. <u>Registration</u>.

2.3.1. <u>Warrant Register</u>. The Warrant Agent shall maintain books ("<u>Warrant Register</u>"), for the registration of original issuance and the registration of transfer of the Warrants. Upon the initial issuance of the Warrants, the Warrant Agent shall issue and register the Warrants in the names of the respective holders thereof in such denominations and otherwise in accordance with instructions delivered to the Warrant Agent by the Company. Except as provided in this <u>Section 2.3.1</u>, all of the Warrants shall initially be represented by one or more physical or Book-Entry Warrant Certificates deposited with the Depository Trust Company (the "<u>Depository</u>") and registered in the name of Cede & Co., a nominee of the Depository. Ownership of beneficial interests in the Book-Entry Warrant Certificates shall be shown on, and the transfer of such ownership shall be effected through, records maintained (i) by the Depository or its nominee for each Book-Entry Warrant Certificate; (ii) by institutions that have accounts with the Depository (such institution, with respect to a Warrant in its account, a "<u>Participant</u>"); or (iii) directly on the book-entry records of the Warrant Agent with respect only to owners of beneficial interests that represent such direct registration.

If the Depository subsequently ceases to make its book-entry settlement system available for the Warrants, the Company may instruct the Warrant Agent regarding making other arrangements for book-entry settlement within ten (10) days after the Depository ceases to make its book-entry settlement available. In the event that the Company does not make alternative arrangements for book-entry settlement within ten (10) days, or the Warrants are not eligible for, or it is no longer necessary to have the Warrants available in, book-entry form, the Warrant Agent shall provide written instructions to the Depository to deliver to the Warrant Agent for cancellation each Book-Entry Warrant Certificate, and the Company shall instruct the Warrant Agent to deliver to the Depository definitive Warrant Certificates in physical form evidencing such Warrants.

At the request of any initial purchaser or beneficial owner of Warrants, the Warrant Agent shall deliver to such purchaser or beneficial owner definitive Warrant Certificates in physical form, registered in the name of such purchaser, evidencing the Warrants purchased by such initial purchaser. The Warrant Certificates shall represent the number of outstanding Warrants from time to time endorsed thereon and that the number of outstanding Warrants represented thereby may from time to time be reduced or increased, as appropriate, to reflect exchanges, redemptions, exercises and other similar transactions.

All definitive Warrant Certificates shall be in substantially the form annexed hereto as <u>Exhibit A</u>. No Warrant Certificate shall be valid for any purpose, and no Warrant evidenced thereby shall be exercisable, until the Warrant has been countersigned by the Warrant Agent by manual or facsimile signature. Such signature by the Warrant Agent upon the Warrant executed by the Company shall be conclusive evidence, and the only evidence, that the Warrant so countersigned has been duly issued hereunder.

- 2.3.2. <u>Beneficial Owner; Registered Holder</u>. The term "<u>beneficial owner</u>" shall mean any person in whose name ownership of a beneficial interest in the Warrants evidenced by a Book-Entry Warrant Certificate is recorded in the records maintained by the Depository or its nominee. Prior to due presentment for registration of transfer of any Warrant, the Company and the Warrant Agent may deem and treat the person in whose name such Warrant shall be registered upon the Warrant Register ("<u>registered holder</u>"), as the absolute owner of such Warrant and of each Warrant represented thereby (notwithstanding any notation of ownership or other writing on the Warrant Certificate made by anyone other than the Company or the Warrant Agent), for the purpose of any exercise thereof, and for all other purposes, and neither the Company nor the Warrant Agent shall be affected by any notice to the contrary. Any reference herein to the term holder or registered holder shall include a beneficial owner who has received definitive Warrant Certificates registered in its name. The term "Holder," when used with respect to any Warrant, shall mean any person in whose name at the time such Warrant shall be registered upon the books to be maintained by the Warrant Agent for that purpose.
- 2.4. <u>Uncertificated Warrants</u>. Notwithstanding the foregoing and anything else herein to the contrary, the Warrants may be issued in uncertificated form.

3. <u>Terms and Exercise of Warrants.</u>

- 3.1 <u>Exercise Price</u>. For purposes of this Agreement, "<u>Exercise Price</u>" shall mean the initial exercise price for each Warrant as set forth in the Warrant, subject to adjustment as provided in the Warrant and herein.
- 3.2 <u>Duration of Warrants</u>. A Warrant may be exercised only during the period ("<u>Exercise Period</u>") specified in the Warrant. Each Warrant not exercised on or before the expiration date, as set forth in the Warrant (the "<u>Expiration Date</u>"), shall become void, and all rights thereunder and all rights in respect thereof under this Agreement shall cease at the close of business on the Expiration Date. The Company, in its sole discretion, may extend the duration of the Warrants by delaying the Expiration Date.
- 3.3 Exercise of Warrants. Warrants may be exercised, at the option of the Holder, in whole or in part, at any time or from time to time during the Exercise Period, by complying with the Warrant Agent's procedures relating to the exercise of such Warrant. In addition, the Holder shall deliver to the then designated office of the Warrant Agent (the "Warrant Agent Office") (i) the Exercise Form substantially in the form attached to the Warrant duly executed by such Holder or its duly authorized agent or attorney (the "Exercise Form") (with a copy to the Company) and (ii) payment of the aggregate Exercise Price. In case an exercise of Warrants is in part only, the Warrant Agent shall make an appropriate adjustment to the account of the Holder to reflect a number of Warrants for the number of shares of Common Stock equal (without giving effect to any adjustment thereof) to the number of such shares called for by such Holder's Warrants prior to such exercise, minus the number of shares designated by the Holder upon such exercise.

3.3.1 Payment. The Holder shall pay the Exercise Price by wire transfer of immediately available funds or good cashier's check drawn on a United States bank and in accordance with the procedures in the Warrant and this Agreement.

The Warrant Agent shall deposit all funds received by it in payment of the Exercise Price in the account of the Company maintained with the Warrant Agent for such purpose and shall advise the Company at the end of each day on which funds for the exercise of the Warrants are received of the amount so deposited to its account. The Warrant Agent shall promptly confirm such telephonic advice to the Company in writing.

3.3.2 <u>Procedures and Validity.</u>

(a) Any exercise of a Warrant pursuant to the terms of this Agreement shall be irrevocable and shall constitute a binding agreement between the Holder and the Company, enforceable in accordance with its terms.

(b) The Warrant Agent shall:

- (i) examine all Exercise Forms and all other documents delivered to it by or on behalf of Holders as contemplated hereunder to ascertain whether or not, on their face, such Exercise Forms and any such other documents have been executed and completed in accordance with their terms and the terms hereof;
- (ii) where an Exercise Form or other document appears on its face to have been improperly completed or executed or some other irregularity in connection with the exercise of the Warrants exists, the Warrant Agent shall endeavor to inform the appropriate parties (including the person submitting such instrument) of the need for fulfillment of all requirements, specifying those requirements which appear to be unfulfilled;
- (iii) inform the Company of and cooperate with and assist the Company in resolving any reconciliation problems between the Exercise Forms received and the crediting of Warrant Shares to the respective Holders' accounts; and
- (iv) advise the Company no later than two (2) business days after receipt of an Exercise Form, of (i) the receipt of such Exercise Form and the number of Warrants exercised in accordance with the terms and conditions of this Agreement, (ii) the percentage of the then outstanding Warrants represented by such exercise and (iii) such other information as the Company shall reasonably require.

(c) All questions as to the validity, form and sufficiency (including time of receipt) of an exercised Warrant and any Exercise Form will be determined by the Company in its sole discretion, which determination shall be final and binding. The Company reserves the right to reject any and all Exercise Forms not in proper form or for which any corresponding agreement by the Company to exchange would, in the opinion of the Company, be unlawful. Such determination by the Company shall be final and binding on the Holders, absent manifest error. Moreover, the Company reserves the absolute right to waive any of the conditions to the exercise of Warrants or defects in the exercise thereof with regard to any particular exercise of Warrants. Neither the Company nor the Warrant Agent shall be under any duty to give notice to the Holders of the Warrants of any irregularities in any exercise of Warrants or any Exercise Form, nor shall it incur any liability for the failure to give such notice.

Issuance of Certificates. Certificates for shares purchased hereunder shall be transmitted by the transfer agent for the Company's Common Stock (the "Transfer Agent") to the Holder by making available for credit to the account of the Holder's prime broker with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by Holder or (B) this Warrant is being exercised via cashless exercise, if permitted, and otherwise by physical delivery to the address specified by the Holder in the Exercise Form by the date that is three (3) Trading Days after the latest of (A) the delivery to the Company of the Exercise Form, (B) surrender of the Warrant (if required) and (C) payment of the aggregate Exercise Price as set forth above (including by cashless exercise, if permitted) (such date, the "Warrant Share Delivery Date"). The Warrant Shares shall be deemed to have been issued, and Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the date the Warrant has been exercised, with payment to the Company of the Exercise Price (or by cashless exercise, if permitted) and all taxes required to be paid by the Holder, if any, pursuant to Section 2(d)(vi) of the Warrant Certificate, prior to the issuance of such shares, having been paid. Notwithstanding the foregoing, the Company shall not be obligated to deliver any securities pursuant to the exercise of a Warrant unless (a) a registration statement under the Securities Act of 1933 (the "Securities Act") with respect to the Common Stock issuable upon exercise of such Warrants is effective and a current prospectus relating to the shares of Common Stock issuable upon exercise of the Warrants is available for delivery to the Holders or (b) in the opinion of counsel to the Company, the exercise of the Warrants is exempt from the registration requirements of the Securities Act and such securities are qualified for sale or exempt from qualification under applicable securities laws of the states or other jurisdictions in which the registered holder resides. Warrants may not be exercised by, or securities issued to, any Holder in any state in which such exercise or issuance would be unlawful. In the event that a registration statement under the Securities Act with respect to the Common Stock underlying the Warrants is not effective or a current prospectus is not available, or because such exercise would be unlawful with respect to a Holder in any state, the registered holder shall not be entitled to exercise such Warrants and such Warrants may have no value and expire worthless. In no event will the Company be required to "net cash settle" the warrant exercise.

3.3.4 <u>Valid Issuance</u>. All shares of Common Stock issued upon the proper exercise of a Warrant in conformity with this Agreement shall be validly issued, fully paid and nonassessable.

4. Adjustments.

- 4.1 <u>Adjustments Generally.</u> The Exercise Price, the number of shares of Common Stock issuable upon exercise of the Warrants and the number of Warrants outstanding are subject to adjustment from time to time upon the occurrence of certain events in accordance with the provisions of the Warrant Certificate.
- 4.2 Notices of Changes in Warrant. Upon every adjustment of the Exercise Price, the number of shares of Common Stock issuable upon exercise of the Warrants and the number of Warrants outstanding, the Company shall give written notice thereof to the Warrant Agent, which notice shall state the Exercise Price resulting from such adjustment and the increase or decrease, if any, in the number of shares purchasable at such price upon the exercise of a Warrant, setting forth in reasonable detail the method of calculation and the facts upon which such calculation is based. Upon the occurrence of any event specified in the Warrant Certificate then, in any such event, the Company shall give written notice to each Holder, at the last address set forth for such Holder in the Warrant Register, of the record date or the effective date of the event. Failure to give such notice, or any defect therein, shall not affect the legality or validity of such event.
- 4.3 <u>No Fractional Shares</u>. Notwithstanding any provision contained in this Agreement to the contrary, the Company shall not issue fractional shares upon exercise of Warrants. If, by reason of any adjustment made pursuant to this <u>Section 4</u>, the Holder of any Warrant would be entitled, upon the exercise of such Warrant, to receive a fractional interest in a share, the Company shall, upon such exercise, round up or down to the nearest whole number the number of shares of Common Stock to be issued to the Holder.
- 4.4 <u>Form of Warrant</u>. The form of Warrant need not be changed because of any adjustment pursuant to this <u>Section 4</u>. However, the Company may, at any time, in its sole discretion, make any change in the form of Warrant that the Company may deem appropriate and that does not affect the substance thereof.

5. <u>Transfer and Exchange of Warrants.</u>

5.1 <u>Exchange and Transfer</u>.

5.1.1 The Warrant Agent shall keep, at the Warrant Agent Office, books in which, subject to such reasonable regulations as it may prescribe, it shall register Warrants and exchanges and transfers of outstanding Warrants upon request to exchange or transfer such Warrants, provided, that the Warrant Agent shall have received a written instruction of transfer or exchange in form satisfactory to the Warrant Agent, duly executed by the Holder thereof or by his duly authorized agent or attorney, providing all information required to be delivered hereunder, such signature to be guaranteed by an eligible guarantor institution to the extent required by the Warrant Agent or the Depository. Upon any such registration of transfer, a Warrant Statement shall be issued to the transferee.

- 5.1.2 No service charge shall be made for any exchange or registration of transfer of Warrants; however, the Warrant Agent and/or the Company may require payment of a sum sufficient to cover any stamp or other tax or other charge that may be imposed in connection with any such exchange or registration of transfer. Neither the Warrant Agent nor the Company shall be required to pay any stamp or other tax or other charge required to be paid in connection with such transfer, and neither the Warrant Agent nor the Company shall be required to issue or deliver any Warrant Share until it has been established to the Company's and the Warrant Agent's satisfaction that such tax or other charge has been paid or that no such tax or other charge is due.
- 5.1.3 The Warrant Agent shall not effect any exchange or registration of transfer which will result in the issuance of a Warrant evidencing a fraction of a Warrant or a number of full Warrants and a fraction of a Warrant.
- 5.1.4 All Warrants credited to a Holder's or transferee's account upon any exchange or transfer of Warrants in accordance with the provisions of this Agreement shall be the valid obligations of the Company evidencing the same obligations, and entitled to the same benefits under this Agreement, as the Warrants that were so exchanged or transferred.
- 5.2 <u>Treatment of Holders of Warrants</u>. Each Holder of Warrants, by accepting the same, consents and agrees with the Company, the Warrant Agent and every subsequent Holder of such Warrants that until the transfer of such Warrants is registered on the books of such Warrant Agent, the Company and the Warrant Agent may treat the registered Holder of such Warrants as the absolute owner thereof for any purpose and as the person entitled to exercise the rights represented by the Warrants evidenced thereby, any notice to the contrary notwithstanding.
- 5.3 <u>Cancellation of Warrant Certificates</u>. Any Warrant Certificate surrender to the Warrant Agent for transfer, exchange or exercise of the Warrants evidenced thereby shall be promptly canceled by the Warrant Agent and shall not be reissued. Promptly following the Expiration Date or at such earlier time that there are no longer outstanding any Warrants, the Global Warrant shall be cancelled or destroyed and the Warrant Agent shall deliver a certificate of such cancellation or destruction to the Company.

6. Other Provisions Relating to Rights of Holders of Warrants.

- 6.1 No Rights as Stockholder. No Warrant shall, and nothing contained in this Agreement, in the Warrant or in the Warrant Statement shall be construed to, entitle the Holder or any beneficial owner thereof to any of the rights of a holder or beneficial owner of Warrant Shares, including, without limitation, the right to vote or to consent or to receive notice as a stockholder in respect of any meeting of stockholders for the election of directors of the Company or any other matter, to receive dividends on Warrant Shares or any rights whatsoever as stockholders of the Company, until such Warrant is duly exercised in accordance with this Agreement and such Holder is issued the Warrant Shares to which it is entitled in connection therewith.
- 6.2 <u>Reservation of Common Stock</u>. The Company shall at all times reserve and keep available a number of its authorized but unissued shares of Common Stock that will be sufficient to permit the exercise in full of all outstanding Warrants issued pursuant to this Agreement.

- Registration of Common Stock. The Company included the shares of Common Stock underlying the Warrants in the registration statement on Form S-3 that was filed with the Securities and Exchange Commission in connection with the registered offering of the Units (the "Registration Statement"). The Company will use its commercially reasonable efforts to maintain the effectiveness of such Registration Statement or file and maintain the effectiveness of another registration statement covering the shares of Common Stock issuable upon exercise of the Warrants at any time that both (a) the Warrants are exercisable and (b) the Exercise Price of the Warrants is less than the price at which the Common Stock is trading on the NYSE Amex (or if the Common Stock is no longer trading on the NYSE Amex, such other stock exchange on which the shares of Common Stock trades). In no event will any Holder of a Warrant be entitled to receive a "net cash settlement" in lieu of physical settlement in shares of Common Stock, regardless of whether the Company complies with this Section 6.3.
- 6.4 <u>Limitation on Monetary Damages</u>. In no event shall the Holder of a Warrant be entitled to receive monetary damages for failure to settle any Warrant exercise if the Common Stock issuable upon exercise of the Warrants has not been registered with the SEC pursuant to an effective registration statement or if a current prospectus is not available for delivery by the Warrant Agent, provided the Company has fulfilled its obligations under <u>Section 6.3</u> to use its commercially reasonable efforts to effect the registration under the Securities Act of the Common Stock issuable upon exercise of the Warrants.

7. <u>Concerning the Warrant Agent and Other Matters.</u>

7.1 <u>Payment of Taxes</u>. The Company will from time to time promptly pay all taxes and charges that may be imposed upon the Company or the Warrant Agent in respect of the issuance or delivery of shares of Common Stock upon the exercise of Warrants, but the Company shall not be obligated to pay any transfer taxes in respect of the Warrants or such shares.

7.2 <u>Resignation, Consolidation, or Merger of Warrant Agent.</u>

7.2.1 Appointment of Successor Warrant Agent. The Warrant Agent, or any successor to it hereafter appointed, may resign its duties and be discharged from all further duties and liabilities hereunder after giving sixty (60) days' notice in writing to the Company. If the office of the Warrant Agent becomes vacant by resignation or incapacity to act or otherwise, the Company shall appoint in writing a successor Warrant Agent in place of the Warrant Agent. If the Company shall fail to make such appointment within a period of 30 days after it has been notified in writing of such resignation or incapacity by the Warrant Agent or by any Holder of a Warrant, then the Holder of any Warrant may apply to the Supreme Court of the State of New York for the County of New York for the appointment of a successor Warrant Agent at the Company's cost. Any successor Warrant Agent, whether appointed by the Company or by such court, shall be a corporation organized and existing under the laws of the State of New York, in good standing and having its principal office in the Borough of Manhattan, City and State of New York, and authorized under such laws to exercise corporate trust powers and subject to supervision or examination by federal or state authority. After appointment, any successor Warrant Agent shall be vested with all the authority, powers, rights, immunities, duties, and obligations of its predecessor Warrant Agent with like effect as if originally named as Warrant Agent hereunder, without any further act or deed; but if for any reason it becomes necessary or appropriate, the predecessor Warrant Agent shall execute and deliver, at the expense of the Company, an instrument transferring to such successor Warrant Agent all the authority, powers, rights of such predecessor Warrant Agent hereunder; and upon request of any successor Warrant Agent the Company shall make, execute, acknowledge, and deliver any and all instruments in writing for more fully and effectually vesting in and confirming to such successor Warrant Agent a

- 7.2.2 <u>Notice of Successor Warrant Agent</u>. In the event a successor Warrant Agent shall be appointed, the Company shall give notice thereof to the predecessor Warrant Agent and the transfer agent for the Common Stock not later than the effective date of any such appointment.
- 7.2.3 Merger or Consolidation of Warrant Agent. Any corporation into which the Warrant Agent may be merged or with which it may be consolidated or any corporation resulting from any merger or consolidation to which the Warrant Agent shall be a party shall be the successor Warrant Agent under this Agreement without any further act.

7.3 Fees and Expenses of Warrant Agent.

- 7.3.1 Remuneration. The Company agrees to pay the Warrant Agent reasonable remuneration for its services as such Warrant Agent hereunder and will reimburse the Warrant Agent upon demand for all expenditures that the Warrant Agent may reasonably incur in the execution of its duties hereunder.
- 7.3.2 <u>Further Assurances</u>. The Company agrees to perform, execute, acknowledge and deliver or cause to be performed, executed, acknowledged and delivered all such further and other acts, instruments and assurances as may reasonably be required by the Warrant Agent for the carrying out or performing of the provisions of this Agreement.

7.4 Liability of Warrant Agent.

- 7.4.1 Reliance on Company Statement. Whenever in the performance of its duties under this Agreement the Warrant Agent shall deem it necessary or desirable that any fact or matter be proved or established by the Company prior to taking or suffering any action hereunder, such fact or matter (unless other evidence in respect thereof be herein specifically prescribed) may be deemed to be conclusively proved and established by a statement signed by the General Counsel, President or Chairman of the Board of the Company and delivered to the Warrant Agent. The Warrant Agent may rely upon such statement for any action taken or suffered in good faith by it pursuant to the provisions of this Agreement.
- 7.4.2 <u>Indemnity</u>. The Warrant Agent shall be liable hereunder only for its own gross negligence, willful misconduct or bad faith. The Company agrees to indemnify the Warrant Agent and save it harmless against any and all liabilities, including judgments, costs and reasonable counsel fees, for anything done or omitted by the Warrant Agent in the execution of this Agreement, except as a result of the Warrant Agent's gross negligence, willful misconduct or bad faith.

- 7.4.3 Exclusions. The Warrant Agent shall have no responsibility with respect to the validity of this Agreement or with respect to the validity or execution of any Warrant (except its countersignature thereof); nor shall it be responsible for any breach by the Company of any covenant or condition contained in this Agreement or in any Warrant; nor shall it be responsible to make any adjustments required under the provisions of Section 4 hereof or responsible for the manner, method or amount of any such adjustment or the ascertaining of the existence of facts that would require any such adjustment; nor shall it by any act hereunder be deemed to make any representation or warranty as to the authorization or reservation of any shares of Common Stock to be issued pursuant to this Agreement or any Warrant or as to whether any shares of Common Stock will when issued be valid and fully paid and nonassessable.
- 7.5 Acceptance of Agency. The Warrant Agent hereby accepts the agency established by this Agreement and agrees to perform the same upon the terms and conditions herein set forth and, among other things, shall account promptly to the Company with respect to Warrants exercised and concurrently account for, and pay to the Company, all moneys received by the Warrant Agent for the purchase of shares of Common Stock through the exercise of Warrants.
- 8. <u>Definitions</u>. For purposes of this Agreement, the following terms shall have the following meanings:
 - a) "Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person as such terms are used in and construed under Rule 405 under the Securities Act.
 - b) "Black Scholes Value" means the value of this Warrant based on the Black and Scholes Option Pricing Model using (i) a price per share of Common Stock equal to the Weighted Average Price of the Common Stock for the Trading Day immediately preceding the date of consummation of the applicable Change of Control, (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of this Warrant as of the date of consummation of the applicable Fundamental Transaction and (iii) an expected volatility equal to the greater of 60% and the 100-day volatility determined as of the Trading Day next following the date of the public announcement of the applicable Fundamental Transaction. Information concerning Company Common Stock activity can be obtained from either Nasdaq Data on Demand or Bloomberg LP.
 - c) "Change of Control" means any Fundamental Transaction other than (A) any reorganization, recapitalization or reclassification of the Common Stock, in which holders of the Company's voting power immediately prior to such reorganization, recapitalization or reclassification continue after such reorganization, recapitalization or reclassification to hold publicly traded securities and, directly or indirectly, the voting power of the surviving entity or entities necessary to elect a majority of the members of the board of directors (or their equivalent if other than a Company) of such entity or entities, or (B) pursuant to a migratory merger effected solely for the purpose of changing the jurisdiction of incorporation of the Company.

- d) "Common Stock" means the common stock of the Company, par value \$0.001 per share, and any other class of securities into which such securities may hereafter be reclassified or changed.
- e) "Common Stock Equivalents" means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.
- f) "Eligible Market" means The New York Stock Exchange, Inc., The NYSE Amex, The NASDAQ Global Select Market, The NASDAQ Global Market or The NASDAQ Capital Market.
- g) "Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.
- h) "Parent Entity" of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.
- i) "Person" means an individual or 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.
- j) "Securities Act" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.
- k) "<u>Subsidiary</u>" means any subsidiary of the Company and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.
- l) "Successor Entity" means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.
- m) "Trading Day" means a day on which the principal Trading Market is open for trading.
- n) "Trading Market" means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE AMEX, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange or the OTC Bulletin Board (or any successors to any of the foregoing).

o) "VWAP" means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. or Nasdaq Data on Demand (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if the OTC Bulletin Board is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the OTC Bulletin Board, (c) if the Common Stock is not then listed or quoted for trading on the OTC Bulletin Board and if prices for the Common Stock are then reported in the "Pink Sheets" published by Pink OTC Markets, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Holders of a majority in interest of the Securities then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

9. <u>Miscellaneous Provisions</u>.

- 9.1 <u>Successors</u>. All the covenants and provisions of this Agreement by or for the benefit of the Company or the Warrant Agent shall bind and inure to the benefit of their respective successors and assigns.
- 9.2 <u>Notices</u>. Any notice, statement or demand authorized by this Agreement to be given or made by the Warrant Agent or by the holder of any Warrant to or on the Company shall be delivered by hand or sent by registered or certified mail or overnight courier service, addressed (until another address is filed in writing by the Company with the Warrant Agent) as follows:

NeoStem, Inc. 420 Lexington Avenue, Suite 450 New York, New York 10170 Attention: General Counsel

Any notice, statement or demand authorized by this Agreement to be given or made by the holder of any Warrant or by the Company to or on the Warrant Agent shall be delivered by hand or sent by registered or certified mail or overnight courier service, addressed (until another address is filed in writing by the Company with the Warrant Agent) as follows:

Continental Stock Transfer & Trust Company 17 Battery Place New York, New York 10004 Attn: Compliance Department

with a copy in each case to:

Lowenstein Sandler PC 65 Livingston Avenue Roseland, NJ 07068 Telephone: 973-597-2564 Facsimile: 973-597-2565 Attention: Alan Woysaniker, Esq.

Any notice, sent pursuant to this Agreement shall be effective, if delivered by hand, upon receipt thereof by the party to whom it is addressed, if sent by overnight courier, on the next business day of the delivery to the courier, and if sent by registered or certified mail on the third day after registration or certification thereof.

- 9.3 <u>Notices to Holders of Warrants</u>. Any notice to Holders of Warrants which by any provisions of this Warrant Agreement is required or permitted to be given shall be given by first class mail prepaid at such Holder's address as it appears on the books of the Warrant Agent.
- 9.4 <u>Applicable Law</u>. The validity, interpretation and performance of this Agreement and of the Warrants shall be governed in all respects by the laws of the State of New York, without giving effect to conflicts of law principles that would result in the application of the substantive laws of another jurisdiction. The Company hereby agrees that any action, proceeding or claim against it arising out of or relating in any way to this Agreement shall be brought and enforced in the courts of the State of New York or the United States District Court for the Southern District of New York, and irrevocably submits to such jurisdiction, which jurisdiction shall be exclusive. The Company hereby waives any objection to such exclusive jurisdiction and that such courts represent an inconvenient forum. Any such process or summons to be served upon the Company may be served by transmitting a copy thereof by registered or certified mail, return receipt requested, postage prepaid, addressed to it at the address set forth in Section 8.2 hereof. Such mailing shall be deemed personal service and shall be legal and binding upon the Company in any action, proceeding or claim.
- 9.5 <u>Persons Having Rights under this Agreement</u>. Nothing in this Agreement expressed and nothing that may be implied from any of the provisions hereof is intended, or shall be construed, to confer upon, or give to, any person or corporation other than the parties hereto and the registered holders of the Warrants, any right, remedy, or claim under or by reason of this Agreement or of any covenant, condition, stipulation, promise, or agreement hereof. All covenants, conditions, stipulations, promises, and agreements contained in this Agreement shall be for the sole and exclusive benefit of the parties hereto and their successors and assigns and of the registered holders of the Warrants.

- 9.6 Examination of the Warrant Agreement. A copy of this Agreement shall be available at all reasonable times at the office of the Warrant Agent in the Borough of Manhattan, City and State of New York, for inspection by the Holder of any Warrant. The Warrant Agent may require any such Holder to submit his, her or its Warrant Statements for inspection by it.
- 9.7 <u>Counterparts</u>. This Agreement may be executed in any number of original or facsimile counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument.
- 9.8 Effect of Headings. The section headings herein are for convenience only and are not part of this Agreement and shall not affect the interpretation thereof.
- 9.9 <u>Amendments</u>. This Agreement may be amended by the parties hereto without the consent of any Holder for the purpose of curing any ambiguity, or curing, correcting or supplementing any defective provision contained herein or adding or changing any other provisions with respect to matters or questions arising under this Agreement as the parties may deem necessary or desirable and that the parties deem shall not adversely affect the interest of the Holders. Except for modifications, adjustments or amendments in accordance with the terms of the Warrant Certificate or this Agreement, all other modifications or amendments, including any amendment to increase the Exercise Price or shorten the Exercise Period, shall require the written consent of the registered holders of a majority of the then outstanding Warrants. The Warrant Agent may request from either the Company or the Holders an opinion of counsel with respect to the validity of any amendment as a condition to its execution of any amendment.
- 9.10 <u>Severability</u>. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of this Agreement.

[Signature page follows]

IN WITNESS WHEREOF, this Warrant Agreement has been duly executed by the parties hereto as of the day and year first above written.

NEOSTEM, INC.

By: /s/ Robin L. Smith

Name: Robin L. Smith
Title: Chief Executive Officer

CONTINENTAL STOCK TRANSFER & TRUST COMPANY

By: /s/ Leslie A. DeLuca Name: Leslie A. DeLuca Title: Vice President

EXHIBIT A

FORM OF WARRANT CERTIFICATE

[FORM OF WARRANT CERTIFICATE FOR SERIES NA WARRANTS]

EXERCISABLE ONLY IF AUTHENTICATED BY THE WARRANT AGENT AS PROVIDED HEREIN

VOID AFTER THE CLOSE OF BUSINESS ON JULY 18, 2016

NEOSTEM, INC.

Warrants to purchase	Warrant Certificate representing shares of common stock, par value \$0.001 per share as described herein
Warrant No	Cusip No. 640650 164

NEITHER THIS SECURITY NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE SOLD, ASSIGNED, TRANSFERRED, ENCUMBERED, OR OTHERWISE DISPOSED OF, EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED.

Each Series NA Warrant (each a "Warrant") represented hereby, entitles the holder to purchase one share (the "Warrant Share") of common stock, \$.001 par value (the "Common Stock") of NeoStem, Inc., a Delaware corporation, (the "Company") for the benefit of certain Holders (as defined in the Warrant Agreement) of such Warrants on the following terms. This Warrant Certificate represents the number of outstanding Warrants from time to time endorsed hereon and the number of outstanding Warrants represented hereby may from time to time be reduced or increased, as appropriate to reflect exchanges, exercises and other similar transactions. This Warrant Certificate is issued under and in accordance with the Warrant Agreement (as hereinafter defined), and is subject to the terms and provisions contained therein, all of which terms and provisions the Holders consent to by acceptance of their book-entry interests in the Warrant Certificate or their receipt of this Warrant Certificate. Copies of the Warrant Agreement are on file at the Company's headquarters. In the event of any conflict or inconsistency between this Warrant Certificate and the Warrant Agreement, the Warrant Agreement shall control. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Warrant Agreement dated as of July 22, 2011 by and between the Company and Continental Stock Transfer & Trust Company (as such agreement may be amended from time to time, the "Warrant Agreement").

<u>Exercise Period</u>. The Warrants shall vest in full and become exercisable on July 22, 2011 (the "<u>Initial Exercise Date</u>") and, notwithstanding anything to the contrary contained herein, shall expire at 5:00 p.m. (Eastern Time) on July 18, 2016 (the "<u>Termination Date</u>").

<u>Section 1.</u> <u>Definitions</u>. For purposes of this Warrant, capitalized terms used but not otherwise defined herein shall have the meanings ascribed to such terms in the Warrant Agreement.

Section 2. Exercise.

- Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the then designated office of the Warrant Agent (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) (i) a duly executed facsimile copy of the Exercise Form substantially in the form attached hereto (with a copy to the Company) and (ii) within three (3) Trading Days following the delivery of the Exercise Form, payment of the aggregate Exercise Price for the shares specified in the applicable Exercise Form. The Holder shall deliver the aggregate Exercise Price by wire transfer of immediately available funds or good cashier's check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Exercise Form. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchased. The Warrant Agent and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Exercise Form within one (1) Business Day of receipt of such notice. The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.
- b) <u>Exercise Price</u>. The exercise price per share of the Common Stock under this Warrant shall be \$1.45, subject to adjustment hereunder (the "Exercise Price").
- c) <u>Cashless Exercise</u>. If at the time of exercise hereof there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the Warrant Shares to the Holder and all of the Warrant Shares are not then registered for resale by Holder into the market at market prices from time to time on an effective registration statement for use on a continuous basis (or the prospectus contained therein is not available for use), then this Warrant may also be exercised, in whole or in part, at such time by means of a "cashless exercise" in which the Holder shall be entitled to receive a certificate for the number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:
- (A) = the VWAP on the Trading Day immediately preceding the date on which Holder elects to exercise this Warrant by means of a "cashless exercise," as set forth in the applicable Exercise Form;
- (B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

In no event may this warrant be net cash settled.

d) <u>Mechanics of Exercise</u>.

- i. <u>Delivery of Certificates Upon Exercise</u>. Certificates for shares purchased hereunder shall be transmitted by the transfer agent for the Company's Common Stock (the "<u>Transfer Agent</u>") to the Holder by crediting the account of the Holder's prime broker with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("<u>DWAC</u>") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by Holder or (B) this Warrant is being exercised via cashless exercise, and otherwise by physical delivery to the address specified by the Holder in the Exercise Form by the date that is three (3) Trading Days after the latest of (A) the delivery to the Company of the Exercise Form, (B) surrender of this Warrant (if required) and (C) payment of the aggregate Exercise Price as set forth above (including by cashless exercise, if permitted) (such date, the "<u>Warrant Share Delivery Date</u>"). The Warrant Shares shall be deemed to have been issued, and Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the date the Warrant has been exercised, with payment to the Company of the Exercise Price (or by cashless exercise, if permitted) and all taxes required to be paid by the Holder, if any, pursuant to Section 2(d) (vi) prior to the issuance of such shares, having been paid.
- ii. Intentionally Omitted.
- iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder a certificate or the certificates representing the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

- Compensation for Buy-In on Failure to Timely Deliver Certificates Upon Exercise. In addition to any other rights available to iv. the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder a certificate or the certificates representing the Warrant Shares (or to credit Holder's broker's DWAC account) pursuant to an exercise on or before the second Trading Day following the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock or credit the Holder's broker's DWAC account upon exercise of the Warrant as required pursuant to the terms hereof.
- v. <u>No Fractional Shares or Scrip</u>. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.
- vi. <u>Charges, Taxes and Expenses</u>. Issuance of certificates for Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; <u>provided</u>, <u>however</u>, that in the event certificates for Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

- vii. <u>Closing of Books</u>. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.
- Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Exercise Form, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Exercise Form shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within two Trading Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon not less than 61 days' prior notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any such increase or decrease will not be effective until the 61st day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

Section 3. Certain Adjustments.

- a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant, and which shall not include any shares of Common Stock issued in connection with dividend payments in respect of the Company's Series E 7% Senior Convertible Preferred Stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.
- b) <u>Subsequent Rights Offerings</u>. If the Company, at any time while the Warrant is outstanding, shall issue rights, options or warrants to all holders of Common Stock (and not to the Holder) entitling them to subscribe for or purchase shares of Common Stock at a price per share less than the VWAP on the record date mentioned below, then the Exercise Price shall be multiplied by a fraction, of which the denominator shall be the number of shares of the Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of additional shares of Common Stock offered for subscription or purchase, and of which the numerator shall be the number of shares of the Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of shares which the aggregate offering price of the total number of shares so offered (assuming receipt by the Company in full of all consideration payable upon exercise of such rights, options or warrants) would purchase at such VWAP. Such adjustment shall be made whenever such rights, options or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights, options or warrants.

- c) Pro Rata Distributions. If the Company, at any time while this Warrant is outstanding, shall distribute to all holders of Common Stock (and not to the Holder) evidences of its indebtedness or assets (including cash and cash dividends) or rights or warrants to subscribe for or purchase any security, then in each such case the Exercise Price shall be adjusted by multiplying the Exercise Price in effect immediately prior to the record date fixed for determination of stockholders entitled to receive such distribution by a fraction of which the denominator shall be the VWAP determined as of the record date mentioned above, and of which the numerator shall be such VWAP on such record date less the then per share fair market value at such record date of the portion of such assets or evidence of indebtedness so distributed applicable to one outstanding share of the Common Stock as determined by the Board of Directors of the Company in good faith. In either case the adjustments shall be described in a statement provided to the Holder of the portion of assets or evidences of indebtedness so distributed or such subscription rights applicable to one share of Common Stock. Such adjustment shall be made whenever any such distribution is made and shall become effective immediately after the record date mentioned above.
- Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock or (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring Company or of the Company, if it is the surviving Company, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. Notwithstanding the foregoing, in the event of a Change of Control other than one in which a Successor Entity that is a publicly traded Company whose stock is quoted or listed for trading on an Eligible Market assumes this Warrant such that the Warrant shall be exercisable for the publicly traded common stock of such Successor Entity, at the request of the Holder delivered before the 90th day after such Change of Control (such a request, a "Black Scholes Exercise"), the Company (or the Successor Entity) shall purchase this Warrant from the Holder by paying to the Holder, within five business days after such request (or, if later, on the effective date of the Fundamental Transaction), cash in an amount equal to the Black Scholes Value of the remaining unexercised portion of this Warrant on the date of such Change of Control.

e) <u>Calculations</u>. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

f) Notice to Holder.

i. <u>Adjustment to Exercise Price</u>. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly mail to the Holder a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be mailed to the Holder at its last address as it shall appear upon the Warrant Register of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided hereunder constitutes, or contains, material, nonpublic information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

- a) <u>Transferability</u>. This Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon delivery at the principal office of the Company or its designated agent, of a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such delivery and, if required, such payment, the Company shall instruct the Warrant Agent to record the Holder's transfer of its interest in the Warrant to be duly noted on its record in the denomination or denominations specified in such instrument of assignment. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.
- b) Intentionally Omitted.
- c) <u>Warrant Register</u>. The Company shall register this Warrant, upon records to be maintained by the Company or the Warrant Agent for that purpose (the "<u>Warrant Register</u>"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

Section 5. Miscellaneous.

- a) <u>No Rights as Stockholder Until Exercise</u>. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i).
- b) Intentionally Omitted.
- c) <u>Saturdays, Sundays, Holidays, etc.</u> If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.
- d) Authorized Shares. The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

- e) <u>Jurisdiction</u>. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York.
- f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, will have restrictions upon resale imposed by state and federal securities laws.
- g) <u>Nonwaiver and Expenses</u>. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies.
- h) <u>Notices</u>. Any notice, request or other document required or permitted to be given or delivered to the Holder by the Company shall be delivered in accordance with the information provided by the Holder to the Company in writing.
- i) <u>Limitation of Liability</u>. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.
- j) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.
- k) <u>Successors and Assigns</u>. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.
- l) <u>Amendment</u>. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holders of a majority in interest of the Warrants.
- m) <u>Severability.</u> Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) <u>Headings</u>. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

Section 6. Validity. This Warrant Certificate shall not be valid or obligatory for any purpose until authenticated by the Warrant Agent.

	NEOSTEM, INC.
	Robin L. Smith Chairman & Chief Executive Officer
	[Certificate of Authentication]
[This is a Warrant Certificate for the NA Warrant	s referred to in the within-mentioned Warrant Agreement.]
CONTINENTAL STOCK TRANSFER & TRUST COMPANY, As Warrant Agent	
By:Authorized Signature	
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[TO BE ATTACHED TO GLOBAL WARRANT CERTIFICATE]

SCHEDULE OF INCREASES OR DECREASES IN GLOBAL WARRANT CERTIFICATE

NA WARRANTS

The following increases or decreases in this Global Warrant have been made:

Date	Amount of decrease in the number	Amount of increase in number of	Number of Warrants represented by	Signature of authorized officer of
	of Warrants represented by this	Warrants represented by this	this Global Security following such	the Depositary
	Global Warrant	Global Warrant	decrease or increase	

FORM OF EXERCISE FORM

To Be Executed by the Holder in Order to Exercise NA Warrant

Sto sha	ock of NeoStem, Inc. (the "Warrant Shares") and the undersign	esented by the book-entry Warrant(s), to purchase ned herewith makes payment of the full purchase price for su of the Warrant Agreement. Such payment takes the form of	ch shares at the price per
The undersi	gned hereby requests that certificates for the Warrant Shares p	purchased hereby be issued in the name of:	
(please print	or type name and address)		
(please inser	rt social security or other identifying number)		
and be deliv	ered as follows:		
(please print	or type name and address)		
(please inser	rt social security or other identifying number)		
	number of shares of Common Stock shall not be all the sha gistered in the name of, and delivered to, Holder.	ares evidenced by this Warrant Certificate, that a new Warr	ant for the balance of such
		Signature of Holder	
		SIGNATURE GUARANTEE:	
This Warran	at may be exercised by delivering the Exercise Form to Contin	nental Stock Transfer & Trust Company at the following addr	esses:
By mail at	Continental Stock Transfer & Trust Company 17 Battery Place New York, New York 10004 Attn:		
		-15-	

[FORM OF ASSIGNMENT]

(TO BE EXECUTED TO TRANSFER THE WARRANT)

number of NA Warrant and does hereby irrevo	cably constitute and appoint	ve name(s) of the Assignee(s) r	named below and all othe attorney, to transfer	nee(s) named below the rights represented by such er rights of the Holder with respect to such Warrants, r said Warrant on the books of the Depositary and/or
Name(s) of Assignee(s)		Address		No. of Warrants
Dated:				
	(Signed exactly as name aprecords of the Depositary)	Signature opears in the		
Signature Guarantee:	records of the Depositing)			

CERTIFICATION

- I, Robin Smith, M.D., certify that:
- 1. I have reviewed this Quarterly Report on Form 10-Q 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: November 10, 2011

/s/ Robin Smith, M.D. Name: Robin Smith, M.D.

Title: Chief Executive Officer of NeoStem, Inc.

A signed original of this written statement required by Section 302 has been provided to NeoStem, Inc. and will be retained by NeoStem, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

CERTIFICATION

- I, Larry A. May, certify that:
- 1. I have reviewed this Quarterly Report on Form 10-Q 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: November 10, 2011

/s/ Larry A. May Name: Larry A. May

Title: Chief Financial Officer of NeoStem, Inc.

A signed original of this written statement required by Section 302 has been provided to NeoStem, Inc. and will be retained by NeoStem, Inc. 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 Quarterly Report of NeoStem, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2011 filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robin Smith, M.D., Chief Executive Officer of the Company, 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 as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition of the Company as of the dates presented and the results of operations of the Company for the periods presented.

Date: November 10, 2011

/s/ Robin Smith, M.D. Robin 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 Form 10-Q or as a separate disclosure document.

A signed original of this written statement required by Section 906 has been provided to NeoStem, Inc. and will be retained by NeoStem, Inc. 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 Quarterly Report of NeoStem, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2011 filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Larry A. May, Chief Financial Officer of the Company, 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 as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition of the Company as of the dates presented and the results of operations of the Company for the periods presented.

Date: November 10, 2011

/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 Form 10-Q or as a separate disclosure document.

A signed original of this written statement required by Section 906 has been provided to NeoStem, Inc. and will be retained by NeoStem, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.