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

AMENDMENT NO. 1
TO
FORM 10-Q

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

For the quarter ended:
June 30, 2000 Commission File Number: 0-19871

STEMCELLS, INC.
(Exact name of registrant as specified in its charter)

DELAWARE	94-3078125
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer identification No)

525 DEL REY AVENUE SUITE C
SUNNYVALE, CA 94085
(Address of principal executive offices including zip code)

(408) 731-8670
(Registrant's telephone number, including area code)

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 twelve months (or for such shorter periods 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 / /

At June 30, 2000, there were 19,612,677 shares of Common Stock, $.01 par value, issued and outstanding.

STEMCELLS, INC.

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PART I - ITEM 1 - FINANCIAL STATEMENTS

STEMCELLS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS

	June 30, 2000 (unaudited)	December 31, 1999 (Note 1)
Assets		
Current assets:		
Cash and cash equivalents	$ 5,535,264	$ 4,760,064
Technology sale receivable	200,000	3,000,000
Other current assets	718,145	1,210,791
Total current assets	6,453,409	8,970,855
Restricted Investments	19,220,165	--
Property held for sale	3,203,491	3,203,491
Property, plant and equipment, net	1,524,650	1,747,885
Intangible assets, net	936,745	1,108,768
Other assets	750,000	750,000
Total assets	$ 32,088,460	$ 15,780,999
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 144,269	$ 631,315
Accrued expenses	615,092	2,605,068
Current maturities of capitalized lease obligations	326,250	324,167
Total current liabilities	1,085,611	3,560,550
Capitalized lease obligations, less current maturities	2,775,000	2,937,083
Deposits	26,000	26,000
Deferred rent	596,222	502,353
Redeemable stock	--	5,248,610
Stockholders' equity		
Convertible Preferred Stock	1,500,000	--
Common stock	196,127	186,355
Additional paid in capital	129,525,509	123,917,758
Accumulated deficit	(121,698,674)	(119,372,710)
Accumulated other comprehensive income	19,220,165	--
Deferred compensation	(1,137,500)	(1,225,000)
Total stockholders' equity	27,605,627	3,506,403
Total liabilities and stockholders' equity	$ 32,088,460	$ 15,780,999

See accompanying notes to condensed consolidated financial statements.

PART I - ITEM 1 - FINANCIAL STATEMENTS

STEMCELLS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(unaudited)	Three Months Ended June 30		Six Months Ended June 30	
	2000	1999	2000	1999
Revenue from collaborative arrangements	$ --	$ 2,520,672	$ --	$ 5,021,707
Operating expenses:				
Research and development	1,115,207	3,280,826	2,021,839	6,847,383
General and administrative	770,019	1,172,856	1,427,733	2,168,315
Encapsulated cell therapy wind down and corporate relocation	54,260	--	288,646	--
	1,939,486	4,453,682	3,738,218	9,015,698
Loss from operations	(1,939,486)	(1,933,010)	(3,738,218)	(3,993,991)
Other income (expense):				
Investment income	64,900	184,220	138,232	406,331
Interest expense	(73,708)	(91,229)	(142,566)	(185,054)
Gain on sale of Modex shares	1,427,686	--	1,427,686	--
Loss on disposal of fixed assets	(11,098)		(11,098)	
	1,407,780	92,991	1,412,254	221,277
Net Loss	$ (531,706)	$ (1,840,019)	$(2,325,964)	$(3,772,714)
Loss per share:				
Net loss	$ (531,706)	$ (1,840,019)	$(2,325,964)	$(3,772,714)
Deemed dividend (note 6)	(265,000)	--	(265,000)	
Net loss attributable to common share	$ (796,706)	$ (1,840,019)	$(2,590,964)	$(3,772,714)
Basic and Diluted Net Loss per share	$ (0.04)	$ (0.10)	$ (0.13)	$ (0.20)
Shares used in computing Basic and Diluted Net Loss per share	19,356,928	18,514,236	19,419,236	18,483,437

See accompanying notes to condensed consolidated financial statements.

PART I - ITEM 1 - FINANCIAL STATEMENTS

STEMCELLS, INC.

CONDENSED STATEMENTS OF CASH FLOWS

(unaudited)	Six Months Ended June 30, 2000	1999
Cash flows from operating activities:		
Net loss	$(2,325,964)	$(3,772,714)
Gain on sale of Modex shares	(1,427,686)	--
Adjustments to reconcile net loss to net cash used for operating activities:		
Depreciation and amortization	407,634	1,163,295
Deferred stock compensation	87,500	189,650
Net changes in operating assets and liabilities	(1,890,508)	(2,075,873)
Net cash used in operating activities	(5,149,024)	(4,495,642)
Cash flows from investing activities:		
Proceeds from marketable securities	--	6,891,026
Purchases of marketable securities	--	(4,397,676)
Proceeds from sale of encapsulated cell technology	2,800,000	--
Proceeds from sale of Modex shares	1,427,686	--
Purchase/Sale of property, plant and equipment, net	8,005	(131,113)
Acquisition of other assets	(20,380)	(274,510)
Net cash provided by investing activities	4,215,311	2,087,727
Cash flows from financing activities:		
Proceeds from the exercise of stock options	368,913	176,545
Proceeds from issuance of Preferred Stock	1,500,000	--
Principal payments under capitalized lease obligations and mortgage payable	(160,000)	(881,250)
Net cash provided by financing activities	1,708,913	(704,705)
Net increase/(decrease) in cash and cash equivalents	775,200	(3,112,620)
Cash and cash equivalents, beginning of period	4,760,064	7,864,788
Cash and cash equivalents, end of period	$ 5,535,264	$ 4,752,168

See accompanying notes to condensed financial statements.

PART I - ITEM 1 - FINANCIAL STATEMENTS

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

June 30, 2000 and 1999

NOTE 1. BASIS OF PRESENTATION

On May 23, 2000, the Company's name was changed to StemCells, Inc. from CytoTherapeutics, Inc., by vote of the shareholders at the Annual Meeting. The accompanying, unaudited, condensed consolidated financial statements have been prepared by the Company in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. 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 financial statements include all adjustments, consisting of normal recurring accruals, considered necessary for a fair presentation of the financial position, results of operations and cash flows for the periods presented. Results of operations for the six months ended June 30, 2000 are not necessarily indicative of the results that may be expected for the entire fiscal year ending December 31, 2000.

The balance sheet at December 31, 1999 has been derived from the audited financial statements at that date but does not include all of the information and footnotes required for complete financial statements in accordance with generally accepted accounting principles.

For the complete financial statements, refer to the audited financial statements and footnotes thereto as of December 31, 1999 included in the Company's Annual Report to Stockholders and the Annual Report on Form 10-K filed with the Securities and Exchange Commission.

NOTE 2. EARNINGS PER SHARE

Net loss-per-share is computed using the weighted-average number of shares of common stock outstanding. The value associated with the beneficial conversion feature of certain preferred stock has been treated as a deemed dividend in the computation of earnings per share (see note 4). Common equivalent shares from stock options and warrants are excluded, as their effect is antidilutive.

NOTE 3. COMPREHENSIVE INCOME

For the six months ended June 30, 2000 and 1999, total comprehensive income/(loss) was $16,894,201 and ($3,772,714) respectively. The reported net loss for the six months ended June 30, 2000 and 1999 was $2,325,964 and $3,772,714. During the second quarter of 2000, the Company recorded its ownership of 126,193 shares of Modex Therapeutics Ltd as available for sale at an estimated fair value of $19,220,165 (see note 5).

NOTE 4. BENEFICIAL CONVERSION VALUE OF 6% CUMULATIVE CONVERTIBLE PREFERRED STOCK

As previously reported, the Company sold 1,500 shares of its 6% cumulative convertible preferred stock plus a warrant for 75,000 shares of the Company's common stock to two members of its Board of Directors for $1,500,000 on terms more favorable to the Company than it was then able to obtain from outside investors. The face value of the shares are convertible at the option of the holders into common stock at $3.77 per share. The Company has valued the beneficial conversion feature reflecting the April 13, 2000 commitment date and the most beneficial per share discount available to the preferred shareholders. Such value was $265,000 and is treated as a deemed dividend as of the commitment date.

NOTE 5. INVESTMENTS

At June 30, 2000, the Company owned 126,193 shares of Modex Therapeutics Ltd. ("Modex"). This Swiss biotechnology company made an initial public offering of shares on the Swiss Exchange on June 23, 2000. Accordingly, with an established market value, the investment was marked to market and recorded as available-for-sale at estimated fair market value based on the June 30, 2000 closing price of $152.31, which was converted from the market price of 247.50 Swiss francs per share at that date. The unrealized gain was reported in other comprehensive income. The market price of Modex stock on October 31, 2000 was 329.50 Swiss francs, which converts to $183.28 and results in an estimated fair value of $23,128,598 for our holdings at that date. Estimated fair value at June 30, 2000 is as follows:

COST	GROSS UNREALIZED GAIN	FAIR VALUE
$0	$19,220,165	$19,220,165

NOTE 6. WIND-DOWN OF ENCAPSULATED CELL TECHNOLOGY

As previously reported, in 1999 the Company restructured its operations to abandon all further encapsulated cell technology research and concentrate its resources on the research and development of its proprietary platform of stem cell technologies. The Company relocated its remaining research and development activities and its corporate headquarters to California, and has been seeking to dispose of its former science and administrative and pilot manufacturing facilities in Rhode Island. At the end of 1999 the balance in the reserve created for wind-down expenses was $1,634,522. For the first half of 2000 the roll-forward of this balance is as follows:

Description	Reserve as at 12/31/99	Cash Payments	Reserve as at 6/30/00
Facilities, Maintenance and other Expenses	462,522	462,522	0
RIPSAT Settlement	1,172,000	1,172,000	0
Totals	$1,634,522	$1,634,522	0

During the first six months of 2000 the Company incurred $288,646 of costs in excess of the amounts reserved as of December 31, 1999 for the carrying costs of the Rhode Island facilities. During the third quarter the Company incurred an additional $480,087 in carrying costs, including lease payments, property taxes and utilities, for the Rhode Island facilities, as it was unable to dispose of them by June 30, 2000, as expected. These amounts were previously included in general and administrative expense, and have been reclassified to be separately disclosed as encapsulated cell therapy wind down and corporate relocation expense. The Company anticipates that it will incur a similar amount in the fourth quarter of 2000 and in every quarter thereafter until it disposes of these facilities. The Company does not currently have a projected date for such disposal and there can be no assurance that it will be able to dispose of these facilities in a reasonable time, if at all. Some additional items that were more properly included in research and development were also reclassified out of general and administrative expense, and facilities costs were more accurately spread between research and development and general and administrative expense.

The fixed assets revenue was applied against property held for sale at December 31, 1999 and June 30, 2000 for financial statement prescription purposes.

NOTE 7. STOCK OPTIONS

As previously reported, in conjunction with the StemCells California merger, the Company adopted the 1997 CytoTherapeutics, Inc. StemCells California Research Stock Option Plan whereby an additional 2,000,000 shares of Common Stock have been reserved. During 1997, the Company awarded options under this plan to purchase 1.6 million shares of the Company's common stock to the Chief Executive Officer and scientific founders of StemCells California, Inc. at an exercise price of $5.25 per share. Under the original grants, approximately 100,000 of these options were exercisable immediately on the date of the grant, 1,031,000 of these options would vest and become exercisable only upon achievement of specified milestones and the remaining 469,000 options would vest over eight years. The Company agreed on October 27, 2000 with Irving Weissman, M.D. and Fred H. Gage, Ph.D., two of the grant recipients, to amend their options. In exchange for the revision of the options, Dr. Weissman and Dr. Gage agreed to rescind their Conduct of Research Agreement with the Company, in all respects, including their right under the Agreement to reacquire certain technology under certain circumstances. Instead of vesting based on performance milestones, Dr. Weissman's and Dr. Gage's options will vest over eight years from the date of the original grant, on the same schedule as the option granted to the third

founder, Dr. David Anderson. 168,750 shares vested upon the revision and the remaining 300,000 shares will vest at 50,000 shares on each September 25 until September 25, 2005, when the final 100,000 shares will vest. The exercise price for the revised options remains $5.25 per share. We expect to incur a charge in the fourth quarter of 2000 of approximately $1,600,000 relating to the vested portion of the options. The deferred compensation expense associated with the unvested portion of the grants was determined to be approximately $2.8 million. The Company plans to revalue the options using the Black-Scholes method on a quarterly basis and recognize additional compensation expense accordingly.

NOTE 8. SUBSEQUENT EVENTS

On August 3, 2000, the Company completed a $4 million common stock financing transaction with Millennium Partners, LP (the "Fund"). StemCells received $3 million of the purchase price at the closing and will receive the remaining $1 million upon effectiveness of a registration statement covering the shares owned by the Fund. The Fund purchased the Company's common stock at $4.33 per share. As set forth in an adjustable warrant issued to the Fund on the closing date, the Fund may be entitled to receive additional shares of common stock on eight dates beginning six months from the closing and every three months thereafter. The adjustable warrant may be exercised at any time prior to the thirtieth day after the last of such dates. The number of additional shares the Fund may be entitled to on each date will be based on the number of shares of common stock the Fund continues to hold on each date and the market price of the Company's common stock over a period prior to each date. The exercise price per share under the adjustable warrant is $.01. Such warrants provide the Fund with the opportunity to acquire additional common shares at a nominal value if the value of the common stock that the Fund holds decreases. The Company will have the right, under certain circumstances, to cap the number of additional shares by purchasing part of the entitlement from the Fund at a purchase price based on the market price of such shares. The Fund also received a five year warrant to purchase up to 101,587 shares of common stock at $4.725 per share. This warrant is callable at any time by StemCells at $7.875 per underlying share. The calculated value of this callable warrant using the Black-Scholes method is $376,888, which the Company accounts for as stock issuance cost which was treated as a credit to paid in capital stockholders' equity. The Company accounts for the sale of the stock and warrants or the exercise of warrants by adding that portion of the proceeds equal to the par value of the new shares to common stock and the balance, including the value of the warrants, to paid in capital. In addition, any repurchase of the shares by the Company would also be accounted for through paid in capital.

In the Purchase Agreement governing the August 3, 2000 sale to the Fund, the Company granted the Fund an option to purchase up to an additional $3 million of its common stock and a callable warrant and an adjustable warrant. The Fund can exercise this option in whole or in part at any time prior to August 3, 2001. The price per share of common stock to be issued upon exercise of the option will be based on the average market price of the common stock for a five-day period prior to the date on which the option is exercised. On August 23, 2000, the Fund exercised $1,000,000 of its option to purchase additional common stock. The Fund paid $750,000 of the purchase price in connection with the closing on August 30, 2000. The Fund will pay the remaining $250,000 upon effectiveness of a registration statement covering the shares owned by the Fund. The Fund purchased the Company's common stock at $5.53 per share, which amount was based upon the average market price of the common stock for the five day period prior to August 23, 2000. An adjustable warrant similar to the one issued on August 3, 2000 was issued to the Fund on August 30, 2000, but was canceled on November 1, 2000 by Agreement of the Company and the Fund. The Fund also received a five year warrant to purchase up to 19,900 shares of common stock at $6.03 per share. This warrant is callable by the Company at any time at $10.05 per underlying share. The calculated value of this callable warrant using the Black-Scholes method is $139,897, which the Company accounts for as a credit to paid in capital

The adjustable warrant contains provisions regarding the adjustment or replacement of the warrants in the event of stock splits, mergers, tender offers and other similar events. The adjustable warrant also limits the number of shares that can be beneficially owned by the Fund to 9.99% of the total number of outstanding shares of Common Stock.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of the financial condition and results of operations of the Company for the six months ended June 30, 2000 and 1999 should be read in conjunction with the accompanying unaudited condensed consolidated financial statements and the related footnotes thereto.

This report includes forward-looking statements. You can identify these statements by forward-looking words such as "may," "will," "possibly," "expect," "anticipate," "project," "believe," "estimate" and "continue" or similar words. You should read statements that contain these words carefully because they discuss our future expectations, contain projections of our future results of operations or of our financial condition, or state other "forward-looking" information. We believe that it is important to communicate our future expectations to our investors. However, there will be events in the future that we have not been able to accurately predict or control and that may cause our actual results to differ materially from those discussed. For example, contaminations at our facilities, changes in the pharmaceutical or biotechnology industries, competition and changes in government regulations or general economic or market conditions could all have significant effects on our results. These factors should be considered carefully and readers should not place undue reliance on our forward-looking statements. Before you invest in our common stock, you should be aware that the occurrence of the events described in the "Business," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Cautionary Factors Related to Forward Looking Information" sections included in our annual report on Form 10-K for the year ended December 31, 1999, as amended, and elsewhere in this report could harm our business operating results and financial condition. All forward looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements and risk factors contained or referred to herein. We are under no duty to update any of the forward looking statements after the date of this prospectus or to conform these statements to actual results.

OVERVIEW

Since our inception in 1988, we have been primarily engaged in research and development of human therapeutic products. As a result of a restructuring in the second half of 1999, our sole focus is now on our stem cell technology. At the beginning of last year, by contrast, our corporate headquarters, most of our employees, and the main focus of our operations were primarily devoted to a different technology--encapsulated cell therapy, or ECT. Since that time, we terminated a clinical trial of the ECT then in progress, we wound down our other operations relating to the ECT, we terminated the employment of those who worked on the ECT, we sold the ECT and we relocated from Rhode Island to Sunnyvale, California. Comparisons with last year's results are correspondingly less meaningful than they may be under other circumstances.

We were known as CytoTherapeutics, Inc., until May 23, 2000, when we changed our name to StemCells, Inc.

We have not derived any revenues from the sale of any products, and we do not expect to receive revenues from product sales for at least several years. We have not commercialized any product and in order to do so we must, among other things, substantially increase our research and development expenditures as research and product development efforts accelerate and clinical trials are initiated. We have incurred annual operating losses since inception and expect to incur substantial operating losses in the future. As a result, we are dependent upon external financing from equity and debt offerings and revenues from collaborative research arrangements with corporate sponsors to finance our operations. There are no such

collaborative research arrangements at this time and there can be no assurance that such financing or partnering revenues will be available when needed or on terms acceptable to us.

Our results of operations have varied significantly from year to year and quarter to quarter and may vary significantly in the future due to the occurrence of material, nonrecurring events, including without limitation the receipt of one-time, nonrecurring licensing payments, and the initiation or termination of research collaborations, in addition to the winding-down of terminated research and development programs referred to above.

RESULTS OF OPERATIONS

SIX MONTHS ENDED JUNE 30, 2000 AND 1999

For the six months ended June 30, 2000 and 1999, revenues from collaborative agreements totaled $0 and $5,021,707, respectively. The decrease in revenues resulted from the June 1999 termination of a Development, Marketing and License Agreement related to our former ECT. We have not yet entered into revenue-producing collaborations with respect to our platform of stem cell technologies. During the second quarter 2000 we realized a $1,427,686 gain in connection with our investment in Modex Therapeutics Ltd., a Swiss biotechnology company that completed an initial public offering on June 23, 2000. At June 30, 2000, we owned 126,193 shares with an estimated fair market value of $19,220,165, based on the per share price of approximately $152.00, which we converted from a market price of 247.50 Swiss francs on that date. The market price of Modex stock on October 31, 2000 was 329.50 Swiss francs, which converts to $183.28 using exchange rates on that date and represents an estimated fair value of $23,128,598 for our holdings.

Research and development expenses totaled $2,021,839 for the six months ended June 30, 2000, compared with $6,847,383 for the same period in 1999. The decrease of $4,825,544, or 70%, from 1999 to 2000 was primarily attributable to the wind-down of research activities relating to the ECT.

General and administrative expenses were $1,427,733 for the six months ended June 30, 2000, compared with $2,168,315 for the same period in 1999. The decrease of $740,582, or 34%, from 1999 to 2000 was primarily attributable to lower payroll costs resulting from the restructuring of administrative operations and to the establishment of a smaller corporate office in California. Some additional items that were more properly included in research and development were also reclassified out of general and administrative expense, and facilities costs were more accurately spread between research and development and general and administrative expense.

Wind-down expenses related to our ECT research, our Rhode Island operations and the transfer of our headquarters to Sunnyvale, California for the six months ended June 30, 2000 and 1999 were $288,646 and $0 respectively. In 1999 we had created a reserve of $1,634,522 for wind-down expenses related to the first half of 2000, of which approximately $463,000 related to the carrying costs through an expected June 30, 2000 disposition of the Rhode Island facilities. During the first six months of 2000 we incurred costs in excess of the amounts reserved as of December 31, 1999 for the carrying costs, including lease payments, property taxes and utilities, of the Rhode Island facilities. These amounts were previously included in general and administrative expense, and have been reclassified to be separately disclosed as encapsulated cell therapy wind down and corporate relocation expense because they are directly related to wind down and relocation. We anticipate that we will continue to incur additional carrying costs for the Rhode Island facilities because we were unable to dispose of them by June 30, 2000, and will incur approximately $500,000 in carrying costs for them in the third quarter of 2000 and in every quarter thereafter until we dispose of these facilities. We do not currently have a projected date for such disposal and there can be no assurance that we will be able to dispose of these facilities in a reasonable time, if at all.

Interest income for the six months ended June 30, 2000 and 1999 was $138,232 and $406,331, respectively. The decrease in interest income in 2000 was attributable to the lower average investment balances during such period. Interest expense was $142,566 for the six months ended June 30, 2000, compared with $185,054 for the same period in 1999. The decrease in 2000 was attributable to lower outstanding debt and capital lease balances in 2000 compared to 1999.

Net loss for the six months ended June 30, 2000 was $2,325,964, or ($0.12) per share, as compared to the net loss of $3,772,714, or ($0.20) per share,

for the comparable period in 1999. The decrease in net loss of $1,446,750 from the same period in 1999 primarily reflects a gain from the sale of certain shares of our stock in Modex, as the reductions in expenses were offset by the decrease in revenues from collaboration agreements. We were one of the founders of Modex, a Swiss biotherapeutics company established in 1996 to pursue encapsulated cell technologies related to our former programs. After Modex' initial public offering on the Swiss Neue Market on June 23, 2000 and our sale of 23,807 shares, we own 126,193 shares of Modex common stock. The IPO price was 168.00 Swiss francs, and the share price on June 30, 2000 was 247.50 Swiss francs. The market price of Modex stock on October 31, 2000 was 329.50 Swiss francs. The shares are subject to a lockup for 6 months from the date of the IPO.

THREE MONTHS ENDED JUNE 30, 2000 AND 1999

For the three months ended June 30, 2000 and 1999, revenues from collaborative agreements totaled $0 and $2,520,672, respectively. The decrease in revenues resulted from the June 1999 termination of a Development, Marketing and License Agreement related to our former programs. We have not yet entered into revenue-producing collaborations with respect to our platform stem cell technology.

During the second quarter 2000 we realized a $1,427,686 gain in connection with our investment in Modex Therapeutics, Ltd., or Modex, a Swiss biotechnology company that completed an initial public offering on June 23, 2000. At June 30, 2000, we owned 126,193 shares with an estimated fair value of $19,220,165, based on the per share price of approximately $152, which we converted from a market price of 247.50 Swiss Francs on that date.

Research and development expenses totaled $1,115,207 for the three months ended June 30, 2000, compared with $3,280,826 for the same period in 1999. The decrease of $2,165,619, or 66%, from 1999 to 2000, was primarily attributable to the wind-down of research activities relating to the ECT.

General and administrative expenses were $770,019 for the three months ended June 30, 2000, compared with $1,172,856 for the same period in 1999. The decrease of $402,837, or 34%, from 1999 to 2000 was primarily attributable to lower payroll costs resulting from the restructuring of administrative operations and to the establishment of a smaller corporate office in California. Some additional items that were more properly included in research and development were also reclassified out of general and administrative expense, and facilities costs were more accurately spread between research and development and general and administrative expense.

Wind-down expenses related to our ECT research, our Rhode Island operations and the transfer of our headquarters to Sunnyvale, California for the three months ended June 30, 2000 and 1999 were $54,260 and $0 respectively. In 1999 we had created a reserve of $1,634,522 for wind-down expenses related to the first half of 2000, of which approximately $463,000 related to the carrying costs, including lease payments, property tax and utilities, through an expected June 30, 2000 disposition of the Rhode Island facilities. During the first six months of 2000 we incurred costs in excess of the amounts reserved as of December 31, 1999. We anticipate that we will continue to incur additional carrying costs for the Rhode Island facilities because we were unable to dispose of them by June 30, 2000, and will incur approximately $500,000 in carrying costs for them in the third quarter of 2000 and in every quarter thereafter until we dispose of these facilities. We do not currently have a projected date for such disposal and there can be no assurance that we will be able to dispose of these facilities in a reasonable time, it at all.

Interest income for the three months ended June 30, 2000 and 1999 was $64,900 and $184,220, respectively. The decrease in interest income in 2000 was attributable to the lower average investment balances during such period.

Interest expense was $73,708 for the three months ended June 30, 2000, compared with $91,229 for the same period in 1999. The decrease in 2000 was attributable to lower outstanding debt and capital lease balances in 2000 compared to 1999.

Net loss for the three months ended June 30, 2000 was $531,706, or ($0.03) per share, as compared to net loss of $1,840,019, or ($0.10) per share, for the comparable period in 1999. The decrease in net loss of $1,308,313 from the same period in 1999 primarily reflects a gain of $1,427,686 in connection with our stock in Modex, as the reductions in expenses were offset by the decrease in revenues from collaboration agreements. We were one of the founders of Modex, a Swiss biotherapeutics company established in 1996 to pursue encapsulated cell technologies related to our former programs. After Modex' initial public offering on the Swiss Neue Market on June 23, 2000 and our sale of 23,807 shares, we own 126,193 shares of Modex common stock. The IPO price was 168.00 Swiss Francs, and the share price on June 30, 2000 was 247.50 Swiss Francs. The shares are subject to a lockup for 6 months from the date of the IPO.

LIQUIDITY AND CAPITAL RESOURCES

Since our inception, we have financed our operations through the sale of common and preferred stock, the issuance of long-term debt and capitalized lease obligations, revenues from collaborative agreements, research grants and interest income.

We had unrestricted cash and cash equivalents totaling $5,535,264 at June 30, 2000. Cash equivalents are invested in money market funds.

We also hold 126,193 shares of Modex stock, which is publicly traded on the Swiss Neue Market exchange. While our Modex stock had an estimated fair market value of $27,204,333 on September 30, 2000 (and $23,128,598 on October 31, 2000), the fair market value of our Modex stock has varied significantly since the Modex public offering and may continue to vary significantly based on increases and decreases in the reported per share price, in Swiss francs, of the Modex stock and on foreign currency exchange rates. We are prohibited under a lock-up agreement entered into at the time of Modex's public offering from selling any of our Modex shares until December 23, 2000. In addition, there is a limited trading market for Modex stock, and if we were to attempt to sell any significant portion of our Modex holdings, we would likely be able to do so only at a significant

discount to the then market price, if at all.

Our liquidity and capital resources were, in the past, significantly affected by our relationships with corporate partners, which were related to our former ECT. These relationships are now terminated, and we have not yet established corporate partnerships with respect to our stem cell technology.

In March 1995, we signed a collaborative research and development agreement with AstraZeneca plc for the development and marketing of certain encapsulated-cell products to treat pain. AstraZeneca made an initial, nonrefundable payment of $5,000,000, included in revenue from collaborative agreements in 1995, a milestone payment of $3,000,000 in 1997 and was to remit up to an additional $13,000,000 subject to achievement of certain development milestones. Under the agreement, we were obligated to conduct certain research and development pursuant to a four-year research plan agreed upon by the parties. Over the term of the research plan, we originally expected to receive annual payments of $5 million to $7 million from AstraZeneca, which was to approximate the research and development costs incurred by us under the plan. Subject to the successful development of such products and obtaining necessary regulatory approvals, AstraZeneca was obligated to conduct all clinical trials of products arising from the collaboration and to seek approval for their sale and use. AstraZeneca had the exclusive worldwide right to market products covered by the agreement. Until the later of either the expiration of all patents included in the licensed technology or a specified fixed term, we were entitled to a royalty on the worldwide net sales of such products in return for the marketing license granted to AstraZeneca and our obligation to manufacture and supply products. AstraZeneca had the right to terminate the original agreement beginning April 1, 1998. On June 24, 1999, AstraZeneca informed us of the results of AstraZeneca's analysis of the double-blind, placebo-controlled trial of a potential ECT product, an encapsulated bovine cell implant for the treatment of severe, chronic pain in cancer patients. AstraZeneca determined that, based on criteria it established, the results from the 85-patient trial did not meet the minimum statistical significance for efficacy established as a basis for continuing worldwide trials for the therapy. AstraZeneca therefore indicated that it did not intend to further develop the bovine cell-containing implant therapy and exercised its right to terminate the agreement. See also Note 16--"Research Agreements" accompanying the Financial Statements set forth in our annual report on Form 10-K for the year ended December 31, 1999, as amended.

In the third quarter of 1999, we announced restructuring plans for the wind-down of operations relating to our ECT and to focus our resources on the research and development of our platform of proprietary stem cell technologies. We terminated approximately 68 full time employees and, in October 1999, relocated our corporate headquarters to Sunnyvale, California. We recorded $6,047,806 of wind-down expenses including employee separation and relocation costs during 1999.

On December 30, 1999, we sold our ECT and assigned our intellectual property assets in it to Neurotech S.A. for a payment of $3,000,000, royalties on future product sales, and a portion of certain Neurotech revenues from third parties. In addition, we retained certain non-exclusive rights to use ECT in combination with our proprietary stem cell technologies and in the field of vaccines for prevention and treatment of infectious diseases. We received $2,800,000 of the initial payment on January 3, 2000 with a remaining balance of $200,000 placed in escrow, to be released to us upon demonstration satisfactory to Neurotech that certain intellectual property is not subject to other claims.

As part of our restructuring of operations and relocation of corporate headquarters to Sunnyvale, California, we identified a significant amount of excess fixed assets. In December of 1999, we completed the disposition of those excess fixed assets, from which we received more than $746,000. The proceeds are being used to fund our continuing operations.

In July 1999, as a result of our decision to close our Rhode Island facilities, the Rhode Island Partnership for Science and Technology, or RIPSAT, alleged that we were in default under a June, 1989 Funding Agreement, and demanded payment of approximately $2.6 million. While we believe we were not in default under the Funding Agreement, we deemed it best to resolve the dispute without litigation and, on March 3, 2000, entered into a settlement agreement with RIPSAT, the Rhode Island Industrial Recreational Building Authority, or IRBA, and the Rhode Island Industrial Facilities Corporation, or RIIFC. We agreed to pay RIPSAT $1,172,000 in full satisfaction of all our obligations to them under the Funding Agreement. At the same time, IRBA agreed to return to us the full amount of our debt service reserve, comprising approximately $610,000 of principal and interest, relating to the bonds we had with IRBA and RIIFC. The $610,000 debt service reserve was transferred directly to RIPSAT, leaving the remainder of approximately $562,000 to be paid by us. We made this payment in March of 2000.

Our liquidity and capital resources could have also been affected by a claim by Genentech, Inc., arising out of their collaborative development and licensing agreement with us relating to the development of products for the treatment of Parkinson's disease; however, the claim was resolved with no effect on our resources. On May 21, 1998, Genentech exercised its right to terminate the Parkinson's collaboration and demanded that we redeem, for approximately $3,100,000, certain shares of our redeemable Common Stock held by Genentech. Genentech's claim was based on provisions in the agreement requiring us to redeem, at the price of $10.01 per share, the shares representing the difference between the funds invested by Genentech to acquire such stock and the amount expended by us on the terminated program less an additional $1,000,000. In March 2000, we entered into a Settlement Agreement with Genentech under which Genentech released us from any obligation to redeem any shares of our Common Stock held by Genentech, without cost to us. Accordingly, the $5.2 million of redeemable common stock shown as a liability in our December 31, 1999 balance sheet was transferred to equity in March 2000 without any impact on our liquidity and capital resources. We and Genentech also agreed that all collaborations between us were terminated, and that neither of us had any rights to the intellectual property of the other.

In May 1996, we secured an equipment loan facility with a bank in the amount of $2,000,000. On August 5, 1999 we made a payment of approximately $752,000 of principal and interest to the lender to retire this loan facility rather than seek a waiver by the lender of our violation of a loan covenant requiring us to maintain unrestricted liquidity in an amount equal to or in excess of $10 million.

We continue to have outstanding obligations in regard to our former facilities in Lincoln, Rhode Island, including lease payments and operating costs of approximately $950,000 per year associated with our former research laboratory and corporate headquarters building and debt service payments and

operating costs of approximately $1,000,000 per year with respect to our pilot manufacturing and cell processing facility. We are actively seeking to sublease, assign or sell our interests in these facilities. Failure to do so within a reasonable period of time will have a material adverse effect on our liquidity and capital resources.

On April 13, 2000, we sold 1,500 shares of our 6% cumulative convertible preferred stock plus warrants for a total of 75,000 shares of our common stock to two members of our Board of Directors for $1,500,000, on terms more favorable to us than we were able to obtain from outside investors. The face value of the shares of preferred stock is convertible at the option of the holders into common stock at $3.77 per share. The holders of the preferred stock have liquidation rights equal to their

original investments plus accrued but unpaid dividends. The investors would be entitled to make additional investments in our securities on the same terms as those on which we complete offerings of our securities with third parties within 6 months, if any such offerings are completed. They have waived that right with respect to the common stock transactions described below. If offerings totaling at least $6 million are not completed during the 6 months, the investors have the right to acquire up to a total of 1,126 additional shares of convertible preferred stock, the face value of which is convertible at the option of the holders into common stock at $6.33 per share. Any unconverted preferred stock is converted, at the applicable conversion price, on April 13, 2002 in the case of the original stock and two years after the first acquisition of any of the additional 1,126 shares, if any are acquired. The warrants expire on April 13, 2005.

On August 3, 2000, we completed a $4 million common stock financing transaction with Millennium Partners, LP, or the Fund, an investment fund with more than a billion dollars in assets under management. We received $3 million of the purchase price at the closing and will receive the remaining $1 million upon effectiveness of a registration statement covering the shares purchased by the Fund. The Fund purchased our common stock at $4.33 per share. The Fund may be entitled, pursuant to an adjustable warrant issued to the Fund in connection with the sale of common stock, to receive additional shares of common stock on eight dates beginning six months from the closing and every three months thereafter. The number of additional shares the Fund may be entitled to on each date will be based on the number of shares of common stock the Fund continues to hold on each date and the market price of our common stock over a period prior to each date. We will have the right, under certain circumstances, to cap the number of additional shares by purchasing part of the entitlement from the Fund. The Fund also received a warrant to purchase up to 101,587 shares of common stock at $4.725 per share. This warrant is callable by us at $7.875 per underlying share.

In addition, the Fund has the option for twelve months to purchase up to $3 million of additional common stock. On August 23, 2000 the Fund exercised $1,000,000 of its option to purchase additional common stock at $5.53 per share. The Fund paid $750,000 of the purchase price in connection with the closing on August 30, 2000. The Fund will pay the remaining $250,000 upon effectiveness of a registration statement covering the shares owned by the Fund. At the closing on August 30, 2000, we issued to the Fund an adjustable warrant similar to the one issued on August 3, 2000. This adjustable warrant was canceled by agreement between us and the Fund on November 1, 2000. The Fund also received a warrant to purchase up to 19,900 shares of common stock at $6.03 per share. This warrant is callable by us at $10.05 per underlying share.

We have limited liquidity and capital resources and must obtain significant additional capital resources in the future in order to sustain our product development efforts. Substantial additional funds will be required to support our research and development programs, for acquisition of technologies and intellectual property rights, for preclinical and clinical testing of our anticipated products, pursuit of regulatory approvals, acquisition of capital equipment, laboratory and office facilities, establishment of production capabilities and for general and administrative expenses. Our ability to obtain additional capital will be substantially dependent on our ability to obtain partnering support for our stem cell technology and, in the near term, on our ability to realize proceeds from the sale, assignment or sublease of our facilities in Rhode Island. Failure to do so will have a material effect on our liquidity and capital resources. Until our operations generate significant revenues from product sales, we must rely on cash reserves and proceeds from equity and debt offerings, proceeds from the transfer or sale of our intellectual property rights, equipment, facilities or investments, government grants and funding from collaborative arrangements, if obtainable, to fund our operations.

We intend to pursue opportunities to obtain additional financing in the future through equity and debt financings, grants and collaborative research arrangements. The source, timing and availability of any future financing will depend principally upon market conditions, interest rates and, more specifically, on our progress in our exploratory, preclinical and future clinical development programs. Lack of necessary funds may require us to delay, reduce or eliminate some or all of our research and product development programs or to license our potential products or technologies to

third parties. Funding may not be available when needed, at all, or on terms acceptable to us.

While our cash requirements may vary, as noted above, we currently expect that our existing capital resources, including income earned on invested capital, will be sufficient to fund our operations into the first quarter of 2001. Our cash requirements may vary, however, depending on numerous factors. Lack of necessary funds may require us to delay, scale back or eliminate some or all of our research and product development programs and/or our capital expenditures or to license our potential products or technologies to third parties.

PART II - ITEM 1

LEGAL PROCEEDINGS

None.

PART II - ITEM 2

(c) On April 13, 2000, we sold 1,500 shares of our 6% cumulative convertible preferred stock plus warrants for a total of 75,000 shares of our common stock to two members of our Board of

Directors for $1,500,000, on terms more favorable than we were then able to obtain from outside investors. The sale was made in reliance on Rule 506 of Regulation D promulgated under the Securities Act of 1933, as amended. The face value of the shares of preferred stock is convertible at the option of the holders into common stock at $3.77 per share. The holders of the preferred stock have liquidation rights equal to their original investments plus accrued but unpaid dividends. The investors would be entitled to make additional investments in the Company on the same terms as those on which the Company completes offerings of its securities with third parties within 6 months, if any such offerings are completed. They have waived that right with respect to the common stock transactions described in Note 8, Subsequent Events. If offerings totaling at least $6 million are not completed during the 6 months, the investors have the right to acquire up to a total of 1,126 additional shares of convertible preferred stock, the face value of which is convertible at the option of the holders into common stock at $6.33 per share. Any unconverted preferred stock is converted, at the applicable conversion price, on April 13, 2002 in the case of the original stock and two years after the first acquisition of any of the additional 1,126 shares, if any are acquired. The warrants, which are exercisable at $6.58 per share, expire on April 13, 2005.

PART II - ITEM 4

SUBMISSION OF MATTERS TO A VOTE OF SECURITY-HOLDERS

(a) The Annual Meeting of Stockholders was held in Menlo Park, California on May 23, 2000.

(b) Not applicable

(c) The following is a brief description of each matter voted upon at the meeting and a breakdown of the votes cast for, against or withheld, as well as the number of abstentions voted for each proposal.

1. Proposal to elect Donald Kennedy, Ph.D. as a Director of the Company - 15,622,499 votes in favor, 85,855 votes against, no abstentions.

2. Amendment to the Company's Restated Certificate of Incorporation to Change its Corporate Name From CytoTherapeutics, Inc. to StemCells, Inc. - 15,561,786 votes in favor, 119,993 votes against, 26,575 abstentions.

3. Ratification of Selection of Ernst & Young LLP as the Company's Independent Public Accountants - 5,634,955 votes in favor, 52,904 votes against, 20,495 abstentions.

PART II - ITEM 6

EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibits

Exhibit 3.1 - Form of Certificate of Designations of 6% Cumulative Convertible Preferred Stock of the Registrant

Exhibit 3.2 - Restated Certificate of Incorporation of the Registrant, as amended on May 24, 2000

Exhibit 10.1 - Form of Securities Purchase Agreement dated as of April 13, 2000

Exhibit 10.2 - Form of Registration Rights Agreement dated as of April 13, 2000

Exhibit 27 - Financial Data Schedule

(b) Reports on Form 8-K

The Company did not file any Reports on Form 8-K during the period April 1 to June 30, 2000.

SIGNATURE

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.

STEMCELLS, INC.

(Name of Registrant)

December 5, 2000

/s/ George Koshy

Controller and Acting Chief Financial Officer (authorized officer and principal financial officer and principal accounting officer)

EXHIBIT 3.1

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 6% CUMULATIVE CONVERTIBLE PREFERRED STOCK FOR STEMCELLS, INC.

STEMCELLS, 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 Four 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 2,626 shares, par value $.01, to be designated 6% Cumulative Convertible Preferred Stock (the "Preferred Shares").

RESOLVED, that subject to the terms and conditions of the Purchase Agreement (as defined herein), 1,500 Preferred Shares may be issued in one tranche (the "Initial Tranche") and further subject to the exercise of an option under the terms of the Purchase Agreement (as defined herein), an additional 1,126 Preferred Shares, in one or more tranches, may be issued (each tranche being sometimes referred to as a "Tranche").

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

1. DESIGNATION. 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 6% Cumulative Convertible Preferred Stock (the "Preferred Shares"). The number of shares constituting such series shall be 2,626.

2. DIVIDENDS.

(a) CUMULATIVE. The holders of the Preferred Shares shall be entitled to receive cumulative dividends at the per share rate of six percent (6%) of the Liquidation Preference (as

defined below) of each Preferred Share, per annum accruing daily and payable and compounding quarterly on March 31, June 30, September 30 and December 31 of each year (each a "Dividend Payment Date") commencing with the first Dividend Payment Date occurring after the original issuance date of such share, in preference and priority to any payment of any dividend on the Common Stock (as defined below) or any other class or series of equity security of the Corporation. Such dividends shall accrue on any given share from the most recent date on which a dividend has been paid with respect to such share, or if no dividends have been paid, from the date of the original issuance of such share, and such dividends shall accrue from day to day whether or not declared, based on the actual number of days elapsed. If at any time dividends on the outstanding Preferred Shares at the rate set forth above shall not have been paid or declared and set apart for payment with respect to all preceding periods, the amount of the deficiency shall be fully paid or declared and set apart for payment, but without interest, before any distribution, whether by way of dividend or otherwise, shall be declared or paid upon or set apart for the shares of any other class or series of equity security of the Corporation. For so long as any Preferred Shares are outstanding, the Corporation shall not pay any dividends on any shares of Common Stock or any shares of any other capital stock, or repurchase any shares of Common Stock or capital stock, without having received written consent of two-thirds in interest of the holders of Preferred Shares, except as otherwise provided herein or in the Purchase Agreement or Registration Rights Agreement (as such terms are defined herein) with respect to the Preferred Shares and Warrants and underlying Common Shares thereof. For purposes of computing any per diem accrual, calculations shall be made using a 360-day year.

(b) PIK PAYMENT. Any dividend payable on the outstanding Preferred Shares shall be paid solely by adding the amount thereof to the Liquidation Preference (as defined below) of such Preferred Shares. Upon the payment of dividends as required by the immediately preceding sentence, such dividends will be deemed paid in full.

3. LIQUIDATION PREFERENCE. In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, the holders of the Preferred Shares shall be entitled to receive, out of the assets of the Corporation available for distribution to stockholders, 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 $1,000 per share plus (i) dividends added to the Liquidation Preference in accordance with Section 2(b) above; (ii) all accrued but unpaid dividends; and (iii) all "Monthly Delay Payments" payable under the Registration Rights Agreement (as defined below) (the "Liquidation Preference").

4. ISSUANCE OF PREFERRED SHARES. The Preferred Shares shall be issued by the Corporation pursuant to a Securities Purchase Agreement, dated on or about the date hereof ("Purchase Agreement") between the Corporation and the initial subscriber(s) for the Preferred Shares thereunder (the "Subscriber"), and holders of Preferred Shares shall enjoy the benefits of the Registration Rights Agreement, dated the date hereof ("Registration Rights Agreement") between such parties in connection with the Purchase Agreement.

5. CONVERSION. Each holder of the Preferred Shares shall have the right at any time and from time to time, at the option of such holder, to convert any or all Preferred Shares held by such holder, for such number of fully paid, validly issued and nonassessable shares ("Common Shares") of common stock, par value $0.01, of the Corporation ("Common Stock"), free and clear of any liens, claims or encumbrances, as is determined by dividing (i) the Liquidation Preference times the number of Preferred Shares being converted (the "Conversion Amount"), by (ii) the applicable Conversion Price (determined as hereinafter provided) in effect on the Conversion Date. Immediately following such conversion, the rights of the holders of converted Preferred Shares shall cease and 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.

(a) MECHANICS OF CONVERSION. To convert Preferred Shares into Common Shares, the holder shall give written notice ("Conversion Notice") to the Corporation in the form of page 1 of Exhibit A hereto (which Conversion Notice may be given by facsimile transmission no later than the Conversion 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 Shares to be issued (the conversion date specified in such Conversion Notice shall be referred to herein as the "Conversion Date"). Either simultaneously with the delivery of the Conversion Notice, or within one (1) Trading Day (as defined below) thereafter, the holder shall deliver (which also may be done by facsimile transmission) page 2 to Exhibit A hereto indicating the computation of the number of Common Shares to be received. 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 or, if identified in writing to all the holders by the Corporation, at the offices of any transfer agent for such shares. The Corporation shall, immediately upon receipt of such Conversion Notice, issue and deliver to or upon the order of such holder, against delivery of the certificates representing the Preferred Shares which have been converted, a certificate or certificates for the number of Common Shares to which such holder shall be entitled (with the number of and denomination of such certificates designated by such holder), and the Corporation shall immediately issue and deliver to such holder a certificate or certificates for the number of Preferred Shares (including any fractional shares) which such holder has not yet elected to convert hereunder but which are evidenced in part by the certificate(s) delivered to the Corporation in connection with such Conversion Notice. The Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such conversion unless certificates evidencing such shares of the Preferred Stock being converted are either delivered to the Corporation or its transfer agent or the holder notifies the Corporation or any such transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement reasonably satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection therewith. The Corporation shall effect such issuance of Common Shares (and certificates for unconverted Preferred Shares) within three (3) Trading Days of the Conversion Date and shall transmit the certificates by messenger or overnight delivery service to reach the address designated by such holder within three (3) Trading Days after such Conversion Date ("T+3"). If certificates evidencing the Common Shares are not received by the holder within five (5) Trading Days of the Conversion Notice, then the holder will be entitled to revoke and

withdraw its Conversion Notice, in whole or in part, at any time prior to its receipt of those certificates. In lieu of delivering physical certificates representing the Common Shares issuable upon conversion of Preferred Shares, provided the Corporation's transfer agent is participating in the Depository Trust Company ("DTC") Fast Automated Securities Transfer ("FAST") program, upon request of the holder, the Corporation shall use its best efforts to cause its transfer agent to electronically transmit the Common Shares issuable upon conversion or exercise to the holder, by crediting the account of the holder's prime broker with DTC through its Deposit Withdrawal Agent Commission ("DWAC") system. The time periods for delivery described above shall apply to the electronic transmittals through the DWAC system. The parties agree to coordinate with DTC to accomplish this objective. The conversion pursuant to this Section 5 shall be deemed to have been made immediately prior to the close of business on the Conversion Date. The person or persons entitled to receive the Common Shares issuable upon such conversion shall be treated for all purposes as the record holder or holders of such Common Shares at the close of business on the Conversion Date.

The term "Trading Day" means a day on which there is trading on the Nasdaq National Market or such other market or exchange on which the Common Stock is then principally traded.

The Corporation's obligation to issue Common Shares upon conversion of Preferred Shares shall, except with respect to the holder's compliance with the notice and delivery requirements set forth above in this Section 5(a), be absolute, is independent of any covenant of any holder of Preferred Shares, 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 Registration Rights Agreement or otherwise.

In the event that the Corporation disputes the holder's computation of the number of Common Shares to be received, then the Corporation shall deliver to the holder the amount of Common Shares not in dispute and shall seek to mutually agree with the holder in good faith on the correct number of shares to be received.

(b) DETERMINATION OF CONVERSION PRICE.

The Conversion Price applicable with respect to the Preferred Shares (the "Conversion Price"), subject to the adjustments set forth below, shall be as follows:

(i) Beginning on the date of closing of the Purchase Agreement (the "Closing Date") up until and including the 20th Trading Day following the Closing Date, the Conversion Price with respect to the Preferred Shares in the Initial Tranche shall be a price equal to 125% of the closing bid price of the Common Stock recorded on the Principal Market (as reported by the Bloomberg financial network or any successor reporting service) on the Trading Day immediately preceding the Closing Date (the "Fixed Price");

(ii)On and after the 21st Trading Day following the Closing Date, the Conversion Price with respect to the Preferred Shares in the Initial Tranche shall be a price equal to the lesser of

(A) the Fixed Price or

(B) 85% of the average of the daily weighted average prices for the Common Stock, using the VAP function provided by Bloomberg, LP, for the Twenty Trading Days following the day that the Corporation files with the Securities and Exchange Commission a report on Form 8-K or Form 10-K disclosing the sale of Preferred Shares pursuant to the Purchase Agreement (the "Disclosure Date")

; provided that such resulting Conversion Price shall be at least $3.00 (the "Minimum Price");

(iii) The Conversion Price with respect to the Preferred Shares contained in the additional Tranches following the Initial Tranche shall be the Fixed Price.

As used herein, "Principal Market" shall mean Nasdaq National Market or such other market where the Common Stock is then listed for trading.

(c) STOCK SPLITS; DIVIDENDS; ADJUSTMENTS.

(i) If the Corporation, at any time while the Preferred Shares are outstanding, (A) shall pay a stock dividend or otherwise make a distribution or distributions on any equity securities (including instruments or securities convertible into or exchangeable for such equity securities) in shares of Common Stock, (B) subdivide outstanding Common Shares into a larger number of shares, or (C) combine outstanding Common Stock into a smaller number of shares, then each Conversion Price shall be multiplied by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding before such event and the denominator of which shall be the number of shares of Common Stock outstanding after such event. Any adjustment made pursuant to this Section 5(c)(i) 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 or combination.

(ii)In the event that the Corporation issues or sells any Common Stock or securities which are convertible into or exchangeable for its Common Stock (other than Preferred Shares), or any warrants or other rights to subscribe for or to purchase or any options for the purchase of its Common Stock ("Convertible Securities") (other than shares or options issued or which may be

issued pursuant to (i) the Corporation's current or future employee, director or BONA FIDE consultant option plans or shares issued upon exercise of options, warrants or rights outstanding on the date of the Purchase Agreement and listed in the Corporation's most recent periodic report filed under the Securities Exchange Act of 1934, as amended, (ii) arrangements with the holders of Preferred Shares, (iii) an underwriting agreement, to one or more underwriters in connection with a bona fide public offering (as defined herein), (iv) licenses agreements, joint ventures, strategic partnerships with or acquisitions of other entities by the Corporation which engage in businesses related or complementary to the Corporation's business) or (v) upon the exercise of the Preferred Shares or the Warrants) ("Exempted Issuances") at an effective purchase price per share (the "Full Dilutive Price") which is less than the Conversion Price, then in such case, the Conversion Price in effect immediately prior to such issue or sale or record date, as applicable, shall be reduced to equal the Full Dilutive Price.

In the event that the Corporation issues or sells any Common Stock or Convertible Securities (other than Exempted Issuances) at an effective purchase price per share (the "Partial Dilutive Price") which is less than the closing market price per share of the Common Stock on the Principal Market on the Trading Day next preceding such issue or sale or, in the case of issuances to holders of its Common Stock, the record date fixed for the determination stockholders entitled to receive such warrants, rights or options (the "Fair Market Price") but greater than the Conversion Price, then in each case, the Conversion Price in effect immediately prior to such issue or sale or record date, as applicable, shall be reduced effective concurrently with such issue or sale to an amount determined by multiplying the Conversion Price then in effect by a fraction, (x) the numerator of which shall be the sum of (1) the number of shares of Common Stock outstanding immediately prior to such issue or sale and (2) the number of shares of Common Stock which the aggregate consideration received by the Corporation for such additional shares would purchase at the Fair Market Price, and (y) the denominator of which shall be the number of shares of Common Stock and Convertible Securities (as defined below) of the Corporation outstanding immediately after such issue or sale.

For the purposes of the foregoing adjustment, in the case of the issuance of any Convertible Securities, the maximum number of shares of Common Stock issuable upon exercise, exchange or conversion of such Convertible Securities shall be deemed to be outstanding, and the aggregate consideration received by the Corporation for the issuance or sale of such Convertible Securities shall be deemed to include any consideration that would be received by the Corporation in connection with the exercise, exchange or conversion of such Convertible Securities, provided that no further adjustment shall be made upon the actual issuance of Common Stock upon exercise, exchange or conversion of such Convertible Securities.

(iii) If the Corporation, at any time while the Preferred Shares are outstanding, shall distribute to all holders of Common Stock evidences of its indebtedness or assets or cash or rights or warrants to subscribe for or purchase

any security of the Corporation or any of its subsidiaries (excluding those referred to in Sections 5(c)(i) or 5(c)(ii) above), then concurrently with such distributions to holder of Common Stock, the Corporation shall distribute to holders of the Preferred Shares, the amount of such indebtedness, assets, cash or rights or warrants which the holders of Preferred Shares would have received had they converted all their Preferred Shares into Common Shares immediately prior to the record date for such distribution.

(iv)Whenever the Conversion Price is adjusted pursuant to Section 5(c)(i) or (ii) above or the Corporation makes a distribution as described in Section 5(c)(iii) above, the Corporation shall promptly mail to each holder of the Preferred Shares a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment, or setting forth a description of the distribution and the facts surrounding same.

(v) All calculations under this Section 5(c) shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be.

(vi) No adjustment in the Conversion Price shall reduce the Conversion price below the then par value of the Common Stock.

(vii) The Corporation from time to time may reduce the Conversion Price by any amount for any period of time if the period is at least 20 Trading Days and if the reduction is irrevocable during the period. Whenever the Conversion Price is reduced, the Corporation shall mail to the holders of Preferred Shares a notice of the reduction. The Corporation shall mail, first class, postage prepaid, the notice at least 15 days before the date the reduced Conversion Price takes effect. The notice shall state the reduced Conversion Price and the period it will be in effect. A reduction of the Conversion Price does not change or adjust the Conversion Price otherwise in effect for purposes of Section 5(c)(i), (ii), or (iii).

(viii) The Conversion Price is also subject to adjustment pursuant to the terms of the Registration Rights Agreement.

(d) 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 of Preferred Shares at least 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.

(e) ISSUE TAXES. The Corporation shall pay any and all issue and other taxes, excluding any income, franchise or similar taxes, that may be payable in respect of any issue or delivery of Common Shares on conversion of Preferred Shares pursuant hereto. However, the holder of any Preferred Shares shall pay any tax that is due because the Common Shares issuable upon conversion thereof are issued in a name other than such holder's name.

(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 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 then applicable Conversion Price. The Corporation promptly will take such corporate action as may, in the opinion of its outside counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including without limitation engaging in best efforts to obtain the requisite stockholder approval.

(g) FRACTIONAL SHARES. No fractional shares shall be issued upon the conversion of any Preferred Shares. Instead of any fractional Common Shares which otherwise would be issuable upon conversion of the Preferred Shares, the Corporation shall pay a cash adjustment in respect of such fraction in an amount equal to the same fraction calculated on the basis of the Fair Market Price. No cash payment of less than $10.00 shall be required to be given unless specifically requested by the holder.

(h) REORGANIZATION, MERGER OR GOING PRIVATE. At any time while the Preferred Shares are outstanding, 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 Exchange Act, then, as part of such reorganization, consolidation, merger, or transfer if the holders of shares of Common Stock receive any publicly traded securities as part or all of the consideration for such reorganization, 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 if the Preferred Shares had been converted immediately prior to such reorganization, reclassification, consolidation or merger, sale or transfer or going private transaction. In addition to the foregoing, if the holders of shares of Common Stock receive any non-publicly traded securities or other property or cash as part or all of the consideration for such reorganization, consolidation, merger or sale, then such distribution shall be treated to the extent thereof as a distribution under Section 5(c) above and such Section shall also apply to such distribution.

(i) LIMITATIONS ON HOLDER'S RIGHT TO CONVERT.

(i) Notwithstanding anything to the contrary contained herein, the number of shares of Common Stock that may be acquired by the holder upon conversion pursuant to the terms hereof shall not exceed a number that, when added to the total number of shares of Common Stock deemed beneficially owned by such holder (other than by virtue

of the ownership of securities or rights to acquire securities that have limitations on the holder's right to convert, exercise or purchase similar to the limitation set forth herein), together with all shares of Common Stock deemed beneficially owned by the holder's "affiliates" (as defined in Rule 144 of the Act) ("AGGREGATION PARTIES") that would be aggregated for purposes of determining whether a group under Section 13(d) of the Securities Exchange Act of 1934 as amended, exists, would exceed 9.99% of the total issued and outstanding shares of the Common Stock (the "RESTRICTED OWNERSHIP PERCENTAGE"); PROVIDED that (w) each holder shall have the right at any time and from time to time to reduce its Restricted Ownership Percentage immediately upon notice to the Corporation and (x) each holder shall have the right (subject to waiver) at any time and from time to time, to increase its Restricted Ownership Percentage immediately in the event of the announcement as pending or planned, of a transaction or event referred to in Section 5(m) below.

(ii) Each time (a "COVENANT TIME") the holder or an Aggregation Party makes a Triggering Acquisition (as defined below) of shares of Common Stock (the "TRIGGERING SHARES"), the holder will be deemed to covenant that it will not, during the balance of the day on which such Triggering Acquisition occurs, and during the 61-day period beginning immediately after that day, acquire additional shares of Common Stock pursuant to rights-to-acquire existing at that Covenant Time, if the aggregate amount of such additional shares so acquired (without reducing that amount by any dispositions) would exceed (x) 9.99% of the number of shares of Common Stock outstanding at that Covenant Time (including the Triggering Shares) minus (y) the number of shares of Common Stock actually owned by the holder at that Covenant Time (regardless of how or when acquired, and including the Triggering Shares). A "TRIGGERING ACQUISITION" means the giving of a Conversion Notice or any other acquisition of Common Stock by the holder or an Aggregation Party; PROVIDED, however, that with respect to the giving of such Conversion Notice, if the associated issuance of shares of Common Stock does not occur, such event shall cease to be a Triggering Acquisition and the related covenant under this paragraph shall terminate. At each Covenant Time, the holder shall be deemed to waive any right it would otherwise have to acquire shares of Common Stock to the extent that such acquisition would violate any covenant given by the holder under this paragraph. Notwithstanding anything to the contrary in the Transaction Documents, in the event of a conflict between any covenant given under this paragraph and any obligation of the holder to convert Preferred Shares pursuant to the Transaction Documents, the former shall supersede the latter, and the latter shall be reduced accordingly. For the avoidance of doubt:

(A) The covenant to be given pursuant to this paragraph will be given at every Covenant Time and shall be calculated based on the circumstances then in effect. The making of a covenant at one Covenant Time shall not terminate or modify any prior covenants.

(B) The holder may therefore from time to time be subject to multiple such covenants, each one having been made at a different Covenant Time, and some possibly being more

restrictive than others. The holder must comply with all such covenants then in effect.

(iii) OVERALL LIMIT ON COMMON STOCK ISSUABLE. Notwithstanding anything contained herein to the contrary, the number of shares of Common Stock issuable by the Company and acquirable by the holders hereunder shall not exceed 3,901,313 shares of Common Stock, subject to appropriate adjustment for stock splits, stock dividends, or other similar recapitalizations affecting the Common Stock (the "MAXIMUM COMMON STOCK ISSUANCE"), unless the issuance of shares hereunder in excess of the Maximum Common Stock Issuance shall first be approved by the Company's shareholders in accordance with applicable law and the By-laws and Articles of Incorporation of the Company. The Company agrees that if at any point in time (the "Trigger Date") the number of Common Shares issued pursuant to conversion of the Preferred Shares and exercise of the Warrants and the number of Common Shares that would then be issuable by the Company in the event of conversion of all the Preferred Shares and exercise of all the Warrants then outstanding, would exceed the Maximum Common Stock Issuance but for this Section 5(i)(iii), then the Company shall promptly call a shareholders meeting to obtain shareholder approval for the issuance of Common Shares hereunder in excess of the Maximum Common Stock Issuance. If such shareholder approval is not obtained within 60 days of the Trigger Date, then each holder of Preferred Shares shall have the right to sell to the Company such number of Preferred Shares and Warrants which cannot be converted or exercised due to such Maximum Common Stock Issuance limitation at a redemption price equal to the "Mandatory Repurchase Price" (as defined in the Registration Rights Agreement).

(j) 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 5.

(k) SPECIFIC ENFORCEMENT. The Corporation agrees that irreparable damage would occur in the event that any of the provisions of this Certificate of Designations were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the holders of Preferred Shares shall be entitled to specific performance, injunctive relief or other equitable remedies to prevent or cure breaches of the provisions of this Certificate of Designations and to enforce specifically the terms and provisions hereof, this being in addition to any other remedy to which any of them may be entitled under agreement, at law or in equity.

(l) MANDATORY REPURCHASE. Each holder shall have the unilateral option and right to compel the Corporation to repurchase any or all of such holder's Preferred Shares within 3 days of a written notice requiring such repurchase, at a price per Preferred Share equal to 120% of the Liquidation Preference if any of the following events involving the Corporation shall have occurred:

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

(ii)A "going private" transaction under Rule 13e-3 promulgated pursuant to the Exchange Act; or

(iii) A tender offer by the Corporation under Rule 13e-4 promulgated pursuant to the Exchange Act.

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 Securities Exchange Act of 1934, as amended (the "Exchange Act")), together with its affiliates and associates (as such terms are defined in Rule 405 under the Securities Act of 1933, as amended (the "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, (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.

Notwithstanding the foregoing, in the event that the consideration received by holders of the Corporation's Common Stock in a Change of Control Transaction consists entirely of common equity securities which: (i) are registered and freely tradeable and (2) are valued on a per share of Common Stock basis at less than the then applicable Conversion Price, then the price per Preferred Share at which the holder may compel the Corporation to repurchase its Preferred Shares shall be the Liquidation Preference.

(m) MANDATORY CONVERSION.

(x) Subject to subsection (m)(y) below, the Preferred Shares shall be automatically converted into Common Shares on the two year anniversary of the Closing Date, in the case of Preferred Shares issued in the Initial Tranche and the two year anniversary of the issuance of THE FIRST SUBSEQUENT TRANCHE, in the case of Preferred Shares issued in subsequent Tranches (each, a "Mandatory Conversion Date") at a conversion price equal to the then applicable Conversion Price; provided, however, that such Mandatory Conversion Date shall be deferred, at the sole option of a holder of Preferred Shares, for such number of days as is equal to 1.5 times the number of days (A) there is a lack of Effective Registration (as defined below), but not including the first 120 days after the Closing; (B) there is not a sufficient amount of Common Stock available for conversion of all outstanding Preferred Shares and exercise of the Warrants, (C) for any other reason the Corporation refuses or announces its refusal to honor conversion of Preferred Shares or exercise of the Warrants, other than for failure to comply with the notice and delivery requirements of Section 5(a) above; or (D) for any other reason there is a suspension, restriction or limitation in the ability of holders of Preferred Shares or

Warrants to sell Common Shares received upon conversion of Preferred Shares or exercise of the Warrants pursuant to the prospectus included in the Registration Statement (as defined in the Registration Rights Agreement).

For purposes of the preceding paragraph, a lack of Effective Registration shall be deemed to have occurred at any time the Common Shares issuable upon conversion of the Preferred Shares or exercise of the Warrants are not capable of being sold on an Approved Market (as defined in the Purchase Agreement) pursuant to an effective registration statement and deliverable prospectus.

(y) Notwithstanding the preceding subsection (m)(x), no holder of Preferred Shares shall be obligated to convert any Preferred Shares held by such holder on the Mandatory Conversion Date (and there shall be no automatic conversion) unless and until each of the following conditions has been satisfied or exists, each of which shall be a condition precedent to any such forced conversion:

(A) no material default or breach of which the Corporation has actual knowledge, exists which has not been cured, and no event shall have occurred which constitutes (or would constitute with notice or the passage of time or both) a material default or breach of the Purchase Agreement, the Registration Rights Agreement, the Warrants, or this Certificate of Designations, which has not been cured;

(B) none of the events described in clauses (i) through (iv) of Section 2(b) of the Registration Rights Agreement shall have occurred and be continuing;

(C) the Registration Statement (as defined in the Registration Rights Agreement) is effective and holders have received unlegended certificates representing Common Shares with respect to all conversions for which Conversion Notices have been given and with respect to all exercises of Warrants for which Notices or Exercise have been given; and

(D) the Corporation and its subsidiaries on a consolidated basis has assets with a net realizable fair market value exceeding its liabilities and is able to pay all its debts as they become due in the ordinary course of business, and the Corporation is not subject to any liquidation, dissolution or winding up of its affairs, or any bankruptcy, insolvency or similar proceeding.

(z) Notwithstanding Section 5(m)(x) above, no holder's Preferred Shares shall be subject to mandatory conversion to the extent such mandatory conversion would result in the holder of Preferred Shares exceeding any of the limitations contained in Section 5(i) above. In such event, the Preferred Shares of such holder shall be converted

in such amount until such limitation is reached, and the remaining Preferred Shares shall be purchased by the Corporation at the Mandatory Redemption Price (as defined in the Registration Rights Agreement).

Such forced conversion shall be subject to and governed by all the provisions relating to voluntary conversion of the Preferred Shares contained herein.

6. VOTING RIGHTS. In addition to all other requirements imposed by Delaware law, and all other voting rights granted under the Corporation's Certificate of Incorporation, the affirmative vote of a majority in interest of the Corporation's outstanding Preferred Shares shall be necessary for (i) any amendment, modification or repeal of this Certificate of Designations (whether by merger, consolidation or otherwise) or for any merger, reclassification, consolidation or reorganization, or (ii) any amendment to the Certificate of Incorporation or by-laws of the Corporation that may amend or change or adversely affect any of the rights, preferences, or privileges of the Preferred Shares, provided, however, that holders of Preferred Shares (other than the Investors under the Purchase Agreement and their affiliates) who are affiliates of the Corporation (and the Corporation itself) shall not participate in such vote and the Preferred Shares of such holders shall be disregarded and deemed not to be outstanding for purposes of such vote.

7. 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.

8. REPLACEMENT CERTIFICATES. The certificate(s) representing the Preferred Shares held by any holder of Preferred Shares 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. Upon receipt by the Corporation of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of any stock certificate representing the Preferred Shares and, in the case of loss, theft or destruction, of indemnity reasonably satisfactory to it, or upon surrender and cancellation of such stock certificate if mutilated, the Corporation will make and deliver a new stock certificate of like tenor and dated as of such cancellation at no charge to the holder.

9. ATTORNEYS' FEES. In connection with enforcement by a holder of Preferred Shares of any obligation of the Corporation hereunder, the prevailing party shall be entitled to recovery of reasonable attorneys' fees and expenses incurred.

10. NO REISSUANCE. No Preferred Shares acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be reissued.

11. SEVERABILITY OF PROVISIONS. 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.

12. LIMITATIONS. Except as may otherwise be required by law and as are set forth in the Purchase Agreement and the Registration Rights 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 Designations (as may be amended from time to time) or otherwise in the Certificate of Incorporation of the Corporation.

Signed on July _____, 2000

STEMCELLS, INC.

By:

Name: Iris Brest
Title: Secretary

EXHIBIT A

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

CONVERSION NOTICE
FOR
6% CUMULATIVE CONVERTIBLE PREFERRED STOCK

The undersigned, as a holder ("Holder") of shares of 6% Cumulative Convertible Preferred Stock ("Preferred Shares") of StemCells, Inc. (the "Corporation"), hereby irrevocably elects to convert _____ Preferred Shares for shares ("Common Shares") of common stock, par value $0.01 per share (the "Common Stock"), of the Corporation according to the terms and conditions of the Certificate of Designations for the Preferred Shares as of the date written below. The undersigned hereby requests that share certificates for the Common Shares to be issued to the undersigned pursuant to this Conversion Notice be issued in the name of, and delivered to, the undersigned or its designee as indicated below. No fee will be charged by the Corporation to the Holder of Preferred Shares for any conversion. Capitalized terms used herein and not otherwise 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:

Issue Common Stock to:
---
at:

IF COMMON SHARES ARE TO BE ISSUED TO A PERSON OTHER THAN HOLDER, HOLDER'S SIGNATURE MUST BE GUARANTEED BELOW:

SIGNATURE GUARANTEED BY:

THE COMPUTATION OF NUMBER OF COMMON SHARES TO BE RECEIVED IS SET FORTH ON PAGE 2 OF THE CONVERSION NOTICE.

PAGE 2 TO CONVERSION NOTICE DATED _____ FOR: _____

(CONVERSION DATE) (NAME OF HOLDER)

COMPUTATION OF NUMBER OF COMMON SHARES TO BE RECEIVED

Initial Tranche _____

Subsequent Tranche _____

Number of Preferred Shares converted: _____ shares

Number of Preferred Shares converted x Liquidation Preference $

TOTAL DOLLAR AMOUNT CONVERTED $

==========

CONVERSION PRICE $

Number of Common Shares = TOTAL DOLLAR AMOUNT CONVERTED / Conversion Price = ----------

NUMBER OF COMMON SHARES =

If the conversion is not being settled by DTC, please issue and deliver _____ certificate(s) for Common Shares in the following amount(s):

- _____

- _____

- _____

If the Holder is receiving certificate(s) for Preferred Shares upon the conversion, please issue and deliver _____ certificate(s) for Preferred Shares in the following amounts:

- _____

- _____

- _____

Exhibit 3.2

AS AMENDED ON MAY 24, 2000

RESTATED CERTIFICATE OF INCORPORATION

OF CYTOTHERAPEUTICS, INC.

Cytotherapeutics, Inc., a corporation organized and existing under the laws of the State of Delaware, hereby certifies as follows:

1. The name of the corporation is Cytotherapeutics, Inc. Cytotherapeutics, Inc. was originally incorporated under the name Cellular Transplants, Inc., and the original Certificate of Incorporation of the corporation was filed with the Secretary of State of the State of Delaware on August 2, 1988. A Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on February 14, 1992 (the "Restated Certificate of Incorporation").

2. Pursuant to Section 245 of the General Corporation law of the State of Delaware, this Restated Certificate of Incorporation restates and integrates, but does not further amend the provisions of the Restated Certificate of Incorporation of this corporation. There is no discrepancy between the provisions of the Restated Certificate of Incorporation as the same has been heretofore amended or supplemented and the provisions of this Restated Certificate of Incorporation.

3. The text of the Restated Certificate of Incorporation as heretofore amended or supplemented is hereby restated to read in its entirety as follows:

ONE. The name of this corporation is Cytotherapeutics, Inc.

TWO. The address of the corporation's registered office in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such office is The Corporation Trust Company.

THREE. The nature of the business or purposes to be conducted by this Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of Delaware.

FOUR. The total number of shares of stock that this Corporation shall have authority to issue is 46,000,000, consisting of 45,000,000 shares of Common Stock, with a par value of $.01 per share (the "Common Stock"), and 1,000,000 shares of Undesignated Preferred Stock with a par value of $.01 per share (the "Undesignated Preferred Stock").

The relative rights, preferences, privileges and restrictions granted to or imposed on the respective classes of the shares of capital stock or the holders thereof are as follows:

1. DIVIDENDS. The holders of Common Stock shall be entitled to such dividends as are declared by the Board of Directors. The right to such dividends on shares of the Common Stock shall not be cumulative and no right shall accrue to holders of Common Stock by reason of the fact that dividends on said shares are not declared in any prior period.

2. LIQUIDATION PREFERENCE.

a. (Eliminated)

b. (Eliminated)

c. COMMON PREFERENCE. In the event of any liquidation, dissolution or winding up of the Corporation, either voluntarily or involuntarily and subject to the rights of the holders of the Undesignated Preferred Stock, if assets remain, the holders of the Common Stock shall be entitled to receive an amount equal to $1.00 per share. If, upon such liquidation, dissolution or winding up of the Corporation, the Assets of the Corporation are insufficient to provide for the cash payment of the full aforesaid preferential amount to the holders of Common Stock, the entire remaining assets legally available for distribution shall be distributed ratably among the holders of Common Stock in proportion to the full preferential amount each such holder is otherwise entitled to receive.

d. NON-PREFERENCE DISTRIBUTION. After the payment or the setting apart of payment to the holders of the Common Stock of the full preferential amounts so payable to them and subject to the rights of the holders of the Undesignated Preferred Stock, the entire remaining assets of this Corporation legally available for distribution shall be distributed equally among the holders of the Common Stock.

e. CONSOLIDATION OR MERGER. A consolidation or merger of the Corporation with or into any other corporation or corporations, or the merger of any other corporation or corporations into the Corporation, in which consolidation or merger the stockholders of the Corporation receive distributions in cash or securities of another corporation or corporations as a result of such consolidation or merger (other than solely to effect a reincorporation), or a sale of all or substantially all of the assets of the Corporation, shall be deemed to be a liquidation, dissolution or winding up within the meaning of this Section 2.

f. NONCASH DISTRIBUTIONS. If any of the assets of the Corporation are to be distributed other than in cash under this Section 2 or for any purpose, then the Board of Directors of the Corporation shall promptly engage independent competent appraisers to determine the value of the assets to be distributed to the holders of Preferred Stock or Common Stock. The Corporation shall, upon receipt of such appraiser's valuation, give prompt written notice to each holder of shares of Preferred Stock or Common Stock of the appraiser's valuation.

3. VOTING RIGHTS.

a. (Eliminated)

b. (Eliminated)

c. COMMON STOCK. Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held, such voting rights to be counted together with all other shares of capital stock of the Corporation having voting powers and not as a separate class.

d. BOARD OF DIRECTORS. Of the authorized members of the Corporation's Board of Directors:

i. (Eliminated)

ii. (Eliminated)

iii. (Eliminated)

iv. subject to the rights of the holders of the Undesignated Preferred Stock, the holders of Common Stock, voting separately as a single class, shall be entitled to elect all remaining authorized members (and to fill any vacancies with respect thereto).

4. (Eliminated)

5. (Eliminated)

6. (Eliminated)

7. THE UNDESIGNATED PREFERRED STOCK.

a. ISSUANCE. The Undesignated Preferred Stock may be issued from time to time in one or more series. All shares of any one series of Undesignated Preferred Stock shall be identical in all respects, except that shares of any one series issued on different dates may differ as to dates, if any, from which dividends thereon are to accrue and/or cumulate.

b. DESIGNATIONS, POWERS, ETC. The Board of Directors of this Corporation is expressly granted authority, at any time and from time to time by the adoption of a resolution or resolutions not inconsistent with the provisions of this Restated Certificate of Incorporation, to authorize the issuance by this Corporation of one or more series of Undesignated Preferred Stock and to fix and determine with respect to each such series all the designations, preferences, powers and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, to the full extent now or hereafter permitted by law, and including, but without limiting the generality of the foregoing, the following:

i. The number of shares of such series, which may subsequently be increased (except as otherwise provided by the resolution or resolutions of the Board of Directors providing for the issuance of such series) or decreased (to a number not less than the number of shares then outstanding) by resolution or resolutions of the Board of Directors, and the distinctive designation thereof;

ii. The dividend rights of such series; the preferences, if any, over any other class or series of stock, or of any other class or series of stock over such series, as to dividends; the extent, if any, to which shares of such series shall be entitled to participate in dividends with shares of any other series or class of stock; whether dividends on shares of such series shall be fully, partially or conditionally cumulative, or a combination thereof; and any limitations, restrictions or conditions on the payment of such dividends;

iii. The rights of such series, and the preferences, if any, over any other class or series of stock, or of any other class or series of stock over such series, in the event of any voluntary or involuntary liquidation, dissolution or winding up of this Corporation and the extent, if any, to which shares of any such series shall be entitled to participate in such event with any other series or class of stock;

iv. Whether or not the shares of such series shall be redeemable, and, if redeemable, the date or dates upon or after which they shall be redeemable, the amount per share payable thereon in the case of the redemption thereof, which amount may vary at different redemption dates;

v. The terms of any purchase, retirement or sinking fund which may be provided for the shares of such series;

vi. The right, if any, of holders of shares of such series to convert the same into, or exchange the same for Common Stock, and the terms and conditions of such conversion or exchange, as well as provisions for adjustment of the conversion rate in such events as the Board of Directors shall determine; and

vii. The voting powers, if any, of such series in addition to the voting powers (if any) required by law.

c. RIGHTS IN THE EVENT OF LIQUIDATION, DISSOLUTION OR WINDING UP. In the event of any liquidation, dissolution or winding up of this Corporation, whether voluntary or involuntary, the holders of Undesignated Preferred Stock of each series shall be entitled to receive only such amount of amount as shall have been fixed by this Restated Certificate of

Incorporation or by the resolution or resolutions of the Board of Directors providing for the issuance of such series.

FIVE. The following provisions shall apply to the Board of Directors:

(a) CLASSIFICATION OF DIRECTORS. Except as otherwise provided in this Restated Certificate of Incorporation or a certificate of designation of this Corporation relating to the rights of the holders of any class or series of Undesignated Preferred Stock, voting separately by class or series, to elect additional directors under specified circumstances, the number of directors of this Corporation shall be as fixed from time to time by or pursuant to the By-Laws of this Corporation. Effective upon the first closing of a public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, covering any of this Corporation's securities, the directors, other than those who may be elected by the holders of any class or series of Preferred Stock voting separately by class or series, shall be classified, with respect to the time for which they severally hold office, into three classes, Class I, Class II and Class III, which shall be as nearly equal in number as possible, and shall be adjusted from time to time in the manner specified in the By-Laws of this Corporation to maintain such proportionality. Each initial director in Class I shall hold office for a term expiring at the first annual meeting of stockholders following the classification of directors, each initial director in Class II shall hold office initially for a term expiring at the second annual meeting of stockholders following the classification of directors, and each initial director in Class III shall hold office for a term expiring at the third annual meeting of stockholders following the classification of directors. Notwithstanding the foregoing provisions of this Section FIVE, each director shall serve until his or her successor is duly elected and qualified or until his or her earlier death, resignation or removal. At each annual meeting of stockholders following the classification of directors, the successors to 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 and until their successors have been duly elected and qualified or until their earlier death, resignation or removal.

(b) REMOVAL OF DIRECTORS. Except as otherwise provided pursuant to the provisions of this Restated Certificate of Incorporation or a certificate of designation of this Corporation relating to the rights of the holders of any class or series of Undesignated Preferred Stock, voting separately by class or series, to elect directors under specified circumstances, any director or directors may be removed from office at any time, but only for cause and only by the affirmative vote, at any regular meeting or special meeting of the stockholders, of not less than 80% of the total number of votes of the then outstanding shares of stock of this Corporation entitled to vote generally in the election of directors, voting together as a single class, but only if notice of such proposal was contained in the notice of such meeting. Any vacancy in the Board of Directors resulting from any such removal or otherwise shall be filled only by vote of a majority of the directors then in office, although less than a quorum, and any directors so chosen shall hold office until the next election of the class for which such directors shall have been chosen and until their successor shall be elected and qualified or until their earlier death, resignation or removal.

(c) CHANGE OF AUTHORIZED NUMBER OF DIRECTORS. In the event of any increase or decrease in the Authorized number of directors, the newly created or eliminated directorships resulting from such increase or decrease shall be apportioned by the Board of Directors among the three classes of directors so as to maintain such classes as nearly equal as possible. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

(d) DIRECTORS ELECTED BY HOLDERS OF UNDESIGNATED PREFERRED STOCK. Notwithstanding the foregoing, whenever the holders of any one or more classes or series of Undesignated Preferred Stock issued by this Corporation shall have the right, voting separately by class or series, to elect directors at an annual or special meeting of stockholders, the election, term of office, filling of vacancies and other features of such directorships shall be governed by the terms of this Restated Certificate of Incorporation or a certificate of designation applicable thereto, and such directors so elected shall not be divided into classes pursuant to this Section FIVE unless expressly provided by such terms.

SIX. The corporation is to have perpetual existence.

SEVEN. In furtherance and not in limitation of the power conferred upon the Board of Directors by law, the Board of Directors shall have the power to make, adopt, alter, amend and repeal from time to time By-Laws of this Corporation, subject to the right or the stockholders entitled to vote with respect thereto to amend or repeal By-Laws made by the Board of Directors as provided for in this Restated Certificate of Incorporation. The affirmative vote of 80% of the total number of votes of the then outstanding shares of capital stock of this Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required for the adoption, amendment or repeal of By-Laws by the stockholders of this Corporation.

EIGHT. If at any time this Corporation shall have a class of stock registered pursuant to the provisions of the Securities Exchange Act of 1934, for so long as such class is so registered, any action by the stockholders of such class must be taken at an annual or special meeting of stockholders and may not be taken by written consent.

NINE. A director of the Corporation shall not be liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except to the extent

that exculpation from liability is not permitted under the Delaware General Corporation Law as in effect at the time such liability is determined. No amendment or repeal of this Section RIGHT shall apply to or have any effect on the liability or alleged liability of any director of the corporation for or with respect to any acts or omissions of such director occurring prior to such amendment or repeal.

TEN. The Corporation shall, to the maximum extent permitted from time to time under the law oft he State of Delaware, indemnify and upon request shall advance expenses to any person who is or was a party or is threatened to be made a party to any threatened, pending or completed action, suit, proceeding or claim, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was or has agreed to be a director or officer of the Corporation of while a director or officer is or was serving at the request of the Corporation as a director, officer, partner, trustee, employee or agent of any corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against expenses (including attorney's fees and expenses), judgments, fines, penalties and amounts paid in settlement incurred in connection with the investigation preparation to defend of defense or such action, suit, proceeding or claim; PROVIDED, HOWEVER, that the foregoing shall not require the Corporation to indemnify or advance expenses to any person in connection with any action, suit, proceeding, claim or counterclaim initiated by or on behalf of such person. Such indemnification shall not be exclusive of other indemnification rights arising under any by-law, agreement, vote of directors or stockholders or otherwise and shall inure to the benefit of the heirs and legal representatives of such person. Any person seeking indemnification under this Section NINE shall be deemed to have met the standard of conduct required for such indemnification unless the cont5rary shall be established. Any repeal or modification of the foregoing provisions of this Section TEN shall not adversely affect any right or protection of a director or officer of the Corporation with respect to any acts or omissions of such director or officer occurring prior to such repeal or modification.

ELEVEN. Advance notice of new business and stockholder nominations for the election of directors shall be given in the manner and to the extent provided in the Bylaws of the corporation. Elections of directors need not be by written ballot unless the Bylaws of the corporation shall so provide.

TWELVE. The Board of Directors of this Corporation, when evaluating any offer of another party (a) to make a tender or exchange offer for any equity security of this Corporation or (b) to effect a business combination, shall, in connection with the exercise of its judgment in determining what is in the best interests of this Corporation as a whole, be authorized to give due consideration to any such factors as the Board of Directors determines to be relevant, including, without limitation:

(i) the interests of this Corporation's stockholders, including the possibility that these interests might be best served by the continued independence of the corporation;

(ii) whether the proposed transaction might violate federal or state laws;

(iii) not only the consideration being offered in the proposed transaction, in relation to the then current market price for the outstanding capital stock of this Corporation, but also to the market price for the capital stock of this Corporation over a period of years, the estimated price that might be achieved in a negotiated sale of this Corporation as a whole or in part or through orderly liquidation, the premiums over market price for the securities of other corporations in similar transactions, current political, economic and other factors bearing on securities prices and this Corporation's financial condition and future prospects; and

(iv) the social, legal and economic effects upon employees, suppliers, customers, creditors and others having similar relationships with this Corporation, upon the communities in which this Corporation conducts its business and upon the economy of the state, region and nation.

In connection with any such evaluation, the Board of Directors is authorized to conduct such investigations and engage in such legal proceedings as the Board of Directors may determine.

THIRTEEN. Notwithstanding any other provisions of this Restated Certificate of Incorporation or the By-Laws (and notwithstanding the fact that a lesser percentage may be specified by law, this Restated Certificate of Incorporation or the By-Laws of this Corporation), the affirmative vote of 80% or the total number of votes of the then outstanding shares of capital stock of this Corporation entitled to vote generally in the election of directors, voting together as s single class, shall be required to amend or repeal, or to adopt any provision inconsistent with the purpose or intent of Sections FIVE, SEVEN, EIGHT, NINE, TEN, ELEVEN, TWELVE and this Section THIRTEEN. Notice of any such proposed amendment, repeal or adoption, shall be contained in the notice of the meeting at which it is to be considered. Subject to the provisions set forth herein, this Corporation reserves the right to amend, alter, repeal or rescind any provision contained in this Restated Certificate of incorporation in the manner now or hereafter prescribed by law.

This Restated Certificate of Incorporation has been duly adopted by the Board of Directors in accordance with Section 245 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, said CytoTherapeutics, Inc. has caused this Restated Certificate of Incorporation to be signed by Seth A. Rudnick, its President, and W. Bradford Smith, its Secretary, this 11th day of August, 2000.

CYTOTHERAPEUTICS, INC.

/s/ Seth A. Rudnick

Seth A. Rudnick, President

ATTEST:

By: /s/ W. Bradford Smith

W. Bradford Smith, Secretary

CERTIFICATE OF AMENDMENT

OF

RESTATED CERTIFICATE OF INCORPORATION

OF

CYTOTHERAPEUTICS, INC.

CytoTherapeutics, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, hereby certifies that:

The name of the Corporation is CytoTherapeutics, Inc. CytoTherapeutics, Inc. was originally incorporated under the name Cellular Transplants, Inc. and the original Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on August 2, 1988. A Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on February 14,1992 and again restated on August 11, 1992. The certificate of incorporation of the Corporation, as restated, is hereby further amended to read as follows:

"ONE: The name of this corporation is StemCells, Inc."

The said amendment has been consented to and authorized by the stockholders of the corporation, acting by unanimous written consent given in accordance with the applicable provisions of Section 228 of the General Corporation Law of the State of Delaware, effective on May 23, 2000.

The said amendment has been duly adopted in accordance with the applicable provisions of Sections 242 and 228 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, the Corporation has caused this Certificate to be signed by Iris Brest, its Secretary, this 23th day of May, 2000.

CYTOTHERAPEUTICS, INC.

By: /s/ Iris Brest

Secretary

EXHIBIT 10.1

SECURITIES PURCHASE AGREEMENT

AMONG

STEMCELLS, INC.

IRVING WEISSMAN

AND

MARK LEVIN

APRIL 13, 2000

INDEX OF DEFINED TERMS

SECURITIES PURCHASE AGREEMENT

SECURITIES PURCHASE AGREEMENT ("AGREEMENT") dated as of April 13, 2000 among StemCells, Inc., a Delaware corporation (the "COMPANY"), Irving Weissman and Mark Levin (the "INVESTORS").

W I T N E S S E T H:

WHEREAS, the Company desires to sell and issue to the Investors, and the Investors wish to purchase from the Company, an aggregate of 1,500 shares of the Company's 6% Convertible Preferred Stock, liquidation preference $1,000 per share (all of such shares being the "PREFERRED SHARES"), having the rights, designations and preferences set forth in the Certificate of Designations (the "CERTIFICATE") in the form of EXHIBIT A attached hereto, on the terms and conditions set forth herein and 75,000 Warrants (the "WARRANTS"), in the form of EXHIBIT B attached hereto to purchase Common Shares (as defined below); and

WHEREAS, the Preferred Shares will be convertible into shares ("COMMON SHARES") of common stock, par value $0.01, of the Company ("COMMON STOCK"), pursuant to the terms of the Certificate, and the Investors will have registration rights with respect to the Common Shares issuable upon conversion of the Preferred Shares and exercise of the Warrants, pursuant to the terms of that certain Registration Rights Agreement to be entered into between the Company and the Investors substantially in the form of EXHIBIT C hereto ("REGISTRATION RIGHTS AGREEMENT");

NOW, THEREFORE, in consideration of the foregoing premises and the covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

ARTICLE I

PURCHASE AND SALE OF PREFERRED SHARES

Section 1.1 ISSUANCE OF PREFERRED SHARES AND WARRANTS. Upon the following terms and conditions, the Company shall issue and sell to each Investor, and each Investor shall purchase from the Company, 750 Preferred Shares and 37,500 Warrants.

Section 1.2 PURCHASE PRICE. The purchase price for the Preferred Shares and Warrants to be acquired by each Investor shall be $750,000 (the "PURCHASE PRICE").

Section 1.3 THE CLOSING.

Subject to the fulfillment or waiver of the conditions set forth in Article V hereof, the purchase and sale of the Preferred Shares and Warrants shall take place at a closing (the "CLOSING"), on or about April 13, 2000 or such other date as the Investors and the Company may agree upon (the "CLOSING DATE").

ARTICLE II

REPRESENTATIONS AND WARRANTIES

Section 2.1 REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company hereby makes the following representations and warranties to the Investors as of the date hereof, the Closing Date and the date of any Option Closing (as defined below):

(a) ORGANIZATION AND QUALIFICATION; MATERIAL ADVERSE EFFECT. The Company is a corporation duly incorporated and existing in good standing under the laws of the State of Delaware and has the requisite corporate power to own its properties and to carry on its business as now being conducted. The Company does not have any Subsidiary other than StemCells California, Inc. (the "SUBSIDIARY"). Except where specifically indicated to the contrary, all references in this Agreement to Subsidiary shall be deemed to refer to the Subsidiary of the Company. The Company is duly qualified as a foreign corporation to do business and is in good standing in every jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary other than those in which the failure so to qualify would not have a Material Adverse Effect. "MATERIAL ADVERSE EFFECT" means any adverse effect on the business, operations, properties, prospects or financial condition of the Company and its Subsidiary, which is (either alone or together with all other adverse effects) material to the Company and its Subsidiary, taken as a whole, and any material adverse effect on the transactions contemplated under this Agreement, the Certificate and the Registration Rights Agreement, or any other agreement or document contemplated hereby or thereby.

(b) AUTHORIZATION; ENFORCEMENT. (i) The Company has all requisite corporate power and authority to enter into and perform this Agreement, the Certificate, the Registration Rights Agreement and the Warrants ("TRANSACTION DOCUMENTS") and to issue the Preferred Shares, the Additional Preferred Shares (as defined below) and the Warrants in accordance with the terms hereof, (ii) the execution and delivery of this Agreement, the Registration Rights Agreement and the Warrants by the Company and the consummation by it of the transactions contemplated hereby and thereby, including the issuance of the Preferred Shares, the Additional Preferred Shares and the Warrants and the resolutions contained in the Certificate, have been duly authorized by all necessary corporate action, and no further consent or authorization of the Company or its Board of Directors (or any committee or subcommittee thereof) or stockholders is required, (iii) the Transaction Documents have been duly executed and delivered by the Company, (iv) this Agreement, the Certificate, the Registration Rights Agreement and the Warrants constitute valid and binding obligations of the Company enforceable against the Company in accordance with their terms, except (A) as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating

to, or affecting generally the enforcement of creditors' rights and remedies or by other equitable principles of general application, and (B) to the extent the indemnification provisions contained in this Agreement and the Registration Rights Agreement may be limited by applicable federal or state securities laws and (v) the Preferred Shares, the Additional Preferred Shares, the Warrants, and the Common Shares issuable upon the conversion and/or exercise thereof have been duly authorized and, upon issuance thereof and payment therefor in accordance with the terms of this Agreement, the Preferred Shares, the Additional Preferred Shares, the Warrants, the Common Shares issuable upon the conversion and/or exercise thereof will be validly issued, fully paid and non-assessable, free and clear of any and all liens, claims and encumbrances.

(c) CAPITALIZATION. As of the date hereof, the authorized capital stock of the Company consists of (i) 46,000,000 shares of Common Stock, of which as of March 20, 2000, 19,506,565 shares are issued and outstanding, 2,446,501 shares are issuable and reserved for issuance pursuant to the Company's stock option and purchase plans and committed pursuant to pending acquisitions, and no shares are issuable and reserved for issuance pursuant to securities exercisable or exchangeable for, or convertible into, shares of Common Stock, and (ii) 1,000,000 shares of preferred stock, of which as of the date hereof, 450,000 shares are currently designated as Junior Preferred Shares. All of such outstanding shares have been, or upon issuance will be, validly issued, fully paid and nonassessable. As of the date hereof, except as disclosed in SCHEDULE 2.1(c), (i) no shares of the Company's capital stock are subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company, (ii) there are no outstanding debt securities, (iii) there are no outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, any shares of capital stock of the Company or its Subsidiary, or contracts, commitments, understandings or arrangements by which the Company or its Subsidiary is or may become bound to issue additional shares of capital stock of the Company or its Subsidiary or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, any shares of capital stock of the Company or its Subsidiary, (iv) there are no agreements or arrangements under which the Company or its Subsidiary is obligated to register the sale of any of their securities under the Securities Act of 1933, as amended ("SECURITIES ACT" or "1933 ACT") (except the Registration Rights Agreement and except as set forth on SCHEDULE 2.1(c)), (v) there are no outstanding securities of the Company or its Subsidiary which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or its Subsidiary is or may become bound to redeem a security of the Company or its Subsidiary, (vi) there are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Preferred Shares, the Additional Preferred Shares or the Warrants as described in this Agreement, the Certificate or the Warrants and (vii) the Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement. The Company has furnished to the Investors true and correct copies of the Company's Certificate of Incorporation, as amended and as in effect on the date hereof (the "CERTIFICATE OF INCORPORATION"), and the Company's By-laws, as in effect on the date hereof (the "BY-LAWS").

(d) [INTENTIONALLY OMITTED].

(e) NO CONFLICTS. The execution, delivery and performance of the Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby and issuance of the Preferred Shares, the Additional Preferred Shares, the Warrants, and the Common Shares underlying the Preferred Shares, the Additional Preferred Shares or the Warrants will not (i) result in a violation of the Certificate of Incorporation, any certificate of designations, preferences and rights of any outstanding series of preferred stock of the Company or the By-laws; (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which the Company or its Subsidiary is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including United States federal and state securities laws and regulations and the rules and regulations of the Nasdaq National Market (the "PRINCIPAL MARKET") or principal securities exchange or trading market on which the Common Stock is traded or listed) applicable to the Company or its Subsidiary or by which any property or asset of the Company or its Subsidiary is bound or affected. Neither the Company nor its Subsidiary is in violation of any term of, or in default under, (x) its certificate of incorporation, any certificate of designations, preferences and rights of any outstanding series of preferred stock or By-laws or their organizational charter or by-laws, respectively, (y) any material contract, agreement, mortgage, indebtedness, indenture, instrument, or (z) any judgment, decree or order or any statute, rule or regulation applicable to the Company or its Subsidiary, the non-compliance with which (in the cases of (y) and (z)) would cause a Material Adverse Effect. Except as specifically contemplated by this Agreement and as required under the 1933 Act or state "blue sky" laws, the Company is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court, governmental agency or any regulatory or self-regulatory agency in order for it to execute, deliver or perform any of its obligations under, or contemplated by, the Transaction Documents or the issuance of the Preferred Shares, the Additional Preferred Shares and the Warrants in accordance with the terms hereof or thereof. All consents, authorizations, orders, filings and registrations which the Company is required to obtain pursuant to the preceding sentence have been obtained or effected on or prior to the date hereof, or in the case of post-sale filings, will be made promptly after the date hereof. The Company complies with and is not in violation of the listing requirements of the Principal Market as in effect on the date hereof in all material respects and on each of the Closing Dates and is not aware of any existing facts which provide a basis for delisting or suspension of the Common Stock by the Principal Market.

(f) SEC DOCUMENTS; FINANCIAL STATEMENTS. Since December 31, 1998, the Company has filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "1934 Act") (all of the foregoing filed prior to the date hereof and all exhibits included therein and financial statements and schedules thereto and documents incorporated by reference therein being hereinafter referred to as the "SEC DOCUMENTS"). As of their respective dates, the SEC Documents complied in all material respects with the requirements of the 1934 Act and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be

stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. As of their respective dates, the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles, consistently applied, during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may exclude footnotes or may be condensed or summary statements) and fairly present in all material respects the financial position of the Company as of the dates thereof and the results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments). Neither the Company nor its Subsidiary or any of their officers, directors, employees or agents have provided the Investors with any material, nonpublic information which was not publicly disclosed prior to the date hereof.

(g) ABSENCE OF CERTAIN CHANGES. Except as set forth in the SEC Documents since December 31, 1998 there has been no adverse change or adverse development in the business, properties, assets, operations, financial condition, prospects, liabilities or results of operations of the Company or its Subsidiary which has had or, to the knowledge of the Company or its Subsidiary, is reasonably likely to have a Material Adverse Effect. The Company has not taken any steps, and does not currently expect to take any steps, to seek protection pursuant to any bankruptcy law nor does the Company or its Subsidiary have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy proceedings.

(h) ABSENCE OF LITIGATION. There is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company or its Subsidiary, threatened against or affecting the Company, the Common Stock or any of the Company's Subsidiary or any of the Company's or the Company's Subsidiary' officers or directors in their capacities as such, which individually and in the aggregate, respectively, would be reasonably likely to result in liability to the Company in excess of $50,000 and $100,000, respectively. The Company is not subject to any order, writ, judgment, decree or injunction that would be reasonably expected to have a Material Adverse Effect.

(i) ACKNOWLEDGMENT REGARDING INVESTORS' PURCHASE OF SHARES. The Company acknowledges and agrees that the Investors are acting solely in the capacity of arm's length purchasers with respect to the Transaction Documents and the transactions contemplated hereby and thereby. The Company further acknowledges that the Investors are not acting as financial advisors or fiduciaries of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated hereby and thereby, and any advice given by the Investors or any of their respective representatives or agents in connection with the Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to the Investors' purchase of the Preferred Shares. The Company further represents to the Investors that the Company's decision to enter into the Transaction Documents has been based solely on the independent evaluation by the Directors of the Company and its representatives who are independent of this transaction.

(j) NO UNDISCLOSED EVENTS, LIABILITIES, DEVELOPMENTS OR CIRCUMSTANCES. No event, liability, development or circumstance has occurred or exists with respect to the Company or its Subsidiary or their respective business, properties, prospects, operations or financial condition, that would be required to be disclosed by the Company under applicable securities laws on a registration statement filed with the SEC relating to an issuance and sale by the Company of its Common Stock and which has not been publicly disclosed.

(k) [Reserved]

(l) No Securities Act Registration. The sale and issuance of the Preferred Shares, Additional Preferred Shares and Warrants in accordance with terms of this Agreement and the issuance of Common Shares upon conversion of the Preferred Shares and Additional Preferred Shares and upon exercise of the Warrants are exempt from registration under the 1933 Act.

(m) EMPLOYEE RELATIONS. Neither the Company nor its Subsidiary is involved in any labor dispute nor, to the knowledge of the Company or its Subsidiary, is any such dispute threatened, the effect of which would be reasonably likely to result in a Material Adverse Effect. Neither the Company nor its Subsidiary is a party to a collective bargaining agreement. The Company and its Subsidiary believe that relations between the Company and its Subsidiary and their respective employees are good. No executive officer (as defined in Rule 501(f) of the 1933 Act) whose departure would be adverse to the Company has notified the Company that such officer intends to leave the Company or otherwise terminate such officer's employment with the Company.

(n) INTELLECTUAL PROPERTY RIGHTS. The Company and its Subsidiary own or possess adequate rights or licenses to use all trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets and rights necessary to conduct their respective businesses as now conducted and as proposed to be conducted in the future. None of the Company's trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, government authorizations, trade secrets or other intellectual property rights have expired or terminated, or are expected to expire or terminate within two (2) years from the date of this Agreement except as would not have a Material Adverse Effect. The Company and its Subsidiary do not have any knowledge of any infringement by the Company or its Subsidiary of trademark, trade name rights, patents, patent rights, copyrights, inventions, licenses, service names, service marks, service mark registrations, trade secret or other similar rights of others, or of any such development of similar or identical trade secrets or technical information by others, and no claim, action or proceeding has been made or brought against, or to the Company's or the Subidiary's knowledge, is threatened against, the Company or its Subsidiary regarding trademarks, trade name rights, patents, patent rights, inventions, copyrights, licenses, service names, service marks, service mark registrations, trade secrets or other infringement. The Company and its Subsidiary have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties.

(o) ENVIRONMENTAL LAWS. The Company and its Subsidiary (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("ENVIRONMENTAL LAWS"), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any such permit, license or approval where such noncompliance or failure to receive permits, licenses or approvals referred to in clauses (i), (ii) or (iii) above could have, individually or in the aggregate, a Material Adverse Effect.

(p) TITLE. The Company and its Subsidiary have good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by them which is material to the business of the Company and its Subsidiary, in each case free and clear of all liens, encumbrances and defects except such as are described in SCHEDULE 2.1(p) or such as do not materially and adversely affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company or its Subsidiary. Any real property and facilities held under lease by the Company or its Subsidiary are held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its Subsidiary.

(q) INSURANCE. The Company and its Subsidiary are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company believes to be prudent and customary in the businesses in which the Company and its Subsidiary are engaged. Neither the Company nor any such Subsidiary has been refused any insurance coverage sought or applied for and neither the Company nor any such Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not materially and adversely affect the condition, financial or otherwise, or the earnings, business or operations of the Company and its Subsidiary taken as a whole.

(r) REGULATORY PERMITS. The Company and its Subsidiary possess all material certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities, necessary to conduct their respective businesses, and neither the Company nor any such Subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit.

(s) INTERNAL ACCOUNTING CONTROLS. The Company and its Subsidiary maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(t) FOREIGN CORRUPT PRACTICES ACT. Neither the Company, nor any director, officer, agent, employee or other person acting on behalf of the Company or any Subsidiary has, in the course of acting for, or on behalf of, the Company, directly or indirectly used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; directly or indirectly made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended, or any similar treaties of the United States; or directly or indirectly made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic government or party official or employee.

(u) TAX STATUS. The Company and its Subsidiary has made or filed all United States federal and state income and all other tax returns, reports and declarations required by any jurisdiction to which it is subject and (i) has paid all taxes and other governmental assessments and charges, shown or determined to be due on such returns, reports and declarations, except those being contested in good faith and (ii) has set aside on its books provisions reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes claimed to be due by the taxing authority of any jurisdiction, and the Company is not aware of any basis for any such claim.

(v) CERTAIN TRANSACTIONS. Except as set forth in the SEC Documents filed on EDGAR at least thirty (30) Trading Days prior to the date hereof and except for arm's length transactions pursuant to which the Company makes payments in the ordinary course of business upon terms no less favorable than the Company could obtain from third parties and other than the grant of stock options disclosed on SCHEDULE 2.1(c), none of the officers, directors or employees of the Company is presently a party to any transaction with the Company or its Subsidiary (other than for services as employees, consultants, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any corporation, partnership, trust or other entity in which any officer, director or any such employee has a substantial interest or is an officer, director, trustee or partner.

(w) DILUTIVE EFFECT. The Company understands and acknowledges that the number of Common Shares issuable upon conversion of Preferred Shares and Additional Preferred Shares and exercise of the Warrants purchased pursuant to this Agreement will increase in certain circumstances. The Company further acknowledges that, subject to such limitations as are expressly set forth in the Transaction Documents, its obligation issue Common Shares upon conversion of Preferred Shares and Additional Preferred Shares and exercise of the Warrants purchased pursuant to this Agreement, is absolute and unconditional regardless of the dilutive effect that such issuance may have on the ownership interests of other stockholders of the Company.

(x) APPLICATION OF TAKEOVER PROTECTIONS. There are no anti-takeover provisions contained in the Company's Certificate of Incorporation or otherwise which will be triggered as a

result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Common Shares and the Investors' ownership of the Common Shares.

(y) RIGHTS PLAN. The Company confirms that no provision of the Company's rights plan will, under any present or future circumstances, delay, prevent or interfere with the performance of any of the Company's obligations under the Transaction Documents and such plan will not be "triggered" by such performance.

(z) OBLIGATIONS ABSOLUTE. Each of the Company and the Investors agrees that, subject only to the conditions, qualifications and exceptions (if any) specifically set forth in the Transaction Documents, its obligations under the Transaction Documents are unconditional and absolute. Except to the extent (if any) specifically set forth in the Transaction Documents, each party's obligations thereunder are not subject to any right of set off, counterclaim, delay or reduction.

(aa) ISSUANCE OF COMMON SHARES. The Common Shares are duly authorized and reserved for issuance and, upon conversion of Preferred Shares or Additional Preferred Shares in accordance with the Certificate, or exercise of the Warrants in accordance with the terms thereof, such Common Shares will be validly issued, fully paid and non-assessable, free and clear of any and all liens, claims and encumbrances, and entitled to be traded on the Principal Market or the New York Stock Exchange or the American Stock Exchange, or the Nasdaq small cap market (collectively with the Principal Market, the "APPROVED MARKETS"), and the holders of such Common Shares shall be entitled to all rights and preferences accorded to a holder of Common Stock. As of the date of this Agreement, the outstanding shares of Common Stock are currently listed on the Principal Market.

(bb) BROKERS. The Company has taken no action which would give rise to any claim by any person for brokerage commissions, finder's fees or similar payments by the Investors relating to this Agreement or the transactions contemplated hereby.

Section 2.2 REPRESENTATIONS AND WARRANTIES OF THE INVESTORS. Each Investor, severally and not jointly, hereby makes the following representations and warranties to the Company as of the date hereof, the Closing Date and the date of any Option Closing:

(a) ACCREDITED INVESTOR STATUS; SOPHISTICATED INVESTOR. Each Investor is an "accredited investor" as that term is defined in Rule 501(a) of Regulation D under the 1933 Act. Each Investor has such knowledge and experience in financial and business matters that he is capable of evaluating the merits and risks of investment in the Preferred Shares, Additional Preferred Shares, the Warrants and Common Shares.

(b) INFORMATION. The Investors and their advisors, if any, have been furnished with all materials relating to the business, finances and operations of the Company which have been requested and materials relating to the offer and sale of the Preferred Shares, Additional Preferred Shares, the Warrants and Common Shares which have been requested by the Investors. The Investors and their advisors, if any, have been afforded the opportunity to ask questions of the Company. Neither such inquiries nor any other due diligence investigations conducted by the

Investors or their advisors, if any, or its representatives shall modify, amend or affect the Investors' right to rely on the Company's representations and warranties contained in Section 2.1 above. The Investors understand that their investment in the Preferred Shares, the Additional Preferred Shares, the Warrants and Common Shares involves a high degree of risk. The Investors have sought such accounting, legal and tax advice as they have considered necessary to make an informed investment decision with respect to their acquisition of the Preferred Shares, the Additional Preferred Shares, the Warrants and Common Shares.

(c) LEGENDS. The Company shall issue certificates for the Preferred Shares, Additional Preferred Shares, the Warrants and Common Shares to the Investors without any legend except as described in Article VI below. The Investors covenant that, in connection with any transfer of Common Shares by the Investors pursuant to the registration statement contemplated by the Registration Rights Agreement, each of them will comply with the applicable prospectus delivery requirements of the 1933 Act, provided that copies of a current prospectus relating to such effective registration statement are or have been supplied to the Investors.

(d) [Reserved]

(e) INVESTMENT REPRESENTATION. Each Investor is purchasing the Preferred Shares (and, if applicable, the Additional Preferred Shares) and the Warrants for his own account and not with a view to distribution in violation of any securities laws. The Investors have been advised and understand that neither the Preferred Shares, the Additional Preferred Shares, the Warrants nor the shares of Common Stock issuable upon conversion or exercise thereof have been registered under the 1933 Act or under the "blue sky" laws of any jurisdiction and may be resold only if registered pursuant to the provisions of the 1933 Act or if an exemption from registration is available, except under circumstances where neither such registration nor such an exemption is required by law. The Investors have been advised and understand that the Company, in issuing the Preferred Shares, the Additional Preferred Shares and the Warrants, is relying upon, among other things, the representations and warranties of the Investors contained in this Section 2.2 in concluding that such issuance is a "private offering" and is exempt from the registration provisions of the 1933 Act.

(f) RULE 144. The Investors understand that there is no public trading market for the Preferred Shares, the Additional Preferred Shares or the Warrants, and that none is expected to develop. The Investors understand that the Preferred Shares, Additional Preferred Shares, Warrants and the Common Shares received upon conversion or exercise thereof must be held indefinitely unless and until registered under the 1933 Act or an exemption from registration is available. The Investors are aware of the provisions of Rule 144 promulgated under the 1933 Act.

(g) RELIANCE BY THE COMPANY. The Investors understand that the Preferred Shares, the Additional Preferred Shares and the Warrants are being offered and sold in reliance on a transactional exemption from the registration requirements of Federal and state securities laws and that the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of the Investors set forth herein in order to

determine the applicability of such exemptions and the suitability of the Investors to acquire the Preferred Shares, the Additional Preferred Shares and the Warrants.

ARTICLE III

COVENANTS

Section 3.1 REGISTRATION AND LISTING; EFFECTIVE REGISTRATION. Until such time as no Preferred Shares, Additional Preferred Shares or Warrants are outstanding and the Preferred Share Option (as defined below) shall have expired, the Company will cause the Common Stock to continue at all times to be registered under Sections 12(b) or (g) of the 1934 Act, will comply in all material respects with its reporting and filing obligations under the 1934 Act, and will not take any action or file any document (whether or not permitted by the 1934 Act or the rules thereunder) to terminate or suspend such reporting and filing obligations. Until such time as no Preferred Shares, Additional Preferred Shares or Warrants are outstanding and the Preferred Share Option (as defined below) shall have expired, the Company shall continue the listing or trading of the Common Stock on the Principal Market or one of the other Approved Markets and comply in all material respects with the Company's reporting, filing and other obligations under the bylaws or rules of the Approved Market on which the Common Stock is listed. The Company shall cause the Common Shares to be listed on the Principal Market or one of the other Approved Markets no later than the effectiveness of the registration of the Common Shares under the Act, and shall continue such listing(s) on one of the Approved Markets, for so long as any Preferred Shares, Additional Preferred Shares or Warrants are outstanding and the Preferred Share Option has not expired.

Section 3.2 CERTIFICATES ON CONVERSION. Upon any conversion by the Investors (or then holder of Preferred Shares or Additional Preferred Shares) of the Preferred Shares or Additional Preferred Shares pursuant to the Certificate, the Company shall issue and deliver to the Investors (or such holder) within three (3) trading days after the conversion date a new certificate or certificates for the number of Preferred Shares or Additional Preferred Shares which the Investors (or such holder) has not yet elected to convert but which are evidenced in part by the certificate(s) submitted to the Company in connection with such conversion (with the denominations of such new certificate(s) designated by the Investors or holder), if any.

Section 3.3 REPLACEMENT CERTIFICATES. The certificate(s) representing the Preferred Shares or Additional Preferred Shares held by any Investor (or then holder) may be exchanged by such Investor (or such holder) at any time and from time to time for certificates with different denominations representing an equal aggregate number of Preferred Shares, as requested by such Investor (or such holder) upon surrendering the same. No service charge will be made for such registration or transfer or exchange.

Section 3.4 SECURITIES COMPLIANCE. The Company shall notify the SEC and the Principal Market, in accordance with their requirements, of the transactions contemplated by this Agreement, the Certificate, the Warrants and the Registration Rights Agreement, and shall take all other necessary action and proceedings as may be required and permitted by applicable law, rule

and regulation, for the legal and valid issuance of the Preferred Shares, Additional Preferred Shares hereunder and the Common Shares issuable upon conversion or exercise thereof.

Section 3.5 NOTICES. The Company agrees to provide all holders of Preferred Shares and Additional Preferred Shares with copies of all notices and information, including without limitation notices and proxy statements in connection with any meetings, that are provided to the holders of shares of Common Stock, contemporaneously with the delivery of such notices or information to such Common Stock holders.

Section 3.6 USE OF PROCEEDS. The Company agrees that the net proceeds received by the Company from the sale of the Preferred Shares or Additional Preferred Shares hereunder and payment of the exercise price of the Warrants shall be used for legally permitted corporate purposes.

Section 3.7 RESERVATION OF SHARES; STOCK ISSUABLE UPON CONVERSION.

(a) The Company shall reserve all authorized but unissued 6% Convertible Preferred Stock for issuance to the Investors pursuant to the terms of this Agreement.

(i) The Company shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the Preferred Shares and Additional Preferred Shares and the exercise of all Warrants, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all Preferred Shares and Additional Preferred Shares and the exercise of all Warrants, and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all the then outstanding Preferred Shares and Additional Preferred Shares and the exercise of all Warrants, the Company will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including without limitation engaging in best efforts to obtain the requisite shareholder approval and taking the actions described in the Certificate. Without in any way limiting the foregoing, the Company agrees to reserve and at all times keep available solely for purposes of conversion of Preferred Shares, Additional Preferred Shares and the exercise of all Warrants, such number of authorized but unissued shares of Common Stock that is at least equal to 200% of the number of Common Shares issuable upon conversion of all Preferred Shares and Additional Preferred Shares, and the exercise of all Warrants computed as if all Preferred Shares and Additional Preferred Shares are convertible at the then Conversion Price (as defined in the Certificate) and all Warrants are exercisable at the then Exercise Price (as defined in the Warrants). If at any

time the number of authorized but unissued shares of Common Stock is not sufficient to effect such issuance, conversion, or exercise, respectively, up to the Maximum Common Stock Issuance (as defined in Section 3.15 below), all the then outstanding Preferred Shares and Additional Preferred Shares and the Warrants, the Investors shall be entitled to, INTER ALIA, the redemption rights provided in the Registration Rights Agreement.

Section 3.8 BEST EFFORTS. The parties shall use their best efforts to satisfy timely each of the conditions described in Article V of this Agreement.

Section 3.9 FORM D; BLUE SKY LAWS. The Company agrees to file a Form D and any corresponding post-sale filings under "blue sky" laws with respect to the Preferred Shares, the Additional Preferred Shares, the Warrants and Common Shares, as required under Regulation D and to provide a copy thereof to each of the Investors promptly after such filing. With the exception of the Form D and such post-sale filings to be made after the Closing Date, the Company shall, on or before the Closing Date, take such action as the Company shall have reasonably determined is necessary to qualify the Preferred Shares, the Additional Preferred Shares, the Warrants and Common Shares for sale to the Investors under applicable securities or "blue sky" laws of the states of the United States (or to obtain an exemption from such qualification), and shall provide evidence of any such action so taken to the Investors on or prior to the Closing Date; provided, however, that the Company shall not be required in connection therewith to register or qualify as a foreign corporation in any jurisdiction where it is not now so qualified or to take any action that would subject it to service of process in suits or taxation, in each case, in any jurisdiction where it is not now so subject.

Section 3.10 PUBLICITY. The Company shall, as soon as practicable following the Closing or any Option Closing, file with the Securities and Exchange Commission a report on Form 8-K or Form 10-K disclosing the material terms of the transactions consummated in the Closing or Option Closing.

Section 3.11 SHAREHOLDER RIGHTS PLAN. None of the acquisitions of Preferred Shares, Additional Preferred Shares, Warrants or Common Shares nor the deemed beneficial ownership of shares of Common Stock prior to, or the acquisition of such shares pursuant to, the conversion of Preferred Shares or Additional Preferred Shares or exercise of the Warrants will in any event under any circumstances trigger the poison pill provisions of any stockholders' rights or similar agreements, or a substantially similar occurrence under any successor or similar plan.

Section 3.12 FINANCIAL INFORMATION. The Company agrees to send copies of any notices and other information made available or given to the shareholders of the Company generally, contemporaneously with the making available or giving thereof to the shareholders to the Investors for so long as any Preferred Shares, Additional Preferred Shares or Warrants are outstanding or the Preferred Share Option has not expired.

Section 3.13 TRANSACTIONS WITH AFFILIATES. The Company agrees that any transaction or arrangement between it or its Subsidiary and any affiliate or employee of the Company shall be

effected on an arms' length basis in accordance with customary commercial practice and, except with respect to grants of options and stock to service providers, including employees, shall be approved by a majority of the Company's outside directors.

Section 3.14 RIGHT TO CO-INVEST; OPTION TO PURCHASE ADDITIONAL SHARES OF PREFERRED STOCK.

(a) (i) The Company agrees that for a period of six months following the Closing Date (the "CO-INVESTMENT PERIOD"), the Investors shall have the right to co-invest, on the same terms as the other investors in such transactions, in any future offerings of the Company's securities (other than securities issued in connection with strategic investments or bank financings), for up to 12.5% for each Investor (an aggregate of up to 25%) of the principal amount of such offerings.

(ii) During the Co-Investment Period, the Company shall give written notice to the Investors upon the closing of a sale of its securities ("SECURITIES FINANCING TRANSACTION"). Each Investor shall have ten (10) business days from receipt of such notice to deliver a written notice to the Company that such Investor elects to exercise his right to co-invest in such Securities Financing Transaction, which notice shall indicate the percentage (up to 12.5%) of the Securities Financing Transaction with respect to which such Investor is co-investing. In the event that any of the consideration to be issued to the Company in a Securities Financing Transaction consists of consideration other than cash, the Investors shall have the right to provide the cash equivalent. This right of co-invest shall continue even if the Investors elect not to co-invest in one or more Securities Financing Transactions.

(b) In the event that prior to the expiration of the Co-Investment Period, the Company shall not have consummated Securities Financing Transactions in the aggregate principal amount of at least $6 million, then each Investor shall have the option (the "PREFERRED SHARE OPTION"), exercisable for a period of 90 days commencing on the expiration of the Co-Investment Period, (the "OPTION PERIOD") to purchase from the Company, up to an additional 563 Preferred Shares (the "ADDITIONAL PREFERRED SHARES").

(c) The Preferred Share Option may be exercised in whole or in part, from time to time during the Option Period. Upon delivery of a notice by an Investor exercising his option hereunder, the Company shall be obligated to sell and deliver to such Investor, and such Investor shall be obligated to purchase, the Additional Preferred Shares specified in the option exercise notice. Closing of such purchase and sale ("OPTION CLOSING") shall take place at the office of the Company within 10 business days of the delivery of the option exercise notice. At the Closing, the Company shall deliver certificates evidencing the Additional Preferred Shares being purchased against the payment of the purchase price therefor.

(d) For the avoidance of doubt:

(i) The Mandatory Conversion Date of the Additional Preferred Shares shall be two (2) years after the date of the first Option Closing.

(ii) The Conversion Price of the Additional Preferred Shares shall be the Fixed Price (as defined in the Certificate), subject to adjustment as set forth in the Certificate.

(iii) The Registration Rights Agreement shall apply to the Common Shares underlying the Additional Preferred Shares, MUTATIS MUTANDIS, with the time periods for filing and effectiveness of the registration statement covering such Common Shares running from the date of the Option Closing.

Section 3.15 OVERALL LIMIT ON COMMON STOCK ISSUABLE. Notwithstanding anything contained herein to the contrary, the number of Common Shares issuable by the Company and acquirable by the Investors collectively hereunder pursuant to conversion of the Preferred Shares and Additional Preferred Shares shall not exceed 3,901,313 shares of Common Stock outstanding as of the date hereof, subject to appropriate adjustment for stock splits, stock dividends, combinations or other similar recapitalization affecting the Common Stock (the "MAXIMUM COMMON STOCK ISSUANCE"), unless the issuance of shares hereunder in excess of the Maximum Common Stock Issuance shall first be approved by the Company's shareholders in accordance with applicable law and the By-laws and Articles of Incorporation of the Company. Without limiting the generality of the foregoing, such stockholders' approval must duly authorize the issuance by the Company of shares of Common Stock outstanding on the date hereof. The parties understand and agree that the Company's failure to seek or obtain such shareholder approval shall in no way adversely affect the validity and due authorization of the issuance and sale of Preferred Shares or Additional Preferred Shares hereunder, and that such approval pertains only to the applicability of the Maximum Common Stock Issuance limitation provided in this Section.

Section 3.16 LIMITATION ON OTHER TRANSACTIONS. The Company shall not, for a period of 30 days from the date hereof, enter into, or propose proposals relating to any convertible securities transaction for an excess of $3,000,000, with any other person.

Section 3.17 OPTION TO CONVERT TRANSACTION. With respect to any transactions in convertible securities in respect of which the Company has commenced negotiations or is in the process of negotiating within 30 days of the Closing Date (a "Subsequent Convertible Transaction"), the Investors shall have the option, exercisable by written notice within 30 days of the closing of the Subsequent Convertible Transaction, to convert the terms of the Transaction Documents (other than the amounts invested) into a transaction on the same terms as such Subsequent Convertible Transaction and to enter into new Transaction Documents identical with the documents of the Subsequent Convertible Transaction except in amount and parties thereto. In such event the Company shall execute such documentation and take such further action as shall be required to effect the foregoing as soon as practicable following receipt of such notice.

ARTICLE IV

TRANSFER AGENT INSTRUCTIONS.

The Company shall issue irrevocable instructions to its transfer agent, and any subsequent transfer agent, to issue certificates, registered in the name of the respective Investor or his respective nominee(s), for the Common Shares in such amounts as specified from time to time by such Investor to the Company upon delivery of a conversion or exercise notice (the "IRREVOCABLE TRANSFER AGENT INSTRUCTIONS"). The Company warrants that no instruction relating to the Common Shares other than the Irrevocable Transfer Agent Instructions referred to in this Article IV will be given by the Company to its transfer agent and that the Common Shares shall be freely transferable on the books and records of the Company as contemplated by Article VI below when the legend referred to therein may be removed. Nothing in this Article IV shall affect in any way the Investors' obligations and agreements set forth in Section 2.2(d) to comply with all applicable prospectus delivery requirements, if any, upon resale of the Common Shares. The Company shall instruct its transfer agent to issue one or more certificates in such names and in such denominations as specified by the Investors and without any restrictive legends. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Investors by vitiating the intent and purpose of the transaction contemplated hereby. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Section will be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section, that the Investors shall be entitled, in addition to all other available remedies, to an injunction restraining any breach and requiring immediate issuance and transfer, without the necessity of showing economic loss and without any bond or other security being required.

ARTICLE V

CONDITIONS TO CLOSINGS

Section 5.1 CONDITIONS PRECEDENT TO THE OBLIGATION OF THE COMPANY TO SELL THE PREFERRED SHARES AND WARRANTS. The obligation hereunder of the Company to issue and/or sell the Preferred Shares and the Warrants to the Investors at the Closing and to issue and/or sell the Additional Preferred Shares to the Investors at an Option Closing is subject to the satisfaction, at or before the Closing, or Option Closing, as the case may be, of each of the applicable conditions set forth below. These conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion.

(a) ACCURACY OF THE INVESTORS' REPRESENTATIONS AND WARRANTIES. The representations and warranties of the Investors will be true and correct in all material respects as of the date when made and as of the Closing Date, or the date of the Option Closing, as the case may be, as though made at that time.

(b) PERFORMANCE BY THE INVESTORS. The Investors shall have performed all agreements and satisfied all conditions required to be performed or satisfied by the Investors at or prior to the Closing, or Option Closing, as the case may be, including payment of the Purchase Price in the case of the Closing and payment of the applicable consideration, in the case of an Option Closing.

(c) NO INJUNCTION. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction which prohibits the consummation of any of the transactions contemplated by this Agreement or the Registration Rights Agreement or the Certificate.

(d) CERTIFICATE. The Investors shall have delivered a certificate to the Company certifying that the representations and warranties of the Investors contained in Section 2.2 are true and correct in all material respects as of the Closing Date in the case of a Closing, and as of the date of the Option Closing, in the case of an Option Closing.

Section 5.2 CONDITIONS PRECEDENT TO THE OBLIGATION OF THE INVESTORS TO PURCHASE THE PREFERRED SHARES. The obligation hereunder of the Investors to acquire and pay for the Preferred Shares and Warrants at the Closing is subject to the satisfaction, at or before the Closing, of each of the applicable conditions set forth below. These conditions are for the Investors' benefit and may be waived by the Investors at any time in its sole discretion.

(a) ACCURACY OF THE COMPANY'S REPRESENTATIONS AND WARRANTIES. The representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time (except for representations and warranties as of an earlier date, which shall be true and correct in all material respects as of such date).

(b) PERFORMANCE BY THE COMPANY. The Company shall have performed all agreements and satisfied all conditions required to be performed or satisfied by the Company at or prior to the Closing, including, without limitation, delivery of certificates representing the Preferred Shares and Warrants issued to Investors.

(c) NASDAQ TRADING. From the date hereof to the Closing Date, trading in the Company's Common Stock shall not have been suspended by the SEC and trading in securities generally as reported by the Principal Market (or other Approved Market) shall not have been suspended or limited, and the Common Stock shall be listed on the Principal Market or another Approved Market.

(d) NO INJUNCTION. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction which prohibits the consummation of any of the transactions contemplated by this Agreement, the Warrants, the Registration Rights Agreement or the Certificate. The NASD shall not have objected or indicated that it may object to the consummation of any of the transactions contemplated by this Agreement.

(e) OPINION OF COUNSEL. At the Closing, the Investors shall have received an opinion of counsel to the Company in the form attached hereto as EXHIBIT D and such other opinions, certificates and documents as the Investors or their counsel shall reasonably require incident to the Closing.

(f) REGISTRATION RIGHTS AGREEMENT. The Company shall have executed and delivered the Registration Rights Agreement in the form and substance of EXHIBIT C attached hereto.

(g) SECRETARY'S CERTIFICATE. The Company shall have delivered to the Investors a certificate in form and substance satisfactory to the Investors and the Investors' counsel, executed by the Secretary of the Company, certifying as to satisfaction of closing conditions, incumbency of signing officers, and the true, correct and complete nature of the Certificate of Incorporation, By-Laws, good standing and authorizing resolutions of the Company.

(h) CERTIFICATE. The Certificate shall have been accepted for filing by the Secretary of State of the State of Delaware and a facsimile copy of the stamped copy thereof shall have been provided to the Investors' counsel.

(i) MISCELLANEOUS. The Company shall have delivered to the Investors such other documents relating to the transactions contemplated by this Agreement or the Investors or its counsel may reasonably request.

(j) FEES AND EXPENSES. The Company shall have reimbursed the Investors for the fees and expenses required pursuant to Section 8.1A.

Section 5.3 CONDITIONS PRECEDENT TO THE OBLIGATION OF THE INVESTORS TO PURCHASE THE ADDITIONAL PREFERRED SHARES. The obligation of the Investors to acquire and pay for the Additional Preferred Shares at an Option Closing is subject to the satisfaction, at or before each Option Closing, of each of the applicable conditions set forth below. The conditions are for the Investors' benefit and may be waived by the Investors at any time in its sole discretion.

(a) CONDITIONS IN SECTION 5.2. The Company shall have complied with the conditions set forth in Section 5.2(a),(b),(c),(d),(e),(g), (i) and (j) with respect to the Additional Preferred Shares, the Option Closing, the date of such Option Closing and the closing conditions for the Option Closing.

(b) COMPLIANCE WITH TRANSACTION DOCUMENTS. The Company shall be in compliance with all of its obligations under the Transaction Documents.

ARTICLE VI

LEGEND AND STOCK

Upon payment therefor as provided in this Agreement, the Company will issue one or more certificates representing the Preferred Shares, the Additional Preferred Shares and the Warrants in the name of the Investors or their designees and in such denominations to be specified by the Investors prior to (or from time to time subsequent to) Closing or Option Closing. Each certificate representing the Preferred Shares, Additional Shares or Warrants, and any Common Shares issued upon conversion or exercise thereof, prior to such Common Shares being registered

under the 1933 Act for resale or available for resale under Rule 144 under the 1933 Act, shall be stamped or otherwise imprinted with a legend substantially in substantially the following form:

THESE SECURITIES HAVE NOT BEEN REGISTERED FOR OFFER OR SALE UNDER THE SECURITIES ACT OF 1933 OR ANY STATE SECURITIES LAWS. THEY MAY NOT BE SOLD OR OFFERED FOR SALE EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER SAID ACT AND ANY APPLICABLE STATE SECURITIES LAW OR AN APPLICABLE EXEMPTION FROM SUCH REGISTRATION REQUIREMENTS.

The Company agrees to reissue Preferred Shares, Additional Preferred Shares or Warrants without the legend set forth above at such time as (i) the holder thereof is permitted to dispose of such Preferred Shares, Additional Preferred Shares or Warrants and/or Common Shares issuable upon conversion of the Preferred Shares or Additional Preferred Shares or exercise of the Warrants pursuant to Rule 144 under the Act, or (ii) such securities are sold to a purchaser or purchasers who (in the opinion of counsel to the seller or such purchaser(s), in form and substance reasonably satisfactory to the Company and its counsel) are able to dispose of such shares publicly without registration under the Act, or (iii) such securities have been registered under the 1933 Act.

Prior to the Registration Statement (as defined in the Registration Rights Agreement) being declared effective, any Common Shares issued pursuant to conversion of Preferred Shares or Additional Preferred Shares or exercise of the Warrants shall bear a legend in the same form as the legend indicated above; provided that such legend shall be removed from the Common Shares and the Company shall issue new certificates without such legend if (i) the holder has sold or disposed of such Common Shares pursuant to Rule 144 under the 1933 Act, or the holder is permitted to dispose of such Common Shares pursuant to Rule 144(k) under the 1933 Act, (ii) such Common Shares are registered for resale under the 1933 Act, or (iii) such Common Shares are sold to a purchaser or purchasers who (in the opinion of counsel to the seller or such purchaser(s), in form and substance reasonably satisfactory to the Company and its counsel) are able to dispose of such shares publicly without registration under the 1933 Act. Upon such Registration Statement becoming effective, the Company agrees to promptly, but no later than three (3) business days thereafter, issue new certificates representing such Common Shares without such legend. Any Common Shares issued after the Registration Statement has become effective shall be free and clear of any legends, transfer restrictions and stop orders. Notwithstanding the removal of such legend, the Investors agree to sell the Common Shares represented by the new certificates in accordance with the applicable prospectus delivery requirements (if copies of a current prospectus are provided to the Investors by the Company) or in accordance with an exemption from the registration requirements of the 1933 Act.

Nothing herein shall limit the right of any holder to pledge these securities pursuant to a bona fide margin account or lending arrangement entered into in compliance with law, including applicable securities laws.

ARTICLE VII

INDEMNIFICATION

In consideration of the Investors' execution and delivery of this Agreement and the Registration Rights Agreement and acquiring the Preferred Shares and Warrants hereunder and in addition to all of the Company's other obligations under the Transaction Documents, the Company shall defend, protect, indemnify and hold harmless the Investors and any of their agents or other representatives (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, the "INDEMNITEES") from and against any and all actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "INDEMNIFIED Liabilities"), incurred by any Indemnitee as a result of, or arising out of, or relating to (a) any misrepresentation or breach of any representation or warranty made by the Company in the Transaction Documents or any other certificate or document contemplated hereby or thereby, (b) any breach of any covenant, agreement or obligation of the Company contained in the Transaction Documents or any other certificate or document contemplated hereby or thereby, (c) any cause of action, suit or claim brought or made against such Indemnitee by a third party and arising out of or resulting from (i) the execution, delivery, performance, breach by the Company or enforcement of the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, (ii) any transaction financed or to be financed in whole or in part, directly or indirectly, with the proceeds of the issuance of the Preferred Shares, Additional Preferred Shares or Warrants or (iii) the status of the Investors or holder of the Preferred Shares, Additional Preferred Shares or Warrants as an investor in the Company and (d) the enforcement of this Article. Notwithstanding the foregoing, Indemnified Liabilities shall not include any liability of any Indemnitee arising solely out of such Indemnitee's gross negligence, willful misconduct or fraudulent action(s). To the extent that the foregoing undertaking by the Company may be unenforceable for any reason, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities which is permissible under applicable law. Except as otherwise set forth herein, the mechanics and procedures with respect to the rights and obligations under this Article VII shall be the same as those set forth in Section 6 (other than Section 6(b)) of the Registration Rights Agreement, including, without limitation, those procedures with respect to the settlement of claims and Company's right to assume the defense of claims.

ARTICLE VIII

GOVERNING LAW, MISCELLANEOUS.

Section 8.1 GOVERNING LAW. THIS AGREEMENT SHALL BE GOVERNED BY AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA WITHOUT REGARD TO THE PRINCIPLES OF CONFLICT OF LAWS. EACH PARTY HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS SITTING IN THE NORTHERN

DISTRICT OF CALIFORNIA, FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR WITH ANY TRANSACTION CONTEMPLATED HEREBY OR DISCUSSED HEREIN, AND HEREBY IRREVOCABLY WAIVES, AND AGREES NOT TO ASSERT IN ANY SUIT, ACTION OR PROCEEDING, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF ANY SUCH COURT, THAT SUCH SUIT, ACTION OR PROCEEDING IS BROUGHT IN AN INCONVENIENT FORUM OR THAT THE VENUE OF SUCH SUIT, ACTION OR PROCEEDING IS IMPROPER. EACH PARTY HEREBY IRREVOCABLY WAIVES PERSONAL SERVICE OF PROCESS AND CONSENTS TO PROCESS BEING SERVED IN ANY SUCH SUIT, ACTION OR PROCEEDING BY MAILING A COPY THEREOF TO SUCH PARTY AT THE ADDRESS FOR SUCH NOTICES TO IT UNDER THIS AGREEMENT AND AGREES THAT SUCH SERVICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW. IF ANY PROVISION OF THIS AGREEMENT SHALL BE INVALID OR UNENFORCEABLE IN ANY JURISDICTION, SUCH INVALIDITY OR UNENFORCEABILITY SHALL NOT AFFECT THE VALIDITY OR ENFORCEABILITY OF THE REMAINDER OF THIS AGREEMENT IN THAT JURISDICTION OR THE VALIDITY OR ENFORCEABILITY OF ANY PROVISION OF THIS AGREEMENT IN ANY OTHER JURISDICTION. EACH PARTY HERETO IRREVOCABLY WAIVES ANY RIGHT TO TRIAL BY JURY.

Section 8.1A FEES. At the Closing, and at each Option Closing, the Company shall reimburse the Investors collectively for all reasonable fees and expenses (including, without limitation, legal fees and disbursements and due diligence expenses), not to exceed $25,000, incurred in connection with the transactions relating to such Closing or Option Closing.

Section 8.2 COUNTERPARTS. This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided that a facsimile signature shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original, not a facsimile signature.

Section 8.3 HEADINGS. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

Section 8.4 SEVERABILITY. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction.

Section 8.5 ENTIRE AGREEMENT; AMENDMENTS; WAIVERS.

(a) This Agreement supersedes all other prior oral or written agreements between the Investors, the Company, their affiliates and persons acting on their behalf with respect to the matters discussed herein, and this Agreement and the instruments referenced herein (including the other Transaction Documents) contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor the Investors makes any representation, warranty, covenant or undertaking with respect to such matters. No provision of this Agreement may be amended other than by an instrument in writing signed by the Company and the Investors, and no provision hereof may be waived other than by an instrument in writing signed by the party against whom enforcement is sought.

(b) The Investors may at any time elect, by notice to the Company, to waive (whether permanently or temporarily, and subject to such conditions, if any, as the Investors may specify in such notice) any of its rights under any of the Transaction Documents to acquire shares of Common Stock from the Company, in which event such waiver shall be binding against the Investors in accordance with its terms; PROVIDED, HOWEVER, that the voluntary waiver contemplated by this sentence may not reduce the Investors' obligations to the Company under the Transaction Documents.

Section 8.6 NOTICES. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing, must be delivered by (i) courier, mail or hand delivery OR (ii) facsimile, and will be deemed to have been delivered upon receipt. The addresses and facsimile numbers for such communications shall be:

If to the Company:

StemCells, Inc..
525 Del Rey Avenue, Suite C
Sunnyvale, CA 94086

Telephone: (408) 731-8670
Facsimile: (408) 731-8674
Attention: President

With a copy to:

Ropes & Gray
One International Place
Boston, MA 02110

Telephone: (617) 951-7000
Facsimile: (617) 951-7050
Attention: Geoffrey B. Davis, Esq.

If to the Transfer Agent:

Boston Equiserve LLP
150 Royall Street
Canton, MA 02021
Telephone: (781) 575-4028
Facsimile: 781-575-2549
Attention: Rob Walsh

If to the Investors:

Irving Weissman
[Address & Phone]

Mark Levin
[Address & Phone]

Each party shall provide five (5) days prior written notice to the other party of any change in address, telephone number or facsimile number. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's facsimile machine containing the time, date, recipient facsimile number and an image of the first page of such transmission or (C) provided by a nationally recognized overnight delivery service, shall be rebuttable evidence of personal service, receipt by facsimile or receipt from a nationally recognized overnight delivery service in accordance with clause (i), (ii) or (iii) above, respectively.

Section 8.7 SUCCESSORS AND ASSIGNS. Except as otherwise provided herein, this Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns, including any Permitted Assignee (as defined below). The Company shall not assign this Agreement, any other Transaction Document, or any of its rights or obligations hereunder or thereunder without the prior written consent of the Investors (except for assignments by operation of law pursuant to merger or consolidation). The Investors may assign some or all of their rights hereunder to any assignee of the Preferred Shares, Warrants, Additional Preferred Shares or Common Shares who is an Accredited Investor, as defined in Rule 501(a) under the 1933 Act (in each case, a "PERMITTED ASSIGNEE"); PROVIDED, however, that any such assignment shall not release the Investors from their obligations hereunder unless such obligations are assumed by such assignee and the Company has consented to such assignment and assumption. Notwithstanding anything to the contrary contained in the Transaction Documents, the Investors shall be entitled to pledge the Preferred Shares, Additional Preferred Shares, Warrants or Common Shares in connection with a bona fide margin account.

Section 8.8 NO THIRD PARTY BENEFICIARIES. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other person.

Section 8.9 SURVIVAL. The representations, warranties and agreements of the Company and the Investors contained in the Agreement shall survive the Closing and each Option Closing.

Section 8.10 FURTHER ASSURANCES. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

Section 8.11 PLACEMENT AGENT. The Investors and the Company each acknowledge and warrant that he or it has not engaged any placement agent in connection with the sale of the Preferred Shares, the Additional Preferred Shares and the Warrants. The Company and the Investors each shall pay, and hold the other party harmless against, any liability, loss or expense (including, without limitation, reasonable attorneys' fees and out-of-pocket expenses) arising in connection with any such claim.

Section 8.12 NO STRICT CONSTRUCTION. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

Section 8.13 REMEDIES. The Investors and each Permitted Assignee shall have all rights and remedies set forth in this Agreement and the Registration Rights Agreement and all rights and remedies which such holders have been granted at any time under any other agreement or contract and all of the rights which such holders have under any law. Any person having any rights under any provision of this Agreement or the Registration Rights Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security), to recover damages by reason of any breach of any provision of this Agreement or the Registration Rights Agreement and to exercise all other rights granted by law. The Investors and each Permitted Assignee without prejudice may withdraw, revoke or suspend its pursuit of any remedy at any time prior to its complete recovery as a result of such remedy.

Section 8.14 PAYMENT SET ASIDE. To the extent that the Company makes a payment or payments to the Investors hereunder or under the Registration Rights Agreement or the Investors enforce or exercise their rights hereunder or thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

Section 8.15 DAYS. Unless the context refers to "business days" or "Trading Days" all references herein to "days" shall mean calendar days. ----

Section 8.16 RESCISSION AND WITHDRAWAL RIGHT. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) the Transaction Documents, wherever the Investors exercise a right, election, demand or option under a Transaction Document and the Company does not fully perform its related obligations within the periods therein provided, then the Investors in their sole discretion may rescind or withdraw from time to time any relevant notice, demand or election in whole or in part prior to and up to and including, the first full business day following full performance by the Company of its obligations, without prejudice to its future actions and rights.

* * * * *

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be duly executed as of the date and year first above written.

COMPANY:	INVESTORS:
STEMCELLS, INC.	
By:	
----------	----------
Name: George W. Dunbar, Jr.	Irving Weissman
Title: Acting President and CEO	

	Mark Levin

LIST OF SCHEDULES

LIST OF EXHIBITS

EXHIBIT 10.2

REGISTRATION RIGHTS AGREEMENT

BETWEEN

STEMCELLS, INC.,

MARK LEVIN

AND

IRVING L. WEISSMAN, M.D.

APRIL 13, 2000

INDEX OF DEFINED TERMS

REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement ("Agreement") is entered into as of April 13, 2000, between StemCells, Inc., with offices at 525 Del Rey Avenue, Suite C, Sunnyvale, California 94086 (the "Company"), and Mark Levin and Irving L. Weissman, M.D. (each, an "Investor," and collectively, the "Investors").

W I T N E S S E T H:

WHEREAS, pursuant to that certain Securities Purchase Agreement, dated on or about the date hereof, by and between the Company and the Investors (the "Purchase Agreement"), the Company has agreed to sell and issue to the Investors, and the Investors have agreed to purchase from the Company, an aggregate of 1,500 shares (750 per Investor), Liquidation Preference $1,000 each, of the Company's Series 6% Convertible Preferred Stock (the "Preferred Shares") subject to the terms and conditions set forth therein, and 75,000 Warrants (37,500 per Investor) (the "Warrants") to purchase shares of the Company's Common Stock, par value $0.01 per share (the "Common Stock") subject to the terms and conditions set forth therein; and

WHEREAS, the Purchase Agreement provides each Investor an option under certain circumstances to purchase up to 563 additional Preferred Shares (the "Additional Preferred Shares"), on the terms and conditions set forth therein; and

WHEREAS, the Purchase Agreement contemplates that the Preferred Shares (including Additional Preferred Shares) will be convertible into shares (the "Common Shares") of Common Stock pursuant to the terms and conditions set forth in the Certificate of Designations for the Preferred Shares (the "Certificate"); and

NOW, THEREFORE, in consideration of the mutual promises, representations, warranties, covenants and conditions set forth in the Purchase Agreement and this Agreement, the Company and the Investors agree as follows:

1. CERTAIN DEFINITIONS. Capitalized terms used herein and not otherwise defined shall have the meaning ascribed thereto in the Purchase Agreement or the Certificate. As used in this Agreement, the following terms shall have the following respective meanings:

"Closing" and "Closing Date" shall have the meanings ascribed to such terms in the Purchase Agreement; provided that they shall refer to the initial Closing and Closing Date scheduled under the Purchase Agreement.

"Commission" or "SEC" shall mean the Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

"Filing Date" shall mean the earliest of (i) 30 days after receipt of a written request from either of the Investors; (ii) the filing of any registration statement with the Commission pursuant to Rule 415 under the Securities Act; or (iii) the date 10 business days after becoming eligible to file a registration statement Form S-3 under the Securities Act, regardless of whether the Company has actually filed a registration statement on or before such date.

"Holder" and "Holders" shall include the Investors and any transferee or

transferees of the Preferred Shares, Additional Preferred Shares, Warrants, Common Shares or Registrable Securities which have not been sold to the public, to whom the registration rights conferred by this Agreement have been transferred in compliance with this Agreement and the Purchase Agreement.

The terms "register", "registered" and "registration" shall refer to a registration effected by preparing and filing a registration statement in compliance with the Securities Act and applicable rules and regulations thereunder, and the declaration or ordering of the effectiveness of such registration statement.

"Registrable Securities" shall mean: (i) the Common Shares or other securities issued or issuable to each Holder or its permitted transferee or designee upon conversion of the Preferred Shares or Additional Preferred Shares or exercise of the Warrants; (ii) securities issued or issuable upon any stock split, stock dividend, recapitalization or similar event with respect to such Common Shares; and (iii) any other security issued as a dividend or other distribution with respect to, in exchange for or in replacement of the securities referred to in the preceding clauses.

"Registration Expenses" shall mean all expenses to be incurred by the Company in connection with each Holder's registration rights under this Agreement, including, without limitation, all registration and filing fees, printing expenses, fees and disbursements of counsel for the Company, blue sky fees and expenses, reasonable fees and disbursements of counsel to Holders (using a single counsel selected by a majority in interest of the Holders) for a "due diligence" examination of the Company and review of the Registration Statement and related documents, and the expense of any special audits incident to or required by any such registration (but excluding the compensation of regular employees of the Company, which shall be paid in any event by the Company).

"Registration Statement" shall have the meaning set forth in Section 2(a) herein.

"Regulation D" shall mean Regulation D as promulgated pursuant to the Securities Act, and as subsequently amended.

"Securities Act" or "Act" shall mean the Securities Act of 1933, as amended.

"Selling Expenses" shall mean all underwriting discounts and selling commissions applicable to the sale of Registrable Securities and all fees and disbursements of counsel for Holders not included within "Registration Expenses."

2. REGISTRATION REQUIREMENTS. The Company shall use its best efforts to effect the registration of the Registrable Securities (including, without limitation, the execution of an undertaking to file post-effective amendments, appropriate qualification under applicable blue sky or other state securities laws and appropriate compliance with applicable regulations issued under the Securities Act) as would permit or facilitate the sale or distribution of all the Registrable Securities in the manner (including manner of sale) and in all states reasonably requested by the Holder. Such best efforts by the

Company shall include, without limitation, the following:

(a) The Company shall, no later than the Filing Date:

(i) Prepare and file a registration statement with the Commission pursuant to Rule 415 under the Securities Act on such form as the Company is then eligible to use under the Securities Act covering resales by the Holders of the Registrable Securities ("Registration Statement"), which Registration Statement, to the extent allowable under the Securities Act and the rules promulgated thereunder (including Rule 416), shall state that such Registration Statement also covers such indeterminate number of additional shares of Common Stock as may become issuable upon conversion of the Preferred Shares and Additional Preferred Shares and exercise of the Warrants. The number of shares of Common Stock initially included in such Registration Statement shall be no less than the sum of two times the number of Common Shares that are then issuable upon conversion of the Preferred Shares and Additional Preferred Shares and exercise of the Warrants (assuming full conversion or exercise, respectively, at the then applicable Conversion Price (as defined in the Certificate) or Exercise Price (as defined in the Warrant) plus such number of shares of Common Stock other than the Registrable Securities as the Company may in its sole discretion include in such registration statement. Nothing in the preceding sentence will limit the Company's obligations to reserve shares of Common Stock pursuant to Section 3.7 of the Purchase Agreement. Thereafter the Company shall use its best efforts to cause such Registration Statement and other filings to be declared effective as soon as possible, and in any event prior to 90 days following the Filing Date. Without limiting the foregoing, the Company will promptly respond to all SEC comments, inquiries and requests, and shall request acceleration of effectiveness at the earliest possible date. The Company shall provide the Holders upon request reasonable opportunity to review any such Registration Statement or amendment or supplement thereto prior to filing.

(ii) Prepare and file with the SEC such amendments and supplements to such Registration Statement and the prospectus used in connection with such Registration Statement as may be necessary to comply with the provisions of the Act with respect to the disposition of all securities covered by such Registration Statement and notify the Holders of the filing and effectiveness of such Registration Statement and any amendments or supplements.

(iii) Furnish to each Holder such numbers of copies of a current prospectus conforming with the requirements of the Act, copies of the Registration Statement, any amendment or supplement thereto and any documents incorporated by reference therein and such other documents as

such Holder may reasonably require in order to facilitate the disposition of Registrable Securities owned by such Holder.

(iv) Register and qualify the securities covered by such Registration Statement under the securities or "Blue Sky" laws of all domestic jurisdictions; provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions.

(v) Notify each Holder immediately of the happening of any event (but not the substance or details of any such events unless specifically requested by a Holder) as a result of which the prospectus (including any supplements thereto or thereof) included in such Registration Statement, as then in effect, includes an untrue statement of material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing, and use its best efforts to promptly update and/or correct such prospectus.

(vi) Notify each Holder immediately of the issuance by the Commission or any state securities commission or agency of any stop order suspending the effectiveness of the Registration Statement or the threat or initiation of any proceedings for that purpose. The Company shall use its best efforts to prevent the issuance of any stop order and, if any stop order is issued, to obtain the lifting thereof at the earliest possible time.

(vii) Permit counsel to the Holders to review the Registration Statement and all amendments and supplements thereto within a reasonable period of time (but not less than 3 full Trading Days (as defined in the Certificate)) prior to each filing, and shall not file any document in a form to which such counsel reasonably objects and will not request acceleration of the Registration Statement without prior notice to such counsel.

(viii) List the Registrable Securities covered by such Registration Statement with all securities exchange(s) and/or markets on which the Common Stock is then listed and prepare and file any required filings with the Nasdaq National Market or any exchange or market where the Common Shares are traded.

(ix) Take all steps necessary to enable Holders to avail themselves of the prospectus delivery mechanism set forth in Rule 153 (or successor thereto) under the Act (if applicable).

(b) Set forth below in this Section 2(b) are (I) events that may arise that the Investors consider will interfere with the full enjoyment of their rights under this Agreement, the Purchase Agreement, the Warrants and the Certificate (the "Interfering Events"), and (II) certain remedies applicable in each of these events.

Paragraphs (i) through (iv) of this Section 2(b) describe the Interfering Events, provide a remedy to the Investors if an Interfering Event occurs and provide that the Investors may require that the Company repurchase outstanding Preferred Shares and Warrants at a specified price if certain Interfering Events are not timely cured.

Paragraph (v) provides, inter alia, that if default adjustments required as the remedy in the case of certain of the Interfering Events are not provided when due, the Company may be required by the Investors to redeem outstanding Preferred Shares and Warrants at a specified price.

Paragraph (vi) provides, inter alia, that the Investors have the right to specific performance.

The preceding paragraphs in this Section 2(b) are meant to serve only as an introduction to this Section 2(b), are for convenience only, and are not to be considered in applying, construing or interpreting this Section 2(b).

(i) DELAY IN EFFECTIVENESS OF REGISTRATION STATEMENT.

(A) (1) In the event that such Registration Statement has not been declared effective within 90 days from the Filing Date, then the Conversion Price (as defined in the Certificate) shall be permanently reduced so that thereafter (subject to further adjustment as set forth herein, in the Certificate and in the other Transaction Documents) it shall be equal to the otherwise applicable Conversion Price multiplied by the "Applicable Percentage." The Applicable Percentage shall be 98% in the event the Registration Statement becomes effective within the first 30 day period after 90 days from the Filing Date. The Applicable Percentage shall be permanently reduced by an additional 1.5% if the Registration Statement is not effective within 120 days from the Filing Date and shall be further reduced an additional 1.5% during each successive 30 day period. For example, if the Registration Statement becomes effective on the 160th day following the Filing Date, the Applicable Percentage shall equal 5%, so that thereafter the Conversion Price shall be 95% of the otherwise applicable Conversion Price. Any adjustments made pursuant to the foregoing provisions shall also apply to the Conversion Price of Additional Preferred Shares.

In addition to the foregoing, if the Registration Statement has not been declared effective within 150 days after the Filing Date, then each Holder shall have the right to sell, at any time after the 150th day after the Filing Date, any or all of its Preferred Shares, and Warrants to the Company for consideration (the "Mandatory Repurchase Price") equal to (I) for the Preferred Shares, the greater of (x) 120% of the Liquidation Preference of all such Preferred Shares being sold to the Company, or (y) the Liquidation Preference for the Preferred Shares being sold to the Company divided by the then applicable Conversion Price multiplied by the greater of the last closing price of the Common Stock on (i) the date a Holder exercises its option pursuant to this Section 2(b) to require repurchase of Preferred Shares or (ii) the date on which the event triggering Holder's remedies under this Section 2(b) first occurred, in each case payable in cash and (II) for the Warrants 120% of the product of (a) the difference between the greater of clauses (i) or (ii) above and the exercise price of the Warrants, multiplied by (b) the number of Warrants being sold to the Company, payable in cash.

(2) In the event that the Company at any time fails to issue unlegended Registrable Securities as required by Article VI of the Purchase Agreement, then the Company shall pay each Holder a Monthly Delay Payment (as defined below) for each 30 day period (or portion thereof) that effectiveness of the Registration Statement is delayed or failure to issue such unlegended Registrable Securities persists.

(B) As used in this Agreement, a "Monthly Delay Payment" shall be a cash payment equal to 1% of the Liquidation Preference of the Preferred Shares held by a Holder for the first 30 day period (or portion thereof) that the specified condition in this Section 2(b) has not been fulfilled or the specified deficiency has not been remedied, 2% of such Liquidation Preference for the next 30 day period (or portion thereof) that the specified condition in this Section 2(b) has not been fulfilled or the specified deficiency has not been remedied, and 3% of such Liquidation Preference thereafter for each subsequent 30 day period (or portion thereof) that the specified condition in this Section 2(b) has not been fulfilled or the specified deficiency has not been remedied. Payment of the Monthly Delay Payments and Mandatory Repurchase Price shall be due and payable from the Company to such Holder within 5 business days of demand therefor. Without limiting the foregoing, if cash payment of the Mandatory Repurchase Price is not made within such 5 business day period, the Holder may revoke and withdraw its election to cause the Company to make such mandatory purchase at any time prior to its

receipt of such cash. At the option of the Holder, Monthly Delay Payments may be added to the Liquidation Preference of the Preferred Shares held by it.

(ii) NO LISTING; PREMIUM PRICE REDEMPTION FOR DELISTING OF CLASS OF SHARES.

(A) In the event that the Company fails, refuses or for any other reason is unable to cause the Registrable Securities to be listed with Nasdaq National Market or one of the other Approved Markets (as defined in the Purchase Agreement) at all times during the period ("Listing Period") from the earlier of the effectiveness of the Registration Statement and the 90th day following the Filing Date until such time as the registration period specified in Section 5 terminates, then the Company shall provide to each Holder a Monthly Delay Payment, for each 30 day period or portion thereof during which such listing is not in effect. In addition to the foregoing, following the 10th day that such listing is not in effect, each Holder shall have the right to sell to the Company any or all of its Preferred Shares and Warrants at the Mandatory Repurchase Price. The provisions of Section 2(b)(i)(B) shall apply to this Section 2(b)(ii)(A).

(B) In the event that shares of Common Stock of the Company are not listed on any of the Approved Markets at all times following the Filing Date, or are otherwise suspended from trading and remain unlisted or suspended for 3 consecutive days, then the Company shall provide to each Holder a Monthly Delay Payment for each 30 day period or portion thereof during which such listing is not in effect. In addition to the foregoing, following the 5th day that the shares are not so listed or are otherwise suspended, at the option of each Holder and to the extent such Holder so elects, each Holder shall have the right to sell to the Company the Preferred Shares and the Warrants held by such Holder, in whole or in part, for the Mandatory Repurchase Price on the terms set forth in Section 2(b)(i)(B) above.

(iii) BLACKOUT PERIODS. In the event that any Holder's ability to sell Registrable Securities under the Registration Statement is suspended for more than (i) five (5) consecutive days or (ii) twenty (20) days in any calendar year ("Suspension Grace Period"), including without limitation by reason of any suspension or stop order with respect to the Registration Statement or the fact that an event has occurred as a result of which the prospectus (including any supplements thereto) included in such Registration Statement then in effect includes an untrue statement of material fact or omits

to state a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing (a "Blackout"), then the Company shall provide to each Holder a Monthly Delay Payment for each 30 day period or portion thereof from and after the expiration of the Suspension Grace Period, on the terms set forth in Section 2(b)(i)(B) above. In addition, at any time following the expiration of the Suspension Grace Period if the Blackout continues for more than five (5) additional consecutive days, a Holder shall have the right to sell to the Company its Preferred Shares and/or Warrants in whole or in part for the Mandatory Repurchase Price on the terms set forth in Section 2(b)(i)(B) above.

(iv) REDEMPTION FOR CONVERSION DEFICIENCY. In the event that the Company does not have a sufficient number of Common Shares available to satisfy the Company's obligations to any Holder upon receipt of a Conversion Notice (as defined in the Certificate) or exercise of the Warrants or the Company is otherwise unable or unwilling for any reason to issue such Common Shares (other than failure of the Holder to comply with the conversion notice and delivery requirements of Section 5 of the Certificate) (each, a "Conversion/Exercise Deficiency") in accordance with the terms of the Certificate, Purchase Agreement and Warrants for any reason after receipt of a Conversion Notice or exercise notice from any Holder, then:

(A) The Company shall provide to each Holder a Monthly Delay Payment for each 30 day period or portion thereof following the Conversion/Exercise Deficiency on all outstanding Preferred Shares and Warrants, on the terms set forth in Section 2(b)(i)(B) above.

(B) At any time five days after the commencement of the running of the first 30-day period described above in clause (A) of this paragraph (iv), at the request of any Holder, the Company promptly shall purchase from such Holder, for the Mandatory Repurchase Price and on the terms set forth in Section 2(b)(i)(B) above, any and all outstanding Preferred Shares and/or Warrants, if the failure to issue Common Shares results from the lack of a sufficient number thereof and shall purchase all of such Holder's Preferred Shares and/or Warrants (or such portion requested by such Holder) for such consideration and on such terms if the failure to issue Common Shares results from any other cause, or is without cause.

(v) MANDATORY PURCHASE PRICE FOR DEFAULTS.

(A) The Company acknowledges that any failure, refusal or inability by the Company to perform the obligations described in the foregoing paragraphs (i) through (iv) will cause the Holders to suffer damages in an amount that will be difficult to ascertain, including without limitation damages resulting from the loss of liquidity in the Registrable Securities and the additional investment risk in holding the Preferred Shares, Warrants and Registrable Securities. Accordingly, the parties agree, after consulting with counsel, that it is appropriate to include in this Agreement the foregoing provisions for Monthly Delay Payments and mandatory redemptions in order to compensate the Holders for such damages. The parties acknowledge and agree that the Monthly Delay Payments and mandatory redemptions set forth above represent the parties' good faith effort to quantify such damages and, as such, agree that the form and amount of such payments and mandatory redemptions are reasonable and will not constitute a penalty.

(B) In the event that the Company fails to pay any Monthly Delay Payment within 5 business days of demand therefor, each Holder shall have the right to sell to the Company any or all of its Preferred Shares and/or Warrants at the Mandatory Repurchase Price on the terms set forth in Section 2(b)(i)(B) above.

(C) The Holder shall have the right to withdraw any request for redemption hereunder at any time prior to its receipt of the Mandatory Repurchase Price.

(vi) CUMULATIVE REMEDIES. The Monthly Delay Payments and mandatory purchases provided for above are in addition to and not in lieu or limitation of any other rights the Holders may have at law, in equity or under the terms of the Certificate, the Purchase Agreement, the Warrants and this Agreement, including without limitation the right to monetary contract damages and specific performance. Each Holder shall be entitled to specific performance of any and all obligations of the Company in connection with the registration rights of the Holders hereunder. Each Monthly Delay Payment provided for herein in the foregoing clauses shall be in addition to each other Monthly Delay Payment; PROVIDED, HOWEVER, that in no event shall the Company be obligated to pay to any holder an aggregate amount greater than three percent (3%) of the Liquidation Preference for the Preferred Shares held by such holder for any 30-day period, provided, that this sentence shall not in any way affect the Company's mandatory purchase obligations hereunder.

(vii) REMEDIES FOR REGISTRABLE SECURITIES. In any case in which a Holder of Preferred Shares and/or Warrants has the right to cause the purchase of its securities under this Section 2(b), it shall also have the right to cause the Company to purchase the Registrable Securities that such Holder owns, in whole or in part at the Holder's option, at a purchase price equal to 120% of the product of (a) the greater of the last closing price of the Common Stock on (i) the date a Holder exercises its option pursuant to this Section 2(b) or (ii) the date on which the event triggering Holder's remedies under this Section 2(b) first occurred, multiplied by (b) the number of Registrable Securities being sold to the Company, payable in cash.

In the case in which a Holder of Preferred Shares or Warrants would have the right to receive Monthly Delay Payments with respect to Preferred Shares or Warrants under Section 2(b), it shall also have the right to receive payments with respect to Registrable Securities owned by it in an amount at the rate of the Monthly Delay Payments that would have applied to the Preferred Shares or Warrants converted into or exercised for Common Shares had such Preferred Shares or Warrants not been converted or exercised.

(viii) REMEDIES FOR ADDITIONAL PREFERRED SHARES. All rights and remedies set forth herein that are stated to apply to Preferred Shares shall also apply, MUTATIS MUTANDIS, to Additional Preferred Shares.

(c) If the Holder(s) intend to distribute the Registrable Securities by means of an underwriting, the Holder(s) shall so advise the Company. Any

such underwriting may only be administered by nationally or regionally recognized investment bankers reasonably satisfactory to the Company.

(d) The Company shall enter into such customary agreements for secondary offerings (including a customary underwriting agreement with the underwriter or underwriters, if any) and take all such other reasonable actions reasonably requested by the Holders in connection therewith in order to expedite or facilitate the disposition of such Registrable Securities. Whether or not an underwriting agreement is entered into and whether or not the Registrable Securities are to be sold in an underwritten offering, the Company shall:

(i) make such representations and warranties to the Holders and the underwriter or underwriters, if any, in form, substance and scope as are customarily made by issuers to underwriters in secondary offerings;

(ii) cause to be delivered to the sellers of Registrable Securities and the underwriter or underwriters, if any, opinions of independent counsel to the Company, on and dated as of each effective day (or in the case of an underwritten offering, dated the date of delivery of any Registrable Securities sold pursuant thereto) of the Registration Statement, and within ninety (90) days following the end of each fiscal year thereafter, which counsel and opinions (in form, scope and substance) shall be reasonably satisfactory to the Holders and the underwriter(s), if any, and their counsel and covering, without limitation, such matters as the due authorization and issuance of the securities being registered and compliance with securities laws by the Company in connection with the authorization, issuance and registration thereof and other matters that are customarily given to underwriters in underwritten offerings, addressed to the Holders and each underwriter, if any;

(iii) cause to be delivered, immediately prior to the effectiveness of the Registration Statement (and, in the case of an underwritten offering, at the time of delivery of any Registrable Securities sold pursuant thereto), and at the beginning of each fiscal year following a year during which the Company's independent certified public accountants shall have reviewed any of the Company's books or records, a "comfort" letter from the Company's independent certified public accountants addressed to the Holders and each underwriter, if any, stating that such accountants are independent public accountants within the meaning of the Securities Act and the applicable published rules and regulations thereunder, and otherwise in customary form and covering such financial and accounting matters as are customarily covered by letters of the independent certified public accountants delivered in connection with secondary offerings; such accountants shall have undertaken in each such letter to update the same during each such fiscal year in which such books

or records are being reviewed so that each such letter shall remain current, correct and complete throughout such fiscal year; and each such letter and update thereof, if any, shall be reasonably satisfactory to the Holders;

(iv) if an underwriting agreement is entered into, the same shall include customary indemnification and contribution provisions to and from the underwriters and procedures for secondary underwritten offerings; and

(v) deliver such documents and certificates as may be reasonably requested by the Holders of the Registrable Securities being sold or the managing underwriter or underwriters, if any, to evidence compliance with clause (i) above and with any customary conditions contained in the underwriting agreement, if any.

(e) The Company shall make available for inspection by the Holders, representative(s) of all the Holders together, any underwriter participating in any disposition pursuant to a Registration Statement, and any attorney or accountant retained by any Holder or underwriter, all financial and other records customary for purposes of the Holders' due diligence examination of the Company and review of any Registration Statement, all SEC Documents (as defined in the Purchase Agreement) filed subsequent to the Closing, pertinent corporate documents and properties of the Company, and cause the Company's officers, directors and employees to supply all information reasonably requested by any such representative, underwriter, attorney or accountant in connection with such Registration Statement, provided that such parties agree to keep such information confidential.

(f) Subject to Section 2(b) above, the Company may suspend the use of any prospectus used in connection with the Registration Statement only in the event, and for such period of time as, such a suspension is required by the rules and regulations of the Commission. The Company will use its best efforts to cause such suspension to terminate at the earliest possible date.

(g) The Company shall file a Registration Statement with respect to any newly authorized and/or reserved (which shall include all shares required to be reserved) Registrable Securities consisting of Common Shares described in clause (i) of the definition of Registrable Securities within five (5) business days of any reservation (or the date reservation was required) or stockholders meeting authorizing same and shall use its best efforts to cause such Registration Statement to become effective within forty-five (45) days of such reservation (or the date reservation was required) or stockholders meeting. If the Holders become entitled, pursuant to an event described in clause (ii), (iii) and (iv) of the definition of Registrable Securities, to receive any securities in respect of Registrable Securities that were already included in a Registration Statement, subsequent to the date such Registration Statement is declared effective, and the Company is unable under the securities laws to add such securities to the then effective Registration Statement, the Company shall promptly file, in accordance

with the procedures set forth herein, an additional Registration Statement with respect to such newly Registrable Securities. The Company shall use its best efforts to (i) cause any such additional Registration Statement, when filed, to become effective under the Securities Act, and (ii) keep such additional Registration Statement effective during the period described in Section 5 below and cause such Registration Statement to become effective within 45 days of that date that the need to file the Registration Statement arose. All of the registration rights and remedies under this Agreement shall apply to the registration of such newly reserved shares and such new Registrable Securities, including without limitation the provisions providing for default payments and mandatory redemptions contained herein.

3. EXPENSES OF REGISTRATION. All Registration Expenses in connection with any registration, qualification or compliance with registration pursuant to this Agreement shall be borne by the Company, and all Selling Expenses of a Holder shall be borne by such Holder.

4. REGISTRATION ON FORM S-3. The Company shall use its best efforts to become qualified for registration on Form S-3 or any comparable or successor form or forms and to remain qualified for registration on such form as the Company is eligible to use under the Securities Act.

5. REGISTRATION PERIOD. In the case of the registration effected by the Company pursuant to this Agreement, the Company shall keep such registration effective until the later of (a) the date on which all the Holders have completed the sales or distribution described in the Registration Statement relating thereto or, if earlier, until such Registrable Securities may be sold by the Holders under Rule 144(k) (provided that the Company's transfer agent has accepted an instruction from the Company to such effect), and (b) the fifth (5th) anniversary of the Filing Date.

6. INDEMNIFICATION.

(a) COMPANY INDEMNITY. The Company will indemnify each Holder, each of its officers, directors, agents and partners, and each person controlling each of the foregoing, within the meaning of Section 15 of the Securities Act and the rules and regulations thereunder with respect to which registration, qualification or compliance has been effected pursuant to this Agreement, and each underwriter, if any, and each person who controls, within the meaning of Section 15 of the Securities Act and the rules and regulations thereunder, any underwriter, against all claims, losses, damages and liabilities (or actions in respect thereof) arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any prospectus, offering circular or other document (including any related registration statement, notification or the like) incident to any such registration, qualification or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances under which they were made, or any violation by the Company of the Securities Act or any state securities law or in either case, any rule or regulation

thereunder applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, qualification or compliance, and will reimburse each Holder, each of its officers, directors, agents and partners, and each person controlling each of the foregoing, each such underwriter and each person who controls any such underwriter, for any legal and any other expenses reasonably incurred in connection with investigating and defending any such claim, loss, damage, liability or action, provided that the Company will not be liable in any such case to a Holder to the extent that any such claim, loss, damage, liability or expense arises out of or is based on any untrue statement or omission based upon written information furnished to the Company by such Holder or the underwriter (if any) therefor and stated to be specifically for use therein. The indemnity agreement contained in this Section 6(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent will not be unreasonably withheld).

(b) HOLDER INDEMNITY. Each Holder will, severally and not jointly, if Registrable Securities held by it are included in the securities as to which such registration, qualification or compliance is being effected, indemnify the Company, each of its directors, officers, agents and partners, and each underwriter, if any, of the Company's securities covered by such a registration statement, each person who controls the Company or such underwriter within the meaning of Section 15 of the Securities Act and the rules and regulations thereunder, each other Holder (if any), and each of their officers, directors and partners, and each person controlling such other Holder(s) against all claims, losses, damages and liabilities (or actions in respect thereof) arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any such registration statement, prospectus, offering circular or other document, or any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statement therein not misleading in light of the circumstances under which they were made, and will reimburse the Company and such other Holder(s) and their directors, officers and partners, underwriters or control persons for any legal or any other expenses reasonably incurred in connection with investigating and defending any such claim, loss, damage, liability or action, in each case to the extent, but only to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in such registration statement, prospectus, offering circular or other document in reliance upon and in conformity with written information furnished to the Company by such Holder and stated to be specifically for use therein, and provided that the maximum amount for which such Holder shall be liable under this indemnity shall not exceed the net proceeds received by such Holder from the sale of the Registrable Securities pursuant to the registration statement in question. The indemnity agreement contained in this Section 6(b) shall not apply to amounts paid in settlement of any such claims, losses, damages or liabilities if such settlement is effected without the consent of such Holder (which consent shall not be unreasonably withheld).

(c) PROCEDURE. Each party entitled to indemnification under this Section 6 (the "Indemnified Party") shall give notice to the party required to provide indemnification (the "Indemnifying Party") promptly after such Indemnified Party has

actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim in any litigation resulting therefrom, provided that counsel for the Indemnifying Party, who shall conduct the defense of such claim or any litigation resulting therefrom, shall be approved by the Indemnified Party (whose approval shall not be unreasonably withheld), and the Indemnified Party may participate in such defense at its own expense, and provided further that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Section 6 except to the extent that the Indemnifying Party is materially and adversely affected by such failure to provide notice. No Indemnifying Party, in the defense of any such claim or litigation, shall, except with the consent of each Indemnified Party, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect to such claim or litigation. Each Indemnified Party shall furnish such non-privileged information regarding itself or the claim in question as an Indemnifying Party may reasonably request in writing and as shall be reasonably required in connection with the defense of such claim and litigation resulting therefrom.

7. CONTRIBUTION. If the indemnification provided for in Section 6 herein is unavailable to the Indemnified Parties in respect of any losses, claims, damages or liabilities referred to herein (other than by reason of the exceptions provided therein), then each such Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such losses, claims, damages or liabilities as between the Company on the one hand and any Holder on the other, in such proportion as is appropriate to reflect the relative fault of the Company and of such Holder in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative fault of the Company on the one hand and of any Holder on the other shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or by such Holder.

In no event shall the obligation of any Indemnifying Party to contribute under this Section 7 exceed the amount that such Indemnifying Party would have been obligated to pay by way of indemnification if the indemnification provided for under Section 6(a) or 6(b) hereof had been available under the circumstances.

The Company and the Holders agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation (even if the Holders or the underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to in the immediately preceding paragraphs. The amount paid or payable by an Indemnified Party as a result of the losses, claims, damages and liabilities referred to in the immediately preceding paragraphs shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such Indemnified Party in connection with investigating or defending any such action or claim.

Notwithstanding the provisions of this section, no Holder or underwriter shall be required to contribute any amount in excess of the amount by which (i) in the case of any Holder, the net proceeds received by such Holder from the sale of Registrable Securities pursuant to the registration statement in question or (ii) in the case of an underwriter, the total price at which the Registrable Securities purchased by it and distributed to the public were offered to the public exceeds, in any such case, the amount of any damages that such Holder or underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

8. SURVIVAL. The indemnity and contribution agreements contained in Sections 6 and 7 and the representations and warranties of the Company referred to in Section 2(d)(i) shall remain operative and in full force and effect regardless of (i) any termination of this Agreement or the Purchase Agreement or any underwriting agreement, (ii) any investigation made by or on behalf of any Indemnified Party or by or on behalf of the Company, and (iii) the consummation of the sale or successive resales of the Registrable Securities.

9. INFORMATION BY HOLDERS. Each Holder shall furnish to the Company such information regarding such Holder and the distribution and/or sale proposed by such Holder as the Company may reasonably request in writing and as shall be reasonably required in connection with any registration, qualification or compliance referred to in this Agreement. The intended method or methods of disposition and/or sale (Plan of Distribution) of such securities as so provided by such Investor shall be included without alteration in the Registration Statement covering the Registrable Securities and shall not be changed without written consent of such Holder.

10. REPLACEMENT CERTIFICATES. The certificate(s) representing the Preferred Shares, Additional Preferred Shares and/or Common Shares held by any Investor (or then Holder) may be exchanged by such Investor (or such Holder) at any time and from time to time for certificates with different denominations representing an equal aggregate number of Preferred Shares, Additional Preferred Shares and/or Common Shares, as reasonably requested by such Investor (or such Holder) upon surrendering the same. No service charge will be made for such registration or transfer or exchange. Upon receipt by the Corporation of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of any certificate representing the Preferred Shares, Additional Preferred Shares or the Warrants, or the underlying Common Shares of any of the foregoing, and, in the case of loss, theft or destruction, of indemnity reasonably satisfactory to it, or upon surrender and cancellation of such certificate if mutilated, the Corporation will make and deliver a new certificate of like tenor and dated as of such cancellation at no charge to the holder.

11. TRANSFER OR ASSIGNMENT. Except as otherwise provided herein, this Agreement shall be binding upon and inure to the benefit of the parties and their

successors and permitted assigns. The rights granted to the Investors by the Company under this Agreement to cause the Company to register Registrable Securities may be transferred or assigned (in whole or in part) to a transferee or assignee of Preferred Shares, Additional Preferred Shares, Warrants or Registrable Securities, and all other rights granted to the Investors by the Company hereunder may be transferred or assigned to any transferee or assignee of any Preferred Shares, Additional Preferred Shares, Warrants or Registrable Securities; provided in each case that the Company must be given written notice by the such Investor at the time of or within a reasonable time after said transfer or assignment, stating the name and address of said transferee or assignee and identifying the securities with respect to which such registration rights are being transferred or assigned; and provided further that the transferee or assignee of such rights agrees in writing to be bound by the registration provisions of this Agreement.

12. MISCELLANEOUS.

(a) REMEDIES. The Company and the Investors acknowledge and agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to an injunction or injunctions to prevent or cure breaches of the provisions of this Agreement and to enforce specifically the terms and provisions hereof, this being in addition to any other remedy to which any of them may be entitled by law or equity.

(b) JURISDICTION. The Company and each Investor (i) hereby irrevocably submits to the exclusive jurisdiction of the United States District Court, the California State courts and other courts of the United States sitting in the Northern District of California for the purposes of any suit, action or proceeding arising out of or relating to this Agreement and (ii) hereby waives, and agrees not to assert in any such suit action or proceeding, any claim that it is not personally subject to the jurisdiction of such court, that the suit, action or proceeding is brought in an inconvenient forum or that the venue of the suit, action or proceeding is improper. The Company and the Investors consent to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing in this paragraph shall affect or limit any right to serve process in any other manner permitted by law.

(c) NOTICES. Any notice or other communication required or permitted to be given hereunder shall be in writing by facsimile, mail or personal delivery and shall be effective upon actual receipt of such notice. The addresses for such communications shall be:

to the Company:

StemCells, Inc.
525 Del Rey Avenue, Suite C
Sunnyvale, CA 92887
Telephone: (408) 731-8670
Facsimile: (408) 731-8674
Attention: President

with a copy to:

Ropes & Gray
One International Place
Boston, MA 02110
Telephone: (617) 951-7000
Facsimile: (617) 951-7050
Attention: Geoffrey B. Davis, Esq.

to Mark Levin:

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with a copy to:

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to Irving L. Weissman, M.D.:

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with a copy to:

Any party hereto may from time to time change its address for notices by giving at least five days' written notice of such changed address to the other parties hereto.

(d) INDEMNITY. Each party shall indemnify each other party against any loss, cost or damages (including reasonable attorney's fees) incurred as a

result of such parties' breach of any representation, warranty, covenant or agreement in this Agreement, including, without limitation, any enforcement of this indemnity.

(e) WAIVERS. No waiver by any party of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right accruing to it thereafter. The representations and warranties and the agreements and covenants of the Company and each Investor contained herein shall survive the Closing.

(f) EXECUTION IN COUNTERPART. This Agreement may be executed in two or more counterparts, all of which shall be considered one and the same agreement, it being understood that all parties need not sign the same counterpart.

(g) SIGNATURES. Facsimile signatures shall be valid and binding on each party submitting the same.

(h) ENTIRE AGREEMENT; AMENDMENT. This Agreement, together with the Purchase Agreement, the Certificate, the Warrants and the agreements and documents contemplated hereby and thereby, contains the entire understanding and agreement of the parties, and may not be amended, modified or terminated except by a written agreement signed by the Company plus the Holders of 75% of the Preferred Shares issued under the Purchase Agreement to that date; provided that for the purposes of this Section 12(h)) the Holders of Common Shares still entitled to registration rights under this Agreement will be deemed to still be Holders of that number of Preferred Shares which were converted into such number of Common Shares issued upon conversion which are still held by them.

(i) GOVERNING LAW. This Agreement and the validity and performance of the terms hereof shall be governed by and construed in accordance with the laws of the State of California applicable to contracts executed and to be performed entirely within such state, except to the extent that the law of the State of Delaware regulates the Company's issuance of securities.

(j) JURY TRIAL. EACH PARTY HERETO WAIVES THE RIGHT TO A TRIAL BY JURY.

(k) TITLES. The titles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

(l) NO STRICT CONSTRUCTION. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rule of strict construction will be applied against any party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the date first above written.

STEMCELLS, INC.

By: ----------

Name: George W. Dunbar, Jr.
Title: Acting President and CEO

Mark Levin

Irving L. Weissman, M.D.

THE SCHEDULE CONTAINS SUMMARY INFORMATION EXTRACTED FROM THE CONSOLIDATED STATEMENT OF EARNINGS FOR THE SIX MONTHS ENDED JUNE 30, 2000 AND THE CONSOLIDATED BALANCE SHEET AT JUNE 30, 2000 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

0000883975
STEMCELLS, INC.

6-MOS	
DEC-31-2000	
JUN-30-2000	
	5,535,264
	19,220,165
	0
	0
	0
	718,145
	4,728,141
	0
	32,088,460
	1,085,611
	2,775,000
	0
	1,500,000
	195,308
	25,910,319
32,088,460	
	0
	0
	0
	0
	3,738,218
	0
	(142,566)
	0
	0
	0
	0
	0
	0
	(2,325,964)
	(0.12)
	(0.00)