

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

FORM 10-Q

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

For the quarter ended:
September 30, 1997

0-19871
Commission File Number

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

DELAWARE

(State or other jurisdiction of
incorporation or organization)

94-3078125

(I.R.S. Employer
identification No)

701 GEORGE WASHINGTON HIGHWAY
LINCOLN, RI 02865

(Address of principal executive offices including zip code)

(401) 288-1000

(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 No

At October 31, 1997, there were 17,813,502 shares of Common Stock, \$.01 par
value, issued and outstanding. There were no issued and outstanding shares of
Preferred Stock.

CYTOTHERAPEUTICS, INC.

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PART I--ITEM 1--FINANCIAL STATEMENTS

CYTOTHERAPEUTICS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS

	SEPTEMBER 30, 1997 (UNAUDITED)	DECEMBER 31, 1996 (AUDITED)
Assets		
Current assets:		
Cash and cash equivalents.....	\$ 6,394,522	\$ 19,921,584
Marketable securities.....	20,224,529	22,685,855
Receivables from collaborative agreement.....	130,294	70,681
Other current assets.....	1,789,560	1,074,091
Total current assets.....	28,538,905	43,752,211
Property, plant and equipment, net.....	15,832,406	10,732,102
Other assets.....	5,578,719	3,912,430
Total assets.....	\$ 49,950,030	\$ 58,396,743
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses.....	\$ 5,316,015	\$ 4,159,769
Deferred revenue.....	1,766,592	1,859,092
Current maturities of capitalized lease obligations.....	454,057	553,557
Current maturities of long term debt.....	626,244	695,570
Total current liabilities.....	8,162,908	7,267,988
Capitalized lease obligations, less current maturities.....	3,631,250	3,971,594
Long term debt, less current maturities.....	3,832,694	4,251,008
Redeemable common stock.....	6,411,712	8,158,798
Stockholders' equity		
Common stock.....	172,390	156,144
Additional paid in capital.....	119,580,825	107,649,659
Accumulated deficit.....	(89,949,843)	(72,922,674)
Deferred compensation.....	(1,773,256)	(90,118)
Cumulative translation adjustment.....	(115,276)	(60,416)
Unrealized gain (loss) on marketable securities.....	(3,374)	14,760
Total stockholders' equity.....	27,911,466	34,747,355
Total liabilities and stockholders' equity.....	\$ 49,950,030	\$ 58,396,743

See accompanying notes to condensed consolidated financial statements.

PART I--ITEM 1--FINANCIAL STATEMENTS

CYTOTHERAPEUTICS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(UNAUDITED)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	1997	1996	1997	1996
Revenue from collaborative arrangements.....	\$ 1,798,552	\$ 1,790,665	\$ 8,740,038	\$ 5,305,514
Operating expenses:				
Research and development.....	4,636,541	4,205,121	13,735,768	12,285,621
Acquired research and development.....	8,312,422		8,312,422	
General and administrative.....	1,377,468	1,611,152	4,858,815	4,018,421
	14,326,431	5,816,273	26,907,005	16,304,042
Loss from operations.....	(12,527,879)	(4,025,608)	(18,166,967)	(10,998,528)
Other income (expense):				
Investment income.....	409,900	525,773	1,526,299	1,733,042
Interest expense.....	(51,047)	(162,718)	(297,141)	(467,458)
Other income (expense).....	21,420	54,394	(89,360)	396,894
	380,273	417,449	1,139,798	1,662,478
Net loss.....	(\$ 12,147,606)	(\$ 3,608,159)	(\$ 17,027,169)	(\$ 9,336,050)
Net loss per share.....	(\$ 0.73)	(\$ 0.23)	(\$ 1.03)	(\$ 0.61)
Shares used in calculation.....	16,629,152	15,413,723	16,533,152	15,352,760

See accompanying notes to condensed consolidated financial statements.

PART I--ITEM 1--FINANCIAL STATEMENTS

CYTOTHERAPEUTICS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(UNAUDITED)	NINE MONTHS ENDED SEPTEMBER 30,	
	1997	1996
	-----	-----
Cash flows from operating activities:		
Net loss.....	(\$ 17,027,169)	(\$ 9,336,050)
Adjustments to reconcile net loss to net cash used for operating activities:		
Depreciation and amortization.....	1,452,212	1,218,629
Acquired research and development.....	8,312,422	
Compensation expense relating to the grant of stock options.....	39,515	46,592
Loss on sale of fixed assets.....	1,434	
Changes in operating assets and liabilities.....	(1,225,959)	234,226
	-----	-----
Net cash used in operating activities.....	(8,447,545)	(7,836,603)
	-----	-----
Cash flows from investing activities:		
Proceeds from sale of marketable securities.....	15,020,093	12,800,806
Purchases of marketable securities.....	(12,576,903)	(3,083,620)
Purchase of property, plant and equipment.....	(6,452,886)	(3,262,684)
Proceeds from the sale of fixed assets.....	3,926	
Acquisition of other assets.....	(611,479)	(610,892)
	-----	-----
Net cash provided by (used in) investing activities.....	(4,617,249)	5,843,610
	-----	-----
Cash flows from financing activities:		
Proceeds from the exercise of stock options.....	577,673	1,424,674
Proceeds from convertible subordinated debt.....		1,920,461
Proceeds from financing transactions.....		821,172
Principal payments under capitalized lease obligations and mortgage payable.....	(807,677)	(876,941)
	-----	-----
Net cash provided by (used in) financing activities.....	(230,004)	3,289,366
	-----	-----
Effect of exchange rate on cash and cash equivalents.....	(232,264)	
Increase (decrease) in cash and cash equivalents.....	(13,527,062)	1,296,373
Cash and cash equivalents, January 1.....	19,921,584	9,548,579
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Cash and cash equivalents, September 30.....	\$ 6,394,522	\$ 10,844,952
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See accompanying notes to condensed consolidated financial statements.

PART I - ITEM 1 - FINANCIAL STATEMENTS

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)
September 30, 1997 and 1996

NOTE 1. BASIS OF PRESENTATION

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 three and nine months ended September 30, 1997 are not necessarily indicative of the results that may be expected for the entire fiscal year ended December 31, 1997.

For further information, refer to the audited financial statements and footnotes thereto as of December 31, 1996 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. NET LOSS PER SHARE

Net loss per share is computed using the weighted average number of shares of common stock outstanding. Common equivalent shares from stock options and warrants are excluded as their effect is antidilutive.

NOTE 3. ADOPTION OF NEW ACCOUNTING PRONOUNCEMENTS

The Company will adopt Statement of Accounting Standards No. 128, Earnings per Share (EPS) which is effective for both interim and annual financial statements for periods ended after December 15, 1997. Under Statement 128, primary EPS computed in accordance with Opinion 15 will be replaced with a simpler calculation called basic EPS. Basic EPS will be calculated by dividing income available to common stockholders by the weighted average common shares outstanding. Fully dilutive EPS will not change significantly, but has been renamed diluted EPS. The adoption of Statement 128 is not expected to have any effect on the Company's financial statements since in the past common equivalent shares from stock options and warrants have been excluded as their effect is antidilutive.

In June 1997, the FASB issued Statement No. 130, "Reporting Comprehensive Income" and Statement No. 131, "Disclosures About Segments of an Enterprise and Related Information." Statement No. 130 establishes standards for reporting and display of comprehensive income and its components. Statement No. 131 establishes standards for the way that public companies report information about

operating segments in financial statements. This statement supersedes Statement No. 14, "Financial Reporting for Segments of a Business Enterprise" but retains the requirements to report information about major customers. Statements 130 and 131 are effective for the Company in fiscal 1998. The Company does not believe that the adoption of these Statements will have a material effect on the Company's financial statements.

NOTE 4. LEGAL PROCEEDINGS

The Company has settled its dispute with NeuroSpheres Ltd. The action in the United States District Court and its counterpart actions in Calgary, as well as all arbitration proceedings have been discontinued. Under the terms of the settlement, the Company has an exclusive royalty-bearing license to growth-factor responsive stem cells for transplantation. NeuroSpheres has an option to acquire co-exclusive rights in exchange for an up front payment of \$5,000,000. NeuroSpheres' option expires in 1998, if unexercised. The parties have no further research obligations to each other.

NOTE 5. STEMCELLS MERGER

In September 1997, a merger of a wholly-owned subsidiary of the Company and StemCells, Inc. was completed. Through the merger, the Company acquired StemCells for a purchase price totaling approximately \$9,443,000, consisting of 1,580,000 new shares of the Company's Common Stock, \$.01 par value valued at \$7,900,000, the assumption of certain liabilities of \$934,000 and transaction costs of \$609,000. The purchase price was allocated, through a valuation, to license agreements valued at \$1,131,000 to be amortized over three years and acquired research and development of \$8,312,000 which has been expensed. As part of the acquisition of StemCells, Richard M. Rose, M.D., became President, Chief Executive Officer and a Director of CytoTherapeutics and Dr. Irving Weissman became a Director of CytoTherapeutics. Upon consummation of the merger, the Company entered into consulting arrangements with the principal scientific founders of StemCells; Dr. Irving Weissman, Dr. Fred H. Gage and Dr. David Anderson. Each principal founder will join the Company's Scientific Advisory Board with Dr. Weissman serving as the Chairman of the Scientific Advisory Board.

To attract and retain Drs. Rose, Weissman, Gage and Anderson, and to expedite the progress of the Company's stem cell program, the Company awarded these individuals options to acquire a total of approximately 1.6 million shares of the Company's Common Stock, at an exercise price of \$5.25 per share; approximately 100,000 of these options are exercisable immediately, 1,031,000 of these options vest and become exercisable only on the achievement of specified milestones related to the Company's stem cell development program and the remaining 469,000 options vest over eight years. In connection with the 469,000 options, the Company has recorded deferred compensation of \$1,750,000 which will be amortized over an eight year period. The Company has also designated a pool of 400,000 options to be granted to persons in a position to make a significant contribution to the success of the stem cells program.

Conduct of the stem cells research will be conducted pursuant to the provisions of an agreement between the Company and Drs. Weissman and Gage providing for a two year research plan. If the goals of the research plan are accomplished, the Company has agreed to fund continuing stem cells research. Increases in stem cells research funding of not more than 25% a year will be funded by the Company as long as the goals of the research plan are being met, provided, however, that the Company will retain the option of ceasing or reducing neural stem cell research even if all research plan goals are met by accelerating the vesting of all still-achievable performance based options and ceasing or reducing non-neural stem cell research even if all plan goals are being met by affording the scientific research founders the opportunity to continue development of the non-neural stem cell research by licensing the technology related to such research to the founders in exchange for a payment to the Company equal to all funding for such research, plus royalty payments.

NOTE 6. SUBSEQUENT EVENT

In October 1997, the Company completed a series of transactions which resulted in the establishment of its previously 50%-owned Swiss subsidiary, Modex Therapeutiques, S.A., as an independent company. In the transactions, the Company reduced its ownership interest from 50% to approximately 25% in exchange for \$4 million cash and elimination of its prior contingent obligation to contribute an additional Sfr 2.4 million (approximately \$1.7 million) to Modex in July 1998. In the transactions, all of the put and call arrangements between the Company and other stockholders of Modex were eliminated and the Company forgave approximately \$450,000 due from Modex to the Company. The Company expects to record a gain on the transactions of approximately \$2,000,000.

The Company and Modex also modified the terms of their existing royalty-bearing Cross License Agreement to (i) expand the field in which Modex is exclusively licensed to apply the Company's proprietary encapsulated cell technology to include, in addition to the original field of diabetes, obesity and anemia, the treatment of hemophilia A and B utilizing Factor VIII and/or Factor IX and two additional applications to be agreed to by the Company and Modex; (ii) eliminate the requirement to make future milestone payments to Modex of up to 300,000 shares of the Company's Common Stock; (iii) limit the scope of the Company's technology licensed to Modex to existing and future encapsulation technology; and (iv) specify the terms under which the Company will manufacture any products Modex may develop based on the Company's technology and grant Modex an option to manufacture or have manufactured such products on payment of a higher royalty. The Cross License Agreement continues to provide for the payment of royalties from Modex to the Company on the sale of any licensed products. The revised agreement similarly limits the scope of the Modex technology exclusively licensed, on a royalty-bearing basis, to the Company for the application of diseases, conditions and disorders of the central nervous system to existing and future encapsulation technology and certain additional existing technology. In addition to their purchase of Modex Common Stock from the Company, the investors participating in the transaction, invested \$1.6 million directly in Modex.

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 three and nine months ended September 30, 1997 and 1996 should be read in conjunction with the accompanying unaudited condensed consolidated financial statements and the related footnotes thereto.

This report may contain certain forward-looking statements regarding, among other things, the Company's results of operations, the progress of the Company's product development and clinical programs, the need for, and timing of, additional capital and capital expenditures, partnering prospects, the need for additional intellectual property rights, effects of regulations, the need for additional facilities and potential market opportunities. The Company's actual results may vary materially from those contained in such forward-looking statements because of risks to which the Company is subject such as risks of delays in research, development and clinical testing programs, obsolescence of the Company's technology, lack of available funding, competition from third parties, failure of the Company's collaborators to perform, regulatory constraints, litigation and other risks to which the Company is subject. See "Cautionary Factors Relevant to Forward-Looking-Information" filed herewith as Exhibit 99 and incorporated herein by reference.

Overview

Since its inception in August 1988, the Company has been primarily engaged in research and development of human therapeutic products. No revenues have been derived from the sale of any products, and the Company does not expect to receive revenues from product sales for at least several years. The Company expects that its research and development expenditures will increase substantially in future years as research and product development efforts accelerate and clinical trials are initiated or broadened. The Company has incurred annual operating losses since inception and expects to incur substantial operating losses in the future. As a result, the Company is dependent upon external financing from equity and debt offerings and revenues from collaborative research arrangements with corporate sponsors to finance its operations. The Company's 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.

Results of Operations

Three months ended September 30, 1997 and 1996

For the quarter ended September 30, 1997 and 1996, revenues from collaborative

agreements totaled \$1,799,000 and \$1,791,000, respectively. The revenues were earned solely from a Development, Marketing and License Agreement with Astra AB, which was signed in March 1995.

Research and development expenses totaled \$4,637,000 for the three months ended September 30, 1997, compared with \$4,205,000 for the same period in 1996. The increase of \$432,000, or 10%, from 1996 to 1997 is principally due to increases in the number of scientists and increased spending for safety and toxicology studies.

Acquired research and development consists of a one-time charge of \$8,312,000 related to the acquisition of StemCells, Inc.

General and administrative expenses were \$1,377,000 for the three months ended September 30, 1997, compared with \$1,611,000 for the same period in 1996. The decrease of \$234,000, or 15%, from 1996 to 1997 was primarily attributable to a one-time charge, in 1996, for consulting costs attributable to the establishment of Modex Therapeutiques SA.

Interest income for the three months ended September 30, 1997 and 1996 was \$410,000 and \$526,000, respectively. The decrease in interest income in 1997 is attributable to the lower average balances, \$28,612,000 vs. \$37,463,000 in the third quarter of 1997 and 1996, respectively.

Interest expense was \$51,000 for the three months ended September 30, 1997, compared with \$163,000 for the same period in 1996. The decrease from 1996 to 1997 was attributable to the capitalization of interest for the new facility of \$112,000 in 1997.

Net loss for the three months ended September 30, 1997 was \$12,148,000, or \$0.73 per share, as compared to net loss of \$3,608,000, or \$0.23 per share, for the comparable period in 1996. The large increase in 1997 is attributable to a one-time charge of \$8,312,000 for acquired research and development related to the purchase of StemCells, Inc.

Results of Operations

Nine months ended September 30, 1997 and 1996

For the nine months ended September 30, 1997 and 1996, revenues from collaborative agreements totaled \$8,740,000 and \$5,306,000, respectively. The revenues were earned primarily from a Development, Marketing and License Agreement with Astra AB, which was signed in March 1995. Included in the 1997 revenues is a \$3,000,000 milestone payment from Astra related to the Phase II clinical program for the Company's pain control implant.

Research and development expenses totaled \$13,736,000 for the nine months ended September 30, 1997, compared with \$12,286,000 for the same period in 1996. The increase of \$1,450,000, or 12%, from 1996 to 1997 is principally due to increases in the number of scientists and an additional six months of expense for Modex Therapeutiques which was founded in July 1996.

Acquired research and development consists of a one-time charge of \$8,312,000 related to the acquisition of StemCells, Inc.

General and administrative expenses were \$4,859,000 for the nine months ended September 30, 1997, compared with \$4,018,000 for the same period in 1996. The increase of \$841,000, or 21%, from 1996 to 1997 was primarily attributable to increased spending for legal fees associated with the NeuroSpheres litigation, patents, recruiting fees and other professional services, as well as, an additional six months of expenses for Modex Therapeutiques which was founded in July 1996.

Interest income for the nine months ended September 30, 1997 and 1996 was \$1,526,000 and \$1,733,000, respectively. The decrease in interest income in 1997 is primarily attributable to the lower average balances, \$34,608,000 vs. \$39,505,000 for the first nine months of 1997 and 1996, respectively

Interest expense was \$297,000 for the nine months ended September 30, 1997, compared with \$467,000 for the same period in 1996. The decrease from 1996 to 1997 was attributable to the capitalization of interest for the new facility in the amount of \$211,000.

Other income in the amount of \$397,000 consists primarily of funds received in May 1996 for settlement of a legal suit filed on behalf of the Company.

Net loss for the nine months ended September 30, 1997 was \$17,027,000 or \$1.03 per share, as compared to net loss of \$9,336,000, or \$0.61 per share, for the comparable period in 1996. The large increase in 1997 is attributable to a one-time charge of \$8,312,000 for acquired research and development related to the purchase of StemCells, Inc.

Liquidity and Capital Resources

Since its inception, the Company has financed its 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.

The Company had unrestricted cash, cash equivalents and marketable securities totaling \$26,619,000 at September 30, 1997. Cash equivalents and marketable securities are invested in agencies of the U.S. government, investment grade corporate bonds and money market funds.

The Company completed construction of a new headquarters and laboratory facility in September 1997 at a cost of approximately \$8,000,000. In October 1996, the Company obtained a line of credit to finance the new facility in the amount of \$5,500,000. This line of credit is secured by a mortgage on the new facility. The Company had borrowed \$1,450,000 under this agreement as of September 30, 1997. The unused commitment expired October 31, 1997. Quarterly principal payments of 1/40 of the loan balance commence September 30, 1997 with the balance due at maturity, October 2001. The loan agreement requires the Company provide full cash collateral if the Company's unencumbered cash balance falls below \$18,000,000 and to comply with certain financial covenants. The Company is currently in negotiations regarding the possible sale and leaseback of such facility.

In May 1996, the Company secured an equipment loan facility with a bank in the amount of \$2,000,000. The Company has borrowed \$741,000 under this agreement as of September 30, 1997. The loan requires interest payments only for the first two years; principal payments are payable over a three-year period beginning May 1998. Any unused commitment expires on May 15, 1998. The loan is secured by equipment purchased with the proceeds of the credit facility.

In October 1997, the Company completed a series of transactions which resulted in the establishment of its previously 50%-owned Swiss subsidiary, Modex Therapeutiques, S.A., as an independent company. In the transactions, the Company reduced its ownership interest from 50% to approximately 25% in exchange for \$4 million cash and elimination of its prior contingent obligation to contribute an additional Sfr 2.4 million (approximately \$1.7 million) to Modex in July 1998. In the transactions, all of the put and call arrangements between the Company and other stockholders of Modex were eliminated and the Company forgave approximately \$450,000 due from Modex to the Company. The Company expects to record a gain on the transaction of approximately \$2,000,000.

The Company and Modex also modified the terms of their existing royalty-bearing Cross License Agreement to (i) expand the field in which Modex is exclusively licensed to apply the Company's proprietary encapsulated cell technology to include, in addition to the original field of diabetes, obesity and anemia, the treatment of hemophilia A and B utilizing Factor VIII and/or Factor IX and two additional applications to be agreed to by the Company and Modex; (ii) eliminate the requirement to make future milestone payments to Modex of up to 300,000 shares of the Company's Common Stock; (iii) limit the scope of the Company's technology licensed to Modex to existing and future

encapsulation technology; and (iv) specify the terms under which the Company will manufacture any products Modex may develop based on the Company's technology and grant Modex an option to manufacture or have manufactured such products on payment of a higher royalty. The Cross License Agreement continues to provide for the payment of royalties from Modex to the Company on the sale of any licensed products. The revised agreement similarly limits the scope of the Modex technology exclusively licensed, on a royalty-bearing basis, to the Company for the application of diseases, conditions and disorders of the central nervous system to existing and future encapsulation technology and certain additional existing technology. In addition to their purchase of Modex Common Stock from the Company, the investors participating in the transaction, invested \$1.6 million directly in Modex.

In September 1997, a merger of a wholly-owned subsidiary of the Company and StemCells, Inc. was completed. Through the merger, the Company acquired StemCells for a purchase price totaling approximately \$9,443,000 consisting of 1,580,000 new shares of the Company's Common Stock, \$.01 par value valued at \$7,900,000, the assumption of certain liabilities of \$934,000 and transaction costs of \$609,000. The purchase price was allocated, through a valuation, to license agreements valued at \$1,131,000 to be amortized over three years and acquired research and development of \$8,312,000 which has been expensed. As part of the acquisition of StemCells, Richard M. Rose, M.D. , became President, Chief Executive Officer and a Director of CytoTherapeutics and Dr. Irving Weissman became a Director of CytoTherapeutics. Upon consummation of the merger, the Company entered into consulting arrangements with the principal scientific founders of StemCells; Drs. Weissman, Gage and Anderson. Each such scientific founder will join the Company's Scientific Advisory Board.

To attract and retain Drs. Rose, Weissman, Gage and Anderson, and to expedite the progress of the Company's stem cell program, the Company awarded these individuals options to acquire a total of approximately 1.6 million shares of the Company's Common Stock, at an exercise price of \$5.25 per share; approximately 100,000 of these options are exercisable immediately, 1,031,000 of these options vest and become exercisable only on the achievement of specified milestones related to the Company's stem cell development program and the remaining 469,000 options vest over eight years. In connection with the 469,000 options, the Company has recorded deferred compensation of \$1,750,000 which will be amortized over an eight year period. The Company has also designated a pool of 400,000 options to be granted to persons in a position to make a significant contribution to the success of the stem cells program.

Conduct of the stem cells research will be conducted pursuant to the provisions of an agreement between the Company and Drs. Weissman and Gage providing for a two year research plan. If the goals of the research plan are accomplished, the Company has agreed to fund continuing stems cells research. Increases in stem cells research funding of not more than 25% a year will be funded by the Company as long as the goals of the research plan are being met, provided, however, that the Company will retain the option of ceasing or reducing neural stem cell research even if all research plan goals are met by accelerating the vesting of all still-achievable performance based options and ceasing or reducing non-neural stem cell research even if all plan goals are being met by affording the scientific research founders the opportunity to continue development of the non-neural stem cell research by licensing the technology related to such research to the founders in exchange for a payment to the Company equal to all funding for such research, plus royalty payments.

In April 1997, CytoTherapeutics entered into an agreement with NeuroSpheres Ltd. replacing all previous agreements and resolving its dispute with NeuroSpheres. The pending action in the United State District Court and its counterpart actions in Calgary, as well as all arbitration proceedings have been discontinued. Under the terms of the settlement, the Company has an exclusive royalty-bearing license to growth-factor responsive stem cells for transplantation. NeuroSpheres has an option to acquire co-exclusive rights in exchange for an up front payment of \$5,000,000. NeuroSpheres' option expires in 1998, if unexercised. The parties have no further research obligations to each other.

In February 1997, CytoTherapeutics and Cognetix, Inc. entered into a Collaboration and Development Agreement to screen selected peptides isolated by Cognetix for possible development into therapeutic products aimed at a broad range of human disease states using CytoTherapeutics' cell-based delivery technology. Based on in vitro data, a screening committee comprised of an equal number of representatives from CytoTherapeutics and Cognetix will determine which compounds to select for in vivo studies and possible clinical trials. Continuation of the agreement is contingent upon meeting an agreed upon proof of concept test. The companies will generally share expenses associated with the development of any specific product candidate and any resulting revenues, except as otherwise determined on a product-by-product basis. As part of the agreement with Cognetix, CytoTherapeutics has purchased \$250,000 of Cognetix preferred stock and subject to certain milestones, is obligated to purchase up to a total of \$1,750,000 of Cognetix stock over the next year. In July 1997, the Company loaned \$250,000 to Cognetix which was repaid with interest in October 1997.

In November 1996, the Company signed collaborative development and licensing agreements with Genentech, Inc. relating to the development of products using the Company's technology to deliver certain of Genentech's proprietary growth factors to treat Parkinson's disease, Huntington's disease and amyotrophic lateral sclerosis ("ALS").

Under the terms of the agreement for Parkinson's disease, Genentech purchased 829,171 shares of common stock for \$8,300,000 to fund development of products to treat Parkinson's disease. Additional equity purchases and other funding by Genentech is available for future clinical development as determined by the parties. Genentech has the right, in its discretion, to terminate the Parkinson's program at specified milestones in the program. If the Parkinson's program is terminated and the funds the Company received from the sale of stock to Genentech pursuant to the Parkinson's agreement exceed the expenses incurred by the Company in connection with such studies by more than \$1 million, Genentech has the right to require the Company to repurchase from Genentech shares of Company Common Stock having a value equal to the amount of the overfunding, based upon the share price paid by Genentech. As such, the Common Stock purchased by Genentech is classified as Redeemable Common Stock until such time as the related funds are expended on the program. Upon commercialization, Genentech and the Company will share profits in the U.S. at an agreed upon percentage, and Genentech will pay the Company a royalty based upon deals outside the U.S. The Company retains manufacturing rights and will be paid manufacturing costs for products sold.

The Company also licensed certain growth factors for the treatment of Huntington's disease and amyotrophic lateral sclerosis ("ALS"). Under the terms of the agreements, the Company is responsible for conducting and funding all preclinical and clinical development, subject to specified rights of Genentech to participate in the development and marketing of the proposed products. Should Genentech share in the development cost of the proposed products, the companies will share profits at a negotiated percentage upon commercialization. Should Genentech elect not to participate in the development, upon commercialization, the Company will pay Genentech an agreed upon royalty based upon sales. These agreements supersede the Development Collaboration and License Agreement between the Company and Genentech entered into in March 1994.

In March 1995, the Company signed a collaborative research and development agreement with Astra for the development and marketing of certain encapsulated-cell products to treat pain. Astra made an initial, nonrefundable payment of \$5,000,000, a milestone payment of \$3,000,000 in the first quarter of 1997 which was recognized as revenue in the second quarter of 1997 and may make up to \$13,000,000 in additional payments subject to the achievement of certain development milestones. Under the agreement, the Company is 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, the Company expects to receive annual research payments from Astra of \$5 million to \$7 million, which the Company expects should approximate the research and development costs incurred by the Company under the plan. Subject to the successful development of such products and obtaining necessary regulatory approvals, Astra is obligated to conduct all clinical trials of products arising from the collaboration and to seek approval for their sale and use. Astra has the exclusive worldwide right to market products covered by the agreement. Until the later of either the last to expire of all patents included in the licensed technology or a specified fixed term, the Company is entitled to a royalty on the worldwide net sales of such products in return for the license granted to Astra and the Company's obligation to manufacture and supply products. Astra has the right to terminate the agreement after April 1, 1998.

Substantial additional funds will be required to support the Company's research and development programs, for acquisition of technologies and intellectual property rights, for preclinical and clinical testing of its anticipated products, pursuit of regulatory approvals, acquisition of capital equipment, expansion of laboratory and office facilities, establishment of production capabilities and for general and administrative expenses. Until the Company's operations generate significant revenues from product sales, cash reserves and proceeds from equity and debt offerings, and funding from collaborative arrangements will be used to fund operations.

The Company intends to pursue opportunities to obtain additional financing in the future through equity and debt financings, lease agreements related to capital equipment, grants and collaborative research arrangements. The source, timing and availability of any future financing will depend principally upon equity market conditions, interest rates and, more specifically, on the Company's continued progress in its exploratory, preclinical and clinical development programs. There can be no assurance that such funds will be available on favorable terms, if at all.

The Company expects that its existing capital resources, revenues from collaborative agreements and income earned on invested capital will be sufficient to fund its operations into the first half of 1999. The Company's cash requirements may vary, however, depending on numerous factors. Lack of necessary funds may require the Company to delay, scale back or eliminate some or all of its research and product development programs and/or its capital expenditures or to license its potential products or technologies to third parties.

PART II - ITEM 1

LEGAL PROCEEDINGS

None.

PART II - ITEM 6

EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibits

- Exhibit 10.65 Agreement and Plan of Merger dated as of August 13, 1997
between StemCells, Inc., the Company, and CTI
Acquisition Corp.
- Exhibit 10.66 Employment agreement, Richard M. Rose, M.D.,
dated as of September 25, 1997
- Exhibit 10.67 Consulting agreement dated as of September 25, 1997
between Dr. Irving Weissman and the Registrant.
- Exhibit 99 Cautionary factors relevant to forward looking statements.

(b) Reports on Form 8-K

The Registrant filed a Current Report on Form 8-K on August 13, 1997
relating to the execution of a merger agreement to acquire StemCells,
Inc.

The Registrant filed a Current Report on Form 8-K on September 26, 1997
relating to the consummation of the acquisition of StemCells, Inc.

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.

CYTOTHERAPEUTICS, INC.

(Name of Registrant)

November 14, 1997

(Date)

/s/ John S. McBride

Senior Vice President and Chief
Financial Officer
(principal financial officer and
principal accounting officer)

AGREEMENT AND PLAN OF MERGER

BY AND AMONG

CytoTherapeutics, Inc.

and

CTI Acquisition, Corp.

and

StemCells, Inc.

Dated as of August 13, 1997

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AGREEMENT AND PLAN OF MERGER

AGREEMENT AND PLAN OF MERGER, dated as of August 13, 1997 (this "Agreement"), among CytoTherapeutics, Inc., a Delaware corporation ("Parent"), CTI Acquisition, Corp., a California corporation and a wholly owned subsidiary of Parent ("Merger Sub") and StemCells, Inc., a California corporation (the "Company").

WITNESSETH:

WHEREAS, the Boards of Directors of Parent, Merger Sub and the Company have each determined that it is advisable and in the best interests of their respective stockholders for Parent to enter into a business combination with the Company upon the terms and subject to the conditions set forth herein;

WHEREAS, in furtherance of such combination, the Boards of Directors of Parent and Merger Sub have each approved the merger of Merger Sub with and into the Company (the "Merger") in accordance with the applicable provisions of the California Corporation Code (the "CCC") upon the terms and subject to the conditions set forth herein;

WHEREAS, Parent, Merger Sub and the Company intend, by approving resolutions authorizing this Agreement, to adopt this Agreement as a plan of reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended (the "Code"), and the regulations promulgated thereunder; and

WHEREAS, pursuant to the Merger, each outstanding share (a "Share") of the Company's capital stock, including the Company's common stock, \$.001 par value (the "Company Common Stock") and the Company's Class B common stock, \$.001 par value (the "Class B Common Stock"), shall be converted into the right to receive shares of Parent's common stock, \$.01 par value ("Parent Common Stock" and together with the Company Common Stock, "Company Stock"), upon the terms and subject to the conditions set forth herein;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements herein contained, and intending to be legally bound hereby, Parent, Merger Sub and the Company hereby agree as follows:

ARTICLE I

THE MERGER

SECTION 1.1 The Merger.

(a) Effective Time. At the Effective Time (as defined in Section 1.2), and subject to and upon the terms and conditions of this Agreement and the CCC, Merger Sub shall be merged with and into the Company, the separate corporate existence of Merger Sub shall cease, and the Company shall continue as the surviving corporation. The Company as the surviving corporation after the Merger is hereinafter sometimes referred to as the "Surviving Corporation."

(b) Closing. Unless this Agreement shall have been terminated and the transactions herein contemplated shall have been abandoned pursuant to Section 8.1 and subject to the satisfaction or waiver of the conditions set forth in Article VII, the consummation of the Merger (the "Closing") will take place as promptly as practicable (and in any event within two business days) after satisfaction or waiver of the conditions set forth in Article VII, at the offices of Ropes & Gray, One International Place, Boston, Massachusetts, unless another date, time or place is agreed to in writing by the parties hereto.

(c) Escrow. At the Effective Time, Parent shall deliver to State Street Bank & Trust Company (or such other escrow agent as the parties may agree), or any successor or other escrow agent (the "Escrow Agent") appointed pursuant to the Escrow Agreement (as hereinafter defined) the number of shares of Parent Common Stock as set forth on Schedule 1 to the Escrow Agreement, such shares to be held and applied in accordance with the Escrow Agreement (the "Escrow Shares").

(d) Stockholders Representative. The Principal Stockholders, by virtue of their approval of the Agreement, will be deemed to have irrevocably constituted and appointed, effective as of the Effective Time, Richard M. Rose (together with his permitted successors, the "Stockholder Representative"), as their true and lawful agent and attorney-in-fact to enter into any agreement in connection with the transactions contemplated by this Agreement and any transactions contemplated by the Escrow Agreement, to exercise all or any of the powers, authority and discretion conferred on him under any such agreement, to waive any terms and conditions of any such agreement (other than the Merger Consideration), to give and receive notices on their behalf and to be their exclusive representative with respect to any matter, suit, claim, action or proceeding arising with respect to any transaction contemplated by any such agreement, including, without limitation, the defense, settlement or compromise of any claim, action or proceeding for which the Parent or the Merger Sub may be entitled to indemnification and the Stockholder Representative agrees to act as, and to undertake the duties and responsibilities of, such agent and attorney-in-fact. This power of attorney is coupled with an interest and is irrevocable. The Stockholder Representative shall not be liable

for any action taken or not taken by him in connection with his obligations under this Agreement (i) with the consent of Principal Stockholders who, as of the date of this Agreement, owned a majority in number of the outstanding shares of Company Common Stock owned by the Principal Stockholders or (ii) in the absence of his own gross negligence or wilful misconduct. If the Stockholder Representative shall be unable or unwilling to serve in such capacity, his successor shall be named by Principal Stockholders holding a majority of the shares of Company Common Stock owned by the Principal Stockholders at the Effective Time who shall serve and exercise the powers of Stockholder Representative hereunder. For purposes of this Agreement, the "Principal Stockholders" shall be those natural persons identified in the Escrow Agreement as being parties to the Escrow Agreement.

(e) Closing Certificate; Exchange Ratio. At the Closing, the Company shall deliver to Parent a certificate, in form and substance satisfactory to Parent and signed by its Chief Executive Officer and Chief Financial Officer (the "Company Closing Certificate"), certifying (i) the number of outstanding shares of Company Common Stock and Class B Common Stock, as of the date of the Closing, (ii) the maximum number of shares of Company Common Stock and Class B Common Stock issuable upon the conversion or exercise of all options, warrants, and other securities of the Company convertible into or exercisable for shares of Company Common Stock that are outstanding on the Closing Date (whether or not such securities are then exercisable in full), and (iii) the Excess Company Expenses (as defined in Section 8.3). The aggregate number of shares of Parent Common Stock to be issued in the Merger in exchange for each share of Company Common Stock shall be the result of dividing (i) the result of \$7,900,000 less the Excess Company Expenses (as defined in Section 8.3) divided by \$5.00, by (ii) the number of shares of Company Common Stock and shares of Class B Common Stock outstanding on the date of the Closing, plus the maximum number of shares of Company Common Stock or Class B Common Stock issuable upon the conversion or exercise of all options, warrants, preferred stock and other securities of the Company convertible into or exercisable for shares of Company Common Stock (other than outstanding shares of Class B Common Stock) or Class B Common Stock that are outstanding on the Closing Date (whether or not such securities are then exercisable in full) (such result, expressed as a ratio of the number of shares of Parent Common Stock to be issued in the Merger for each then outstanding share of Company Common Stock, is hereinafter referred to as the "Exchange Ratio"). The number of shares of Common Stock issuable upon conversion of the Convertible Promissory Notes and the Stock Purchase Warrants (each as defined in Section 2.3 below) shall be deemed to be 18,503.

SECTION 1.2 Effective Time. As promptly as practicable after the satisfaction or waiver of the conditions set forth in Article VII, the parties hereto shall cause the Merger to be consummated by filing a duly executed and delivered Agreement of Merger in a form reasonably acceptable to the Company and Parent and as contemplated by the CCC (the "Merger Agreement"), with the Secretary of State of the State of California, in such form as required by, and executed in accordance with the relevant provisions of, the CCC (the time of such filing being the "Effective Time").

SECTION 1.3 Effect of the Merger. At the Effective Time, the effect of the Merger shall be as provided in this Agreement, the Merger Agreement and the applicable provisions of the CCC. Without limiting the generality of the foregoing, and subject thereto, at the Effective Time all the property, rights, privileges, powers and franchises of the Company and Merger Sub shall vest in the Surviving Corporation, and all debts, liabilities and duties of the Company and Merger Sub shall become the debts, liabilities and duties of the Surviving Corporation.

SECTION 1.4 Articles of Incorporation, By-Laws.

(a) Articles of Incorporation. Unless otherwise determined by Parent prior to the Effective Time, at the Effective Time the Articles of Incorporation of the Surviving Corporation, as in effect immediately prior to the Effective Time, shall be amended and restated to read as did the Articles of Incorporation of the Merger Sub immediately prior to the Effective Time, except that the name of the Surviving Corporation will remain unchanged.

(b) By-Laws. Unless otherwise determined by Parent prior to the Effective Time, the By-Laws of the Surviving Corporation, as in effect immediately prior to the Effective Time, shall be amended and restated to read as did the By-Laws of the Merger Sub immediately prior to the Effective Time, except that the name of the Surviving Corporation shall remain unchanged.

SECTION 1.5 Directors and Officers. The initial directors and officers of the Surviving Corporation shall be as follows, each to hold office in accordance with the Articles of Incorporation and By-Laws of the Surviving Corporation: Irving Weissman, M.D. - Director, Fred Gage, M.D. - Director, Seth A. Rudnick, M.D. - Director, John McBride - Director and Treasurer, Ivor Elrifi - Director and Secretary and Richard Rose - President.

SECTION 1.6 Effect on Capital Stock. At the Effective Time, by virtue of the Merger and without any action on the part of the Parent, Merger Sub, the Company or the holders of any of the following securities:

(a) Conversion of Securities.

(i) Each share of Company Common Stock issued and outstanding immediately prior to the Effective Time and each share of Class B Common Stock issued and outstanding immediately prior to the Effective Time (excluding any shares of Company Common Stock or Class B Common Stock to be canceled pursuant to Section 1.6(b) and Company Dissenting Shares (as defined in Section 1.6(c)) shall be converted, subject to Section 1.6(i), into the right to receive validly issued, fully paid and nonassessable shares ("Parent Shares") of Parent Common Stock equal to the Exchange Ratio.

(ii) Each of the Convertible Promissory Notes (as defined in Section 2.3 below) outstanding immediately prior to the Effective Time shall, in full satisfaction thereof, be converted into the right to receive the number of shares of Company Common Stock

equal to the outstanding principal balance of each such Convertible Promissory Note divided by \$11.40. The resultant number of shares of Company Common Stock shall be converted into the right to receive shares of Parent Common Stock as provided in Section 1.6(a)(i) above.

(b) Cancellation. Each share of Company Common Stock and each share of Class B Common Stock held in the treasury of the Company and each share of Company Common Stock and each share of Class B Common Stock owned by Parent, Merger Sub or any direct or indirect wholly owned subsidiary of the Company or Parent immediately prior to the Effective Time shall, by virtue of the Merger and without any action on the part of the holder thereof, cease to be outstanding, be canceled and retired without payment of any consideration therefor and cease to exist.

(c) Shares of Dissenting Holders. (a) Notwithstanding anything to the contrary contained in this Agreement, any holder of Company Common Stock or Class B Common Stock with respect to which dissenters' rights, if any, are granted by reason of the Merger under the CCC and who does not vote in favor of the Merger and who otherwise complies with Chapter 13 of the CCC shall be entitled to receive with respect to such shares (the "Company Dissenting Shares") the payment provided for by Chapter 13 of the CCC and only such payment, and shall not be entitled to receive shares of Parent Common Stock pursuant to Section 1.6(a) hereof. If any such holder fails to perfect, effectively withdraws or loses his or her dissenters' rights under the CCC, his or her Company Dissenting Shares shall thereupon be deemed to have been converted, as of the Effective Time, into the right to receive shares of Parent Common Stock pursuant to Section 1.6(a).

(d) Payments on Company Dissenting Shares. Any payments relating to the Company Dissenting Shares shall be made solely by the Surviving Corporation and no funds or other property have been or will be provided by Merger Sub or any of Parent's other direct or indirect subsidiaries for such payment.

(e) Stock Options under the 1996 Stock Option Plan.

(i) At the Effective Time, each outstanding option to purchase Company Common Stock granted under the Company's 1996 Stock Option Plan (the "Company Stock Option Plan" and each such option a "Stock Option"), whether vested or unvested, shall be deemed assumed by Parent and deemed to constitute an option to acquire, on the same terms and conditions as were applicable to such Stock Option under the Company Stock Option Plan and any other agreement to which such Stock Option is subject prior to the Effective Time, the number (rounded down to the nearest whole number) of shares of Parent Common Stock as the holder of such Stock Option would have been entitled to receive pursuant to the Merger had such holder exercised such option in full immediately prior to the Effective Time (not taking into account whether or not such option was in fact exercisable), at a price per share equal to (x) the aggregate

exercise price for Company Common Stock otherwise purchasable pursuant to such Stock Option divided by (y) the result obtained by multiplying the number of shares of Company Common Stock otherwise purchasable pursuant to such Stock Option by the Exchange Ratio (provided that in no event shall the per share exercise price under such option be less than \$.01).

(ii) As soon as practicable after the Effective Time, Parent shall deliver to each holder of an outstanding Stock Option an appropriate notice setting forth such holder's rights pursuant thereto, and such Stock Option shall continue in effect on the same terms and conditions.

(iii) Parent shall take all corporate action necessary to reserve for issuance a sufficient number of shares of Parent Common Stock for delivery pursuant to the terms set forth in this Section 1.6(e).

(iv) Subject to any applicable limitations under the Securities Act of 1933, as amended, and the rules and regulations thereunder (the "Securities Act"), Parent shall file a Registration Statement on Form S-8 (or any successor form), effective promptly following the Effective Time, with respect to the shares of Parent Common Stock issuable upon exercise of the Stock Options, and the Parent shall use all reasonable efforts to maintain the effectiveness of such registration statement (and maintain the current status of the prospectus or prospectuses relating thereto) for so long as such options shall remain outstanding.

(f) Other Stock Options.

(i) At the Effective Time, each outstanding option to purchase Company Common Stock other than the Stock Options (each a "Licensor Stock Option"), whether vested or unvested, shall be deemed assumed by Parent and deemed to constitute an option to acquire, on the same terms and conditions as were applicable to the Licensor Stock Option prior to the Effective Time, the number (rounded down to the nearest whole number) of shares of Parent Common Stock as the holder of such Licensor Stock Option would have been entitled to receive pursuant to the Merger had such holder exercised such option in full immediately prior to the Effective Time (not taking into account whether or not such option was in fact exercisable), at a price per share equal to (x) the aggregate exercise price for Company Common Stock otherwise purchasable pursuant to such Licensor Stock Option divided by (y) the result obtained by multiplying the number of shares of Company Common Stock otherwise purchasable pursuant to such Licensor Stock Option by the Exchange Ratio (provided that in no event shall the per share exercise price of such option be less than \$.01).

(ii) As soon as practicable after the Effective Time, Parent shall deliver to each holder of an outstanding Licensor Stock Option an appropriate notice setting forth

such holder's rights pursuant thereto, and such Licensor Stock Option shall continue in effect on the same terms and conditions.

(iii) Parent shall take all corporate action necessary to reserve for issuance a sufficient number of shares of Parent Common Stock for delivery pursuant to the terms set forth in this Section 1.6(f).

(g) Stock Purchase Warrants.

(i) The holders of the Stock Purchase Warrants (as defined in Section 2.3 below), by virtue of their approval of the Agreement, will be deemed to have agreed to the changes to and conversion of the Stock Purchase Warrants as follows: at the Effective Time, each outstanding Stock Purchase Warrant (as defined in Section 2.3 below) shall be deemed exercisable in full and deemed assumed by Parent and deemed to constitute a warrant to acquire, on the same terms and conditions as were applicable such Stock Purchase Warrants prior to the Effective Time, the number (rounded down to the nearest whole number) of shares of Parent Common Stock as the holder of such Stock Purchase Warrant would have been entitled to receive pursuant to the Merger had such holder exercised such Warrant option in full immediately prior to the Effective Time (not taking into account whether or not such Warrant option was in fact exercisable), at a price per share equal to (x) the aggregate exercise price for Company Common Stock otherwise purchasable pursuant to such Stock Purchase Warrant divided by (y) the result obtained by multiplying the number of shares of Company Common Stock otherwise purchasable pursuant to such Stock Purchase Warrant (assuming the Exercise Price (as defined in the Stock Purchase Warrants) is \$11.40 divided by the Exchange Ratio (provided that in no event shall the per share exercise price of such option be less than \$.01). Each of the Stock Purchase Warrants shall be deemed to be exercisable for the number of shares of Company Common Stock equal to the initial dollar amount set forth in Section 1 of each such Stock Purchase Warrant divided by \$11.40 (rounded down to the nearest whole share). The Exercise Period (as defined in the Stock Purchase Warrants) shall be deemed to be from the date of the Effective Time through an including the date five years from the date of such Stock Purchase Warrant.

(ii) As soon as practicable after the Effective Time, Parent shall deliver to each holder of an outstanding Stock Purchase Warrant an appropriate notice setting forth such holder's rights pursuant thereto, and such Stock Purchase Warrants shall continue in effect on the same terms and conditions.

(iii) Parent shall take all corporate action necessary to reserve for issuance a sufficient number of shares of Parent Common Stock for delivery pursuant to the terms set forth in this Section 1.6(g).

(h) Capital Stock of Merger Sub. Each share of common stock, \$.001 par value, of Merger Sub issued and outstanding immediately prior to the Effective Time shall be converted into and exchanged for one validly issued, fully paid and nonassessable share of common stock, \$.001 par value, of the Surviving Corporation.

(i) Adjustments to Exchange Ratio. The Exchange Ratio shall be adjusted to reflect fully the effect of any stock split, reverse split, reclassification, stock dividend (including any dividend or distribution of securities convertible into Parent Common Stock), reorganization, recapitalization or other like change with respect to Parent Common Stock occurring after the date hereof and prior to the Effective Time.

(j) Fractional Shares. No certificates or scrip representing less than one share of Parent Common Stock shall be issued upon the surrender for exchange of a certificate or certificates which immediately prior to the Effective Time represented outstanding Shares (the "Certificates"). In lieu of any such fractional share, each holder of Shares who would otherwise have been entitled to a fraction of a share of Parent Common Stock upon surrender of Certificates for exchange shall be paid upon such surrender cash (without interest) determined by multiplying (i) \$5.00 by (ii) the fractional interest of Parent Common Stock to which such holder would otherwise be entitled. As soon as practicable after determining the amount of cash, if any, to be paid to former holders of Company Common Stock with respect to any fractional shares of Parent Common Stock, the Parent shall promptly pay such amounts to such holders in accordance with Article I.

SECTION 1.7 Exchange of Certificates.

(a) Exchange Agent. Parent shall supply, or shall cause to be supplied, to or for the account of Boston Equiserve, or such other bank or trust company as shall be designated by Parent (the "Exchange Agent"), in trust for the benefit of the holders of Company Stock, for exchange in accordance with this Section 1.7, certificates evidencing the shares of Parent Common Stock issuable pursuant to Section 1.6 in exchange for outstanding shares of the Company's capital stock. All of the shares of Parent Common Stock issued in the Merger shall be issued as of and be deemed to be outstanding as of the Effective Time. Parent shall cause all such shares of Parent Common Stock to be issued in connection with the Merger to be duly authorized, validly issued, fully paid and nonassessable.

(b) Exchange Procedures. As soon as reasonably practicable after the Effective Time, Parent will instruct the Exchange Agent to mail to each holder of record of Certificates (i) a letter of transmittal (which shall specify that delivery shall be effected, and risk of loss and title to the Certificates shall pass, only upon proper delivery of the Certificates to the Exchange Agent and shall be in such form and have such other provisions as Parent may reasonably specify that are not inconsistent with the terms of this Agreement), and (ii) instructions to effect the surrender of the Certificates in exchange for the certificates evidencing the shares of Parent Common Stock. Upon surrender of a Certificate for cancellation to the Exchange Agent together with such letter

of transmittal, duly executed, and such other customary documents as may be required pursuant to such instructions, the holder of such Certificate shall be entitled to receive in exchange therefor (A) certificates evidencing that number of whole of shares of Parent Common Stock which such holder has the right to receive in accordance with the Exchange Ratio in respect of the Shares formerly evidenced by such Certificate, (B) any dividends or other distributions to which such holder is entitled pursuant to Section 1.7(c), and (C) cash in respect of fractional shares as provided in Section 1.6(h) (the shares of Parent Common Stock, dividends, distributions and cash being, collectively, the "Merger Consideration"), and the Certificate so surrendered shall forthwith be canceled. In the event of a transfer of ownership of Shares which is not registered in the transfer records of the Company as of the Effective Time, the Merger Consideration may be issued and paid in accordance with this Article I to a transferee if the Certificate evidencing such Shares is presented to the Exchange Agent, accompanied by all documents required to evidence and effect such transfer pursuant to this Section 1.7(b) and by evidence that any applicable stock transfer taxes have been paid. Until so surrendered, each outstanding Certificate that, prior to the Effective Time, represented Shares of Company Stock will be deemed from and after the Effective Time, for all corporate purposes, other than the payment of dividends and subject to Section 1.6(g), to evidence the ownership of the number of full shares of Parent Common Stock into which such shares of Company Stock shall have been so converted.

(c) Distributions With Respect to Unexchanged Parent Common Stock. No dividends or other distributions declared or made after the Effective Time with respect to shares of Parent Common Stock with a record date after the Effective Time shall be paid to the holder of any unsurrendered Certificate with respect to the shares of Parent Common Stock they are entitled to receive until the holder of such Certificate shall surrender such Certificate. Subject to applicable law, following surrender of any such Certificate, there shall be paid to the record holder of the certificates representing whole shares of Parent Common Stock issued in exchange therefor, without interest, at the time of such surrender, the amount of dividends or other distributions with a record date after the Effective Time theretofore paid with respect to such whole shares of Parent Common Stock.

(d) Transfers of Ownership. If any certificate for shares of Parent Common Stock is to be issued in a name other than that in which the Certificate surrendered in exchange therefor is registered, it will be a condition to the issuance thereof that the Certificate so surrendered will be properly endorsed and otherwise in proper form for transfer and that the person requesting such exchange will have paid to Parent or any agent designated by it any transfer or other taxes required by reason of the issuance of a certificate for shares of Parent Common Stock in any name other than that of the registered holder of the certificate surrendered, or have established to the satisfaction of Parent or any agent designated by it that such tax has been paid or is not payable.

(e) No Liability. Neither Parent, Merger Sub nor the Company shall be liable to any holder of Company Stock for any Merger Consideration delivered to a public official pursuant to

any applicable abandoned property, escheat or similar law following the passage of time specified therein.

(f) Withholding Rights. Parent or the Exchange Agent shall be entitled to deduct and withhold from the Merger Consideration otherwise payable pursuant to this Agreement to any holder of Company Stock such amounts as Parent or the Exchange Agent is required to deduct and withhold with respect to the making of such payment under the Code, or any provision of state, local or foreign tax law. To the extent that amounts are so withheld by Parent or the Exchange Agent, such withheld amounts shall be treated for all purposes of this Agreement as having been paid to the holder of the Shares in respect of which such deduction and withholding was made by Parent or the Exchange Agent.

SECTION 1.8 Stock Transfer Books. At the Effective Time, the stock transfer books of the Company shall be closed, and there shall be no further registration of transfers of Company Stock thereafter on the records of the Company.

SECTION 1.9 No Further Ownership Rights in Company Stock. The Merger Consideration delivered upon the surrender for exchange of Shares in accordance with the terms hereof shall be deemed to have been issued in full satisfaction of all rights pertaining to such Shares, and there shall be no further registration of transfers on the records of the Surviving Corporation of Shares which were outstanding immediately prior to the Effective Time. If, after the Effective Time, Certificates are presented to the Surviving Corporation for any reason, they shall be canceled and exchanged as provided in this Article I.

SECTION 1.10 Lost, Stolen or Destroyed Certificates. In the event any Certificates shall have been lost, stolen or destroyed, the Exchange Agent shall issue in exchange for such lost, stolen or destroyed Certificates, upon the making of an affidavit of that fact by the holder thereof, such shares of Parent Common Stock as may be required pursuant to Section 1.6 as well as the other Merger Consideration as provided in this Article; provided, however, that Parent may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed Certificates to deliver an agreement of indemnification in form satisfactory to Parent, or a bond in such sum as Parent may reasonably direct as indemnity against any claim that may be made against Parent or the Exchange Agent with respect to the Certificates alleged to have been lost, stolen or destroyed.

SECTION 1.11 Tax Consequences. It is intended by the parties hereto that the Merger shall constitute a reorganization within the meaning of Section 368 of the Code. The parties hereto hereby adopt this Agreement as a "plan of reorganization" within the meaning of Sections 1.368-2(g) and 1.368-3(a) of the United States Treasury Regulations.

SECTION 1.12 Taking of Necessary Action; Further Action. Each of Parent, Merger Sub and the Company will take all such reasonable and lawful action as may be necessary or appropriate in order to effectuate the Merger in accordance with this Agreement as promptly as

possible. If, at any time after the Effective Time, any such further action is necessary or desirable to carry out the purposes of this Agreement and to vest the Surviving Corporation with full right, title and possession to all assets, property, rights, privileges, powers and franchises of the Company and Merger Sub, the officers and directors of the Company and Merger Sub immediately prior to the Effective Time are fully authorized in the name of their respective corporations or otherwise to take, and will take, all such lawful and necessary action.

SECTION 1.13 Material Adverse Effect. When used in connection with the Company or Parent or any of its subsidiaries, as the case may be, the term "Material Adverse Effect" means any change, effect or circumstance that, individually or when taken together with all other such changes, effects or circumstances that have occurred prior to the date of determination of the occurrence of the Material Adverse Effect, (a) is or is reasonably likely to be materially adverse to the business, assets (including intangible assets), prospects, financial condition or results of operations of the Company or Parent and its subsidiaries, as the case may be, in each case taken as a whole, or (b) is or is reasonably likely to delay or prevent the consummation of the transactions contemplated hereby.

ARTICLE II

REPRESENTATIONS AND WARRANTIES REGARDING THE COMPANY

The Company hereby represents and warrants to Parent and Merger Sub that, except as set forth in the written disclosure schedule delivered on or prior to the date hereof by the Company to Parent that is arranged in paragraphs corresponding to the numbered and lettered paragraphs contained in this Article II (the "Company Disclosure Schedule"), the statements contained in this Article II are true and correct as of the date of this Agreement and, unless a date is specified in such representation or warranty, will be true and correct as of the date of Closing (as though made on and as of the date of Closing unless such representations is as of a specific date, then only as of that date). Disclosure in any paragraph of the Disclosure Schedule shall qualify only the corresponding paragraph in this Article II:

SECTION 2.1 Organization and Qualification; Subsidiaries. The Company is a corporation duly organized, validly existing and in good standing under the laws of California and has the requisite corporate power and authority necessary to own, lease and operate the properties it purports to own, operate or lease and to carry on its business as it is now being conducted, except where the failure to be so organized, existing and in good standing or to have such power and authority could not reasonably be expected to have a Material Adverse Effect. The Company is not required to be qualified or licensed as a foreign corporation in any state to do business, because the character of its properties owned, leased or operated and the nature of its activities makes such qualification or licensing unnecessary. The Company does not directly or indirectly own any equity or similar interest in, or any interest convertible into or exchangeable or exercisable for, any equity or similar interest in, any corporation, partnership, joint venture or other business association or entity.

SECTION 2.2 Articles of Incorporation and By-Laws. The Company has heretofore furnished to Parent a complete and correct copy of its Articles of Incorporation and By-Laws as amended to date. Such Articles of Incorporation and By-Laws are in full force and effect. The Company is not in violation of any of the provisions of its Articles of Incorporation or By-Laws.

SECTION 2.3 Capitalization. The authorized capital stock of the Company consists of (i) 5,000,000 shares of Company Common Stock and (ii) 80,000 shares of Class B Common Stock. As of the date hereof, (a) 491,217 shares of Company Common Stock and 80,000 shares of Class B Common Stock, respectively, were issued and outstanding, all of which are validly issued, fully paid and nonassessable, and no such shares were held in treasury, (b) no shares of Company Common Stock were held by subsidiaries of the Company, (c) 28,000 shares of Company Common Stock were reserved for future issuance pursuant to outstanding stock options granted under the Company Stock Option Plan, (d) 75,500 shares of Company Common Stock were reserved for future issuance pursuant to outstanding Licensor Stock Options and (e) 80,000 shares of Company Common Stock were reserved for issuance pursuant to the conversion of the shares of Class B Common Stock. Upon the conversion of the shares of Class B Common Stock outstanding on the date hereof, there will be outstanding an additional 80,000 shares of Company Common Stock. Section 2.3 of the Company Disclosure Schedule sets forth a list of all convertible promissory notes (the "Convertible Promissory Notes"), options and warrants (the "Stock Purchase Warrants") issued by the Company. Except as set forth in Section 2.3 or Section 2.11 of the Company Disclosure Schedule, there are no options, warrants or other rights, agreements, arrangements or commitments of any character relating to the issued or unissued capital stock of the Company or obligating the Company to issue or sell any shares of capital stock of, or other equity interests in, the Company. All shares of the capital stock of the Company subject to issuance as aforesaid, upon issuance on the terms and conditions specified in the instruments pursuant to which they are issuable, shall be duly authorized, validly issued, fully paid and nonassessable. Except as disclosed in Section 2.3 of the Company Disclosure Schedule, there are no obligations, contingent or otherwise, of the Company to repurchase, redeem or otherwise acquire any shares of capital stock of the Company to provide funds to or make any investment (in the form of a loan, capital contribution, guaranty or otherwise) in any entity.

SECTION 2.4 Authority Relative to this Agreement. (a) The Company has all necessary corporate power and authority to execute and deliver this Agreement and the Merger Agreement and to perform its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. The execution and delivery of this Agreement and the Merger Agreement by the Company and the consummation by the Company of the transactions contemplated hereby and thereby have been duly and validly authorized by all necessary corporate action, and no other corporate proceedings on the part of the Company are necessary to authorize this Agreement or the Merger Agreement or to consummate the transactions so contemplated (other than the Requisite Approvals as hereinafter defined). The Board of Directors of the Company has determined that it is advisable and in the best interest of the

Company's stockholders for the Company to enter into a business combination with Parent upon the terms and subject to the conditions of this Agreement, and has unanimously recommended that the Company's stockholders approve and adopt this Agreement, the Merger Agreement and the Merger. This Agreement has been duly and validly executed and delivered by the Company and, assuming the due authorization, execution and delivery by Parent and Merger Sub, as applicable, constitutes a legal, valid and binding obligation of the Company enforceable against the Company in accordance with its terms.

(b) The affirmative vote of the holders of a majority of the outstanding shares of Company Common Stock and the Class B Common Stock (on an as converted basis), voting as a single class, and the affirmative vote of the holders of a majority of the outstanding shares of Class B Common Stock voting as its own class is necessary to approve this Agreement, the Merger Agreement and the Merger (the "Requisite Approvals").

SECTION 2.5 No Conflict; Required Filings and Consents.

(a) Section 2.5(a) of the Company Disclosure Schedule includes a list of (i) all loan agreements, notes, indentures, mortgages, pledges, conditional sale or title retention agreements, security agreements, equipment obligations, guaranties, standby letters of credit, equipment leases or lease purchase agreements to which the Company is a party or by which it is bound; and (ii) all contracts, agreements, licenses, material transfer agreements, sponsored research agreements, commitments or other understandings or arrangements to which the Company is a party or by which it or any of its properties or assets is bound or affected, but excluding contracts, agreements, research agreements, licenses, equipment leases, equipment obligations, commitments or other understandings or arrangements entered into in the ordinary course of business and involving, in the case of each of (i) and (ii) above, payments (or obligations to make payments) or receipts by the Company of less than \$5,000 in any single instance but not more than \$20,000 in the aggregate.

(b) Except as disclosed in Section 2.5(b) of the Company Disclosure Schedule, (i) the Company has not breached, is not in default under, and has not received written notice of any breach of or default under, any of the agreements, contracts, licenses or other instruments referred to in clauses (i) or (ii) of Section 2.5(a), (ii) to the best knowledge of the Company, no other party to any of the agreements, contracts, licenses or other instruments referred to in clauses (i) or (ii) of Section 2.5(a) has breached or is in default of any of its obligations thereunder and (iii) each of the agreements, contracts, licenses and other instruments referred to in clauses (i) or (ii) of Section 2.5(a) is in full force and effect and no event has occurred and no circumstances exist which would permit a licensor under any of the licenses referred to in clause (ii) of Section 2.5(a) to cause the license granted to the Company pursuant to such license to be made non-exclusive.

(c) Except as set forth in Section 2.5(c) of the Company Disclosure Schedule, the execution and delivery of this Agreement by the Company does not, and the performance of this

Agreement by the Company and the consummation of the transactions contemplated hereby will not, (i) conflict with or violate the Articles of Incorporation or By-Laws of the Company, (ii) conflict with or violate any federal, foreign, state or provincial law, rule, regulation, order, judgment or decree (collectively, "Laws") applicable to the Company or by which its properties is bound or affected, or (iii) result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default under), or impair the Company's rights or alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of a Lien (as defined in Section 2.14) on any of the properties or assets of the Company or pursuant to, any note, bond, mortgage, indenture, contract, agreement, research agreement, lease, license, permit, franchise or other instrument or obligation to which the Company is a party or by which the Company or any of its properties is bound.

(d) The execution and delivery of this Agreement by the Company does not, and the performance of this Agreement by the Company will not, require any consent, approval, authorization or permit of, or filing with or notification to, any federal, foreign, state or provincial governmental or regulatory authority except (i) for applicable requirements, if any, of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, state securities laws ("Blue Sky Laws"), any required foreign anti-trust or similar filings and the filing and recordation of appropriate merger or other documents as required by the CCC, and (ii) where the failure to obtain such consents, approvals, authorizations or permits, or to make such filings or notifications, would not prevent or delay consummation of the Merger, or otherwise prevent or delay the Company from performing its obligations under this Agreement.

SECTION 2.6 Permits.

Except as disclosed in Section 2.6 of the Company Disclosure Schedule, the Company holds all permits, licenses, easements, variances, exemptions, consents, certificates, orders and approvals from governmental authorities which are material to the operation of the business of the Company as it is now being conducted (collectively, the "Company Permits"). The Company and its subsidiaries are in compliance with the terms of the Company Permits, except where the failure to so comply could not reasonably be expected to have a Material Adverse Effect.

SECTION 2.7 Financial Statements.

(a) Attached to the Company Disclosure Schedule is the unaudited consolidated balance sheet of the Company as of July 31, 1997, to (the "Financial Statements").

(b) The Financial Statements (including, in each case, any related notes thereto) fairly presents the financial position of the Company as at the date thereof.

(c) The Company's accounts payables as of the date hereof are set forth in Section 2.7(c) to the Company Disclosure Schedule.

SECTION 2.8 Absence of Certain Changes or Events. Except as set forth in Section 2.8 of the Company Disclosure Schedule, since [Date of Balance Sheet), the Company has conducted its business in the ordinary course and there has not occurred: (a) any Material Adverse Effect; (b) any damage to, destruction or loss of any asset of the Company (whether or not covered by insurance) that could reasonably be expected to have a Material Adverse Effect; (c) any material revaluation by the Company of any of its assets, including, without limitation, writing off notes or accounts receivable other than in the ordinary course of business; (f) any other action or event that would have required the consent of Parent pursuant to Section 5.1 had such action or event occurred after the date of this Agreement; or (g) any sale or license of the property or assets of the Company.

SECTION 2.9 No Undisclosed Liabilities. Except as is disclosed in Section 2.9 of the Company Disclosure Schedule, the Company has no liabilities (absolute, accrued, contingent or otherwise), except liabilities (a) in the aggregate adequately provided for on the face of the Company's balance sheet included in the Financial Statements, (b) incurred in connection with this Agreement, or (c) incurred in the ordinary course of business.

SECTION 2.10 Absence of Litigation. Except as set forth in Section 2.10 of the Company Disclosure Schedule, there are no claims, actions, suits, proceedings or investigations pending or, to the knowledge of the Company, threatened against the Company, or any properties or rights of the Company, before any federal, foreign, state or provincial court, arbitrator or administrative, governmental or regulatory authority or body, nor, to the knowledge of the Company, is there any basis therefor.

SECTION 2.11 Employee Benefit Plans, Employment Agreements.

(a) Except for the Company Stock Option Plan, the Company has no, and has never had any (i) employee pension plans (as defined in Section 3(2) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA")), (ii) employee welfare plans (as defined in Section 3(1) of ERISA), (iii) other bonus, stock option, stock purchase, incentive, deferred compensation, supplemental retirement, severance and other similar fringe or employee benefit plans, programs or arrangements, written or otherwise, for the benefit of, or relating to, any present or former employee (including any beneficiary of any such employee) of, or any present or former consultant (including any beneficiary of any such consultant) to the Company.

(b) Section 2.11(b) of the Company Disclosure Schedule sets forth a true and complete list of: (i) all employment agreements with officers of the Company; (ii) all agreements with consultants who are individuals obligating the Company to make annual cash payments in an amount exceeding \$30,000 (iii) all employees of, or consultants to, the Company who have executed a non-competition agreement with the Company; (iv) all severance agreements,

programs and policies of the Company with or relating to its employees, in each case with outstanding commitments exceeding \$30,000, excluding programs and policies required to be maintained by law; and (v) all plans, programs, agreements and other arrangements of the Company with or relating to its employees which contain change in control provisions.

SECTION 2.12 Intentionally Deleted.

SECTION 2.13 Restrictions on Business Activities. Except for this Agreement, to the best of the Company's knowledge, there is no agreement, judgement, injunction, order or decree binding upon the Company which has or could reasonably be expected to have the effect of prohibiting or impairing any business practice of the Company, any acquisition of property by the Company or any of its subsidiaries or the conduct of business by the Company as currently conducted or as proposed to be conducted by the Company, except for any prohibition or impairment as could not reasonably be expected to have a Material Adverse Effect.

SECTION 2.14 Title to Property. Except as set forth in Section 2.14 of the Company Disclosure Schedule, the Company has good and defensible title to all of its tangible properties and assets, free and clear of all security liens, claims, pledges, agreements, charges and other encumbrances (collectively, "Liens"), except liens for taxes not yet due and payable and such liens or other imperfections of title, if any, as do not materially detract from the value of or interfere with the present use of the property affected thereby. The Company does not own or lease any real property and the Company is not party to or bound by any lease with respect to personal property.

SECTION 2.15 Taxes.

(a) For purposes of this Agreement, "Tax" or "Taxes" shall mean taxes, fees, levies, duties, tariffs, imposts, and governmental impositions or charges of any kind in the nature of (or similar to) taxes, payable to any federal, state, local or foreign taxing authority, including (without limitation) (i) income, franchise, profits, gross receipts, ad valorem, net worth, value added, sales, use, service, real or personal property, special assessments, capital stock, license, payroll, withholding, employment, social security (or similar), workers' compensation, unemployment compensation, disability, utility, severance, production, excise, stamp, occupation, premiums, windfall profits, environmental (including taxes under Code Section 59A), customs duties, registration, alternative and add-on minimum, estimated, transfer and gains taxes, or other tax of any kind whatsoever and (ii) in all cases, including interest, penalties, additional taxes and additions to tax imposed with respect thereto whether disputed or not; and "Tax Returns" shall mean returns, reports, declarations, forms and information returns or statements relating to Taxes including any schedule or attachment thereto required to be filed with the IRS or any other federal, foreign, state, local or provincial taxing authority, domestic or foreign, including, without limitation, consolidated, combined and unitary tax returns.

(b) Other than as disclosed in Section 2.15(b) of the Company Disclosure Schedule, (i) the Company has filed all Tax Returns required to be filed by it and all such Tax Returns were correct and complete in all material respects, (ii) the Company has paid and discharged all Taxes due in connection with or with respect to the periods or transactions covered by such Tax Returns and have paid all other Taxes as are due, except such as are being contested in good faith by appropriate proceedings (to the extent that any such proceedings are required) and with respect to which the Company is maintaining adequate reserves, (iii) no Tax Return referred to in clause (i) has been the subject of examination by the Internal Revenue Service ("IRS") or the appropriate state, local or foreign taxing authority of which written notice was received; (vii) no deficiencies have been asserted or assessments made as a result of any examinations of the Tax Returns referred to in clause (i) by the IRS or the appropriate state, local or foreign taxing authority; (iv) no action, suit, proceeding, audit, claim, deficiency or assessment has been claimed or raised or is pending with respect to any Taxes of the Company; (v) the Company has withheld from its employees, customers, consultants and other payees (and timely paid to the appropriate governmental authority) all amounts required by the Tax withholding provisions of applicable federal, state, local, and foreign laws (including, without limitation, income, social security, and employment Tax withholding for all types of compensation, and withholding on payments to non-United States persons) for all periods; (vi) there has not been filed a consent under Code section 341(f) concerning collapsible corporations with respect to the Company; (vii) the Company has not made any payment, is not obligated to make any payment, and is not a party to any agreement that could obligate it to make any payments that will not be deductible under Code section 280G or be subject to the excise tax of Code section 4999 and (viii) no claim has ever been made by any authority in a jurisdiction where the Company does not file Tax Returns that it is or may be subject to tax by that jurisdiction. There are no tax liens on or security interests in any assets of the Company; and neither the Company nor any of its subsidiaries has granted any waiver of any statute of limitations with respect to, or any extension of a period for the assessment of, any Tax. The accruals and reserves for Taxes (including deferred taxes) reflected in the Financial Statements are in all material respects adequate to cover all Taxes required to be accrued through the date thereof (including interest and penalties, if any, thereon and Taxes being contested) in accordance with generally accepted accounting principles.

SECTION 2.16 Environmental Matters. Except in all cases as, in the aggregate, have not had and could not reasonably be expected to have a Material Adverse Effect, the Company is and always has been in compliance with all applicable federal, state, foreign or local laws or any regulation, code, plan, order, decree, judgment, notice or demand letter issued, entered, promulgated or approved thereunder relating to pollution or protection of the environment, including laws relating to emissions, discharges, releases or threatened releases of pollutants, contaminants, or hazardous or toxic materials or wastes into ambient air, surface water, ground water, or land or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport, or handling of pollutants, contaminants or hazardous or toxic materials or wastes by the Company or its respective agents ("Environmental Laws").

SECTION 2.17 Intellectual Property.

(a) All of the proprietary intellectual property which the Company, directly or indirectly, owns, or is licensed or otherwise possesses legally enforceable rights to use, including, without limitation, all inventions, patents, trademarks, trade names, service marks, copyrights, and any applications therefor, compositions of matter, cells, techniques, technology, trade secrets, know-how, research and development, know-how, technical data, proprietary computer software programs or applications, and other tangible or intangible proprietary information or material (collectively, the "Company Intellectual Property Rights") are described in Section 2.17(a) of the Company Disclosure Schedule. Such Section sets forth a complete list of all patents, trademarks, registered copyrights, trade names and service marks, and any applications therefor, included in the Company Intellectual Property Rights, and specifies, where applicable, the jurisdictions in which each such Company Intellectual Property Right has been issued or registered or in which an application for such issuance and registration has been filed, including the respective registration or application numbers, the names of all registered owners and, in the case of any application, the status of such application.

(b) Section 2.17(b) of the Company Disclosure Schedule sets forth a complete list of all licenses, sublicenses and other agreements as to which the Company is a party and pursuant to which the Company or any other person is authorized to use any Company Intellectual Property Right or other trade secret material to the Company, and includes the identity of all parties thereto. The Company is not in violation of any license, sublicense or agreement described on such list and the Company has neither taken any action nor failed to take any action that with the passage of time would result in violation of any such license, sublicense or agreement described on such list. The execution and delivery of this Agreement by the Company, and the consummation of the transactions contemplated hereby, will neither cause the Company to be in violation or default under any such license, sublicense or agreement, nor entitle any other party to any such license, sublicense or agreement to terminate or modify such license, sublicense or agreement, except as set forth on Section 2.17(c) of the Company Disclosure Schedule.

(c) Except as set forth in Section 2.17(c) of the Company Disclosure Schedule the Company is the sole and exclusive owner or licensee of, with all right, title and interest in and to (free and clear of any Liens or other encumbrances) the Company Intellectual Property Rights, and has sole and exclusive rights (and is not contractually obligated to pay any compensation to any third party in respect thereof) to the use thereof or the material covered thereby in connection with the services or products in respect of which the Company Intellectual Property Rights are being used. Except as disclosed in Section 2.17(c) of the Company Disclosure Schedule, to the Company's knowledge, the Company has not interfered with, infringed upon, misappropriated, or otherwise come into conflict with any intellectual property rights of third parties, and the Company has never received any charge, complaint, claim, demand, or notice alleging any such interference, infringement, misappropriation, or violation (including any claim that the Company must license or refrain from using any intellectual property rights of any third party). To the knowledge of the Company, no third party has interfered with,

infringed upon, misappropriated, or otherwise come into conflict with any Company Intellectual Property Rights. With respect to all registered patents, trademarks, service marks and copyrights included in the Company Intellectual Property Rights, the Company has not received any notice, claim or demand alleging that any of such patents, trademarks, service marks or copyrights are invalid. No Company Intellectual Property Right of the Company is subject to any outstanding decree, order, judgment, or stipulation restricting in any manner the licensing thereof by the Company. The Company has not entered into any agreement under which the Company is restricted from selling, licensing or otherwise distributing any of its products to any class of customers, in any geographic area, during any period of time or in any segment of the market. All of the employees, consultants and independent contractors of the Company developed any of the Company Intellectual Property have entered into agreements assigning all right, title and interest in the Company Intellectual Property to the Company. The Company has a policy requiring each employee, consultant and independent contractor to execute a confidentiality agreement substantially in the form previously delivered to Parent.

SECTION 2.18 Interested Party Transactions. Except as set forth in Section 2.18 of the Company Disclosure Schedule, since December 31, 1996, no event has occurred that would be required to be reported as a Certain Relationship or Related Transaction, pursuant to Item 404 of Regulation S-K promulgated by the SEC assuming the monetary threshold for reporting such relationships and transactions under such Item was \$20,000.

SECTION 2.19 Insurance. The Company maintains no insurance policies.

SECTION 2.20 Accounts Receivable; Inventories.

(a) The Company has no accounts or notes receivable. The Company has no inventory of raw materials and supplies, manufactured, goods in process, or finished goods.

SECTION 2.21 Equipment. All of the tangible personal property of the Company other than inventory (the "Equipment") is in good working order, operating condition and state of repair, ordinary wear and tear excepted.

SECTION 2.22 Brokers. No broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission in connection with the transactions contemplated by this Agreement based upon arrangements made by or on behalf of the Company or its subsidiaries or affiliates.

SECTION 2.23 Change in Control Payments. Except as set forth on Section 2.11(d) or Section 2.23 of the Company Disclosure Schedule, the Company does not have any plans, programs or agreements to which it is a party, or to which it is subject, pursuant to which payments may be required or acceleration of benefits may be required upon a change of control of the Company.

SECTION 2.24 Expenses. Section 2.24 of the Company Disclosure Schedule attached hereto sets forth a description of the estimated expenses of the Company and its subsidiaries which the Company expects to incur, or has incurred, in connection with the transactions contemplated by this Agreement.

ARTICLE III

[Intentionally Deleted]

ARTICLE IV

REPRESENTATIONS AND WARRANTIES OF PARENT AND MERGER SUB

Parent and Merger Sub hereby, jointly and severally, represent and warrant to the Company that, except as set forth in the written disclosure schedule delivered on or prior to the date hereof by Parent to the Company that is arranged in paragraphs corresponding to the numbered and lettered paragraphs contained in this Article III (the "Parent Disclosure Schedule"):

SECTION 4.1 Organization and Qualification; Subsidiaries. Each of Parent and its subsidiaries is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and has the requisite corporate power and authority necessary to own, lease and operate the properties it purports to own, operate or lease and to carry on its business as it is now being conducted, except where the failure to be so organized, existing and in good standing or to have such power, authority could not reasonably be expected to have a Material Adverse Effect. Each of Parent and each of its subsidiaries is duly qualified or licensed as a foreign corporation to do business, and is in good standing, in each jurisdiction where the character of its properties owned, leased or operated by it or the nature of its activities makes such qualification or licensing necessary, except for such failures to be so duly qualified or licensed and in good standing that could not reasonably be expected to have a Material Adverse Effect.

SECTION 4.2 Charter and By-Laws. Parent has heretofore furnished to the Company a complete and correct copy of its Certificate of Incorporation and By-Laws, as amended to date and the Articles of Incorporation and By-laws of Merger Sub, as amended to date. Such Certificate of Incorporation, Articles of Incorporation and By-Laws are in full force and effect. Neither Parent nor Merger Sub is in violation of any of the provisions of its charter or By-Laws.

SECTION 4.3 Capitalization. As of July 31, 1997, the authorized capital stock of Parent consisted of (i) 45,000,000 shares of Parent Common Stock of which 16,536,172 shares were issued and outstanding, all of which are validly issued, fully paid and non-assessable, none of which were held in treasury, 2,914,415 shares were reserved for future issuance under Parent's

equity incentive plan, directors option plan and employee stock purchase plan and (ii) 1,000,000 shares of preferred stock, \$.01 par value per share, none of which was issued and outstanding and none of which was held in treasury. No material change in such capitalization has occurred between June 30, 1997 and the date hereof. The authorized capital stock of Merger Sub consists of 1000 shares of common stock, \$.001 par value, all of which are issued and outstanding.

SECTION 4.4 Authority Relative to this Agreement. Each of Parent and Merger Sub has all necessary corporate power and authority to execute and deliver this Agreement and the Merger Agreement and to perform its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. The execution and delivery of this Agreement and the Merger Agreement by Parent and Merger Sub and the consummation by Parent and Merger Sub of the transactions contemplated hereby and thereby have been duly and validly authorized by all necessary corporate action on the part of Parent and Merger Sub, and no other corporate proceedings on the part of Parent or Merger Sub are necessary to authorize this Agreement, the Merger Agreement, or to consummate the transactions contemplated hereby or thereby. This Agreement has been duly and validly executed and delivered by Parent and Merger Sub and, assuming the due authorization, execution and delivery by the Company, constitutes a legal, valid and binding obligation of Parent and Merger Sub enforceable against each of them in accordance with its terms.

SECTION 4.5 No Conflict, Required Filings and Consents.

(a) Except as set forth in Section 4.5(c) of the Parent Disclosure Schedule, the execution and delivery of this Agreement by Parent and Merger Sub do not, and the performance of this Agreement by Parent and Merger Sub will not, (i) conflict with or violate the Certificate of Incorporation or By-Laws of Parent or the Articles of Incorporation or By-Laws of Merger Sub, (ii) conflict with or violate any law, rule, regulation, order, judgment or decree applicable to Parent or any of its subsidiaries or by which its or their respective properties are bound or affected, or (iii) result in any breach of or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or impair Parent's or any of its subsidiaries' rights or alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of a lien or encumbrance on any of the properties or assets of Parent or any of its subsidiaries pursuant to, any note, bond, mortgage, indenture, contract, agreement, lease, license, permit, franchise or other instrument or obligation to which Parent or any of its subsidiaries is a party or by which Parent or any of its subsidiaries or its or any of their respective properties are bound or affected, except in any such case for any such conflicts, violations, breaches, defaults or other occurrences that could not reasonably be expected to have a Material Adverse Effect.

(b) The execution and delivery of this Agreement by Parent and Merger Sub does not, and the performance of this Agreement by Parent and Merger Sub will not, require any consent, approval, authorization or permit of, or filing with or notification to, any governmental or regulatory authority, domestic or foreign, except (i) for applicable requirements, if any, of the

Securities Act, the Exchange Act, the Blue Sky Laws, any foreign antitrust or similar filings and the filing and recordation of appropriate merger or other documents as required by the CCC, and (ii) where the failure to obtain such consents, approvals, authorizations or permits, or to make such filings or notifications, would not prevent or delay consummation of the Merger, or otherwise prevent Parent or Merger Sub from performing their respective obligations under this Agreement, and would not have a Material Adverse Effect.

SECTION 4.6 SEC Filings; Financial Statements.

(a) Parent has filed all forms, reports and documents required to be filed with the SEC, including (i) its Annual Reports on Form 10-K for the fiscal years ended December 31, 1996 and December 31, 1995, (ii) its Quarterly Report on Form 10-Q for the quarter ended March 31, 1997, (iii) all proxy statements relating to Parent's meetings of stockholders (whether annual or special) since January 1, 1997, (iv) all other reports or registration statements (other than Reports on Form 10-Q) filed by Parent with the SEC since January 1, 1997, (v) all amendments and supplements to all such reports and registration statements filed by Parent with the SEC and (vi) a draft of the Parents Quarterly Report on Form 10-Q for the quarter ended June 30, 1997 (collectively, the "Parent SEC Reports"). The Parent SEC Reports (i) were prepared in all material respects in accordance with the requirements of the Securities Act or the Exchange Act, as the case may be, and (ii) did not at the time they were filed (or in the case of June 30, 1997 10-Q, when filed) (or if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing) contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. None of Parent's subsidiaries is required to file any forms, reports or other documents with the SEC.

(b) Each of the consolidated financial statements (including, in each case, any related notes thereto) contained in the Parent SEC Reports has been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods involved (except as may be indicated in the notes thereto) and each fairly presents in all material respects the consolidated financial position of Parent and its subsidiaries as at the respective dates thereof and the consolidated results of its operations and cash flows for the periods indicated, except that the unaudited interim financial statements were or are subject to normal and recurring year-end adjustments which were not or are not expected to be material in amount.

SECTION 4.7 Ownership of Merger Sub; No Prior Activities. As of the date hereof and the Effective Time, except for obligations or liabilities incurred in connection with its incorporation or organization and the transactions contemplated by this Agreement and except for this Agreement and any other agreements or arrangements contemplated by this Agreement, Merger Sub has not and will not have incurred, directly or indirectly, through any subsidiary or affiliate, any obligations or liabilities or engaged in any business activities of any type or kind whatsoever or entered into any agreements or arrangements with any person.

ARTICLE V

CONDUCT OF BUSINESS PENDING THE MERGER

SECTION 5.1 Conduct of Business by the Company Pending the Merger. The Company covenants and agrees that, during the period from the date of this Agreement and continuing until the earlier of the termination of this Agreement or the Effective Time, unless Parent, shall otherwise agree in writing, the Company shall conduct its business only in, and the Company shall not take any action except in, the ordinary course of business and in a manner consistent with past practice other than actions taken by the Company in contemplation of the Merger; and the Company shall use all reasonable commercial efforts to preserve substantially intact the business organization of the Company, to keep available the services of the present officers, employees and consultants of the Company and to preserve the present relationships of the Company with customers, suppliers and other persons with which the Company or any of its subsidiaries has significant business relations. By way of amplification and not limitation, except as contemplated by this Agreement, the Company shall not, during the period from the date of this Agreement and continuing until the earlier of the termination of this Agreement or the Effective Time, directly or indirectly do, or propose to do, any of the following without the prior written consent of Parent:

(a) amend or otherwise change the Articles of Incorporation or By-Laws of the Company;

(b) issue, sell, pledge, dispose of or encumber, or authorize the issuance, sale, pledge, disposition or encumbrance of, any shares of capital stock of any class, or any options, warrants, convertible securities or other rights of any kind to acquire any shares of capital stock, or any other ownership interest (including, without limitation, any phantom interest) in the Company, or its affiliates (except for the issuance of shares of Company Common Stock issuable pursuant to Stock Options which were granted under the Company Stock Option Plan and are outstanding on the date hereof).

(c) sell, pledge, dispose of or encumber any assets of the Company (except for (i) sales of assets in the ordinary course of business and in a manner consistent with past practice, (ii) dispositions of obsolete or worthless assets, and (iii) sales of immaterial assets not in excess of \$10,000 in the aggregate);

(d) (i) declare, set aside, make or pay any dividend or other distribution (whether in cash, stock or property or any combination thereof) in respect of any of its capital stock, (ii) split, combine or reclassify any of its capital stock or issue or authorize or propose the issuance of any other securities in respect of, in lieu of or in substitution for shares of its capital stock (except for the issuance of shares of Company Common Stock issuable pursuant to Stock Options which were granted under the Company Stock Option Plan and are outstanding on the date hereof) or (iii) amend the terms or change the period of exercisability of, purchase, repurchase, redeem or

otherwise acquire, any of its securities, including, without limitation, shares of Company Stock or any option, warrant or right, directly or indirectly, to acquire shares of the Company's capital stock or propose to do any of the foregoing;

(e) (i) acquire (by merger, consolidation, or acquisition of stock or assets) any corporation, partnership or other business organization or division thereof; (ii) incur any indebtedness for borrowed money calling for aggregate payments in excess of \$10,000 or issue any debt securities or assume, guarantee or endorse or otherwise as an accommodation become responsible for, the obligations of any person or, except in the ordinary course of business consistent with past practice, make any loans or advances; (iii) enter into or amend any material contract or agreement; (iv) authorize any capital expenditures or purchase of fixed assets which are, in the aggregate, in excess of \$10,000 for the Company and its subsidiaries taken as a whole; or (v) enter into or amend any contract, agreement, commitment or arrangement to effect any of the matters prohibited by this Section 5.1(e);

(f) increase the compensation payable or to become payable to its officers or employees, or grant any severance or termination pay to, or enter into any employment or severance agreement with any director, officer or other employee of the Company, or establish, adopt, enter into or amend any collective bargaining, bonus, profit sharing, thrift, compensation, stock option, restricted stock, pension, retirement, deferred compensation, employment, termination, severance or other plan, agreement, trust, fund, policy or arrangement for the benefit of any current or former directors, officers or employees, except, in each case, as may be required by law provided the Company may increase wages in the ordinary course of business consistent with the Company's past practice but not more than 5% for any individual employee;

(g) take any action to change accounting policies or procedures (including, without limitation, procedures with respect to revenue recognition, payments of accounts payable and collection of accounts receivable);

(h) make any material tax election inconsistent with past practice or settle or compromise any material federal, state, local or foreign tax liability or agree to an extension of a statute of limitations;

(i) pay, discharge or satisfy any claims, liabilities or obligations (absolute, accrued, asserted or unasserted, contingent or otherwise), other than the payment, discharge or satisfaction in the ordinary course of business and consistent with past practice of liabilities reflected or reserved against in the Financial Statements or incurred in the ordinary course of business and consistent with past practice; or

(j) take, or agree in writing or otherwise to take, any of the actions described in Sections 5.1 (a) through (i) above, or any action which would make any of the representations or warranties of the Company contained in this Agreement untrue or incorrect or prevent the Company from performing or cause the Company not to perform its covenants hereunder.

SECTION 5.2 No Solicitation.

(a) The Company shall not, directly or indirectly, through any officer, director, employee, stockholder, representative or agent of the Company, (i) solicit, initiate or encourage the initiation of any inquiries or proposals regarding any merger, sale of substantial assets, sale of any shares of capital stock (including without limitation by way of a tender offer or stock sale), license to any of the Company Intellectual Property Rights or similar transactions involving the Company other than the Merger (any of the foregoing inquiries or proposals being referred to herein as an "Acquisition Proposal"), (ii) engage in negotiations or discussions concerning, or provide any nonpublic information to any person relating to, any Acquisition Proposal or (iii) agree to, approve or recommend any Acquisition Proposal.

(b) The Company shall immediately notify Parent after receipt of any Acquisition Proposal, or any modification of or amendment to any Acquisition Proposal, or any request for nonpublic information relating to the Company in connection with an Acquisition Proposal or for access to the properties, books or records of the Company by any person or entity that informs the Board of Directors of the Company that it is considering making, or has made, an Acquisition Proposal. Such notice to Parent shall be made orally and in writing.

(c) The Company shall immediately cease and cause to be terminated any existing discussions or negotiations with any persons (other than Parent and Merger Sub) conducted heretofore with respect to any Acquisition Proposal or any request for nonpublic information relating to the Company. The Company agrees not to release any third party from the confidentiality provisions of any confidentiality agreement to which the Company is a party.

(d) The Company shall ensure that the officers, directors and employees of the Company and any investment banker or other advisor or representative retained by the Company are aware of the restrictions described in this Section 5.2.

ARTICLE VI

ADDITIONAL AGREEMENTS

SECTION 6.1 Stockholder Meeting. As promptly as practicable after the execution of this Agreement, and in any event within 20 days thereafter, the Company shall call and hold a special meeting of its stockholders in accordance with applicable laws for the purpose of obtaining the approval of the Merger, this Agreement, the Merger Agreement, and the transactions contemplated hereby (the "Stockholder Meeting"). Except as otherwise agreed by Parent, the Company shall not solicit proxies from any of its stockholders in connection with the Stockholder Meeting.

SECTION 6.2 Access to Information; Confidentiality. Upon reasonable notice and subject to restrictions contained in confidentiality agreements to which such party is subject (from which such party shall use reasonable efforts to be released), the Company and Parent shall each (and shall cause each of their subsidiaries to) afford to the officers, employees, accountants, counsel and other representatives of the other, reasonable access, during the period to the Effective Time, to all its properties, books, contracts, commitments and records and, during such period, the Company and Parent each shall (and shall cause each of their subsidiaries to) furnish promptly to the other all information concerning its business, properties and personnel as such other party may reasonably request, and each shall make available to the other the appropriate individuals (including attorneys, accountants and other professionals) for discussion of the other's business, properties and personnel as either Parent or the Company may reasonably request. Each party shall keep such information confidential in accordance with the terms of the confidentiality letter (the "Confidentiality Letter") dated as of April 18, 1997 between Parent and the Company.

SECTION 6.3 Consents; Approvals. The Company and Parent shall each use their reasonable best efforts to obtain all consents, waivers, approvals, authorizations or orders (including, without limitation, all United States and foreign governmental and regulatory rulings and approvals), and the Company and Parent shall make all filings (including, without limitation, all filings with United States and foreign governmental or regulatory agencies) required in connection with the authorization, execution and delivery of this Agreement by the Company and Parent and the consummation by them of the transactions contemplated hereby, in each case as promptly as practicable.

SECTION 6.4 Notification of Certain Matters. The Company shall give prompt notice to Parent, and Parent shall give prompt notice to the Company, of (i) the occurrence or nonoccurrence of any event the occurrence or nonoccurrence of which would be likely to cause any representation or warranty contained in this Agreement to become materially untrue or inaccurate, or (ii) any failure of the Company, Parent or Merger Sub, as the case may be, materially to comply with or satisfy any covenant, condition or agreement to be complied with or satisfied by it hereunder; provided, however, that the delivery of any notice pursuant to this Section shall not limit or otherwise affect the remedies available hereunder to the party receiving such notice; and provided further that failure to give such notice shall not be treated as a breach of covenant for the purposes of Sections 7.2(a) or 7.3(a) unless the failure to give such notice results in material prejudice to the other party.

SECTION 6.5 Further Action/Tax Treatment. Upon the terms and subject to the conditions hereof each of the parties hereto shall use all reasonable efforts to take, or cause to be taken, all actions and to do, or cause to be done, all other things necessary, proper or advisable to consummate and make effective as promptly as practicable the transactions contemplated by this Agreement, to obtain in a timely manner all necessary waivers, consents and approvals and to effect all necessary registrations and filings, and otherwise to satisfy or cause to be satisfied all conditions precedent to its obligations under this Agreement. The foregoing covenant shall not

include any obligation by Parent to agree to divest, abandon, license or take similar action with respect to any assets (tangible or intangible) of Parent or the Company. Each of Parent, Merger Sub and the Company shall use its best efforts to cause the Merger to qualify, and will not (both before and after consummation of the Merger) take any actions which to its knowledge could reasonably be expected to prevent the Merger from qualifying, as a reorganization under the provisions of Section 368 of the Code.

SECTION 6.6 Public Announcements. Parent and the Company shall consult with each other before issuing any press release with respect to the Merger or this Agreement and shall not issue any such press release or make any such public statement without the prior consent of the other party, which shall not be unreasonably withheld; provided, however, that Parent may, without the prior consent of the Company (after reasonable efforts to give notice to the Company), issue such press release or make such public statement as may upon the advice of counsel be required by law or the rules and regulations of the NASDAQ Stock Market.

SECTION 6.7 Conveyance Taxes. Parent and the Company shall cooperate in the preparation, execution and filing of all returns, questionnaires, applications, or other documents regarding any real property transfer or gains, sales, use, transfer, value added, stock transfer and stamp taxes, any transfer, recording, registration and other fees, and any similar taxes which become payable in connection with the transactions contemplated hereby that are required or permitted to be filed at or before the Effective Time.

ARTICLE VII

CONDITIONS TO THE MERGER

SECTION 7.1 Conditions to Obligation of Each Party to Effect the Merger. The respective obligations of each party to effect the Merger shall be subject to the satisfaction at or prior to the Effective Time of the following conditions:

(a) Requisite Approvals. This Agreement, the Merger Agreement and the Merger shall have received the Requisite Approvals.

(b) No Injunctions or Restraints; Illegality. No temporary restraining order, preliminary or permanent injunction or other order issued by any court of competent jurisdiction or other legal restraint or prohibition preventing the consummation of the Merger shall be in effect, nor shall any proceeding brought by any administrative agency or commission or other governmental authority or instrumentality, domestic or foreign, seeking any of the foregoing be pending; and there shall not be any action taken, or any statute, rule, regulation or order enacted, entered, enforced or deemed applicable to the Merger, which makes the consummation of the Merger illegal; and

(c) Governmental Actions. There shall not have been instituted, pending or threatened any action or proceeding (or any investigation or other inquiry that might result in such an action or proceeding) by any governmental authority or administrative agency before any governmental authority, administrative agency or court of competent jurisdiction, nor shall there be in effect any judgment, decree or order of any governmental authority, administrative agency or court of competent jurisdiction, in either case, seeking to prohibit or limit Parent from exercising all material rights and privileges pertaining to its ownership of the Surviving Corporation or the ownership or operation by Parent or any of its subsidiaries of all or a material portion of the business or assets of Parent or any of its subsidiaries, or seeking to compel Parent or any of its subsidiaries to dispose of or hold separate all or any material portion of the business or assets of Parent or any of its subsidiaries (including the Surviving Corporation and its subsidiaries), as a result of the Merger or the transactions contemplated by this Agreement.

(d) Merger Agreement; Officers' Certificates. The Merger Agreement shall have been executed and delivered by the parties thereto. The Officers' Certificates contemplated under Section 1103 of the CCC shall have been executed and delivered by the requisite officers of the constituent corporations to the Merger.

SECTION 7.2 Additional Conditions to Obligations of Parent and Merger Sub. The obligations of Parent and Merger Sub to effect the Merger are also subject to the following conditions:

(a) Representations and Warranties. The representations and warranties of the Company contained in this Agreement shall be true and correct in all respects at and as of the Effective Time with the same force and effect as if made at and as of such time, except where the failure of such representations and warranties to be true and correct would not be reasonably expected to have a Material Adverse Effect on the Company, and Parent shall have received a certificate to such effect signed by the President of the Company;

(b) Agreements and Covenants. The Company shall have performed or complied with all agreements and covenants required by this Agreement to be performed or complied with by it at or prior to the Effective Time and Parent and Merger Sub shall have received a certificate to such effect signed on behalf of the Company by the President of the Company;

(c) Consents Obtained. All consents, waivers, approvals, authorizations or orders required to be obtained, and all filings required to be made, by the Company for the due authorization, execution and delivery of this Agreement and the consummation by it of the transactions contemplated hereby shall have been obtained and made by the Company;

(d) Opinion of Counsel to the Company. Parent shall have received an opinion of Wilson, Sonsini, Goodrich & Rosati, counsel to the Company in form and substance as set forth on Exhibit 7.2(d) attached hereto;

(e) Tax Opinion. Parent shall have received an opinion of Ropes & Gray, in form and substance reasonably satisfactory to Parent, to the effect that the Merger will constitute a reorganization within the meaning of Section 368 of the Code. In rendering such opinion, counsel may rely upon such reasonable representations and certificates of Parent, Merger Sub, the Company and certain shareholders of the Company as the parties may agree, and the parties to this Agreement agree to make, and to use reasonable efforts to cause such shareholders of the Company to make, such representations and deliver such certificates;

(f) Registration Rights. All existing registration rights, preemptive rights and rights of first refusal with respect to the purchase of the capital stock of the Company of holders of Company securities shall have been terminated and Parent and Merger Sub shall have received a certificate to such effect signed on behalf of the Company by the President and the Chief Financial Officer of the Company;

(g) Consulting Agreements. Each of the Principal Stockholders other than Richard Rose shall have entered into consulting agreements with Parent in a the form reasonably satisfactory to Parent (the "Consulting Agreements") and such agreements shall be in full force and effect as of the Effective Time;

(h) Rose Employment Agreement. Richard Rose shall have entered into an employment agreement with Parent in a from reasonably satisfactory to Parent (the "Employment Agreement").

(i) Escrow Agreement. Each of the Principal Stockholders shall have executed and delivered a counterpart to the Escrow Agreement which agreement shall be substantially in the form of Exhibit 7.2(i) (the "Escrow Agreement");

(j) Research Plan Agreement. Each of the Principal Stockholders (other than Richard Rose) shall have executed a counterpart to the Research Plan Agreement which Agreement shall be substantially in the form of Exhibit 7.2(j) (the "Research Plan Agreement");

(k) Stockholder Consent. In addition to obtaining the Requisite Approvals, stockholders of the Company holding not less than 85% of the Company Common Stock that will be outstanding immediately prior the Effective Time and 85% of the Class B Common Stock outstanding shall have (a) either (i) voted for and approved each of this Agreement, the Merger Agreement and the Merger or (ii) approved each of this Agreement, the Merger Agreement and the Merger by written consent and (b) executed and delivered an Investment Letter in the form of Exhibit 7.2(k).

(l) License Agreements. Each of the license agreements listed on Section 2.17(b) of the Company Disclosure Schedule and each of the sponsored research agreements listed on Section 2.5(a) of the Company Disclosure Schedule shall be in full force and effect and no party to any such license or agreement shall have given any notice of its intention to terminate or cease

work under or not renew any such license or agreement. Each of the holders of the Licensor Stock Options shall have consented in writing to the assumption by Parent of such Licensor Stock Option and the issuance of shares of Parent Common Stock in lieu of Company Common Stock under such option, all as provided in Section 1.6(f) above.

SECTION 7.3 Additional Conditions to Obligation of the Company. The obligation of the Company to effect the Merger is also subject to the following conditions:

(a) Representations and Warranties. The representations and warranties of Parent and Merger Sub contained in this Agreement shall be true and correct in all respects on and as of the Effective Time, with the same force and effect as if made at and as of such time, except where the failure of such representations and warranties to be true and correct would not be reasonably expected to have Material Adverse Effect on Parent, and the Company shall have received a certificate to such effect signed by the Chief Financial Officer of Parent;

(b) Agreements and Covenants. Parent and Merger Sub shall have performed or complied in all material respects with all agreements and covenants required by this Agreement to be performed or complied with by them on or prior to the Effective, and the Company shall have received a certificate to such effect signed by the Chairman and the Chief Financial Officer of Parent;

(c) Consents Obtained. All material consents, waivers, approvals, authorizations or orders required to be obtained, and all filings required to be made, by Parent and Merger Sub for the authorization, execution and delivery of this Agreement and the consummation by them of the transactions contemplated hereby shall have been obtained and made by Parent and Merger Sub;

(d) Tax Opinions. The Company shall have received a written opinion of Wilson, Sonsini, Goodrich & Rosati, in form and substance reasonably satisfactory to the Company, to the effect that the Merger will constitute a reorganization within the meaning of Section 368 of the Code. In rendering such opinion, counsel may rely upon such reasonable representations and certificates of Parent, Merger Sub, the Company and certain shareholders of the Company as the parties may agree, and the parties to this Agreement agree to make, and to use reasonable efforts to cause such shareholders of the Company to make, such representations and deliver such certificates;

(e) Opinion of Counsel to Parent. The Company shall have received an opinion of Ropes & Gray, counsel to Parent, in form and substance as set forth on Exhibit 7.3(e) attached hereto;

(f) Rose Employment Agreement. Parent and Richard Rose shall have entered into an employment agreement in a form reasonably acceptable to the Company; and

(g) Consulting Agreements. Parent shall have executed and delivered counterparts to Consulting Agreements for each of the Principal Stockholders other than Richard Rose and such Consulting Agreements shall be in a form reasonably satisfactory to the Company.

(h) Research Plan Agreement. Parent shall have executed and delivered a counterpart to the Research Plan Agreement.

(i) Legal Expenses. The legal expenses due to Wilson, Sonsini, Goodrich & Rosati: ("W,S,G&R") set forth in Section 2.7(c) of the Company Disclosure Schedule and the fees and expenses of W,S,G&R for services rendered to the Company in connection with the transactions contemplated by this Agreement shall have been paid.

ARTICLE VIII

TERMINATION

SECTION 8.1 Termination. This Agreement may be terminated at any time prior to the Effective Time, notwithstanding approval thereof by the Stockholders of the Company:

(a) by mutual written consent duly authorized by the Boards of Directors of Parent and the Company; or

(b) by either Parent or the Company if the Merger shall not have been consummated by October 31, 1997 (provided that the right to terminate this Agreement under this Section 8.1(b) shall not be available to any party whose failure to fulfill any obligation under this Agreement has been the cause of or resulted in the failure of the Merger to occur on or before such date); or

(c) by either Parent or the Company if a court of competent jurisdiction or governmental, regulatory or administrative agency or commission shall have issued a nonappealable final order, decree or ruling or taken any other action having the effect of permanently restraining, enjoining or otherwise prohibiting the Merger (provided that the right to terminate this Agreement under this Section 8.1(c) shall not be available to any party who has not complied with its obligations under Section 6.6 and such noncompliance materially contributed to the issuance of any such order, decree or ruling or the taking of such action); or

(d) by Parent, (i) if any representation or warranty of the Company set forth in this Agreement shall be untrue when made in any material respect, or (ii) upon a breach of any covenant or agreement on the part of the Company set forth in this Agreement, such that the conditions set forth in Section 7.2(a) or 7.2(b) would not be satisfied (each a "Terminating Breach"), provided, that, if such Terminating Breach is curable prior to October 31, 1997 by the Company through the exercise of its reasonable best efforts and for so long as the Company

continues to exercise such reasonable best efforts, Parent may not terminate this Agreement under this Section 8.1(d); or

(e) by the Company, (i) if any representation or warranty of Parent set forth in this Agreement shall be untrue when made, or (ii) upon a breach of any covenant or agreement on the part of Parent set forth in this Agreement, such that the conditions set forth in Section 7.3(a) or 7.3(b) would not be satisfied (each a "Company Terminating Breach"), provided that, if such Company Terminating Breach is curable prior to October 31, 1997 by Parent through the exercise of its reasonable best efforts and for so long as Parent continues to exercise such reasonable best efforts, the Company may not terminate this Agreement under this Section 8.1(e); or

(f) by Parent, if any representation or warranty of the Company shall have become untrue such that the condition set forth in Section 7.2(a) would not be satisfied, or by the Company, if any representation or warranty of Parent shall have become untrue such that the condition set forth in Section 7.3(a) would not be satisfied, in either case other than by reason of a Terminating Breach; or

(g) by Parent in the event an action is threatened or commenced for which Parent is obligated to indemnify the directors and officers of the Company pursuant to Section 9.1(e).

SECTION 8.2 Effect of Termination. In the event of the termination of this Agreement pursuant to Section 8.1, this Agreement shall forthwith become void and there shall be no liability on the part of any party hereto or any of its affiliates, directors, officers or stockholders except (i) for the confidentiality provisions of Section 6.2, Sections 6.6, 8.3, 9.1, 9.2, 9.5, 9.7, 9.8, 9.9, 9.10, 9.12, 9.13 and 9.14 which shall survive any termination of this Agreement, and (ii) nothing herein shall relieve any party from liability for any breach hereof.

SECTION 8.3 Fees and Expenses.

Except as set forth in this Section 8.3, all fees and expenses incurred in connection with this Agreement and the transactions contemplated hereby shall be paid by the party incurring such expenses, whether or not the Merger is consummated; provided, however, that in the event the Merger is consummated, the stockholders of the Company shall pay all legal, accounting, financial advisory, investment banking and other fees incurred by the Company or any Subsidiary (or for which the Company or any Subsidiary may be or become liable) in connection with this Agreement and the consummation of the Merger in excess of \$75,000 (the "Excess Company Expenses"). At the Closing, the Company shall provide to Parent a good faith estimate of the total Company Expenses and such amount shall be used in calculating the Exchange Ratio pursuant to Section 1.1(e). If, following the Effective Time, it is determined that there are additional unpaid Excess Company Expenses, the Stockholders Representative shall permit Parent to receive Escrow Shares having a value as calculated in accordance with the Escrow Agreement in payment of such expenses.

ARTICLE IX

GENERAL PROVISIONS

SECTION 9.1 Indemnification.

(a) Charters and By-Laws. The Surviving Corporation agrees that all rights to indemnification or exculpation now existing in favor of the employees, agents, directors or officers of the Company (the "Company Indemnified Parties") as provided in its charter or By-Laws shall continue in full force and effect for a period of not less than three years from the Closing Date; provided, however, that, in the event any claim or claims are asserted or made within such three-year period, all rights to indemnification in respect of any such claim or claims shall continue until disposition of any and all such claims. Any determination required to be made with respect to whether a Company Indemnified Party's conduct complies with the standards set forth in the charter or By-Laws of the Company or otherwise shall be made by independent counsel selected by the Company Indemnified Party reasonably satisfactory to the Surviving Corporation (whose fees and expenses shall be paid by the Surviving Corporation).

(b) Survival of Representations and Warranties.

(i) The representations and warranties of the Company and Parent made in this Agreement, shall survive the Merger for a period of eighteen months from the Closing Date and shall remain operative and in full force and effect regardless of any investigation made by or on behalf of any other party hereto, any person controlling any such party or any of their officers or directors, whether prior to or after the execution of this Agreement.

(ii) No claim for indemnification under this Section 9.1 for breach of a representation or warranty may be commenced after the date that is eighteen months following of the Closing Date, provided, however, that claims made within the applicable time period shall survive to the extent of such claim until such claim is finally determined and, if applicable, paid.

(c) Indemnification of the Parent and Merger Sub. By their approval of this Agreement and their acceptance of the Merger Consideration, each of the Principal Stockholders (each in his capacity as an indemnifying party, an "Indemnifying Party") agrees to indemnify, defend, protect, and hold harmless each of Parent, Merger Sub, the Surviving Corporation and each of their respective subsidiaries and affiliates (each in its capacity as an indemnified party, an "Parent Indemnitee") at all times from and after the date of this Agreement from and against all claims, damages, actions, suits, proceedings, demands,

assessments, adjustments, costs and expenses (including specifically, but without limitation, reasonable attorneys' fees and expenses of investigation) (collectively "Damages") incurred by such Parent Indemnitee as a result of or incident to (i) any breach of any representation or warranty of the Company set forth herein with respect to which a claim for indemnification is brought by a Parent Indemnitee within the applicable survival period described in Section 9.1(b) or (ii) any breach or nonfulfillment by the Company, or any noncompliance by the Company with, any covenant, agreement, or obligation contained herein except to the extent waived by Parent.

(d) Indemnification of the Stockholders of the Company. Parent (in its capacity as an indemnifying party, an "Indemnifying Party") agrees to indemnify, defend, protect, and hold harmless each of the stockholders of the Company (each in his or her or its capacity as an indemnified party, a "Company Indemnitee") at all times from and after the date of this Agreement from and against all Damages incurred by such Company Indemnitee as a result of or incident to (i) any breach of any representation or warranty of the Parent or Merger Sub set forth herein with respect to which a claim for indemnification is brought by a Company Indemnitee within the applicable survival period described in Section 9.1(b), (ii) any breach or nonfulfillment by Parent or Merger Sub, or any noncompliance by Parent or Merger Sub with, any covenant, agreement, or obligation contained herein except to the extent waived by the Company.

(e) Indemnification of Directors and Officers of the Company. Parent (in its capacity as an indemnifying party, an "Indemnifying Party") agrees to indemnify, defend, protect and hold harmless each of the officers and directors of the Company (in his or her capacity as an indemnified party a, "Company Indemnitee"; the term "Indemnitee" shall refer to both Company Indemnitees and Parent Indemnitees) from and against all Damages incurred by such Company Indemnitee as a result of or incident to (i) any claim or action brought by a stockholder or stockholders of Parent to which an officer or director of the Company is made a party as a result of such stockholder's service as a director or officer of the Company or as a result of such person's ownership of shares of the capital stock of the Company or (ii) any claim or action brought by a stockholder of the Company in connection with the transactions contemplated by this Agreement alleging a breach of the duties of the officers and directors of the Company to the stockholders of the Company.

(f) Third Person Claims. Promptly after an Indemnitee has received notice of or has knowledge of any claim by a person not a party to this Agreement ("Third Person") or the commencement of any action or proceeding by a Third Person, the Indemnitee shall, give the Indemnifying Party written notice of such claim or the commencement of such action or proceeding; provided, however, that the failure to give such notice will not effect the Indemnities' right to indemnification hereunder with respect to such claim, action or proceeding, except to the extent that the Indemnifying Parties have been actually prejudiced as a result of such failure. If an Indemnifying Party notifies the Indemnitee within 30 days from the receipt of the foregoing notice that he or it wishes to defend against the claim by the Third

Person then the Indemnifying Parties shall have the right to assume and control the defense of the claim by appropriate proceedings with counsel reasonably acceptable to Indemnitee. The Indemnitee may participate in the defense, at its sole expense of any such claim for which the Indemnifying Parties shall have assumed the defense pursuant to the preceding sentence, provided that counsel for the Indemnifying Parties shall act as lead counsel in all matters pertaining to the defense or settlement of such claims, suit or proceedings; provided, however, that Indemnitee shall control the defense of any claim or proceeding that in Indemnitee's reasonable judgment could have a material and adverse effect on Indemnitee's business apart from the payment of money damages. The Indemnitee shall be entitled to indemnification for the reasonable fees and expenses of its counsel for any period during which the Indemnifying Parties have not assumed the defense of any claim. Any such fees and expenses shall be paid promptly by the Indemnifying Party following receipt of an invoice for such fees and expenses. Whether or not the Indemnifying Parties shall have assumed the defense of any claim, neither the Indemnitee nor any Indemnifying Party shall make any settlement with respect to any such claim, suit or proceeding without the prior consent of the other, which consent shall not be unreasonably withheld or delayed. It is understood and agreed that in situations where failure to settle a claim expeditiously could have an adverse effect on the party wishing to settle, the failure of the party controlling the defense to act upon a request for consent to such settlement within five business days of receipt of notice thereof shall be deemed to constitute consent to such settlement for purposes of this Section 9.1. If the Indemnifying Party desires to accept a final and complete settlement of any such Third Person claim and the Indemnitee refuses to consent to such settlement, then the Indemnifying Party's liability under this Article IX with respect to such Third Person claim shall be limited to the amount so offered in settlement by said Third Person and the Indemnitee shall reimburse the Indemnifying Party for any additional costs of defense which it subsequently incurs with respect to such claim. For purposes of this Article IX, notice by a Parent Indemnitee to the Stockholders Representative shall be deemed to be notice to the Principal Stockholders in their capacity as Indemnifying Parties hereunder and decisions by the Stockholders Representative shall be binding upon each of the Principal Stockholders.

(g) Method of Payment. All claims for indemnification by Parent, Merger Sub or the Surviving Corporation or another Parent Indemnitee shall be paid solely from the Escrow Account. To the extent that Parent, Merger Sub, or the Surviving Corporation or another Indemnitee makes a claim against the Escrow Account pursuant to the Escrow Agreement, and such claim is paid in shares of Parent Common Stock, then for purposes of such payment, the shares of Parent Common Stock shall be valued at the average of the daily closing sales prices of a share of Parent Common Stock as reported by the NASDAQ Stock Market (as reported by the Wall Street Journal or, if not reported thereby, as reported by another authoritative source as mutually agreed by Parent and the Company) for the five (5) consecutive trading days ending on and including the date of the effective time. In no event shall any Principal Stockholder be obligated to indemnify a Parent Indemnitee other than from the Escrow Account. All claims for indemnification by a Company Indemnitee shall be paid in cash.

(h) Limitations. (i) Except as provided below, the Principal Stockholders shall not be required to indemnify any Parent Indemnitee until Damages suffered by such Parent Indemnitee, together with Damages suffered with respect to all other claims for indemnification by Parent Indemnitees pursuant to this Agreement, exceeds \$1,000,000 and then the Parent Indemnitee shall be entitled to recover from the Principal Stockholders all Damages incurred by such Parent Indemnitee (including the first \$1,000,000 of Damages). The foregoing sentence shall not in any way limit Parent's right to recover amounts in respect of the Excess Company Expenses from the Escrow Account. Notwithstanding the foregoing, in connection with Damages resulting from or incident to any breach of the representation and warranty of the Company set forth in Section 2.3 or Section 2.7(c), the Parent Indemnitees shall be entitled to be indemnified in full to the extent such Damages exceed an aggregate of \$250,000. The liability of the Principal Stockholders to provide indemnification for Damages hereunder shall be limited to the Escrow Shares.

(ii) With respect to claims by Company Indemnitees pursuant to Section 9.1(d), Parent shall not be required to indemnify any Company Indemnitee until the Damages suffered by such Company Indemnitees, together with Damages suffered with respect to all other claims for indemnification by Company Indemnitees pursuant to Section 9.1(d), exceed \$1,000,000 and then the Company Indemnitees shall be entitled to recover from Parent all Damages incurred by such Company Indemnitee (including the first \$1,000,000 of Damage).

(iii) All Damages paid to an Indemnitee shall be paid net of any insurance recovery and tax benefit such Indemnitee actually receives as a result of the claim or incident giving rise to such Damages.

(i) Exclusive Remedy; No Circular Recovery. The rights of Indemnitees under this Article IX shall be the exclusive remedy of the Indemnitees with respect to any claim for which such Indemnitee is entitled to indemnification hereunder. Each Principal Stockholder hereby agrees that he will not make any claim for indemnification against either Parent or Merger Sub by reason of the fact that he was a director, officer, employee, consultant, agent or other representative of the Company (whether such claim is for Damages of any kind or otherwise and whether such claim is pursuant to any statute, charter, by-law, contractual obligation or otherwise) with respect to any claim for indemnification brought by a Parent Indemnitee against the Principal Stockholders.

SECTION 9.2 Notices. All notices and other communications given or made pursuant hereto shall be in writing and shall be deemed to have been duly given or made if and when delivered personally or by overnight courier to the parties at the following addresses or sent by electronic transmission, with confirmation received, to the telecopy numbers specified below (or at such other address or telecopy number for a party as shall be specified by like notice):

(a) If to Parent or Merger Sub:

CytoTherapeutics, Inc.
Two Richard Square
Providence, Rhode Island 02906

Telecopier No.: (401) 272-3310
Telephone No.: (401) 272-3485
Attention: General Counsel

With a copy to:

Geoffrey B. Davis, Esq.
Ropes & Gray
30 Kennedy Plaza
Providence, Rhode Island 02903

Telecopier No.: (401) 455-4400
Telephone No.: (401) 455-4401

(b) If to the Company or Principal Stockholder:

c/o Alan Austin, Esq.
Wilson, Sonsini, Goodrich & Rosati
650 Page Mill Road
Palo Alto, CA 94303-1050

Telecopier No.: (415) 496-4084
Telephone No.: (415) 493-9300

With a copy to:

Alan K. Austin, Esq.
Wilson, Sonsini, Goodrich & Rosati
650 Page Mill Road
Palo Alto, CA 94303-1050

Telecopier No.: (415) 496-4084
Telephone No.: (415) 493-9300

(c) If to the Principal Stockholders, to the address for such Principal Stockholder set forth in the records of Parent.

SECTION 9.3 Certain Definitions. For purposes of this Agreement, the term:

(a) "affiliates" means a person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, the first mentioned person; including, without limitation, any partnership or joint venture in which the first mentioned person (either alone, or through or together with any other subsidiary) has, directly or indirectly, an interest of 5% or more;

(b) "beneficial owner" with respect to any shares of Company Common Stock means a person who shall be deemed to be the beneficial owner of such shares (i) which such person or any of its affiliates or associates (as such term is defined in Rule 12b-2 of the Exchange Act) beneficially owns, directly or indirectly, (ii) which such person or any of its affiliates or associates has, directly or indirectly, (A) the right to acquire (whether such right is exercisable immediately or subject only to the passage of time), pursuant to any agreement, arrangement or understanding or upon the exercise of conversion rights, exchange rights, warrants or options, or otherwise, or (B) the right to vote pursuant to any agreement, arrangement or understanding, or (iii) which are beneficially owned, directly or indirectly, by any other persons with whom such person or any of its affiliates or associates has any agreement, arrangement or understanding for the purpose of acquiring, holding, voting or disposing of any shares;

(c) "business day" means any day other than a Saturday or Sunday or any day on which banks in the State of Rhode Island are required or authorized to be closed;

(d) "control" (including the terms "controlled by" and "under common control with") means the possession, directly or indirectly or as trustee or executor, of the power to direct or cause the direction of the management or policies of a person, whether through the ownership of stock, as trustee or executor, by contract or credit arrangement or otherwise;

(e) "person" means an individual, corporation, partnership, association, trust, unincorporated organization, other entity or group (as defined in Section 13(d)(3) of the Exchange Act); and

(f) "subsidiary" or "subsidiaries" of the Company, Parent or any other person means any corporation, partnership, joint venture or other legal entity of which the Company, the Surviving Corporation, Parent or such other person, as the case may be (either alone or through or together with any other subsidiary), owns, directly or indirectly, more than 50% of the stock or other equity interests the holders of which are generally entitled to vote for the election of the board of directors or other governing body of such corporation or other legal entity.

SECTION 9.4 Amendment. This Agreement may be amended by the parties hereto by action taken by or on behalf of their respective Boards of Directors at any time prior to the Effective Time; provided, however, that, after approval of the Merger by the stockholders of the Company, no amendment may be made which by law requires further approval by such stockholders without such further approval. This Agreement may not be amended except by an instrument in writing signed by the parties hereto.

SECTION 9.5 Waiver. At any time prior to the Effective Time, any party hereto may with respect to any other party hereto (a) extend the time for the performance of any of the obligations or other acts, (b) waive any inaccuracies in the representations and warranties contained herein or in any document delivered pursuant hereto, or (c) waive compliance with any of the agreements or conditions contained herein. Any such extension or waiver shall be valid only if set forth in an instrument in writing signed by the party or parties to be bound thereby.

SECTION 9.6 Headings. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

SECTION 9.7 Severability. If any term or other provision of this Agreement is invalid, illegal or incapable of being enforced by any rule of law, or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in full force and effect so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner adverse to any party. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the parties hereto shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in an acceptable manner to the end that the transactions contemplated hereby are fulfilled to the fullest extent possible.

SECTION 9.8 Entire Agreement. This Agreement constitutes the entire agreement and supersedes all prior agreements and undertakings (other than the Confidentiality Letter), both written and oral, among the parties, or any of them, with respect to the subject matter hereof.

SECTION 9.9 Assignment; Guarantee of Merger Sub Obligations. This Agreement shall not be assigned by operation of law or otherwise, except that Parent and Merger Sub may assign all or any of their rights hereunder to any affiliate thereof provided that no such assignment shall relieve the assigning party of its obligations hereunder. Parent guarantees the full and punctual performance by Merger Sub of all the obligations hereunder of Merger Sub or any such assignees.

SECTION 9.10 Parties in Interest. This Agreement shall be binding upon and inure solely to the benefit of each party hereto, and nothing in this Agreement, express or implied, is intended to or shall confer upon any other person any right, benefit or remedy of any nature whatsoever under or by reason of this Agreement, including, without limitation, by way of subrogation, other than Section 9.1(a) (which is intended to be for the benefit of the Indemnified Parties and may be enforced by such Indemnified Parties).

SECTION 9.11 Failure or Indulgence Not Waiver; Remedies Cumulative. No failure or delay on the part of any party hereto in the exercise of any right hereunder shall impair such right or be construed to be a waiver of, or acquiescence in, any breach of any representation, warranty or agreement herein, nor shall any single or partial exercise of any such right preclude any other

or further exercise thereof or of any other right. All rights and remedies existing under this Agreement are cumulative to, and not exclusive of, any rights or remedies otherwise available.

SECTION 9.12 Governing Law. This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of California applicable to contracts executed and fully performed within the State of California.

SECTION 9.13 Waiver of Jury Trial. To the extent not prohibited by applicable law which cannot be waived, each of the parties hereto hereby waives, and covenants that he or it will not assert (whether as plaintiff, defendant, or otherwise), any right to trial by jury in any forum in respect of any issue, claim, demand, cause of action, action, suit or proceeding arising out of or based upon this Agreement or the subject matter hereof, in each case whether now existing or hereafter arising and whether in contract or tort or otherwise. Any of the parties hereto may file an original counterpart or a copy of this Section 9.13 with any court as written evidence of the consent of each of the parties hereto to the waiver of his or its right to trial by jury.

SECTION 9.14 Counterparts; Miscellaneous. This Agreement may be executed in one or more counterparts, and by the different parties hereto in separate counterparts, each of which when executed shall be deemed to have been executed simultaneously and shall be deemed to be an original but all of which taken together shall constitute one and the same agreement. This Agreement is to be deemed to have been prepared jointly by the parties hereto, and any uncertainty or ambiguity existing herein, if any, shall not be interpreted against any party, but shall be interpreted according to the application of the rules of interpretation for agreements that have been negotiated at arm's-length. To the extent not prohibited by applicable law which cannot be waived, all of the rights and remedies of the parties hereunder shall be cumulative.

[This space intentionally left blank.]

IN WITNESS WHEREOF, Parent, Merger Sub and the Company have caused this Agreement to be executed as of the date first written above by their respective officers thereunto duly authorized.

CYTOTHERAPEUTICS, INC.

By: /s/ Seth Rudnick

Name: Seth Rudnick
Title: President

CTI ACQUISITION, CORP.

By: /s/ John McBride

Name: John McBride
Title:

STEMCELLS, INC.

By: /s/ Richard Rose

Name: Richard Rose
Title: President

CYTOTHERAPEUTICS, INC.
Two Richmond Square
Providence, RI 02906
401-272-3310

September 25, 1997

Richard M. Rose, M.D.
6826 LaValle
Plateada
P.O. Box 567
Rancho Santa Fe, CA 92067

Dear Richard:

This letter will confirm our offer to you of employment with CytoTherapeutics, Inc. (the "Company") under the terms and conditions that follow:

1. Position and Duties. As of the Effective Date, as such term is defined in the Agreement and Plan of Merger among the Company, CTI Acquisition, Inc., StemCells, Inc., you and certain other individuals dated August 13, 1997, you will be employed by the Company hereunder on a full-time basis as its President and Chief Executive Officer. In addition, and without further compensation, you agree to service as a member of the Board of Directors of the Company (the "Board") and as a director or officer of one or more of the Company's Affiliates, as defined below, if so elected or appointed from time to time. As President and Chief Executive Officer, you will be expected to exert your full-time best efforts to promote and protect the business interests of the Company. Specifically, but not exclusively, your responsibilities will be to manage the operations of the Company, to build and maintain an outstanding and harmonious working team of both scientific and professional employees, to secure, promote and maintain the appropriate financing and capital structure of the Company, to manage and direct the strategic development of the Company's business plan and its implementation and to oversee the overall scientific affairs of the Company. You will report directly to the Board.

2. Salary and Bonus. For all services that you perform for the Company and its Affiliates, the Company will provide you compensation during your employment in accordance with this Paragraph 2. Your base salary will be at the rate of Two Hundred and Seventy-Five Thousand Dollars (\$275,000) per year. Your performance and compensation will be reviewed at least annually by the Compensation Committee of the Board. In

addition to your base salary, you will be eligible, at the end of calendar year, beginning with calendar 1998, during your employment hereunder, for a bonus of up to twenty-five percent (25%) of your base salary, the amount of each such bonus being determined by the Board in its discretion.

3. Stock Options.

a. Through the CytoTherapeutics, Inc. 1992 Equity Incentive Plan (the "Incentive Plan"), and subject to the terms and conditions of such Plan, you will be granted an option to acquire 200,000 shares of the common stock of the Company (the "Time-Based Option") at the fair market value of such shares on the Effective Date, as determined by the Board. Subject to your continued employment by the Company, the Time-Based Option will vest over forty-eight (48) months as follows: (i) one quarter of the shares will vest on the first anniversary of the Effective Date and (ii) the remaining shares shall vest at the rate of one forty-eighth (1/48) per month on the last day of each month during the ensuing thirty-six months. Except as otherwise expressly provided herein, the Time-Based Option shall be governed by the terms of the Incentive Plan, as in effect from time to time. Any Change in Control will result in the accelerated vesting of the option to acquire 100% of such shares. A Change in Control shall mean any consolidation or merger in which the Company is not the surviving corporation, a transaction or series of related transactions that result in the acquisition of all of substantially all of the Company's outstanding Common Stock by a single person or entity or by a group of persons or entities acting in concert, or the sale or transfer of all or substantially all of the Company's assets.

b. In addition to the Time-Vested Option, the Company will grant you an option to acquire 100,000 shares of the common stock of the Company (the "Performance-Based Option") at fair market value of such shares on the Effective Date, as determined by the Board. The Performance-Based Options are subject to the terms of the Performance-Based Incentive Option Agreement, a copy of which is attached hereto as Schedule A, and to your execution of that Option Agreement.

c. In addition to the foregoing options, you shall be eligible, at the end of any calendar year beginning with calendar year 1998, or as otherwise determined from time to time by the Board or the Compensation Committee of the Board, to receive additional options, the amount and terms of any such options to be determined by the Board or such Compensation Committee in their sole discretion.

4. Relocation and Relocation Allowance. Promptly following the Effective Date, you will establish your principal office at the Company's offices in Rhode Island and a temporary residence for yourself within driving distance of such office. You will relocate permanently to the Rhode Island area no later than July 31, 1998. The allocation of your time between the Company's operations in Rhode Island, the Company's operations in

California and travel elsewhere on Company business will, in your role as President and CEO of the Company, be primarily determined by you; however, you will not spend an average of more than one business day per week during any calendar quarter in California without approval of the Board. The Company will provide you with One Hundred and Twenty Five Thousand Dollars (\$125,000) for relocation, temporary housing and related expenses, which sum shall be payable to you \$75,000 on execution and delivery of this Agreement and \$50,000 upon your permanent relocation to Rhode Island as provided above.

In addition, the Company will provide you with an interest-free bridge loan in an amount (not to exceed \$200,000) reasonably required by you in order to purchase a house within driving distance of the Company's offices in Rhode Island, such loan to be secured by a second mortgage on such house and to be payable by you at the time of the sale of your residence in California. You agree to use reasonable efforts to sell such residence.

5. Benefits. You will be entitled to participate in any and all employee benefit plans from time to time in effect for senior management of the Company generally, except to the extent that such plans are duplicative of benefits otherwise provided to you under this Agreement. Such participation shall be subject to (i) the terms of the applicable plan documents, (ii) generally applicable policies of the Company and (iii) the discretion of the Board and plan administrators, as provided for in or contemplated by such plan. The Company will provide you with a leased automobile, the cost of which will be paid by you and the Company in proportion to your business and personal use of such automobile. Prior to your permanent relocation to within driving distance of the Company's principal offices, the Company will reimburse you for the cost of two round trips per month to southern California. The Company expects that these trips will generally be made in connection with Company business and that you will attempt, to the extent possible, to schedule any personal trips to coincide with such business. The Company will provide you with four weeks vacation per year. The Company shall reimburse you for all expenses reasonably incurred by you in connection with your performance of your duties hereunder on a basis consistent with Company policies.

6. Confidentiality and Restricted Activities. You agree that some restrictions on your activities during and after employment are necessary to protect the goodwill, Confidential Information and other legitimate interests of the Company:

a. During your employment and thereafter, except as required by applicable law or for the proper performance of your duties and responsibilities to the Company, you shall not use or disclose to any Person any Confidential Information, as defined below. This restriction shall continue to apply after your employment terminates, regardless of the reason for such termination.

b. While you are employed by the Company and for a period of one (1) year thereafter, you will not, directly or indirectly, engage in any activity, whether as

owner, partner, investor, consultant, employee, agent or otherwise, that is competitive with the business of the Company or its Affiliates, provided, however, that nothing contained in this paragraph shall prohibit you from owning up no more than one percent (1%) of the outstanding stock of any publicly traded company.

c. While you are employed by the Company and for a period of one (1) year thereafter, you will not, directly or indirectly, hire or attempt to hire any employee of the Company or its Affiliates, assist in such hiring by any Person or otherwise solicit, induce or encourage any employee of the Company or any of its Affiliates to terminate his or her relationship with them.

d. You agree that you will not, during your employment with the Company, improperly use or disclose any proprietary information or trade secrets of any former or concurrent employer or other Person with whom you have an agreement or duty to keep in confidence information acquired by you in confidence, if any. You also agree that you will not bring onto Company premises any unpublished document or proprietary information belonging to any such employer or other Person, unless consented to in writing by such employer or other Person.

e. All documents, records, tapes, software and other media of every kind and description relating to the business, present or otherwise, of the Company and its Affiliates and any copies, in whole or in part, thereof (the "Documents"), whether or not prepared by you, shall be the sole and exclusive property of the Company and its Affiliates. You agree to safeguard all Documents and to surrender to the Company at the time your employment terminates, or at such earlier time or times as the Board may specify, all Documents and other property of the Company and its Affiliates (including without limitation, devices and equipment) then in your possession or control.

f. You agree that the Company shall, in addition to any other remedies available to it, be entitled to preliminary and permanent injunctive relief against any breach by you of the covenants contained in this Paragraph 6, without having to post bond. In the event that any provision of this Paragraph 6 shall be determined by a court of competent jurisdiction to be unenforceable by reason of its being extended over too great a time, too large a geographic area or too great a range of activities, it shall be interpreted to extend only over the maximum period of time, geographic area or range of activities as to which it may be enforceable.

g. For purposes of this Agreement:

i. A business shall be deemed to be competitive with the Company or its Affiliates if it engages or proposes to engage in any business activity which is both (A) utilizing or seeking to develop technology capable of utilizing the transplantation

of cells as a therapeutic agent for the diagnosis, prevention or treatment of human disease, injury or condition and (B) in any field the Company or any of its Affiliates is then pursuing or then has in contemplation or planning.

ii. "Affiliates" means all persons and entities directly or indirectly controlling, controlled by or under common control with the Company, where control may be by management authority, equity interest or otherwise.

iii. "Confidential Information" means any and all information of the Company and its Affiliates that is not generally known by others with whom they compete or do business or with whom they plan to compete or do business and any and all information, publicly known in whole or in part or not, which, if disclosed by the Company or its Affiliates, would assist in competition against them. Confidential Information includes without limitation such information relating to (i) the development, research, testing, production and marketing activities of the Company and its Affiliates, (ii) the products and services of the Company and its Affiliates, (iii) their patents, trade secrets, licenses and intellectual property, patients and clinical trials; (iv) the costs, sources of supply, financial performance and strategic plans of the Company and its Affiliates, (v) the identity and special needs of the customers of the Company and its Affiliates and (vi) the people and organizations with whom the Company and its Affiliates have business relationships and those relationships. Confidential Information also includes information that the Company or any of its Affiliates has received belonging to others with any understanding, express or implied, that it would not be disclosed. Confidential Information does not include, however, information that has become publicly known and generally available other than through a wrongful act by you or any other Person owing a duty of confidentiality to the Company or any of its Affiliates.

iv. "Person" means an individual, a corporation, an association, a partnership, an estate, a trust and any other entity or organization, other than the Company or any of its Affiliates.

7. Inventions.

a. You hereby represent to the Company and agree that, except as described in Schedule B hereof, you have no inventions, original works of authorship, developments, improvements or trade secrets that were made by you prior to your employment with the Company and which relates to the Company's current or proposed business, products or research and development.

b. You will promptly make full written disclosure to the Company, hold in trust for the Company's sole right and benefit and hereby assign and agree to assign to the Company or its designee all of your right, title and interest in any and all Inventions.

As used in this Agreement, "Inventions" means inventions, discoveries, developments, methods, processes, compositions, works, concepts and ideas (whether or not patentable or copyrightable or constituting trade secrets) conceived, made, created, developed or reduced to practice by you (whether alone or with others and whether or not during normal business hours or on or off Company premises) during your employment that relate in any way to the business, products or services of the Company or any of its Affiliates or to any prospective activity of the Company or any of its Affiliates or for which the Confidential Information or the Company's facilities have been utilized. You further acknowledge and agree that all original works of authorship made by you solely or jointly with others within the scope of your employment and eligible for protection by copyright are "works made for hire," as that term is defined in the United States Copyright Act. You agree to keep and maintain adequate and current records of all Inventions made by you solely or jointly with others during your employment with the Company. Such records will be in the form of notes, sketches, drawings or any other format that may be specified by the Company. These records will be available to, and remain the sole property of, the Company at all times. You agree to assist the Company or its designee, at the Company's expense, in every proper way, to secure the Company's rights in the Inventions and copyrights, including without limitation disclosure to the Company of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, assignments and all other instruments that the Company shall deem necessary or desirable in order to apply for and obtain such rights, and in order to assign and convey to the Company, its successors, designees and nominees the sole and exclusive right, title and interest in and to such Inventions, and any copyrights, patents, or other intellectual property rights relating thereto, both during your employment by the Company and thereafter. In the event that the Company is unable for any reason to secure or to prosecute any patent application with respect to any of such Inventions (including without limitation, renewals, extensions, continuations, divisions or continuations in part thereof), you hereby irrevocably designate and appoint the Company and its duly authorized officers and agents as your agents and attorney-in-fact to act for and in your behalf and instead of you, to execute and file any such application and to do all other lawfully permitted acts to further the prosecution and issuance of patents thereof with the same legal force and effect as if executed by you. You agree that you will assist the Company in the prosecution and enforcement of the Company's rights to the Inventions and copyrightable materials after termination of your employment, at the Company's expense.

8. Termination and Termination Benefits. Your employment with the Company is "at will," which means that either you or the Company may terminate your employment at any time, with or without cause or good reason.

a. The Company may terminate your employment other than for "cause" at any time upon written notice to you and, in that event, (i) the Company will continue to pay you your base salary for the longer of (A) one year following the date of such

termination or (B) two years following the date of such termination in the case of any such termination occurring in connection with a Change in Control or (C) until the third anniversary of the Effective Date, provided, however, that the Company's obligation, if any, to pay such base salary on and after the second anniversary of such termination shall be reduced, on a dollar-for-dollar basis, by your total pre-tax compensation from any employment (including self-employment). If subsection (C) applies, you agree to seek such employment and accurately and promptly to report to the Company any such compensation derived therefrom. In addition, the Time-Based Option will become fully vested as to all unvested shares covered by such option as of the date your employment terminates. To the maximum extent permitted by the Company's benefit plans, all benefits provided to you hereunder shall continue for the longer of (A) one year following the date of such termination or (B) two years following the date of any such termination which occurs in connection with a Change in Control. The Company shall not be obligated to purchase any special insurance or other coverage in order to satisfy the foregoing obligation.

b. The Company may terminate your employment upon written notice to you in the event that you become disabled during your employment through any illness, injury, accident or condition of either physical or psychological nature and, as a result, you are unable to perform substantially all of your duties and responsibilities hereunder for ninety (90) days during any three hundred and sixty-five (365) calendar days. In that event, the Company will continue to pay you your base salary (i) for a period of six (6) months following such termination or (ii) until you obtain other employment or (iii) until you become eligible for disability income under any disability income plan provided by the Company, whichever of these events shall first occur.

c. The Company may terminate your employment hereunder for cause at any time upon written notice to you setting forth in reasonable detail the nature of such cause. The following, as determined by the Company in its reasonable judgment, shall constitute "cause" for termination: (i) your willful failure to perform your material duties and responsibilities to the Company and its Affiliates (including, without limitation, those duties and responsibilities described in Section 1) and; (ii) your material breach of Paragraph 6 or Paragraph 7 of this Agreement; (iii) fraud, embezzlement or other material dishonesty with respect to the Company or any of its Affiliates; or (iv) your conviction of, or plea of nolo contendere to, a felony.

d. You may terminate your employment at any time, with or without good reason, upon written notice to the Company. If you decide to terminate your employment without good reason, you agree to give the Company three months' notice of termination. You may terminate your employment hereunder with good reason at any time upon written notice to the Company. The following shall constitute "good reason" for termination: material breach by the Company of any provision of this Agreement, including, without limitation, any material diminution in your authority or responsibilities from that

contemplated by Section 1 hereof, which breach continues for more than ten (10) business days following receipt by the Company of written notice from you setting forth in reasonable detail the nature of such breach. If you terminate your employment with good reason, the Company will be obligated to you under Paragraph 8.a hereof as if the Company had terminated your employment other than for cause.

e. If you resign without good reason or your employment is terminated by the Company for cause, the Company shall have no further obligation to you other than for base salary earned through the date of termination. No severance pay or other benefits of any kind will be provided.

9. Withholding. All payments and reimbursements made by the Company under this Agreement shall be reduced by any tax or other amounts required to be withheld by the Company under applicable law.

10. Assignment. Neither you nor the Company may make any assignment of this Agreement or any interest herein, by operation of law or otherwise, without the prior written consent of the other; provided, however, that the Company may assign its rights and obligations under this Agreement without your consent to one of its Affiliates or to any Person with whom the Company shall hereafter affect a reorganization, consolidation or merger or to whom the Company transfers all or substantially all of its properties or assets. This Agreement shall inure to the benefit of and be binding upon you and the Company and each of your respective successors, executors, administrators, heirs and permitted assigns.

11. Waiver. Except as otherwise expressly provided in this Agreement, no waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of either party to require performance of any term or obligation of this Agreement, or the waiver by either party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

12. Severability. If any portion or provision of this Agreement shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

13. Notices. Except as otherwise expressly provided herein, any notices, requests, demands and other communications provided for by this Agreement shall be in writing and shall be effective when delivered in person or deposited in the United States mail, postage prepaid, registered or certified, and addressed to you at your last known

address on the books of the Company or, in the case of the Company, at its main office, attention of the Chairman of the Board.

14. Captions. The captions and headings in this Agreement are for convenience only and in no way define or describe the scope or content of any provision of this Agreement.

15. Entire Agreement. This Agreement sets forth the entire agreement and understanding between you and the Company and supersedes all prior communications, agreements and understandings, written and oral, with respect to the terms and conditions of your employment. This Agreement may not be amended or modified, except by an agreement in writing signed by you and the Chairman of the Board or other specifically authorized representative of the Company.

16. Governing Law. This Agreement shall be governed, construed and enforced in accordance with the laws of Rhode Island, without regard to the conflict of laws principles thereof.

17. No Conflicting Agreements. You hereby represent to the Company that neither your execution and delivery of this Agreement nor your acceptance of employment with the Company nor your performance under this Agreement will conflict with or result in a breach of any of the terms, conditions or provisions of any agreement to which you are a party or are bound or any order, injunction, judgment or decrees of any court or governmental authority or any arbitration award applicable to you.

18. Compliance with Agreement. The Company's obligations under this Agreement and its obligation to deliver stock under the terms of the stock options granted pursuant to the terms of this Agreement (or otherwise granted you during the course of your employment) are conditioned on your compliance with the terms and conditions of this Agreement and the accuracy of the representations made to the Company by you herein.

19. Agreement Void. If the Effective Date does not occur, for any reason whatsoever, this agreement shall be null and void and of no force or effect.

If the foregoing is acceptable to you, please sign the enclosed copy of this letter in the space provided below and return it to me, whereupon this letter and such copy will constitute a binding agreement between you and the Company on the basis set forth above as of the date first above written.

Sincerely yours,
CYTOTHERAPEUTICS, INC.

By: /S/ SETH A. RUDNICK

Seth A. Rudnick, M.D.
Chairman

Accepted and agreed:

/S/ RICHARD M. ROSE

Richard M. Rose, M.D.

Date:

Performance-Based Incentive Option Agreement

Optionee: Richard M. Rose Shares Subject to Option: 100,000
Dated: September 25, 1997

CYTOTHERAPEUTICS, INC.

PERFORMANCE-BASED INCENTIVE OPTION AGREEMENT

This Agreement is made as of the date set forth above by and between CytoTherapeutics, Inc., a Delaware corporation (the "Company" or "CTI"), and the Optionee specified above (the "Optionee").

WHEREAS, Optionee has entered into a Consulting or Employment Agreement with the Company which provides for the grant of the options evidenced hereby (the "Consulting/Employment Agreement"); and

WHEREAS, Optionee is in a position to make a significant contribution to the long-term success of the Company, and in particular the Company's stemcell research program.

NOW, THEREFORE, the Company and Optionee agree as follows:

1. Grant of Option. This agreement evidences the grant by the Company to Optionee pursuant to the Company's 1997 Stemcells Research Stock Option Plan (the "Plan") of an option to purchase, in whole or in part, on the terms provided herein, the number of shares specified above of the Company's Common Stock, \$.01 par value (the "Common Stock"), at a per share price equal to \$5.25 (the "Option"). This Option is not intended to qualify as an "incentive stock option" within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended. This Option shall terminate on the tenth anniversary of the date of this Agreement (the "Final Exercise Date"), and is subject to earlier termination as provided in Sections 6 and 7 below.

2. Exercisability of Option. Subject to the terms and conditions hereof, this Option shall vest and become exercisable as follows:

Milestone - - - - -	% of Shares Vesting - - - - -
On the date of this Agreement	6.25%
First Corporate Partnership (as defined below) (before September 1, 1998)	

If greater than \$5,000,000 and less than or equal to \$10,000,000	6.25%
If greater than \$10,000,000 and less than or equal to \$15,000,000	8.75%
If greater than \$15,000,000	11.25%
Second Corporate Partnership (before September 1, 1999)	
If greater than \$5,000,000 and less than or equal to \$10,000,000	6.25%
If greater than \$10,000,000 and less than or equal to \$15,000,000	8.75%
If greater than \$15,000,000	11.25%
First Corporate Partnership resulting from discovery of a new stem cell (before June 30, 2000)	
If greater than \$5,000,000 and less than or equal to \$10,000,000	6.25%
If greater than \$10,000,000 and less than or equal to \$15,000,000	8.75%
If greater than \$15,000,000	11.25%
Second Corporate Partnership resulting from discovery of a new stem cell (before June 30, 2000)	
If greater than \$5,000,000 and less than or equal to \$10,000,000	6.25%
If greater than \$10,000,000 and less than or equal to \$15,000,000	8.75%
If greater than \$15,000,000	11.25%
Commencement of first clinical trial of a CTI stem cell product (before June 30, 2000)	12.50%
Filing of first United States regulatory filing for marketing approval of a CTI stem cell product (before June 30, 2003)	12.50%
Filing of first European Union or Japanese regulatory filing for market	12.50%

approval with respect to a CTI stem cell product (before June 30, 2004)

First United States commercial approval of a CTI stem cell product (before June 30, 2005) 25.00%

First European Union or Japanese commercial approval of a CTI stem cell product (before June 30, 2005) 25.00%

For purposes of the foregoing, "Corporate Partnership" means any joint venture, licensing agreement, collaboration agreement, or research and development agreement to which the Company is a party and which is material to the long-term success of the Company. A "Corporate Partnership resulting from the discovery of a new stem cell" shall mean a Corporate Partnership which is formed to commercially develop technology resulting from research conducted pursuant to the Research Plan (as such term is defined in a letter agreement between the Company and Messrs. Weissman, Gage and Anderson, dated as of September __, 1997) which the corporate partner and CTI reasonably believe has resulted in the discovery of a previously undiscovered stem cell.

The dollar amounts set forth above with respect to Corporate Partnerships refer to the receipt by the Company of the aggregate amount of the following payments received in connection with any such Corporate Partnership:

- (i) any non-refundable up-front license fees;
- (ii) the present value of all non-refundable, non-contingent license fees payable at a later date;
- (iii) the amount by which the purchase price paid for any non-refundable, non-contingent equity investment in the Company made in connection with such Corporate Partnership exceeds the fair market value of such equity investment as reasonably determined by the Board of Directors of the Company; and
- (iv) 50% of all non-contingent payments for sponsored research under any sponsored research agreement, provided, however, that in the case of the \$5 million target in each of the first two corporate partnership milestones, 100% of such payments shall count toward satisfaction of such target.

The Company shall not structure any Corporate Partnership in a bad faith effort to avoid giving rise to the vesting of options hereunder.

3. Exercise of Option. Each election to exercise this Option shall be in writing, signed by Optionee or by his duly appointed guardian or representative, his executor or administrator or the person or persons to whom this Option is transferred by will or the applicable laws of descent and distribution (collectively, the "Legal Representative"), and received by the Company at its principal office in Providence, Rhode Island, accompanied by payment in full as provided in Section 4 below. In the event this Option is exercised by such Legal Representative, the Company shall be under no obligation to deliver stock hereunder unless and until the Company is reasonably satisfied that the person or persons exercising this Option is or are the duly appointed guardian(s) or representative(s) of Optionee, the duly appointed executor(s) or administrator(s) of the deceased Optionee or the person or persons to whom this Option has been transferred by will or the applicable laws of descent and distribution.

4. Payment for Stock. Shares of Common Stock shall be issued only upon receipt by the Company of full payment of the purchase price for the shares as to which this Option is exercised. The purchase price is payable by Optionee to the Company either (i) in cash or by certified check or cashier's check payable to the order of the Company; or (ii) through the delivery of shares of Common Stock (duly owned by Optionee and as to which Optionee has good title free and clear of any liens and encumbrances) which have been outstanding for at least six months and which have a fair market value (as determined by the Board of Directors of the Company) on the last business day prior to the date of exercise of this Option equal to the purchase price; or (iii) by delivery of an unconditional and irrevocable undertaking by a broker to deliver promptly to the Company sufficient funds to pay the exercise price; or (iv) by any combination of the forgoing permissible forms of payment. The Company will not be obligated to deliver any shares unless and until, in the opinion of the Company's counsel, all applicable federal and state laws and regulations have been complied with, nor, in the event the outstanding Common Stock is at the time listed upon any stock exchange, unless and until the shares to be delivered have been listed or authorized to be listed upon official notice that legal matters in connection with the issuance and delivery of such shares have been approved by the Company's counsel. The Company will use its best efforts to effect any such compliance or listing, and Optionee agrees to take any action reasonably requested by the Company in connection therewith. Subject to any applicable limitations under the Securities Act of 1933, as amended, and the rules and regulations thereunder, the Company will promptly file a Registration Statement on Form S-8 (or any successor form), with respect to the shares of Common Stock issuable upon exercise of this Option, and the Company will use all reasonable efforts to maintain the effectiveness of such registration statement for so long as this Option shall remain outstanding. The Company may require that Optionee agree that he will notify the Company when he makes any disposition of the shares issued upon exercise of this Option whether by sale, gift or otherwise. Optionee will have the rights of a shareholder only as to shares actually acquired by him upon exercise of this Option.

5. Non-transferability of Option. This Option may not be transferred by Optionee otherwise than by will or by the laws of descent and distribution. During Optionee's lifetime this Option may be exercised only by Optionee or Optionee's duly appointed guardian or representative.

6. Termination of Service. In the event Optionee ceases to be a consultant to or employee of the Company because the Company terminates his service for Cause (as defined in the Consulting/Employment Agreement) or Optionee terminates his service without Good Reason (as defined in the Consulting/Employment Agreement), this Option shall immediately terminate except that Optionee may thereafter exercise this Option, to the extent he was entitled to exercise it on the date when his service terminated, for a period of 90 days after the date of such termination. In no event, however, may this Option be exercised after the Final Exercise Date.

7. Death or Disability. In the event Optionee dies or Optionee's service with the Company terminates by reason of disability (meaning the inability of Optionee, because of physical or mental illness or injury, to perform substantially all of his duties and responsibilities to the Company), this Option shall continue to be eligible for vesting as set forth in Section 2 of this Agreement for a period of two years after Optionee's death or the termination of his service because of disability. In addition, this Option may be exercised, as to all or any of (a) the shares that Optionee was entitled to purchase immediately prior to his death or the termination of his service because of disability and (b) the shares that vest in accordance with the preceding sentence, by Optionee or his Legal Representative, at any time or times within three years after his death or such termination of service. Except as so exercised this Option will expire at the end of such period. In no event, however, may this Option be exercised after the Final Exercise Date.

8. Administration. This Option will be administered by the Board of Directors of the Company, which will have the authority to interpret this agreement and to decide all questions and settle all controversies and disputes which may arise in connection herewith. All decisions, determinations and interpretations of the Board of Directors will be binding on all parties concerned. A majority of the members of the Board of Directors will constitute a quorum, and all determinations of the Board of Directors will be made by a majority of its members. Any determination of the Board of Directors under this agreement may be made without notice or meeting of the Board of Directors by a written instrument signed by a majority of the members of the Board of Directors. In the event of any conflict between the terms of this Option and the terms of the Plan the terms of this Option will control.

9. Stock to be Delivered. Stock to be delivered upon exercise of this Option may constitute an original issue of authorized but unissued stock or may consist of previously issued stock acquired by the Company as determined from time to time by the

Board of Directors. The Board of Directors and the proper officers of the Company will take any appropriate action required for such delivery.

10. Changes in Stock. In the event of a stock dividend, stock split or combination of shares, recapitalization or other change in the Company's capital structure, the Board of Directors of the Company (whose determination will be binding on Optionee) will make appropriate adjustments to the number and kind of shares of stock or other securities subject to this Option, the exercise price and other relevant provisions. Except as provided in the following paragraph, in the event of a Change in Control (as defined below), this Option will expire and cease to be exercisable, provided that at least twenty days prior to the effective date of any such Change in Control, the Board of Directors shall either (a) make this Option immediately exercisable in full, or (b) arrange to have the acquiror or an affiliate thereof grant a replacement option or other replacement award containing terms that the Board of Directors reasonably determines to be equitable under the circumstances. "Change in Control" means any consolidation or merger in which the Company is not the surviving corporation, a transaction or series of related transactions that result in the acquisition of all or substantially all of the Company's outstanding Common Stock by a single person or entity or by a group of persons or entities acting in concert, or the sale or transfer of all or substantially all of the Company's assets.

11. Acceleration of Options on Change in Control. Any Change in Control will result in the accelerated vesting of the lesser of (i) 50% of the shares originally issuable pursuant to this Option or (ii) all of the shares which would become vested on the achievement of all milestones which are not time-barred at the time of Change in Control.

In addition, the Shares subject to this Option shall be accelerated under the circumstances and to the extent described in Section 1 (f) of the Agreement (the "Research Agreement") dated September 25, 1997 among the Company, Irving Weissman and Fred H. Gage.

12. Amendments. The Board of Directors of the Company may at any time or times amend this Option for the purpose of satisfying the requirements of any changes in applicable laws or regulations or for any other purpose which may at the time be permitted by law, provided that no such amendment will adversely affect the rights of Optionee without his consent.

13. Governing Law. This agreement shall be governed by and construed in accordance with the laws of the State of Delaware (not including the conflict of laws principles thereof).

[Incentive Option Agreement]

IN WITNESS WHEREOF, the Company has caused this agreement to be executed by its duly authorized officer. This Option is granted at the Company's office, on the date stated above.

CYTOTHERAPEUTICS, INC.

By: -----
President

Accepted and Agreed:

Optionee

Prior Inventions

None.

CYTOTHERAPEUTICS, INC.

CONSULTING AGREEMENT -- WEISSMAN

This Agreement, dated as of September 25, 1997, is between Irving Weissman, M.D., an individual with an address at 4147 Jefferson, Redwood City, California 94062 (the "Consultant") and CytoTherapeutics, Inc., a Delaware corporation with an address at 2 Richmond Square, Providence, Rhode Island 02906 (the "Company").

In consideration of the mutual promises, terms, provisions and conditions set forth in this Agreement, the parties hereby agree as follows:

1. University Policies. Reference is made to the policies to which Consultant is subject as a result of his engagement with the Stanford University Medical Center (the "University") and his obligations to the University thereunder (the "University Policies"). It is the intention of the Company and the Consultant that the services to be performed by the Consultant hereunder be consistent with such Policies.
2. Consulting and Other Services. Subject to the terms and conditions set forth in this Agreement, Consultant shall provide to the Company the following services:
 - a. Consulting Services. The Consultant will act as a consultant to the Company during those hours when he is not working for the University and as mutually agreed to by and between the Consultant and the Company. The Consultant's consulting services to be rendered hereunder will involve those areas mutually agreed to by and between the Consultant and the Company. These areas include applications of the isolation, expansion and gene modification of stem and progenitor cells primarily for the liver, pancreas, and the central and peripheral nervous systems (the "Specialty Area"). Notwithstanding the generality of the foregoing, the Specialty Area shall specifically exclude applications of hematopoietic stem and progenitor cell isolation, expansion and gene-modification and SCID-Hu mice. The Company hereby retains the Consultant as a consultant to the Company, and the Consultant hereby agrees to perform the following services related to the Specialty Area for the Company:
 - i. The Consultant shall spend at least one day per month consulting for the Company and a reasonable amount of time for informal consultations over the telephone or otherwise. In addition, as a member of the Company's Scientific Advisory Board, Consultant shall attend four one-day meetings per year at such times and places as the Company may request, which may include weekends.

ii. The Consultant may from time to time be unavailable to attend meetings or perform other consulting duties, due to other prior obligations including but not limited to teaching and other academic duties and attending scientific conferences, and such unavailability shall not be considered a breach of this Agreement if the Consultant gives the Company reasonable notice of such unavailability.

b. Other Services. In addition, (i) during the term of this Agreement, the Company shall cause Consultant to be elected to the Board of Directors of its subsidiary, StemCells, Inc.; (ii) until at least June 30, 1999, the Company shall appoint Consultant as Chairman of the Company's Scientific Advisory Board and (iii) the Company shall elect Consultant as a member of the Company's Board of Directors to serve until the next annual meeting of Stockholders and shall, at such annual meeting, nominate Consultant for election to a three-year term as a director. Consultant agrees to serve in all such capacities when so appointed or elected.

3. Cash Compensation. Consultant will receive cash compensation for his services hereunder as provided in the attached Schedule A.

4. Stock Options. In further consideration for the services provided hereunder, the Company will grant to Consultant options to purchase 500,000 shares of Common Stock of the Company in accordance with the terms and conditions set forth in the form of Performance-Based Incentive Option Agreement (the "Option Agreement") attached hereto as Schedule B.

5. Expenses. The Company will reimburse the Consultant for any actual expenses incurred by the Consultant while rendering services under this Agreement so long as the expenses are reasonable and necessary. Such expenses shall include reasonable and necessary travel, lodging and meals in connection with services performed under this Agreement. Requests for reimbursement shall be in a form reasonably acceptable to the Company.

6. Confidentiality and Noncompetition Provisions. Consultant agrees that some restrictions on his activities during and after his consulting service are necessary to protect the goodwill, Confidential Information and other legitimate interests of the Company:

a. Proprietary Information. Consultant agrees to be bound by the following:

i. The Consultant recognizes that in performance under this Agreement he will have contact with information of substantial value to the Company that is not generally known outside the Company and that gives the Company an advantage over its competitors who do not know or use it, including, but not limited to, techniques, designs, drawings, processes, inventions, developments, equipment, prototypes, slides, customer information and business, scientific and financial information relating to the business,

products, practices or techniques of the Company. The Consultant agrees to regard and preserve as confidential such information.

- ii. The Consultant will not, at any time (except as authorized by the Company), divulge or disclose, directly or indirectly, to any person, firm, association or corporation other than bona fide employees of the Company or any affiliate of the Company, acting in that capacity, or use for his own benefit or gain or any purpose other than the performance of services hereunder, any Confidential Information (as hereinafter defined), of the Company or any of its affiliates. "Confidential Information" means any knowledge, or data concerning the business, technology or affairs of the Company or any affiliate of the Company including any inventions, discoveries, improvements, products, processes, technology, trade secrets, know-how, designs, formulas, or any other confidential material, data, information or instructions, technical or otherwise, owned by the Company or any affiliate of the Company.
 - iii. All documents, data, records, apparatus, equipment and other physical property produced by the Consultant or others in connection with the Consultant's activities pursuant to this Agreement or which are furnished to the Consultant by the Company shall be and remain the sole property of the Company and shall be returned promptly to the Company as and when requested by the Company.
 - iv. The limitations imposed by this Section 6.1 shall not apply to (i) information which at the time of disclosure to Consultant is in the public domain or already possessed by the Consultant, (ii) information which becomes available to the public at any time, other than as a result of acts by the Consultant in violation of this Agreement, (iii) information which is lawfully required to be disclosed to any governmental agency or is otherwise required to be disclosed by law and (iv) information disclosed to the Consultant in good faith by a third party who has an independent right to such information and who discloses the same to the Consultant.
- b. Exclusive Consulting Agreement. With the exception of the Consultant's existing relationships with the University pursuant to the University Policies during the term of this Agreement and, in the case of any termination of this Agreement by the Company for "Cause" (as defined below) or by the Consultant for other than "Good Reason" (as defined below), for two years thereafter, the Consultant will not, directly or indirectly, own, manage, operate, join, control, finance or participate in the ownership, management, operation, control or financing of, or be connected as an officer, director, employee, partner, principal, agent, investigator, consultant or advisor with any person, business or enterprise which is engaged in

developing products or technology relating to the Specialty Area in actual or potential competition with the Company or its affiliates, without the express prior written consent of the Company.

- c. Non-solicitation. During the term of this Agreement and for two years thereafter, Consultant will not, directly or indirectly, attempt to hire any employee of the Company, assist in such hiring by any other person, corporation or other entity, or otherwise solicit, induce or encourage any employee of the Company to terminate his or her relationship with the Company.
 - d. Non-Disclosure of Third Party Proprietary Information. Consultant will not, during his consulting service with the Company, improperly use or disclose any proprietary information or trade secrets of any former or concurrent employer, or other person or entity with whom he has an agreement or duty to keep in confidence information acquired by him in confidence, if any.
 - e. Remedies. Consultant agrees that the Company shall, in addition to any other remedies available to it, be entitled to preliminary and permanent injunctive relief against any breach by Consultant of the covenants contained in this Section 6, without having to post bond. In the event that any provision of this Section shall be determined by any court of competent jurisdiction to be unenforceable by reason of its being extended over too great a time, too large a geographic area or too great a range of activities, it shall be interpreted to extend only over the maximum period of time, geographic area or range of activities as to which it may be enforceable.
7. Inventions.
- a. This Section 7 does not apply to any inventions, discoveries, improvements, products, processes, technology, trade secrets, know-how, designs, formulas, or any other subject matter that is owned by University pursuant to the University Policies.
 - b. Subject to Section 7.1, Consultant agrees that any Inventions (as defined below) shall be the property of the Company and its assigns. Consultant agrees to assign, and does hereby assign, to the Company all right, title and interest in and to all such Inventions. As used herein, "Inventions" includes all inventions, improvements, biological materials, know-how, data and other subject matter (whether or not patented or patentable, and including all intellectual property rights therein) developed, made, conceived, reduced to practice, discovered or learned by Consultant, solely or jointly with others, that arise from the performance of services under this Agreement, relate to the Specialty Area or are based upon Confidential Information of the Company. To the extent he is free to do so, the Consultant shall promptly disclose to the Company all inventions, discoveries,

improvements, processes, technology and know-how (whether or not patentable and whether or not reduced to practice) which the Consultant may conceive or make (either by himself or jointly with others) during the term of this Agreement with the Company.

- c. Consultant agrees to assist Company, or its designee, at the Company's expense, in every proper way to secure the Company's rights in the Inventions and any intellectual property rights therein in any and all countries, including the disclosure to the Company of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, assignments and all other instruments which the Company shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to the Company, its successors, assigns and nominees the sole and exclusive rights, title and interest in and to such Inventions, and any intellectual property rights therein.
- d. Consultant agrees that if in the course of performing the Services, Consultant incorporates into any Invention developed hereunder any invention, improvement, development, concept, discovery or other proprietary subject matter owned by Consultant or in which Consultant has an interest, the Company is hereby granted and shall have a nonexclusive, royalty-free, perpetual, irrevocable, worldwide license, with the right to grant and authorize sublicenses, to make, have made, modify, use and sell such item as part of or in connection with such Invention.

8. Term and Termination. This Agreement shall be in effect for ten (10) years commencing on the date hereof subject to earlier termination as set forth in this Section 8. The Company may terminate Consultant's service under this Agreement at any time for Cause (as defined below). Consultant may terminate his service under this Agreement at any time for Good Reason (as defined below). At any time after June 30, 1999, the Company may terminate the Consultant's service under this Agreement other than for Cause and the Consultant may terminate his service hereunder other than for those for Good Reason. Consultant's services hereunder shall also terminate on his death or disability (as defined in Section 7 of the Option).

- a. Upon termination of Consultant's service with the Company for any reason, the Company shall have no further obligation to Consultant under this Agreement other than for amounts earned through the date of termination. No severance pay or other benefits of any kind will be provided. The effect of such termination (if any) on the options granted pursuant to Section 4 shall be as set forth in the Option Agreement.
- b. The following shall constitute "Cause": (i) any willful act of personal dishonesty, fraud or misrepresentation taken by the consultant in connection with his or her responsibilities as a Consultant which was intended to result in substantial gain

or personal enrichment of the Consultant at the expense of the Company and was materially and demonstrably injurious to the Company; (ii) the Consultant's conviction of a felony on account of any act which was materially and demonstrably injurious to the Company; (iii) the Consultant's willful and continued failure to substantially perform his or per principal duties and obligations or employment (other than any such failure resulting from incapacity due to physical or mental illness), which failure is not remedied in a reasonable period of time after receipt of written notice from the Company; or (iv) any change in University Policies which materially adversely affects Consultant's ability to perform the services contemplated hereunder or to assign his rights in Inventions to the Company. For the purposes of this Section, no act or failure to act shall be considered "willful" unless done or omitted to be done in bad faith and without reasonable belief that the act or omission was in or not opposed to the best interests of the company.

- c. The following shall constitute "Good Reason" for termination: material breach by the Company of any provision of this Agreement which breach continues for more than ten (10) business days following written notice from Consultant to the Company setting forth in reasonable detail the nature of such breach.

9. No Conflict. Consultant represents that to the best of his knowledge and belief (a) his execution and delivery of, and performance of his expected duties under, this Agreement do not conflict with any other agreement to which he is a party or by which he is bound, including, without limitation, any agreement to keep in confidence proprietary information acquired by Consultant in confidence or trust prior to his retention as a consultant by the Company, and (b) he has not brought and will not bring with him to the Company or use in performance of his responsibilities at the Company any equipment, supplies, facility or trade secret information of any current or former employer which are not generally available to the public, unless he has obtained written authorization for their use.

10. Independent Contractor. In rendering services to the Company, Consultant shall act as an independent contractor and not as an employee or agent of the Company.

11. Amendment. The provisions of this Agreement may be amended by the written agreement of the Company and Consultant.

12. Choice of Law. This Agreement shall be governed and construed in accordance with the internal laws of the State of Rhode Island.

13. Successors, etc. This Agreement shall be binding upon and shall inure to the benefit of the Company's successors, transferees and assigns. The Company requires the personal services of Consultant hereunder, and Consultant may not assign this Agreement.

14. Execution of Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one instrument.

15. Severability. In the event that any provision of this Agreement would, under applicable law, be invalid or unenforceable, such provision shall, to the extent permitted under applicable law, be construed by modifying or limiting it so as to be valid and enforceable to the maximum extent possible under applicable law. The provisions of this Agreement are severable, and in the event that any provision hereof should be held invalid or unenforceable in any respect, it shall not invalidate, render unenforceable or otherwise affect any other provision hereof.

16. Notices. Any and all notices, requests, demands and other communications provided for by this Agreement shall be in writing and shall be effective when delivered in person or five business days after deposit in the United States mail, postage prepaid, registered or certified, and addressed to Consultant at his address set forth above or, in the case of the Company, at its address set forth above, attention of President, or to such other address as either party may specify by notice to the other.

17. Prior Agreement with StemCells. As of the Effective Time, this Agreement supersedes any consulting agreement, commitment, understanding or arrangements, express, implied, oral, or written between StemCells, Inc. and Consultant, except that any agreement between StemCells, Inc. and Consultant, to the extent that such agreement relates to confidentiality or non-disclosure or assignment of proprietary rights, noncompetition or nonsolicitation relating to StemCell's business, shall remain in full force and effect and inure to the benefit of the Company, and shall be in addition to, and not in limitation of, the rights of the Company hereunder.

18. Entire Agreement. This Agreement constitutes the entire agreement between the parties hereto, and supersedes any and all prior or contemporaneous communications, agreements and understandings, written or oral, with respect to the terms and conditions of Consultant's service to the Company.

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed and delivered by its duly authorized officer and Consultant has executed and delivered this Agreement.

CYTOTHERAPEUTICS, INC.

By: /S/ SETH RUDNICK

Name: Seth Rudnick
Title: President

/S/ IRVING WEISSMAN

Irving Weissman, M.D.

Schedule A

\$50,000 per year, payable quarterly in advance.

Schedule B

FORM OF PERFORMANCE-BASED INCENTIVE OPTION AGREEMENT

Optionee: Irving Weisman

Shares Subject to Option: 500,000

Dated: September 25, 1997

CYTOTHERAPEUTICS, INC.

PERFORMANCE-BASED INCENTIVE OPTION AGREEMENT

This Agreement is made as of the date set forth above by and between CytoTherapeutics, Inc., a Delaware corporation (the "Company" or "CTI"), and the Optionee specified above (the "Optionee").

WHEREAS, Optionee has entered into a Consulting or Employment Agreement with the Company which provides for the grant of the options evidenced hereby (the "Consulting/Employment Agreement"); and

WHEREAS, Optionee is in a position to make a significant contribution to the long-term success of the Company, and in particular the Company's stemcell research program.

NOW, THEREFORE, the Company and Optionee agree as follows:

1. Grant of Option. This agreement evidences the grant by the Company to Optionee pursuant to the Company's 1997 Stemcells Research Stock Option Plan (the "Plan") of an option to purchase, in whole or in part, on the terms provided herein, the number of shares specified above of the Company's Common Stock, \$.01 par value (the "Common Stock"), at a per share price equal to \$5.25 (the "Option"). This Option is not intended to qualify as an "incentive stock option" within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended. This Option shall terminate on the tenth anniversary of the date of this Agreement (the "Final Exercise Date"), and is subject to earlier termination as provided in Sections 6 and 7 below.

2. Exercisability of Option. Subject to the terms and conditions hereof, this Option shall vest and become exercisable as follows:

Milestone -----	% of Shares Vesting -----
On the date of this Agreement	6.25%
First Corporate Partnership (as defined below) (before September 1, 1998)	
If > \$5,000,000 and \$10,000,000	6.25%
If > \$10,000,000 and \$15,000,000	8.75%
If > \$15,000,000	11.25%
Second Corporate Partnership (before September 1, 1999)	
If > \$5,000,000 and \$10,000,000	6.25%
If > \$10,000,000 and \$15,000,000	8.75%
If > \$15,000,000	11.25%
First Corporate Partnership resulting from discovery of a new stem cell (before June 30, 2000)	
If > \$5,000,000 and \$10,000,000	6.25%
If > \$10,000,000 and \$15,000,000	8.75%
If > \$15,000,000	11.25%
Second Corporate Partnership resulting from discovery of a new stem cell (before June 30, 2000)	
If > \$5,000,000 and \$10,000,000	6.25%
If > \$10,000,000 and \$15,000,000	8.75%
If > \$15,000,000	11.25%
Commencement of first clinical trial of a CTI stem cell product (before June 30, 2000)	12.50%
Filing of first United States regulatory filing for marketing approval of a CTI stem cell product (before June 30, 2003)	12.50%

Filing of first European Union or Japanese regulatory filing for market approval with respect to a CTI stem cell product (before June 30, 2004)

12.50%

First United States commercial approval of a CTI stem cell product (before June 30, 2005) 25.00%

First European Union or Japanese commercial approval of a CTI stem cell product (before June 30, 2005) 25.00%

For purposes of the foregoing, "Corporate Partnership" means any joint venture, licensing agreement, collaboration agreement, or research and development agreement to which the Company is a party and which is material to the long-term success of the Company. A "Corporate Partnership resulting from the discovery of a new stem cell" shall mean a Corporate Partnership which is formed to commercially develop technology resulting from research conducted pursuant to the Research Plan (as such term is defined in a letter agreement between the Company and Messrs. Weissman, Gage and Anderson, dated as of September __, 1997) which the corporate partner and CTI reasonably believe has resulted in the discovery of a previously undiscovered stem cell.

The dollar amounts set forth above with respect to Corporate Partnerships refer to the receipt by the Company of the aggregate amount of the following payments received in connection with any such Corporate Partnership:

- (i) any non-refundable up-front license fees;
- (ii) the present value of all non-refundable, non-contingent license fees payable at a later date;
- (iii) the amount by which the purchase price paid for any non-refundable, non-contingent equity investment in the Company made in connection with such Corporate Partnership exceeds the fair market value of such equity investment as reasonably determined by the Board of Directors of the Company; and
- (iv) 50% of all non-contingent payments for sponsored research under any sponsored research agreement, provided, however, that in the case of the \$5 million target in each of the first two corporate partnership milestones, 100% of such payments shall count toward satisfaction of such target.

The Company shall not structure any Corporate Partnership in a bad faith effort to avoid giving rise to the vesting of options hereunder.

3. Exercise of Option. Each election to exercise this Option shall be in writing, signed by Optionee or by his duly appointed guardian or representative, his executor or administrator or the person or persons to whom this Option is transferred by will or the applicable laws of descent and distribution (collectively, the "Legal Representative"), and received by the Company at its principal office in Providence, Rhode Island, accompanied by payment in full as provided in Section 4 below. In the event this Option is exercised by such Legal Representative,

the Company shall be under no obligation to deliver stock hereunder unless and until the Company is reasonably satisfied that the person or persons exercising this Option is or are the duly appointed guardian(s) or representative(s) of Optionee, the duly appointed executor(s) or administrator(s) of the deceased Optionee or the person or persons to whom this Option has been transferred by will or the applicable laws of descent and distribution.

4. Payment for Stock. Shares of Common Stock shall be issued only upon receipt by the Company of full payment of the purchase price for the shares as to which this Option is exercised. The purchase price is payable by Optionee to the Company either (i) in cash or by certified check or cashier's check payable to the order of the Company; or (ii) through the delivery of shares of Common Stock (duly owned by Optionee and as to which Optionee has good title free and clear of any liens and encumbrances) which have been outstanding for at least six months and which have a fair market value (as determined by the Board of Directors of the Company) on the last business day prior to the date of exercise of this Option equal to the purchase price; or (iii) by delivery of an unconditional and irrevocable undertaking by a broker to deliver promptly to the Company sufficient funds to pay the exercise price; or (iv) by any combination of the foregoing permissible forms of payment. The Company will not be obligated to deliver any shares unless and until, in the opinion of the Company's counsel, all applicable federal and state laws and regulations have been complied with, nor, in the event the outstanding Common Stock is at the time listed upon any stock exchange, unless and until the shares to be delivered have been listed or authorized to be listed upon official notice that legal matters in connection with the issuance and delivery of such shares have been approved by the Company's counsel. The Company will use its best efforts to effect any such compliance or listing, and Optionee agrees to take any action reasonably requested by the Company in connection therewith. Subject to any applicable limitations under the Securities Act of 1933, as amended, and the rules and regulations thereunder, the Company will promptly file a Registration Statement on Form S-8 (or any successor form), with respect to the shares of Common Stock issuable upon exercise of this Option, and the Company will use all reasonable efforts to maintain the effectiveness of such registration statement for so long as this Option shall remain outstanding. The Company may require that Optionee agree that he will notify the Company when he makes any disposition of the shares issued upon exercise of this Option whether by sale, gift or otherwise. Optionee will have the rights of a shareholder only as to shares actually acquired by him upon exercise of this Option.

5. Non-transferability of Option. This Option may not be transferred by Optionee otherwise than by will or by the laws of descent and distribution. During Optionee's lifetime this Option may be exercised only by Optionee or Optionee's duly appointed guardian or representative.

6. Termination of Service. In the event Optionee ceases to be a consultant to or employee of the Company because the Company terminates his service for Cause (as defined in the Consulting/Employment Agreement) or Optionee terminates his service without Good Reason (as defined in the Consulting/Employment Agreement), this Option shall immediately terminate except that Optionee may thereafter exercise this Option, to the extent he was entitled to exercise

it on the date when his service terminated, for a period of 90 days after the date of such termination. In no event, however, may this Option be exercised after the Final Exercise Date.

7. Death or Disability. In the event Optionee dies or Optionee's service with the Company terminates by reason of disability (meaning the inability of Optionee, because of physical or mental illness or injury, to perform substantially all of his duties and responsibilities to the Company), this Option shall continue to be eligible for vesting as set forth in Section 2 of this Agreement for a period of two years after Optionee's death or the termination of his service because of disability. In addition, this Option may be exercised, as to all or any of (a) the shares that Optionee was entitled to purchase immediately prior to his death or the termination of his service because of disability and (b) the shares that vest in accordance with the preceding sentence, by Optionee or his Legal Representative, at any time or times within three years after his death or such termination of service. Except as so exercised this Option will expire at the end of such period. In no event, however, may this Option be exercised after the Final Exercise Date.

8. Administration. This Option will be administered by the Board of Directors of the Company, which will have the authority to interpret this agreement and to decide all questions and settle all controversies and disputes which may arise in connection herewith. All decisions, determinations and interpretations of the Board of Directors will be binding on all parties concerned. A majority of the members of the Board of Directors will constitute a quorum, and all determinations of the Board of Directors will be made by a majority of its members. Any determination of the Board of Directors under this agreement may be made without notice or meeting of the Board of Directors by a written instrument signed by a majority of the members of the Board of Directors. In the event of any conflict between the terms of this Option and the terms of the Plan the terms of this Option will control.

9. Stock to be Delivered. Stock to be delivered upon exercise of this Option may constitute an original issue of authorized but unissued stock or may consist of previously issued stock acquired by the Company as determined from time to time by the Board of Directors. The Board of Directors and the proper officers of the Company will take any appropriate action required for such delivery.

10. Changes in Stock. In the event of a stock dividend, stock split or combination of shares, recapitalization or other change in the Company's capital structure, the Board of Directors of the Company (whose determination will be binding on Optionee) will make appropriate adjustments to the number and kind of shares of stock or other securities subject to this Option, the exercise price and other relevant provisions. Except as provided in the following paragraph, in the event of a Change in Control (as defined below), this Option will expire and cease to be exercisable, provided that at least twenty days prior to the effective date of any such Change in Control, the Board of Directors shall either (a) make this Option immediately exercisable in full, or (b) arrange to have the acquiror or an affiliate thereof grant a replacement option or other replacement award containing terms that the Board of Directors reasonably determines to be equitable under the circumstances. "Change in Control" means any consolidation or merger in

which the Company is not the surviving corporation, a transaction or series of related transactions that result in the acquisition of all or substantially all of the Company's outstanding Common Stock by a single person or entity or by a group of persons or entities acting in concert, or the sale or transfer of all or substantially all of the Company's assets.

11. Acceleration of Options on Change in Control. Any Change in Control will result in the accelerated vesting of the lesser of (i) 50% of the shares originally issuable pursuant to this Option or (ii) all of the shares which would become vested on the achievement of all milestones which are not time-barred at the time of Change in Control.

In addition, the Shares subject to this Option shall be accelerated under the circumstances and to the extent described in Section 1 (f) of the Agreement (the "Research Agreement") dated September 25, 1997 among the Company, Irving Weissman and Fred H. Gage.

12. Amendments. The Board of Directors of the Company may at any time or times amend this Option for the purpose of satisfying the requirements of any changes in applicable laws or regulations or for any other purpose which may at the time be permitted by law, provided that no such amendment will adversely affect the rights of Optionee without his consent.

13. Governing Law. This agreement shall be governed by and construed in accordance with the laws of the State of Delaware (not including the conflict of laws principles thereof).

[Incentive Option Agreement]

IN WITNESS WHEREOF, the Company has caused this agreement to be executed by its duly authorized officer. This Option is granted at the Company's office, on the date stated above.

CYTOTHERAPEUTICS, INC.

By: -----

President

Accepted and Agreed:

- -----
Optionee

9-MOS
DEC-31-1997
SEP-30-1997
6,394,522
20,224,529
0
0
0
28,538,905
24,119,649
8,287,243
49,950,030
8,162,908
7,463,944
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0
172,390
27,739,076
49,950,030
0
8,740,038
0
26,907,005
0
297,141
(17,027,169)
0
(17,027,169)
0
0
(17,027,169)
(1.03)
(1.03)

CAUTIONARY FACTORS RELEVANT TO FORWARD-LOOKING INFORMATION

CytoTherapeutics, Inc. (the "Company") wishes to caution readers that the following important factors, among others, in some cases have affected and in the future could affect the Company's results and could cause actual results and needs of the Company to vary materially from forward-looking statements made in this Website by the Company on the basis of management's current expectations. The business in which the Company is engaged is rapidly changing, extremely competitive and involves a high degree of risk, and accuracy with respect to forward-looking projections is difficult. References are to the Company's 1996 Annual Report of Form 10-K

Early Stage Development; History of Operating Losses - Substantially all of the Company's revenues to date have been derived, and for the foreseeable future substantially all of the Company's revenues will be derived, from collaborative agreements, research grants and income earned on invested funds. The Company will incur substantial operating losses in the future as the Company conducts its research, development, clinical trial and manufacturing activities. There can be no assurance that the Company will achieve revenues from product sales or become profitable.

Future Capital Needs; Uncertainty of Additional Funding - The development of the Company's products will require the commitment of substantial resources to conduct the time-consuming research, preclinical development and clinical trials that are necessary for regulatory approvals and to establish production and marketing capabilities if such approvals are obtained. The Company will need to raise substantial additional funds to continue its product development efforts and intends to seek such additional funds through partnership, collaborative or other arrangements with corporate sponsors, public or private equity or debt financings, or from other sources. Future cash requirements may vary from projections based on changes in the Company's research and development programs, progress in preclinical and clinical testing, the Company's ability to enter into, and perform successfully under, collaborative agreements, competitive and technological advances, the need to obtain proprietary rights owned by third parties, facilities requirements, regulatory approvals and other factors. Lack of necessary funds may require the Company to delay, reduce or eliminate some or all of its research and product development programs or to license its potential products or technologies to third parties. No assurance can be given that funding will be available when needed, if at all, or on terms acceptable to the Company.

Uncertainties of Clinical Development and New Mode of Therapy - None of the Company's proposed products has been approved for commercial sale or entered Phase III clinical trials. Even if the Company's proposed products appear to be promising at an early stage of research or development such products may later prove to be ineffective, have adverse side effects, fail to receive necessary regulatory approvals, be difficult or uneconomical to manufacture or market on a commercial scale, be precluded from development by new regulations, be adversely affected by government price controls or limitations on reimbursement, be precluded from commercialization by proprietary rights of third parties or be subject to significant competition

from other products. There can be no assurance that the Company will be able to demonstrate, as required, that its implants, on a consistent basis and on a commercial scale, among other things: (i) successfully isolate transplanted cells from the recipient's immune system; (ii) remain biocompatible with the tissue into which they are implanted, including, for certain implants, brain tissue; (iii) adequately maintain the viability of cells contained within the membrane; (iv) safely permit the therapeutic substances produced by the cells within the membrane to pass through the membrane unto the patient in controlled doses for extended periods; and (v) are sufficiently durable for the intended indication.

Government Regulation - The Company's research, preclinical development and clinical trials, as well as the manufacturing and marketing of its potential products, are subject to extensive regulation by governmental authorities in the United States and other countries. The process of obtaining FDA and other required regulatory approvals is lengthy, expensive and uncertain. There can be no assurance that the Company or its collaborators will be able to obtain the necessary approvals to commence or continue clinical testing or to manufacture or market its potential products in anticipated time frames, if at all. In addition, several legislative proposals have been made to reform the FDA. If such proposals are enacted they may result in significant changes in the regulatory environment the Company faces. These changes could result in different, more costly or more time consuming approval requirements for the Company's products, in the dilution of FDA resources available to review the Company's products, or in other unpredictable consequences. See "Government Regulation."

There has been increasing regulatory concern about the risks of cell transplantation. Concern has focused on cells derived from cows (such as are used in the Company's pain program) and cells from primates and pigs. The United Kingdom has adopted a moratorium on xenotransplantation pending further research and discussion and the EC Commission has introduced a ban on the use of "high risk material" from cattle and sheep in the Member States of the European Community in the manufacture of pharmaceuticals (this ban would apparently not include cells used in the Company's pain program). In addition, the FDA has recently proposed guidelines which impose significant constraints on the conduct of clinical trials utilizing xenotransplantation. Furthermore, the FDA has published a "Proposed Approach to Regulation of Cellular and Tissue-Based Products" which relates to use of human cells. The Company cannot presently determine the effects of such actions nor what other actions may be taken. Restrictions on the testing or use of cells (whether nonhuman or human) as human therapeutics could materially adversely affect the Company's product development programs and the Company itself. See "Government Regulation."

Dependence on Outside Parties - The Company's strategy for the research, development, commercialization and marketing of its products contemplates that the Company will enter into various arrangements with corporate sponsors, pharmaceutical companies, universities, research groups and others. There is no assurance that the Company will be able to enter into any additional arrangements on terms acceptable to the Company, or successfully perform its obligations under its existing or any additional arrangements. If any of the Company's collaborators fails to perform its obligations in a timely manner or terminate their agreement with the

Company, the development or commercialization of the Company's product candidate or research program under such collaborative agreement may be adversely affected.

Need for and Uncertainty of Obtaining Patent Protection - Patent protection for products such as those the Company proposes to develop is highly uncertain and involves complex factual and evolving legal questions. No assurance can be given that any patents issued or licensed to the Company will not be challenged, invalidated or circumvented, or that the rights granted under such patents will provide competitive advantages to the Company.

Existence of Third Party Patents and Proprietary Rights; Need to Obtain Licenses - A number of pharmaceutical, biotechnology and other companies, universities and research institutions have filed patent applications or have been issued patents relating to cell therapy and encapsulation and other technologies potentially relevant to or required by the Company's expected products. The Company cannot predict which, if any, of such applications will issue as patents or the claims which might be allowed. The Company is aware of a number of third-party patent applications and patents relating to cell encapsulation or claiming use of genetically modified cells to treat disease, disorder or injury. In particular, the Company is aware of a third-party U.S. patent which relates the use of cells for alleviating chronic pain in humans and of two issued U. S. patents claiming certain methods for treating defective, diseased or damaged cells in the mammalian CNS by grafting genetically modified cells. The Company cannot predict the effect of existing patent applications and patents on future unencapsulated products. In addition, the Company is aware of third-party patents and patent applications claiming rights to the neurotrophic factors (such as CNTF, NT 4/5, Neurturin, and CT-1) which the Company hopes to deliver with its technology, and to the production of these factors through the use of genetically modified cells. The Company expects to use genetically modified cells to produce these factors for use in its products. The Company may also be required to seek licenses in regard to other cell lines, the techniques used in creating or obtaining such cell lines, the materials used in the manufacture of its implants or otherwise. There can be no assurance that the Company will be able to establish collaborative arrangements or obtain licenses to the foregoing technology or to other necessary or desirable technology on acceptable terms, if at all, or that the patents underlying any such licenses will be valid and enforceable. See "Patents, Proprietary Rights and Licenses" in the Company's Annual Report on Form 10-K.

Sources of Cells and Other Materials - The Company's potential products require genetically engineered cell lines or living cells harvested from animal or human sources. There can be no assurance that the Company will successfully identify or develop sources of the cells required for its potential products and obtain such cells in quantities sufficient to satisfy the commercial requirements of its potential products. These supply limitations may apply, in particular, to primary cells which must be drawn directly from animal or human sources, such as the bovine adrenal chromaffin cells currently used in the Company's product for the treatment of pain. As an alternative to primary cells, the Company is developing products based on the use of genetically altered cells. Intellectual property rights to important genetic constructs used in developing such cells, including the constructs used to develop cells producing neurotrophic factors, are or may be claimed by one or more companies, which could prevent the Company from using such cells.

Manufacturing Uncertainties - The Company's pilot manufacturing plant, may not have sufficient capacity to permit the Company to produce all the products for all of the clinical trials it anticipates developing. In addition, the Company has not developed the capability to commercially manufacture any of its proposed products and is unaware of any other company which has manufactured any membrane-encapsulated cell product on a commercial scale. There can be no assurance that the Company will be able to develop the capability of manufacturing any of its proposed products at a cost, consistency or in the quantities necessary to make a commercially viable product, if at all.

Competition - Competitors of the Company are numerous and include major pharmaceutical and chemical companies, biotechnology companies, universities and other research institutions. Currently, several of these competitors market and sell therapeutic products for the treatment of chronic pain, Parkinson's disease and other CNS conditions. In addition, most of the Company's competitors have substantially greater capital resources, experience in obtaining regulatory approvals and, in the case of commercial entities, experience in manufacturing and marketing pharmaceutical products, than the Company. A number of other companies are attempting to develop methods of delivering therapeutic substances within or across the blood brain barrier. There can be no assurance that the Company's competitors will not succeed in developing technologies and products that are more effective than those being developed by the Company or that would render the Company's technology and products obsolete or non-competitive. See "Competition."

Dependence on Key Personnel - The Company is highly dependent on the principal members of its management and scientific staff and certain of its outside consultants. Vacancies have occurred and are likely to occur from time to time among the Company's senior management and scientific staff. Loss of the services of any of the Company's key employees or consultants or the continued existence of such vacancies could have a material adverse effect on the Company's operations. In addition, the Company's operations are dependent upon its ability to attract and retain additional qualified scientific and management personnel. There can be no assurance the Company will be able to attract and retain such personnel on acceptable terms given the competition among pharmaceutical, biotechnology and health care companies, universities and research institutions for experienced personnel.

Reimbursement and Health Care Reform - In both domestic and foreign markets, sales of the Company's potential products will depend in part upon the availability and amounts of reimbursement from third-party health care payor organizations, including government agencies, private health care insurers and other health care payors such as health maintenance organizations and self-insured employee plans. There is considerable pressure to reduce the cost of therapeutic products. There can be no assurance that reimbursement will be provided by such payors at all or without substantial delay, or, if such reimbursement is provided, that the approved reimbursement amounts will provide sufficient funds to enable the Company to sell its products on a profitable basis. See "Reimbursement and Health Cost Control."