AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JANUARY 31, 2001

REGISTRATION NO. 333-54208

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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

AMENDMENT NO. 1 TO
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

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

DELAWARE	2836	94-3078125
(State or other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

525 DEL REY AVENUE, SUITE C
SUNNYVALE, CA 94085
(408)731-8670
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

IRIS BREST, ESQ.
STEMCELLS, INC.
525 DEL REY AVENUE, SUITE C
SUNNYVALE, CA 94085
(408)731-8670
(Name, address, including zip code, and telephone number, including area code, of agent for service)

COPIES TO:
GEOFFREY B. DAVIS, ESQ.
Ropes & Gray
One International Place
Boston, Massachusetts 02110
(617) 951-7000
(617) 951-7050 (fax)

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. /X/

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / /

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / /

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / /

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. / /

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED	PROPOSED MAXIMUM OFFERING PRICE PER SHARE(1)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(1)	AMOUNT OF REGISTRATION FEE

Common Stock, par value $.01 per share.....	65,000 Shares	$3.266	$212,264	$53.07

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act of 1933. The maximum price per share information is based on the average of the high and low sale prices on the Nasdaq National Market on January 22, 2001.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

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PROSPECTUS
JANUARY 31, 2001

STEMCELLS, INC.
SHARES OF COMMON STOCK

The selling stockholders listed on page 44 of this prospectus or in an accompanying supplement to this prospectus are offering to sell 65,000 shares of our common stock.

Our common stock is traded on the Nasdaq National Market under the symbol "STEM."

THIS INVESTMENT INVOLVES RISKS. SEE "RISK FACTORS" BEGINNING ON PAGE 4.

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

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PROSPECTUS SUMMARY

THIS SUMMARY HIGHLIGHTS IMPORTANT INFORMATION REGARDING OUR BUSINESS AND THIS OFFERING. BECAUSE THIS IS ONLY A SUMMARY, IT DOES NOT CONTAIN ALL THE INFORMATION THAT MAY BE IMPORTANT TO YOU. YOU SHOULD READ THE ENTIRE PROSPECTUS CAREFULLY, INCLUDING "RISK FACTORS" AND OUR FINANCIAL STATEMENTS AND RELATED NOTES, BEFORE DECIDING TO INVEST IN OUR COMMON STOCK.

STEMCELLS, INC.

We are engaged in research and development efforts focused on the identification, isolation and expansion of stem cells as the underlying technology for developing potential cell transplant therapies. Stem cells are key cells in the body that produce all of the functional mature cell types found in normal, healthy individuals. Our goal is to develop therapies that will use stem cells to repopulate or repair tissues, such as those of the brain, pancreas or liver, that have been damaged or lost as a result of disease or injury. All of our programs are currently at the discovery or pre-clinical stage.

Many diseases, such as Alzheimer's, Parkinson's and other degenerative diseases of the brain or nervous system, involve the failure of organs that cannot be transplanted. Other diseases, such as hepatitis and diabetes, involve organs such as the liver or pancreas that can be transplanted, but there is a very limited supply of those organs available for transplant. We estimate based on information available to us from the Alzheimer's Association, the Centers for Disease Control, the Family Caregiver's Alliance and the Spinal Cord Injury Information Network, that these conditions affect more than 18 million people in the United States and account for more than $150 billion annually in health care costs.

We believe that our stem cell technologies, if successfully developed, may provide the basis for effective therapies for these and other conditions. Our aim is to return patients to productive lives and significantly reduce the substantial health care costs often associated with these diseases and disorders. We have made significant progress toward developing stem cell therapies for the nervous system by identifying and characterizing the human central nervous system stem cell. We have also made significant advances in our search for the stem cells of the pancreas and the liver by identifying novel markers on the surface of cells so they can be isolated and tested to determine whether they are stem cells.

We have established our intellectual property position with respect to stem cell therapies for each of these three areas--the central nervous system, the pancreas and the liver--by patenting or seeking patent protection for our discoveries and by entering into exclusive licensing arrangements. Our portfolio of issued patents includes a method of culturing normal human neural stem cells in our proprietary medium, and our published studies show that our cultured and expanded cells give rise to all three major cell types of the central nervous system. In addition, the Company recently announced the results of a new study that showed that human brain stem cells can be successfully isolated with the use of markers present on the surface of freshly obtained brain cells. We believe this is the first reproducible process for isolating highly purified populations of well-characterized normal human neural stem cells, and we have applied for a composition of matter patent. We also have filed an improved process patent for the growth and expansion of these purified normal human neural cells.

Historical Note: We were formerly known as CytoTherapeutics and were incorporated in Delaware in 1988. We currently have one subsidiary, StemCells California, Inc., a California corporation we acquired in September 1997. Until mid-1999, we had programs in a different technology, encapsulated cell therapy, as well as stem cell programs. In 1999, we embarked on a major restructuring of our research and development operations and sold the encapsulated cell therapy technology. We now focus exclusively on the discovery, development and commercialization of our proprietary platform of stem cell technologies.

SUMMARY CONSOLIDATED FINANCIAL AND OTHER DATA
(IN THOUSANDS, EXCEPT PER SHARE DATA)

The following table summarizes the consolidated financial data for our business. You should read this table together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and notes included elsewhere in this prospectus.

	YEAR ENDED DECEMBER 31					NINE MONTHS ENDED SEPTEMBER 30	
	1995	1996	1997	1998	1999	1999	2000
STATEMENT OF OPERATIONS DATA							
Revenue from collaborative agreements	$11,761	$ 7,104	$ 10,617	$ 8,803	$ 5,022	$ 5,022	$ --
Research and development expenses	14,730	17,130	18,604	17,659	9,991	8,432	3,350
Acquired research and development			8,344				
ECT wind-down expenses					6,048	4,078	769
Net loss	$(8,891)	$(13,759)	$(18,114)	$(12,628)	$(15,709)	$(10,484)	$(4,865)
Basic and diluted net loss per share	$ (0.69)	$ (0.89)	$ (1.08)	$ (0.69)	$ (0.84)	$ (0.56)	$ (0.26)
Shares used in computing basic and diluted net loss per share	12,799	15,430	16,704	18,291	18,706	18,561	19,683

The following table provides a summary of our consolidated balance sheets.

	AS OF DECEMBER 31					AS OF SEPTEMBER 30
	1995	1996	1997	1998	1999	2000
BALANCE SHEET DATA						
Cash, cash equivalents and marketable securities	$44,192	$42,607	$29,050	$17,386	$ 4,760	$ 7,247
Restricted investments						27,204
Total assets	56,808	58,397	44,301	32,866	15,781	41,632
Long-term debt, including capitalized leases	5,441	8,223	4,108	3,762	2,937	2,692
Redeemable common stock		8,159	5,583	5,249	5,249	
Stockholders' equity	45,391	34,747	28,900	17,897	3,506	37,126

In July 1999 we began restructuring the company to focus solely on our stem cell technology. As part of this restructuring we terminated all activities related to our former encapsulated cell technology and we relocated our headquarters from Lincoln, Rhode Island to Sunnyvale, California. The results shown for the nine months ended September 30, 2000 includes $768,733 in expenses related to the restructuring. For more information on this restructuring see "Risk Factors," "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and notes included elsewhere in this prospectus.

During 2000 we realized a $1,427,686 gain and recognized an increase in value related to our remaining holdings of $27,204,333 in connection with our investment in Modex Therapeutics Ltd., a Swiss biotechnology company that completed an initial public offering on June 23, 2000. For more information on Modex see "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and notes included elsewhere in this prospectus.

RISK FACTORS

YOU SHOULD CAREFULLY CONSIDER THE RISKS DESCRIBED BELOW BEFORE MAKING AN INVESTMENT DECISION REGARDING STEMCELLS, INC. WE MAY FACE OTHER RISKS NOT DESCRIBED BELOW THAT WE DO NOT PRESENTLY KNOW ABOUT OR THAT WE CURRENTLY DEEM IMMATERIAL.

OUR BUSINESS, FINANCIAL CONDITION OR RESULTS OF OPERATIONS COULD BE MATERIALLY ADVERSELY AFFECTED BY ANY OF THESE RISKS. CONSEQUENTIALLY, THE TRADING PRICE OF OUR COMMON STOCK COULD DECLINE, RESULTING IN THE LOSS OF ALL OR PART OF YOUR INVESTMENT.

OUR TECHNOLOGY IS AT AN EARLY STAGE OF DISCOVERY AND DEVELOPMENT AND WE MAY FAIL TO DEVELOP ANY PRODUCTS.

Our stem cell technology is at the early pre-clinical stage for the brain stem cell and at the discovery phase for the liver and pancreas stem cells and has not yet led to the development of any proposed product. We may fail to discover the stem cells we are seeking, to develop any products, to obtain regulatory approvals, to enter clinical trials, or to commercialize any products. Any product using stem cell technology may fail to (i) survive and persist in the desired location, (ii) provide the intended therapeutic benefits, (iii) properly integrate into existing tissue in the desired manner, or (iv) achieve benefits therapeutically equal to or better than the standard of treatment at the time of testing. In addition, any such product may cause undesirable side effects. Results of early pre-clinical research may not be indicative of the results that will be obtained in later stages of preclinical or clinical research. If the appropriate regulatory authorities do not approve our products, or if we fail to maintain regulatory compliance, we would have limited ability to commercialize our products, and our business and results of operations would be harmed. Furthermore, since stem cells are a new form of therapy, the marketplace may not accept any products we may develop.

If we do succeed in developing products, we will face many potential obstacles such as the need to obtain regulatory approvals, and to develop or obtain manufacturing, marketing and distribution capabilities. In addition, we will face substantial additional risks such as product liability.

WE HAVE LIMITED LIQUIDITY AND CAPITAL RESOURCES AND MAY NOT OBTAIN THE SIGNIFICANT CAPITAL RESOURCES WE WILL NEED TO SUSTAIN OUR RESEARCH AND DEVELOPMENT EFFORTS.

We have limited liquidity and capital resources and must obtain substantial additional capital to support our research and development programs, for acquisition of technology and intellectual property rights, and, to the extent we decide to undertake these activities ourselves, for pre-clinical and clinical testing of our anticipated products, pursuit of regulatory approvals, establishment of production capabilities, establishment of marketing and sales capabilities and distribution channels, and general administrative expenses.

We owned 126,193 shares of Modex Therapeutics Ltd., stock with an estimated fair market value on June 30, 2000 of $19,220,165 based on the per share price of approximately $152.00, which we converted from a market price of 247.50 Swiss francs on June 30, 2000, and we had been restricted from selling these shares until December 23, 2000. On January 2, 2001, the market price of Modex stock was 210.00 Swiss francs, which converts to $130.39 using the exchange rates on that date, and represents an estimated fair market value of $16,453,825 for our holdings on that date. The performance of Modex stock since Modex's initial public offering does not predict its future value and the value of our holdings is subject to change and could decrease significantly. On January 9, 2001, we sold 22,616 Modex shares for a net price of 182.00 Swiss francs per share, which converts to $112.76 per share, for total proceeds of $2,550,230.27. In connection with this sale, we agreed not to resell any more of our remaining 103,577 Modex shares until April 12, 2001. If we decide to sell more of our Modex shares, due to the relatively small trading volume in Modex shares and the relatively large size of our holding, or other factors, we may not be able to sell our Modex shares at their market value or at all, and we may have to sell these shares at a significant discount to the market price. If we

sell some but not all of our Modex shares, it is likely that we would have to agree, in connection with the sale, to refrain from selling additional shares for several months. In addition, fluctuations in currency exchange rates could decrease the proceeds we might realize on a potential sale of Modex shares.

We intend to pursue our needed capital resources through equity and debt financings, corporate alliances, grants and collaborative research arrangements. Our ability to complete any such arrangements successfully will depend upon market conditions and, more specifically, on continued progress in our research and development efforts. We may fail to obtain the necessary capital resources from any such sources when needed or on terms acceptable to us. If we do not obtain the necessary capital resources, we may have to delay, reduce or eliminate some or all of our research and development programs or license our technology or any potential products to third parties rather than commercializing them ourselves.

WE HAVE PAYMENT OBLIGATIONS RESULTING FROM REAL PROPERTY OWNED OR LEASED BY US IN RHODE ISLAND, WHICH ADVERSELY AFFECT OUR ABILITY TO FUND OUR STEM CELL RESEARCH AND DEVELOPMENT.

Prior to our reorganization in 1999 and the resulting consolidation of all functions in California, we carried out our former encapsulated cell therapy programs at facilities in Lincoln, Rhode Island, where we also had our administrative offices. Although we have vacated these facilities, we have continuing obligations for lease payments and operating costs of approximately $950,000 per year for our former science and administrative facility, which we have leased through June 30, 2013, and debt service payments and operating costs of approximately $1,000,000 per year for our former encapsulated cell therapy pilot manufacturing facility. We are currently seeking to sublease the science and administrative facility and to sell the pilot manufacturing facility, but may not be able to do so. These continuing costs significantly reduce our cash resources and adversely affect our ability to fund further development of our stem cell technology. The lease for the science and administrative facility contains a provision requiring occupancy of the premises and we currently may be in violation of this provision. If the landlord decides to pursue its rights, we may be required to pay the landlord the entire amount due for the rest of the lease period.

WE MAY NEED BUT FAIL TO OBTAIN PARTNERS TO SUPPORT OUR STEM CELL DEVELOPMENT EFFORTS AND TO COMMERCIALIZE OUR TECHNOLOGY.

Equity and debt financings alone may not be sufficient to fund the cost of developing our stem cell technologies and we may need to rely on our ability to reach partnering arrangements to provide financial support for our stem cell discovery and development efforts. In addition, in order to successfully develop and commercialize our technology, we may need to enter into a wide variety of arrangements with corporate sponsors, pharmaceutical companies, universities, research groups and others. While we have engaged, and expect to continue to engage, in discussions regarding such arrangements, we have not reached any agreement regarding any such arrangement and we may fail to obtain any such agreement on terms acceptable to us, if at all. Even if we enter into these arrangements, we may not be able to satisfy our obligations under them or renew or replace them after their original terms. Furthermore, these arrangements may require us to grant certain rights to third parties, including exclusive marketing rights to one or more products, or may have other terms that are burdensome to us, and may involve the acquisition of our securities. If any of our collaborators terminates its relationship with us or fails to perform its obligations in a timely manner, the development or commercialization of our technology and potential products may be adversely affected.

We entered into a Sponsored Research Agreement with the Scripps Research Institute under which we funded certain research in return for licenses or options to license the inventions resulting from the research. This agreement expired on November 14, 2000 and we are negotiating with Scripps to extend the term of this agreement or to enter into a new agreement. As of the date of this prospectus, we have not yet completed our negotiations with Scripps and we cannot give any assurance

that our negotiations will be successful. If we are unable to extend the term of this agreement or enter into a new agreement, we will have to find a replacement to perform this research or we will have to perform this research ourselves. In either case, we may experience delay and additional expense in connection with this research effort.

WE HAVE A HISTORY OF OPERATING LOSSES AND WE MAY FAIL TO OBTAIN REVENUES OR BECOME PROFITABLE.

We have incurred $124,237,900 in operating losses through September 30, 2000 and expect to continue to incur substantial operating losses in the future in order to conduct our research and development activities, and if those activities are successful, to fund clinical trials and other expenses. These expenses include the cost of acquiring technology, product testing, acquiring regulatory approvals, establishing production, marketing, sales and distribution programs, and administrative expenses. We have not earned any revenues from sales of any product. All of our past revenues have been derived from, and any revenues we may obtain for the foreseeable future are expected to be derived from, cooperative agreements, research grants, investments and interest on invested capital. We have no cooperative agreements and we have received only two research grants for our stem cell technology, and we may not obtain any such agreements or additional grants in the future, or receive any revenues from them.

WE DO NOT ANTICIPATE RECEIVING FUTURE REVENUES FROM THE SALE OF OUR ENCAPSULATED CELL TECHNOLOGY.

In December 1999, we sold our encapsulated cell therapy technology to Neurotech S.A. While under the terms of the sale we may receive royalty and other payments from Neurotech under certain circumstances, we do not anticipate receiving any material payments from Neurotech in the near future, if at all.

WE DEPEND ON PATENTS AND PROPRIETARY RIGHTS TO PROTECT OUR INTELLECTUAL PROPERTY FROM INFRINGEMENT. NEVERTHELESS, SUCH PROTECTION IS UNCERTAIN AND, IF GAINED, MAY OFFER ONLY LIMITED PROTECTION. IF WE ARE UNABLE TO PROTECT OUR PATENTS AND PROPRIETARY RIGHTS, OUR BUSINESS, FINANCIAL CONDITION AND RESULTS OF OPERATION WILL BE HARMED.

We own or license a number of patents or pending patent applications covering human nerve stem cell cultures, central nervous system stem cell cultures, neuroblast cultures, peripheral nervous system stem cell cultures, and an animal model for liver failure. Patent protection for products such as those we propose to develop is highly uncertain and involves complex and continually evolving factual and legal questions. The governmental authorities that consider patent applications can deny or significantly reduce the patent coverage requested in an application before or after issuing the patent. Consequently, we do not know whether any of our pending applications will result in the issuance of patents, or if any existing or future patents will provide sufficient protection or significant commercial advantage or if others will circumvent these patents. Since patent applications are secret until patents are issued in the United States or until the applications are published in foreign countries, and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain that we were the first to make the inventions covered by each of our pending patent applications or that we were the first to file patent applications for such inventions. Our patents may not issue from our pending or future patent applications or, if issued, may not be of commercial benefit to us, or may not afford us adequate protection from competing products. In addition, third parties may challenge our patents or governmental authorities may declare them invalid. In the event that a third party has also filed a patent application relating to inventions claimed in our patent applications, we may have to participate in proceedings to determine priority of invention. This could result in substantial uncertainties and cost for us, even if the eventual outcome is favorable to us, and the outcome might not be favorable to us. Even if a patent issues, a court could decide that the patent was issued invalidly.

IF OTHERS ARE FIRST TO DISCOVER AND PATENT ANY STEM CELLS WE ARE SEEKING TO DISCOVER, WE COULD BE BLOCKED FROM FURTHER WORK ON THAT STEM CELL, AND OUR BUSINESS WOULD BE HARMED.

Because the first person or entity to discover and obtain a valid patent to a particular stem or progenitor cell may effectively block all others, it will be important to our development efforts for us or our collaborators to be the first to discover any stem cell that we are seeking. Failure to be the first could prevent us from commercializing all of our research and development related to such stem cell and have a material adverse effect on the Company.

WE MAY NEED TO OBTAIN LICENSES TO THIRD PARTY PATENTS, AND MAY NOT BE ABLE TO GET THEM.

A number of pharmaceutical, biotechnology and other companies, universities and research institutions have filed patent applications or have received patents relating to cell therapy, stem cells and other technologies potentially relevant to or necessary for our expected products. We cannot predict which, if any, of the applications will issue as patents. We are also aware of a number of patent applications and patents claiming use of genetically modified cells to treat disease, disorder or injury. We are aware of three patents issued to two competitors claiming certain methods for enriching central nervous system stem cells through gene modification of in vitro cultured cells. These patents were issued or licensed to NeuralStem and Layton Bioscience. It is possible that NeuralStem or Layton Bioscience will be able to produce commercially available stem cell products before we can. These genetically modified cells may be effective in treating defective, diseased or damaged central nervous system tissue.

If third party patents or patent applications contain claims infringed by our technology and these claims are valid, we may be unable to obtain licenses to these patents at a reasonable cost, if at all, and may also be unable to develop or obtain alternative technology. If we are unable to obtain such licenses at a reasonable cost, our business could be significantly harmed. We may have to to defend ourselves in court against allegations of infringement of third party patents. Patent litigation is very expensive and could consume substantial resources and create significant uncertainties. An adverse outcome in such a suit could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties, or require us to cease using such technology.

Proprietary trade secrets and unpatented know-how are also important to our research and development activities. We cannot be certain that others will not independently develop the same or similar technologies on their own or gain access to our trade secrets or disclose such technology, or that we will be able to meaningfully protect our trade secrets and unpatented know-how and keep them secret.

We require our employees, consultants, and significant scientific collaborators and sponsored researchers to execute confidentiality agreements upon the commencement of an employment or consulting relationship with us. These agreements may, however, fail to provide meaningful protection or adequate remedies for us in the event of unauthorized use, transfer or disclosure of such information or inventions.

We have obtained rights from universities and research institutions to technologies, processes and compounds that we believe may be important to the development of our products. Licensors may cancel our licenses or convert them to non-exclusive licenses if we fail to use the relevant technology or otherwise breach these agreements. Loss of such licenses could expose us to the risks of third party patents and/or technology. We can give no assurance that any of these licenses will provide effective protection against our competitors.

WE COMPETE WITH COMPANIES THAT HAVE SIGNIFICANT ADVANTAGES OVER US.

The market for therapeutic products that address degenerative diseases is large and competition is intense. We expect competition to increase. We believe that our most significant competitors will be

fully integrated pharmaceutical companies and more established biotechnology companies, such as Biogen, Inc. and Genzyme, an Elan Corporation. These companies already produce or are developing treatments for degenerative diseases that are not stem-cell based, and they have significantly greater capital resources and expertise in research and development, manufacturing, testing, obtaining regulatory approvals and marketing than we do. Many of these potential competitors have significant products approved or in development that could be competitive with our potential products, and also operate large, well-funded research and development programs. In addition, we expect to compete with smaller companies such as NeuralStem and Layton Bioscience and with universities and other research institutions who are developing treatments for degenerative diseases that are stem-cell based.

Our competitors may succeed in developing technologies and products that are more effective than those being developed by us, or that would render our technology obsolete or non-competitive.

The relative speed with which we and our competitors can develop products, complete the clinical testing and approval processes, and supply commercial quantities of a product to market will affect our ability to gather market acceptance and market share. With respect to clinical testing, competition may delay progress by limiting the number of clinical investigators and patients available to test our potential products.

DEVELOPMENT OF OUR TECHNOLOGY WILL BE SUBJECT TO EXTENSIVE GOVERNMENT REGULATION.

Our research and development efforts, as well as any future clinical trials, and the manufacturing and marketing of any products we may develop, will be subject to extensive regulation by governmental authorities in the United States and other countries. The process of obtaining U.S. Food and Drug Administration and other necessary regulatory approvals is lengthy, expensive and uncertain. We or our collaborators may fail to obtain the necessary approvals to commence or continue clinical testing or to manufacture or market our potential products in reasonable time frames, if at all. In addition, the United States Congress and other legislative bodies may enact regulatory reforms or restrictions on the development of new therapies that could adversely affect the regulatory environment in which we operate or the development of any products we may develop.

We base our research and development on the use of human stem and progenitor cells obtained from fetal tissue. The federal and state governments and other jurisdictions impose restrictions on the use of fetal tissue. These restrictions change from time to time and may become more onerous. Additionally, we may not be able to identify or develop reliable sources for the cells necessary for our potential products--that is, sources that follow all state and federal guidelines for cell procurement. Further, we may not be able to obtain such cells in the quantity or quality sufficient to satisfy the commercial requirements of our potential products. As a result we may be unable to develop or produce our products in a profitable manner.

We may apply for status under the Orphan Drug Act for certain of our therapies, in order to gain a seven year period of marketing exclusivity for those therapies. The U.S. Congress in the past considered, and in the future again may consider, legislation that would restrict the extent and duration of the market exclusivity of an orphan drug. If enacted, such legislation could prevent us from obtaining some or all of the benefits of the existing statute even if we were to apply for and be granted orphan drug status with respect to a potential product.

WE DEPEND ON A LIMITED NUMBER OF KEY PERSONNEL.

We are highly dependent on the principal members of our management and scientific staff and certain of our outside consultants, including the members of our scientific advisory board, our chief executive officer, each of our vice presidents and the directors of our neural stem cell and liver stem cell programs. Although we have entered into employment agreements with some of these individuals, they may terminate their agreements at any time. We currently have outside consultants and interim

personnel in key management and scientific positions who are not permanent employees. Loss of services of any of these individuals could have a material adverse effect on our operations, because these individuals possess management experience or specialized scientific skills which we do not otherwise have and which we may not be able to replace. In addition, our operations are dependent upon our ability to attract and retain additional qualified scientific and management personnel. More generally, we may not be able to attract and retain the personnel we need on acceptable terms given the competition for experienced personnel among pharmaceutical, biotechnology and health care companies, universities and research institutions. If we lose the services of these key personnel or are unable to attract and retain additional qualified personnel, we may have to delay, reduce or eliminate some or all of our research and development programs.

HEALTHCARE INSURERS AND OTHER ORGANIZATIONS MAY NOT PAY FOR OUR PRODUCTS OR MAY IMPOSE LIMITS ON REIMBURSEMENTS.

In both domestic and foreign markets, sales of potential products are likely to 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, and government and other third party payors are increasingly attempting to contain health care costs by limiting both coverage and the level of reimbursement for new therapeutic products, and by refusing, in some cases, to provide any coverage for uses of approved products for disease indications for which the Food and Drug Administration has not granted marketing approval. Significant uncertainty exists as to the reimbursement status of newly approved health care products. We can give 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 be sufficient to enable us to sell products we develop on a profitable basis. Changes in reimbursement policy could also adversely affect the willingness of pharmaceutical companies to collaborate with us on the development of our stem cell technology.

In certain foreign markets, pricing or profitability of prescription pharmaceuticals is subject to government control. We expect that there will continue to be a number of Federal and state proposals to implement government control over health care costs. Efforts at healthcare reform are likely to continue in future legislative sessions. We do not know what legislative proposals Federal or state governments will adopt or what actions Federal, state or private payers for healthcare goods and services may take in response to healthcare reform proposals or legislation. We cannot predict the effect government control and other healthcare reforms may have on our business.

OUR QUARTERLY OPERATING RESULTS MAY FLUCTUATE.

Our operating results have varied, and may in the future continue to vary, significantly from quarter to quarter due to a variety of factors. These factors include the receipt of one-time license or milestone payments under collaborative agreements, costs associated with the winddown of our encapsulated cell therapy programs, variation in the level of expenses related to our research and development efforts, receipt of grants or other support for our research and development efforts, and other factors. Quarterly comparisons of our financial results are not necessarily meaningful and you should not rely upon them as an indication of future performance.

OUR STOCK PRICE MAY BE VOLATILE AND THIS VOLATILITY COULD RESULT IN LAWSUITS OR MAKE IT DIFFICULT TO RAISE CAPITAL.

The market price for our common stock has been volatile and could decline below the offering price for the shares. We believe that the market price for our common stock could fluctuate substantially due to some or all of the risk factors enumerated above.

The stock market has recently experienced extreme price and volume fluctuations. These fluctuations have especially affected the market price of the stock of many high technology and health care-related companies. Such fluctuations have often been unrelated to the operating performance of these companies. Nonetheless, these broad market fluctuations may negatively affect the market price of our common stock. In the past, companies that have experienced volatility in the market price of their stock have been the objects of securities class action litigation. If we were the object of securities class action litigation, we could incur material costs and suffer a diversion of our management's attention and resources. In addition, volatility in our stock price may make it difficult for us to obtain additional capital resources through financings on terms acceptable to us.

EVENTS WITH RESPECT TO OUR SHARE CAPITAL COULD CAUSE THE PRICE OF OUR COMMON STOCK TO DECLINE.

Sales of substantial amounts of our common stock on the open market, or the availability of such shares for sale, could adversely affect the price of our common stock. In particular, as of October 31, 2000, we had outstanding stock options to purchase approximately 2,566,530 shares of common stock, at an average exercise price of approximately $4.402 per share, subject to adjustment in certain circumstances. Of this total, options covering approximately 941,309 shares are currently exercisable at an average exercise price of approximately $4.742 per share.

FORWARD-LOOKING STATEMENTS

This prospectus includes forward-looking statements. You can identify these statements by forward-looking words such as "may," "will," "possibly," "expect," "anticipate," "project," "believe," "estimate" and "continue" or similar words. You should read statements that contain these words carefully because they discuss our future expectations, contain projections of our future results of operations or of our financial condition, or state other "forward-looking" information. We believe that it is important to communicate our future expectations to our investors. However, there will be events in the future that we have not been able to accurately predict or control and that may cause our actual results to differ materially from those discussed. For example, contaminations at our facilities, changes in the pharmaceutical or biotechnology industries, competition and changes in government regulations or general economic or market conditions could all have significant effects on our results. These factors should be considered carefully and readers should not place undue reliance on our forward-looking statements. Before you invest in our common stock, you should be aware that the occurrence of the events described in the "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business" sections and elsewhere in this prospectus could harm our business, operating results and financial condition. All forward looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements and risk factors contained throughout this prospectus.

INDUSTRY AND MARKET DATA

In this prospectus, we rely on and refer to information and statistics regarding disease occurrences, costs of treatment, biotechnology, and the market sectors in which we may compete in the future. We obtained this information and statistics from various third party sources, discussions with our consultants and/or our own internal estimates. We believe that these sources and estimates are reliable, but we have not independently verified them.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares offered pursuant to this prospectus.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our common stock. We currently intend to retain any future earnings to fund the development and growth of our business. We do not, therefore, anticipate paying any cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will be dependent on then existing conditions, including our financial stability, results of operations, contractual restrictions, capital requirements, business prospects and other factors our board of directors deems relevant.

CAPITALIZATION

The following table presents our consolidated capitalization as of September 30, 2000. This table excludes

- 2,797,518 shares of common stock issuable upon the exercise of outstanding stock options and warrants as follows:

a) as of September 30, 2000, 2,501,031 shares of common stock upon the exercise of stock options pursuant to our stock option plans at a weighted average price of $4.209 per share.

b) 101,587 shares of common stock upon the exercise of a warrant held by Millennium Partners, L.P in conjunction with the aforementioned August 3, 2000 financing at an exercise price of $4.725 per share.

c) 19,900 shares of common stock upon the exercise of a warrant held by Millennium Partners, L.P. in conjunction with the aforementioned August 30, 2000 financing at an exercise price of $6.03 per share.

d) 100,000 shares of common stock upon the exercise of warrants granted to May Davis Group, Inc. and four of its affiliates in connection with the aforementioned financing at an exercise price of $5.0375 per share.

e) 75,000 shares of common stock upon the exercise of warrants at $6.58125 per share held by holders of our 6% cumulative convertible preferred stock purchased on April 13, 2000 for $1,500,000.

- The right under certain circumstances for holders of our 6% cumulative convertible preferred stock to acquire up to a total of 1,126 additional shares of our 6% cumulative convertible preferred stock, which is convertible at the option of the holders into common stock at $6.33 per share subject to customary antidilution protection.

- Millennium Partners, L.P.'s option to purchase up to an additional $2,000,000 of common stock through August 3, 2001.

- The right of the holders of our 6% cumulative convertible preferred stock to convert their preferred shares into 397,878 shares of common stock at $3.77 per share.

- 65,000 shares issued to NeuroSpheres, Ltd. on October 30, 2000.

This table should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and notes thereto included elsewhere in this prospectus.

	AS OF SEPTEMBER 30, 2000
Stockholders' equity:	
Convertible Preferred Stock, par value $0.01 per share, 1,000,000 shares authorized, 2,626 designated as 6% Cumulative Convertible Preferred Stock, 1,500 shares issued	$ 1,500,000
Common stock, par value $0.01 per share, 45,000,000 shares authorized, 20,881,812 shares issued	208,818
Additional paid-in-capital	134,698,668
Stock subscription receivable	(1,250,004)
Accumulated deficit	(124,237,900)
Accumulated other comprehensive income	27,204,333
Deferred compensation	(997,664)
Total stockholders' equity	$ 37,126,251

DILUTION

This offering is for sales of stock by our existing stockholders on a continuous or delayed basis in the future. Sales of common stock by stockholders will not result in any substantial change to the net tangible book value per share before and after the distribution of shares by the selling stockholders. There will be no change in net tangible book value per share attributable to cash payments made by purchasers of the shares being offered. Prospective investors should be aware, however, that the price of our shares may not bear any rational relationship to net tangible book value per share.

SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and notes to those statements and other financial information included elsewhere in this prospectus.

The consolidated historical financial data presented below as of December 31, 1995, 1996, 1997, 1998, and 1999 and for the years then ended are derived from our consolidated financial statements, which have been audited by Ernst & Young LLP, our independent auditors. The selected consolidated financial data as of September 30, 1999 and 2000, and for the nine months then ended are derived from our unaudited financial statement. In the opinion of management, the unaudited financial statements have been prepared on the same basis as the audited consolidated financial statements and include all adjustments (consisting only of normal recurring adjustments) necessary for a fair presentation of the financial position and results of operations for such periods. The selected consolidated financial data for the nine months ended September 30, 2000 are not necessarily indicative of the results that may be expected for the year ended December 31, 2000 or any other future period.

	YEAR ENDED DECEMBER 31,					NINE MONTHS ENDED SEPTEMBER 30,	
	1995	1996	1997	1998	1999	1999	2000
STATEMENT OF OPERATIONS DATA							
Revenue from collaborative agreements	$11,761	$ 7,104	$ 10,617	$ 8,803	$ 5,022	$ 5,022	$ --
Research and development expenses	14,730	17,130	18,604	17,659	9,991	8,432	3,350
Acquired research and development			8,344				
ECT wind-down and corporate relocation expenses					6,048	4,078	769
Net loss	$(8,891)	$(13,759)	$(18,114)	$(12,628)	$(15,709)	$(10,484)	$(4,865)
Basic and diluted net loss per share	$ (0.69)	$ (0.89)	$ (1.08)	$ (0.69)	$ (0.84)	$ (0.56)	$ (0.26)
Shares used in computing basic and diluted net loss per share	12,799	15,430	16,704	18,291	18,706	18,561	19,683

The following table provides a summary of our consolidated balance sheets.

	AS OF DECEMBER 31,					AS OF SEPTEMBER 30,
	1995	1996	1997	1998	1999	2000
BALANCE SHEET DATA						
Cash, cash equivalents and marketable securities	$44,192	$42,607	$29,050	$17,386	$ 4,760	$ 7,247
Restricted investments						27,204
Total assets	56,808	58,397	44,301	32,866	15,781	41,632
Long-term debt, including capitalized leases	5,441	8,223	4,108	3,762	2,937	2,692
Redeemable common stock		8,159	5,583	5,249	5,249	--
Stockholders' equity	45,391	34,747	28,900	17,897	3,506	37,126

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

The following discussion of our financial condition and results of operations for the nine months ended September 30, 2000 and 1999 and the years ended December 31, 1999, 1998, and 1997 should be read in conjunction with our consolidated financial statements and notes to those statements and other financial information included elsewhere in this prospectus.

RESULTS OF OPERATIONS

OVERVIEW

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

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

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

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

NINE MONTHS ENDED SEPTEMBER 30, 2000 AND 1999

For the nine months ended September 30, 2000 and 1999, revenues from collaborative agreements totaled $0 and $5,021,707, respectively. The decrease in revenues resulted from the June 1999 termination of a Development, Marketing and License Agreement related to our former ECT. We have not entered into revenue-producing collaborations with respect to our platform of stem cell technologies.

During the second quarter 2000 we realized a $1,427,686 gain in connection with our investment in Modex Therapeutics Ltd ("Modex"), a Swiss biotechnology company that completed an initial public offering on June 23, 2000. At September 30, 2000, we owned 126,193 shares with an estimated fair value of $27,204,333, based on the per share price of $215.58 which we converted from a market price of 372.00 Swiss francs on that date. On January 2, 2001 the market price was 210.00 Swiss Francs, which converts to $130.39 and results in an estimated fair value of $16,453,825 for the Company's

holdings on that date. On January 9, 2001, we sold 22,616 Modex shares for a net price of 182.00 Swiss francs per share, which converts to $112.76 per share, for total proceeds of $2,550,230.27. In connection with this sale, we agreed not to resell any more of our remaining 103,577 Modex shares until April 12, 2001.

Research and development expenses totaled $3,350,101 for the nine months ended September 30, 2000, compared with $8,432,262 for the same period in 1999. The decrease of $5,082,161, or 60% from 1999 to 2000 is primarily attributable to the wind-down of research activities relating to the ECT.

General and administrative expenses were $2,172,137 for the nine months ended September 30, 2000, compared with $3,195,672 for the same period in 1999. The decrease of $1,023,535, or 32%, from 1999 to 2000 was primarily attributable to lower payroll costs (approximately $882,000) resulting from the restructuring of administrative operations and to the establishment of a smaller corporate office in California (approximately $136,000).

Wind-down expenses related to our ECT research, our Rhode Island operations and the transfer of our headquarters to Sunnyvale, California for the nine months ended September 30, 2000 and 1999 was $768,733 and $4,078,034 respectively. In 1999 we had created a reserve of $1,634,522 for wind-down expenses related to the first half of 2000, of which approximately $463,000 related to the carrying costs through an expected June 30, 2000 disposition of the Rhode Island facilities. During the first six months of 2000 we incurred $288,646 of costs in excess of the amounts reserved as of December 31, 1999 for the carrying costs, including lease payments, property taxes and utilities, of the Rhode Island facilities. During the third quarter we incurred an additional $480,087 in carrying costs for the Rhode Island facilities, as we were unable to dispose of them by June 30, 2000, as expected. These amounts were previously included in general and administrative expense, and have been reclassified to be separately disclosed as encapsulated cell therapy wind down and corporate relocation expense because they were directly related to the wind down and relocation. We anticipate that we will incur a similar amount in the fourth quarter of 2000 and in every quarter thereafter until we dispose of these facilities. We do not currently have a projected date for such disposal and there can be no assurance that we will be able to dispose of these facilities in a reasonable time, if at all. Some additional items that were more properly included in research and development were also reclassified out of general and administrative expense, and facilities costs were more accurately spread between research and development and general and administrative expense.

Interest income for the nine months ended September 30, 2000 and 1999 was $218,480 and $504,114 respectively. The decrease in interest income in 2000 was attributable to the lower average investment balances during such period. Interest expense was $209,287 for the nine months ended September 30, 2000, compared with $236,836 for the same period in 1999. The decrease in 2000 was attributable to lower outstanding debt and capital lease balances in 2000 compared to 1999.

Net loss for the nine months ended September 30, 2000 was $4,865,190 or ($0.25) per share, as compared to net loss of $10,483,760 or ($0.56) per share, for the comparable period in 1999. The decrease in net loss of $5,618,570 or 54% from the same period in 1999 was primarily attributable to the wind-down of research activities relating to the ECT and reflects a gain of $1,427,686 in connection with our investment in Modex. We (then known as CytoTherapeutics, Inc.) were one of the founders of Modex, a Swiss biotherapeutics company established in 1996 to pursue encapsulated cell technologies related to our former programs. After Modex' Initial Public offering on the Swiss Neue Market on June 23, 2000 and our sale of 23,807 shares, we owned 126,193 shares of Modex common stock. The IPO price was 168.00 Swiss Francs, and the share price on September 30, 2000 was 372.00 Swiss Francs. On January 2, 2001 the market price was 210.00 Swiss Francs. On January 9, 2001, we sold 22,616 Modex shares for a net price of 182.00 Swiss francs per share, which converts to $112.76 per share, for total proceeds of $2,550,230.27. In connection with this sale, we agreed not to resell any more of our remaining 103,577 Modex shares until April 12, 2001.

YEARS ENDED DECEMBER 31, 1999, 1998 AND 1997

Revenues from collaborative agreements totaled $5,022,000, $8,803,000 and $10,617,000 for the years ending December 31, 1999, 1998 and 1997, respectively. We earned revenues primarily from a Development, Marketing and License Agreement with AstraZeneca Group plc, which we signed in March 1995. The decrease in revenues from 1998 to 1999 resulted primarily from the June 1999 termination of the AstraZeneca Agreement. 1997 revenues included a $3,000,000 milestone payment from AstraZeneca related to the Phase II clinical trials for an ECT product.

Research and development expenses totaled $9,984,000 in 1999, as compared to $17,659,000 in 1998 and $18,604,000 in 1997. The decrease of $7,668,000, or 43%, from 1998 to 1999 was primarily attributable to the wind-down of research activities relating to the ECT, precipitated by termination of the AstraZeneca Agreement. The decrease of $945,000, or 5%, from 1997 to 1998 was primarily attributable to a reduction in spending on research agreements and a reduction in research and development personnel.

Acquired research and development consists of a one-time charge of $8,344,000 related to the acquisition of StemCells California, Inc., in 1997. Commercialization of this technology will require significant incremental research and development expenses over a number of years. With the recent completion of the restructuring of our research operations, we are now focused solely on the research and development of our platform of stem cell technologies, which encompasses the technology acquired upon the acquisition of StemCells California, Inc. and related technology we have developed or licensed.

General and administrative expenses were $4,927,303 for the year ended December 31, 1999, compared with $4,603,000 in 1998 and $6,158,000 in 1997. The 1999 general administrative expenses were positively impacted by the reduction in facility costs that were included in wind-down ($239,000), reduction in amortization of patents and intangible assets of approximately $338,000, as well as reduced activities and related personnel costs estimated at approximately $500,000 that were not incurred. This was due to the wind-down of our ECT programs and relocation of our headquarters in October 1999. The reduction of $1,555,000, or 25%, from 1997 to 1998 was primarily attributable to a reduction in legal fees, recruiting and relocation expenses, as well as a reduction in employees.

Wind-down and relocation expenses totaled $6,047,806 for the year ended December 31, 1999; no such expenses were incurred in 1998 and 1997. These expenses relate to the wind-down of our encapsulated cell technology research and our other Rhode Island operations the transfer of our corporate headquarters to Sunnyvale, California.

They include accruals of approximately $1,554,000 for employee severance costs, $1,858,000 in losses and reserves for the write-down of related patents and fixed assets, $1,172,000 for our costs of settlement of a 1989 funding agreement with the Rhode Island Partnership for Science and Technology, $702,000 of estimated additional carrying costs through an expected June 30, 2000 disposition of the Rhode Island facilities, and other related expenses totaling $762,000.

Interest income for the years ended December 31, 1999, 1998 and 1997 totaled $564,000, $1,254,000 and $1,931,000, respectively. The average cash and investment balances were $10,663,000, $21,795,000 and $33,343,000 in 1999, 1998 and 1997, respectively. The decrease in interest income from 1997 to 1998 to 1999 was attributable to lower average balances.

In 1999, interest expense was $335,000, compared with $472,000 in 1998 and $438,000 in 1997. The decrease from 1998 to 1999 was attributable to lower outstanding debt and capital lease balances. The increase from 1997 to 1998 was primarily attributable to capitalization of $210,000 of interest on the new facility in 1997.

In October 1997, we recognized a gain in the amount of $3,387,000 related to the sale of 50 percent of our interest in Modex Therapeutics Ltd.

The net loss in 1999, 1998 and 1997 was $15,709,000, $12,628,000, and $18,114,000, respectively. The loss per share was $0.84, $0.69 and $1.08 in 1999, 1998 and 1997, respectively. The increase from 1998 to 1999 is primarily attributable to the elimination of revenue from the AstraZeneca Agreement, which was terminated in June 1999, as well as expenses related to the wind-down of our ECT research and our other Rhode Island operations, the transfer of our corporate headquarters to Sunnyvale, California and an accrual of approximately $1,172,000 for our estimate of the costs of settlement of the funding agreement with RIPSAT. The decrease from 1997 to 1998 was attributable to a one-time charge of $8,344,000 for acquired research and development related to the purchase of StemCells California, Inc. offset by the $3,387,000 gain on a partial sale of our interest in Modex in 1997.

The 1999 decrease in patents of $3,229,932 from 1998 was primarily due to management's decision to wind down the ECT program and dispose of the related intellectual property. During the fourth quarter of 1999 we sold the patents related to our encapsulated cell technology to Neurotech for $3,000,000.

Accrued expenses increased by $1,584,949, primarily due to the accrual of approximately $1,172,000 for our estimate of the costs of settlement of a 1989 funding agreement with the Rhode Island Partnership for Science and Technology and $463,000 for the estimated lease payments and operating costs of the Rhode Island facilities through an expected disposal date of June 30, 2000.

LIQUIDITY AND CAPITAL RESOURCES

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

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

We also hold 126,193 shares of Modex stock as of January 2, 2001, which is publicly traded on the Swiss Neue Market exchange. While our Modex stock had an estimated fair market value of $27,204,333 on September 30, 2000 (and $16,453,825 on January 2, 2001), the fair market value of our Modex stock has varied significantly since the Modex public offering and may continue to vary significantly based on increases and decreases in the reported per share price, in Swiss francs, of the Modex stock and on foreign currency exchange rates. We had been prohibited under a lock-up agreement entered into at the time of Modex's public offering from selling any of our Modex shares until December 23, 2000. On January 9, 2001, we sold 22,616 Modex shares for a net price of 182.00 Swiss francs per share, which converts to $112.76 per share, for total proceeds of $2,550,230.27. In connection with this sale, we agreed not to resell any more of our remaining 103,577 Modex shares until April 12, 2001. There is a limited trading market for Modex stock, and if we were to attempt to sell any significant portion of our remaining Modex holdings, we would likely be able to do so only at a significant discount to the then market price, if at all. If we sell some but not all of our Modex shares, it is likely that we would have to agree, in connection with the sale, to refrain from selling additional shares for several months.

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

In March 1995, we signed a collaborative research and development agreement with AstraZeneca plc for the development and marketing of certain encapsulated-cell products to treat pain. AstraZeneca made an initial, nonrefundable payment of $5,000,000, included in revenue from collaborative

agreements in 1995, a milestone payment of $3,000,000 in 1997 and was to remit up to an additional $13,000,000 subject to achievement of certain development milestones. Under the agreement, we were obligated to conduct certain research and development pursuant to a four-year research plan agreed upon by the parties. Over the term of the research plan, we originally expected to receive annual payments of $5 million to $7 million from AstraZeneca, which was to approximate the research and development costs incurred by us under the plan. Subject to the successful development of such products and obtaining necessary regulatory approvals, AstraZeneca was obligated to conduct all clinical trials of products arising from the collaboration and to seek approval for their sale and use. AstraZeneca had the exclusive worldwide right to market products covered by the agreement. Until the later of either the expiration of all patents included in the licensed technology or a specified fixed term, we were entitled to a royalty on the worldwide net sales of such products in return for the marketing license granted to AstraZeneca and our obligation to manufacture and supply products. AstraZeneca had the right to terminate the original agreement beginning April 1, 1998. On June 24, 1999, AstraZeneca informed us of the results of AstraZeneca's analysis of the double-blind, placebo-controlled trial of a potential ECT product, an encapsulated bovine cell implant for the treatment of severe, chronic pain in cancer patients. AstraZeneca determined that, based on criteria it established, the results from the 85-patient trial did not meet the minimum statistical significance for efficacy established as a basis for continuing worldwide trials for the therapy. AstraZeneca therefore indicated that it did not intend to further develop the bovine cell-containing implant therapy and exercised its right to terminate the agreement. See also Note 17--"Research Agreements" to the Accompanying Consolidated Financial Statements.

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

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

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

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

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

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

We continue to have outstanding obligations in regard to our former facilities in Lincoln, Rhode Island, including lease payments and operating costs of approximately $950,000 per year associated with our former research laboratory and corporate headquarters building, and debt service payments and operating costs of approximately $1,000,000 per year with respect to our pilot manufacturing and cell processing facility. We are actively seeking to sublease, assign or sell our interests in these facilities. Failure to do so within a reasonable period of time will have a material adverse effect on our liquidity and capital resources.

On April 13, 2000, we sold 1,500 shares of our 6% cumulative convertible preferred stock plus warrants for a total of 75,000 shares of our common stock to two members of our Board of Directors for $1,500,000, on terms more favorable to us than we were able to obtain from outside investors. The face value of the shares of preferred stock is convertible at the option of the holders into common stock at $3.77 per share. The holders of the preferred stock have liquidation rights equal to their original investments plus accrued but unpaid dividends. The investors would be entitled to make additional investments in our securities on the same terms as those on which we complete offerings of our securities with third parties within 6 months, if any such offerings are completed. They have waived that right with respect to the common stock transactions described below. If offerings totaling at least $6 million are not completed during the 6 months, the investors have the right to acquire up to a total of 1,126 additional shares of convertible preferred stock, the face value of which is convertible at the option of the holders into common stock at $6.33 per share. Any unconverted preferred stock is converted, at the applicable conversion price, on April 13, 2002 in the case of the original stock and two years after the first acquisition of any of the additional 1,126 shares, if any are acquired. The warrants expire on April 13, 2005.

On August 3, 2000, we completed a $4 million common stock financing transaction with Millennium Partners, LP, or the Fund, an investment fund with more than a billion dollars in assets under management. We received $3 million of the purchase price at the closing and received the remaining $1 million upon effectiveness of a registration statement covering the shares purchased by the Fund. The Fund purchased our common stock at $4.33 per share. The Fund may be entitled, pursuant to an adjustable warrant issued in connection with the sale of common stock to the Fund, to receive additional shares of common stock on eight dates beginning six months from the closing and every three months thereafter. The number of additional shares the Fund may be entitled to on each

date will be based on the number of shares of common stock the Fund continues to hold on each date and the market price of our common stock over a period prior to each date. We will have the right, under certain circumstances, to cap the number of additional shares by purchasing part of the entitlement from the Fund. The Fund also received a warrant to purchase up to 101,587 shares of common stock at $4.725 per share. This warrant is callable by us at $7.875 per underlying share.

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

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

We intend to pursue opportunities to obtain additional financing in the future through equity and debt financings, grants and collaborative research arrangements. The source, timing and availability of any future financing will depend principally upon market conditions, interest rates and, more specifically, on our progress in our exploratory, preclinical and future clinical development programs. Lack of necessary funds may require us to delay, reduce or eliminate some or all of our research and product development programs or to license our potential products or technologies to third parties. Funding may not be available when needed--at all, or on terms acceptable to us.

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

OVERVIEW

We are engaged in research aimed at the development of therapies that would use stem and progenitor cells derived from fetal or adult sources to treat, and possibly cure, human diseases and injuries such as Parkinson's disease, hepatitis, diabetes, and spinal cord injuries. The body uses certain key cells known as stem cells to produce all the functional mature cell types found in normal organs of healthy individuals. Progenitor cells are cells that have already developed from the stem cells, but can still produce one or more types of mature cells within an organ.

Many diseases, such as Alzheimer's, Parkinson's, and other degenerative diseases of the brain or nervous system, involve the failure of organs that cannot be transplanted. Other diseases, such as hepatitis and diabetes, involve organs such as the liver or pancreas that can be transplanted, but there is a very limited supply of those organs available for transplant. We estimate, based on information available to us from the Alzheimer's Association, the Centers for Disease Control, the Family Caregiver's Alliance and the Spinal Cord Injury Information Network, that these conditions affect more than 18 million people in the United States and account for more than $150 billion annually in health care costs.

Our proposed therapies are based on the transplanting of healthy human stem and progenitor cells to repair or replace central nervous system, pancreas or liver tissue that has been damaged or lost as a result of disease or injury, potentially returning patients to productive lives and significantly reducing health care costs. We believe that we have achieved significant progress in research regarding stem cells of the central nervous system through the advances we have made in the isolation, purification and transplantation of central nervous system stem and progenitor cells. We have also made advances in our research programs to discover the stem cells of the pancreas and of the liver. We have established an intellectual property position in all three areas of our stem cell research--the central nervous system, the pancreas and the liver--by patenting our discoveries and entering into exclusive licensing arrangements. We believe that, if successfully developed, our platform of stem cell technologies may create the basis for therapies that would address a number of conditions with significant unmet medical needs.

CELL THERAPY BACKGROUND

ROLE OF CELLS IN HUMAN HEALTH AND TRADITIONAL THERAPIES

Cells maintain normal physiological function in healthy individuals by secreting or metabolizing substances, such as sugars, amino acids, neurotransmitters and hormones, which are essential to life. When cells are damaged or destroyed, they no longer produce, metabolize or accurately regulate those substances. Impaired cellular function is associated with the progressive decline common to many degenerative diseases of the nervous system, such as Parkinson's disease, Alzheimer's disease and amyotrophic lateral sclerosis.

Recent advances in medical science have identified cell loss or impaired cellular function as leading causes of degenerative diseases. Biotechnology advances have led to the identification of some of the specific substances or proteins that are deficient. While administering these substances or proteins as medication does overcome some of the limitations of traditional pharmaceuticals such as lack of specificity, there is no existing technology that can deliver them to the precise sites of action and in the appropriate physiological quantities or for the duration required to cure the degenerative condition.

Cells, however, do this naturally. As a result, investigators have considered replacing failing cells that are no longer producing the needed substances or proteins by implanting stem or progenitor cells capable of regenerating the cell that the degenerative condition has damaged or destroyed. Where

there has been irreversible tissue damage or organ failure, transplantation of stem cells offers the possibility of generating new and healthy tissue, thus potentially restoring the organ function and the patient's health.

THE POTENTIAL OF OUR STEM CELL-BASED THERAPY

We believe that, if successfully developed, stem cell-based therapy--the use of stem or progenitor cells to treat diseases--has the potential to provide a broad therapeutic approach comparable in importance to traditional pharmaceuticals and genetically engineered biologics.

Stem cells are rare and only available in limited supply, whether from the patients themselves or from donors. Cells obtained from the same person who will receive them may be abnormal if the patient is ill or the tissue is contaminated with disease-causing cells. Also, the cells can often be obtained only through significant surgical procedures. The challenge, therefore, has been three-fold:

1) to identify the stem cells;

2) to create techniques and processes that can be used to expand these rare cells in sufficient quantities for effective transplants; and

3) to establish a bank of normal human stem or progenitor cells that can be used for transplantation into individuals whose own cells are not suitable because of disease or other reasons.

We have developed and demonstrated a process, based on a proprietary IN VITRO culture system in chemically defined media, that reproducibly grows normal human central nervous system, or CNS, stem and progenitor cells. We believe this is the first reproducible process for growing normal human CNS stem cells. More recently, we have discovered markers on the cell surface that identify the human CNS stem cells. This allows us to purify them and eliminate other unwanted cell types. Together, these discoveries enable us to select normal human CNS stem cells and to expand them in culture to produce a large number of pure stem cells.

Because these cells have not been genetically modified, they may be especially suitable for transplantation and may provide a safer and more effective alternative to therapies that are based on cells derived from cancer cells, from cells modified by a cancer gene to make them grow, from an unpurified mixture of many different cell types, or from animal derived cells.

We believe our proprietary stem cell technologies may enable therapies to replace specific cells that have been damaged or destroyed, permitting the restoration of function through the replacement of normal cells where this has not been possible in the past. In our research, we have shown that stem cells of the central nervous system transplanted into hosts are accepted, migrate, and successfully specialize to produce mature neurons and glial cells.

More generally, because the stem cell is the pivotal cell that produces all the functional mature cell types in an organ, we believe these cells, if successfully identified and developed for transplantation, may serve as platforms for five major areas of regenerative medicine and biotechnology:

- tissue repair and replacement,

- correction of genetic disorders,

- drug discovery and screening,

- gene discovery and use, and

- diagnostics.

We will be pursuing key alliances in these areas.

OUR PLATFORM OF STEM CELL TECHNOLOGIES

Stem cells have two defining characteristics:

- some of the cells developed from stem cells produce all the kinds of mature cells making up the particular organ; and

- they "self renew"--that is, other cells developed from stem cells are themselves new stem cells, thus permitting the process to continue again and again.

Stem cells are known to exist for many systems of the human body, including the blood and immune system, the central and peripheral nervous systems (including the brain), and the liver, pancreas endocrine, and the skin systems. These cells are responsible for organ regeneration during normal cell replacement and, to a more or less limited extent, after injury. We believe that further research and development will allow stem cells to be cultivated and administered in ways that enhance their natural function, so as to form the basis of therapies that will replace specific subsets of cells that have been damaged or lost through disease, injury or genetic defect.

We also believe that the person or entity that first identifies and isolates a stem cell and defines methods to culture any of the finite number of different types of human stem cells will be able to obtain patent protection for the methods and the composition, making the commercial development of stem cell treatment and possible cure of currently intractable diseases financially feasible.

Our strategy is to be the first to identify, isolate and patent multiple types of human stem and progenitor cells with commercial importance. Our portfolio of issued patents includes a method of culturing normal human central nervous system stem and progenitor cells in our proprietary chemically defined medium, and our published studies show that these cultured and expanded cells give rise to all three major cell types of the central nervous system. Also, a separate study sponsored by us using these cultured stem and progenitor cells showed that the cells are accepted, migrate, and successfully specialize to produce neurons and glial cells.

More recently, we announced the results of a new study that showed that human central nervous system stem cells can be successfully isolated by markers present on the surface of freshly obtained brain cells. We believe this is the first reproducible process for isolating highly purified populations of well-characterized normal human central nervous system stem cells, and have applied for a composition of matter patent. Because the cells are highly purified and have not been genetically modified, they may be especially suitable for transplantation and may provide a safer and more effective alternative than therapies that are based on cells derived from cancer cells, or from cells modified by a cancer gene to make them grow, or from an unpurified mixture of many different cell types or cells derived from animals. We have also filed an improved process patent for the growth and expansion of these purified normal human central nervous system cells.

Neurological disorders such as Parkinson's disease, epilepsy, Alzheimer's disease, and the side effects of stroke, affect a significant portion of the U.S. population and there currently are no effective long-term therapies for them. We believe that therapies based on our process for identifying, isolating and culturing neural stem and progenitor cells may be useful in treating such diseases. We are continuing our research into, and have initiated the development of, human central nervous system stem and progenitor cell-based therapies for these diseases.

We continue to advance our research programs to discover the islet stem cell in the human pancreas and the liver stem cell. Islet cells are the cells that produce insulin, so islet stem cells may be useful in the treatment of Type 1 diabetes and those cases of Type 2 diabetes where insulin secretion is

defective. Liver stem cells may be useful in the treatment of diseases such as hepatitis, cirrhosis of the liver and liver cancer.

EXPECTED ADVANTAGES OF OUR STEM CELL TECHNOLOGY

NO OTHER TREATMENT

To the best of our knowledge, no one has developed an FDA-approved method for replacing lost or damaged tissues from the human nervous system. Replacement of tissues in other areas of the human body is limited to those few sites, such as bone marrow or peripheral blood cell transplants, where transplantation of the patient's own cells is now feasible. In a few additional areas, including the liver, transplantation of donor organs is now used, but is limited by the scarcity of organs available through donation. We believe that our stem cell technologies have the potential to reestablish function in at least some of the patients who have suffered the losses referred to above.

REPLACED CELLS PROVIDE NORMAL FUNCTION

Because stem cells can duplicate themselves, or self-renew, and specialize into the multiple kinds of cells that are commonly lost in various diseases, transplanted stem cells may be able to migrate limited distances to the proper location within the body, to expand and specialize and to replace damaged or defective cells, facilitating the return to proper function. We believe that such replacement of damaged or defective cells by functional cells is unlikely to be achieved with any other treatment.

RESEARCH EFFORTS AND PRODUCT DEVELOPMENT PROGRAMS

OVERVIEW OF RESEARCH AND PRODUCT DEVELOPMENT STRATEGY

We have devoted substantial resources to our research programs to isolate and develop a series of stem and progenitor cells that we believe can serve as a basis for replacing diseased or injured cells. Our efforts to date have been directed at methods to identify, isolate and culture large varieties of stem and progenitor cells of the human nervous system, liver and pancreas and to develop therapies utilizing these stem and progenitor cells.

The following table lists the potential therapeutic indications for, and current status of, our primary research and product development programs and projects. The table is qualified in its entirety by reference to the more detailed descriptions of such programs and projects appearing elsewhere in this prospectus. We continually evaluate our research and product development efforts and reallocate resources among existing programs or to new programs in light of experimental results, commercial potential, availability of third party funding, likelihood of near-term efficacy, collaboration success or significant technology enhancement, as well as other factors. Our research and product development

programs are at relatively early stages of development and will require substantial resources to commercialize.

RESEARCH AND PRODUCT DEVELOPMENT PROGRAMS	
PROGRAM DESCRIPTION AND OBJECTIVE	STAGE/STATUS(1)
HUMAN NEURAL STEM CELL	PRECLINICAL
Repair or replace damaged central nervous system tissue (including spinal cord, degenerated retinas and tissue affected by certain genetic disorders)	- Demonstrated IN VITRO the ability to initiate and expand stem cell-containing human neural cultures and specialization into three types of central nervous system cells - Demonstrated the ability of neurosphere-initiating stem cells from human brain - Demonstrated in rodent studies that transplanted human brain-derived stem cells are accepted and properly specialized into the three major cell types of the central nervous system.
PANCREAS ISLET STEM CELL	RESEARCH
Repair or replace damaged pancreas islet tissue	- Identified markers on the surface of cells to identify, isolate and culture islet stem cells of the pancreas - Commenced small animal testing
LIVER STEM CELL	RESEARCH
Repair or replace damaged liver tissue including tissue resulting from certain metabolic genetic diseases	- Demonstrated the production of hepatocytes from purified mouse hematopoietic stem cells - Identified IN VITRO culture assay for growth of human bipotent liver progenitor cells that can produce both bile duct and hepatocytes - Showed that the in vitro culture of human bipotent liver cells can also grow human hepatitis virus

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(1) "Research" refers to early stage research and product development activities IN VITRO, including the selection and characterization of product candidates for preclinical testing. "Preclinical" refers to further testing of a defined product candidate IN VITRO and in animals prior to clinical studies.

RESEARCH AND DEVELOPMENT PROGRAMS

Our portfolio of stem cell technology results from our exclusive licensing of central nervous system, stem and progenitor cell technology, animal models for the identification and/or testing of stem and progenitor cells and our own research and development efforts to date. We believe that therapies using stem cells represent a fundamentally new approach to the treatment of diseases caused by lost or damaged tissue. We have assembled an experienced team of scientists and scientific advisors to consult with and advise our scientists on their continuing research and development of stem and progenitor cells. This team includes, among others, Irving L. Weissman, M.D., of Stanford University, Fred H. Gage, Ph.D., of The Salk Institute and David Anderson, Ph.D., of the California Institute of Technology.

BRAIN STEM AND PROGENITOR CELL RESEARCH AND DEVELOPMENT PROGRAM

We began our work with central nervous system stem and progenitor cell cultures in collaboration with NeuroSpheres, Ltd., in 1992. We believe that NeuroSpheres was the first to invent these cultures. We are the exclusive, worldwide licensee from NeuroSpheres to such inventions and associated patents and patent applications for all uses, including transplantation in the human body, as embodied in these patents. See "License Agreements and Sponsored Research Agreements--NeuroSpheres, Ltd."

In 1997, our scientists invented a reproducible method for growing human CNS, stem and progenitor cells in cultures. In preclinical IN VITRO and early IN VIVO studies, we demonstrated that these cells specialize into all three of the cell types of the central nervous system. Because of these results, we believe that these cells may form the basis for replacement of cells lost in certain degenerative diseases. We are continuing research into, and have initiated the development of, our human CNS stem and progenitor cell cultures. We have initiated the cultures and demonstrated that these cultures can be expanded for a number of generations IN VITRO in chemically defined media. In collaboration with us, Dr. Anders Bjorklund has shown that cells from these cultures can be successfully transplanted and accepted into the brains of rodents where they subsequently migrated and specialized into the appropriate cell types for the site of the brain into which they were placed.

In 1998, we expanded our preclinical efforts in this area by initiating programs aimed at the discovery and use of specific monoclonal antibodies to facilitate identification and isolation of CNS and other stem and progenitor cells or their specialized progeny. Also in 1998, our researchers devised methods to advance the IN VITRO culture and passage of human CNS stem cells that resulted in a 100-fold increase in CNS stem and progenitor cell production after 6 passages. We are expanding our preclinical efforts toward the goal of selecting the proper indications to pursue.

In December 1998, we announced that the US Patent and Trademark Office had granted patent No. 5,851,832, covering our methods for the human CNS cell cultures containing central nervous system stem cells, for compositions of human CNS cells expanded by these methods, and for use of these cultures in human transplantation. These human CNS stem and progenitor cells expanded in culture may be useful for repairing or replacing damaged central nervous system tissue, including the brain and the spinal cord.

In October 1999, the US Patent and Trademark Office granted patent number 5,968,829 entitled "Human CNS Neural Stem Cells," covering our composition of matter patent for human CNS stem cells, and also allowed a separate patent application for our media for culturing human CNS stem cells.

Also in 1999, we announced the filing of a US patent application covering our proprietary process for the direct isolation of normal human CNS stem cells based on the markers found to be present on the surface of freshly obtained brain cells. Since the filing of this patent application, our researchers have completed a study designed to identify, isolate and culture human CNS stem cells utilizing this proprietary process. In November 1999, we announced the study's first results: Our researchers, by using our proprietary markers on the surface of the cell, had succeeded in identifying, isolating and purifying human CNS stem cells from brain tissue, and were able to expand the number of these cells in culture.

We believe that this is the first study to show a reproducible process for isolating highly purified populations of well-characterized normal human CNS stem cells. Because the cells are normal human CNS stem cells and have not been genetically modified, they may be especially suitable for transplantation and may provide a safer and more effective alternative to therapies that are based on cells derived from cancer cells or from an unpurified mix of many different cell types, or from animal derived cells.

In January 2000, we reported what we regard as an even more important result: In long term animal studies, our researchers were able to take these purified and expanded stem cells and transplant them into normal mouse brain hosts, where they take hold and grow into neurons and glial cells.

During the course of the study, the transplanted human CNS stem cells survived for as long as one year and migrated to specific functional domains of the host brain, with no sign of tumor formation or adverse effects on the animal recipients; moreover, the cells were still dividing. These findings show that when CNS stem cells isolated and cultured with our proprietary processes are transplanted, they adopt the characteristics of the host brain and act like normal stem cells. In other words, the study suggests the possibility of a continual replenishment of normal human brain cells.

As noted above, human CNS stem and progenitor cells harvested and purified and expanded using our proprietary processes may be useful for creating therapies for the treatment of degenerative brain diseases such as Parkinson's, Huntington's and Alzheimer's disease. These conditions affect more than 5 million people in the United States and there are no effective long-term therapies currently available. We believe the ability to purify human brain stem cells directly from fresh tissue is important because:

- it provides an enriched source of normal stem cells, not contaminated by other unwanted or diseased cell types, that can be expanded in culture without fear of also expanding some unwanted cell types;

- it opens the way to a better understanding of the properties of these cells and how they might be manipulated to treat specific diseases. For example, in certain genetic diseases such as Tay Sachs and Gaucher's, a key metabolic enzyme required for normal development and function of the brain is absent. Brain-derived stem cell cultures might be genetically modified to produce those proteins. The modified brain stem cells could be transplanted into patients with these genetic diseases;

- the efficient acceptance of these non-transformed normal human stem cells into host brains means that the cell product can be tested in animal models for its ability to correct deficiencies caused by various human neurological diseases. This technology could also provide a unique animal model for the testing of drugs that act on human brain cells either for effectiveness of the drug against the disease or its toxicity to human nerve cells.

PANCREAS STEM CELLS DISCOVERY RESEARCH PROGRAMS

Our discovery program directed to the identification, isolation and culturing of the pancreas stem and progenitor cells is currently being conducted by Nora Sarvetnick, Ph.D., of The Scripps Research Institute, in collaboration with some of our senior researchers.

According to diabetes and juvenile diabetes foundations, between 800,000 and 1.5 million Americans have Type 1 diabetes, which is often called "juvenile diabetes" and most commonly diagnosed in childhood; and 30,000 new patients are diagnosed with the disease every year. It is a costly, serious, lifelong condition, requiring constant attention and insulin injections every day for survival.

About 15 million other people in the United States have Type 2 diabetes mellitus, which is also a chronic and potentially fatal condition; and more than 700,000 new patients are diagnosed annually.

In 1998, we obtained an exclusive, worldwide license from The Scripps Research Institute to novel technology developed by Dr. Sarvetnick which may facilitate the identification and isolation of pancreas stem and progenitor cells by using a mouse model that continuously regenerates the pancreas. We believe that stem cells produce the regeneration, in which case this animal model may be useful for identifying specific markers on the cell surface unique to the pancreas stem cells. We believe this may lead to the development of cell-based treatments for Type 1 diabetes and that portion of Type 2 diabetes characterized by defective secretion of insulin.

In 1999, advances in the research sponsored by us resulted in our obtaining additional exclusive, worldwide licenses from The Scripps Research Institute to novel markers on the cell surface identified by Dr. Sarvetnick and her research team as being unique to the pancreas islet stem cell for which we have now filed a US patent application. In collaboration with Dr. Sarvetnick, we continue to advance the discovery program directed at the identification, isolation and culturing of pancreas stem and progenitor cells utilizing this technology.

LIVER STEM CELLS DISCOVERY RESEARCH PROGRAMS

We initiated our discovery work for the liver stem and progenitor cell through a sponsored research agreement with Markus Grompe, Ph.D., of Oregon Health Sciences University. Dr. Grompe's work focuses on the discovery and development of a suitable method for identifying and assessing liver stem and progenitor cells for use in transplantation. We have also obtained a worldwide exclusive license to a novel mouse model of liver failure for evaluating cell transplantation developed by Dr. Grompe.

Approximately 1 in 10 Americans suffers from diseases and disorders of the liver for which there are currently no effective, long-term treatments.

In 1998, our researchers continued to advance methods for establishing enriched cell populations suitable for transplantation in preclinical animal models. We are focused on discovering and utilizing our proprietary methods to identify, isolate and culture liver stem and progenitor cells and to evaluate these cells in preclinical animal models.

In 1999, our researchers devised a culture assay that we will use in our efforts to identify liver stem and progenitor cells. In addition to supporting the growth of an early human liver bipotent progenitor cell, it is also possible to infect this culture with human hepatitis virus, providing a valuable system for study of the virus. This technology could also provide a unique IN VITRO model for the testing of drugs that act on, or are metabolized by, human liver cells.

An important element of our stem cell discovery program is the further development of intellectual property positions with respect to stem and progenitor cells. We have also obtained rights to certain inventions relating to stem cells from, and are conducting stem cell related research at, several academic institutions. We expect to expand our search for new stem and progenitor cells and to seek to acquire rights to additional inventions relating to stem and progenitor cells from third parties.

WIND-DOWN OF ENCAPSULATED CELL THERAPY RESEARCH AND DEVELOPMENT PROGRAMS

Until mid-1999, we engaged in research and development in encapsulated cell therapy technology, or ECT, including a pain control program funded by AstraZeneca Group plc. The results from the 85-patient double-blind, placebo-controlled trial of our encapsulated bovine cell implant for the treatment of severe, chronic pain in cancer patients did not, however, meet the criteria AstraZeneca had established for continuing trials for the therapy, and in June 1999, AstraZeneca terminated the collaboration.

Consequently, in July 1999, we announced plans for the restructuring of our research operations to abandon all further ECT research and to concentrate our resources on the research and development of our proprietary platform of stem cell technology. We reduced our workforce by approximately 68 full-time employees who had been focused on ECT programs, wound down our research and manufacturing operations in Lincoln, Rhode Island, and relocated our remaining research and development activities, and our corporate headquarters, to the facilities of our wholly owned subsidiary, StemCells California, Inc., in Sunnyvale, California. We are actively seeking to sublease, assign or sell our interest in our former corporate headquarters building and our pilot manufacturing and cell processing facility in Rhode Island.

In December 1999 we sold our intellectual property assets related to our ECT to Neurotech S.A., a privately held French company, in exchange for a payment of $3 million, royalties on future product sales, and a portion of certain revenues Neurotech may in the future receive from third parties. We retained certain non-exclusive rights to use the ECT in combination with our proprietary stem cell technology, and in the field of vaccines for prevention and treatment of infectious diseases.

In a related development, by mutual consent we and the Advanced Technology Program of the National Institute of Standards and Technology terminated two grants previously awarded to us for our encapsulated cell therapy and stem cell-related research. The encapsulated cell therapy grant was obviated by the sale of the technology to Neurotech. The funding agency has invited us to resubmit a proposal consistent with the new directions we are taking in our research and development of our platform of stem cell technologies.

SUBSIDIARY

STEMCELLS CALIFORNIA, INC.

On September 26, 1997, we acquired by merger StemCells, Inc. (now StemCells California, Inc.), a California corporation, in exchange for 1,320,691 shares of our common stock and options and warrants for the purchase of 259,296 common shares. Simultaneously with the acquisition, its President, Richard M. Rose, M.D., became our President, Chief Executive Officer and a director, and Irving L. Weissman, M.D., a founder of the California corporation, became a member of our board of directors. We, as the sole stockholder of our subsidiary, voted on February 23, 2000, to amend its Certificate of Incorporation to change its name to StemCells California, Inc.

CORPORATE INVESTMENT

In July 1996, we, together with certain founding scientists, established Modex Therapeutics SA, a Swiss biotherapeutics company, to pursue extensions of our former technology of ECT for certain applications outside the central nervous system. Modex, headquartered in Lausanne, Switzerland, was formed to integrate technologies developed by us and by several other institutions to develop products to treat diseases such as diabetes, obesity and anemia. After our disposition of the encapsulated cell technology in December 1999, we no longer had common research or development interests with Modex, but we held approximate 17% of its stock. Modex completed an initial public offering on June 23, 2000, in the course of which we realized a gain of approximately $1.4 million from the sale of certain shares. After Modex's IPO, we owned 126,193 shares, or approximately 9%, of Modex's equity, subject to a lockup until December 23, 2000. The closing market price of Modex stock on the Swiss Neue Market exchange on January 2, 2001 was 210.00 Swiss francs, or approximately $130.39, per share. On January 9, 2001, we sold 22,616 Modex shares for a net price of 182.00 Swiss francs per share, which converts to $112.76 per share, for total proceeds of $2,550,230.27. In connection with this sale, we agreed not to resell any more of our remaining 103,577 Modex shares until April 12, 2001.

LICENSE AGREEMENTS AND SPONSORED RESEARCH AGREEMENTS

We have entered into a number of license agreements with commercial and non-profit institutions, as well as a number of research-plus-license agreements with academic organizations. The research agreements provide that we will fund certain research costs, and in return, will have a license or an option for a license to the resulting inventions. Under the license agreements, we will typically be subject to obligations of due diligence and the requirement to pay royalties on products that use patented technology licensed under such agreements.

NEUROSPHERES, LTD.

In March 1994, we entered into a Contract Research and License Agreement with NeuroSpheres, Ltd., which was clarified in a License Agreement dated as of April 1, 1997. Under the agreement as clarified, we obtained an exclusive patent license from NeuroSpheres in the field of transplantation, subject to a limited right of NeuroSpheres to purchase a nonexclusive license from us, which right was not exercised and has expired. We have developed additional intellectual property relating to the subject matter of the license. We entered into an additional license agreement with

NeuroSpheres as of October 30, 2000, under which we obtained an exclusive license in the field of non-transplant uses, such as drug discovery and drug testing, so that together the licenses are exclusive for all uses of the technology. We made up-front payments to NeuroSpheres of 65,000 shares of our common stock and $50,000, and we will make additional cash payments when milestones are achieved in the non-transplant field, or in any products employing NeuroSpheres patents for generating cells of the blood and immune system from neural stem cells. Milestone payments would total $500,000 for each product that is approved for market. Our agreements with NeuroSpheres will terminate at the expiration of all patents licensed to us, but can terminate earlier if we breach without curing our obligations under the agreement or if we declare bankruptcy. We would have a security interest in the licensed technology in the event that NeuroSpheres declares bankruptcy.

SIGNAL PHARMACEUTICALS, INC.

In December 1997, we entered into two license agreements with Signal Pharmaceuticals, Inc. under which each party licensed to the other certain patent rights and biological materials for use in defined fields. An initial disagreement as to the interpretation of the licensed rights was resolved by the parties, and the agreements are operating in accordance with their terms. Signal has now been acquired by Celgene. Each agreement with Signal will terminate at the expiration of all patents licensed under it, but the licensing party can terminate earlier if the other party breaches its obligations under the agreement or declares bankruptcy. Also, the party receiving the license can terminate the agreement at any time upon notice to the other party. Under these agreements, we must reimburse Signal for payments it must make to the University of California based on products we develop and for 50% of certain other payments Signal must make.

SPONSORED RESEARCH AGREEMENTS

Under Sponsored Research Agreements with The Scripps Research Institute and Oregon Health Sciences University, we funded certain research in return for licenses or options to license the inventions resulting from the research. We have also entered into license agreements with the California Institute of Technology. All of these agreements relate largely to stem or progenitor cells and or to processes and methods for the isolation, identification, expansion or culturing of stem or progenitor cells.

Our research agreement with Scripps expired on November 14, 2000 and we are negotiating with Scripps to extend the term of this agreement or to enter into a new agreement. As of the date of this prospectus, we have not yet completed our negotiations with Scripps and we cannot give any assurance that our negotiations will be successful. If we are unable to extend the term of this agreement, we will have to find a replacement to perform this research or we will have to perform this research ourselves. In either case, we may experience delay and additional expense in connection with this research effort. Our license agreements with Scripps will terminate upon expiration, revocation or invalidation of the patents licensed to us, unless governmental regulations require a shorter term. These license agreements also will terminate earlier if we breach without curing our obligations under the agreement or if we declare bankruptcy, and we can terminate the license agreements at any time upon notice. Upon the initiation of the Phase II trial for our first product using Scripps licensed technology, we must pay Scripps $50,000 and upon completion of that Phase II trial we must pay Scripps an additional $125,000. Upon approval of the first product for sale in the market, we must pay Scripps $250,000.

Our license agreements with the California Institute of Technology will expire upon expiration, revocation, invalidation or abandonment of the patents licensed to us. We can terminate any of these license agreements by giving 30 days' notice to the California Institute of Technology. Either party can terminate these license agreements upon a material breach by the other party. We paid $10,000 to the California Institute of Technology upon execution of the license agreements, and we must pay an additional $10,000 upon the issuance of the patent licensed to us under the relevant agreement. We

also will pay $5,000 on the anniversary of the issuance of the patent licensed to us under the relevant agreement. These amounts are creditable against royalties we must pay under the license agreements. The maximum royalties that we will have to pay to the California Institute of Technology will be $2 million per year, with an overall maximum of $15 million. Once we pay the $15 million maximum royalty, the licenses will become fully paid and irrevocable.

MANUFACTURING

The keys to successful commercialization of brain stem and progenitor cells are efficacy, safety, consistency of the product, and economy of the process. We expect to address these issues by appropriate testing and banking representative vials of large-scale cultures. Commercial production is expected to involve expansion of banked cells and packaging them in appropriate containers after formulating the cells in an effective carrier. The carrier may also be used to improve the stability and acceptance of the stem cells or their progeny. Because of the early stage of our stem and progenitor cell programs, all of the issues that will affect manufacture of stem and progenitor cell products are not yet clear.

MARKETING

We expect to market and sell our products primarily through co-marketing, licensing or other arrangements with third parties. There are a number of substantial companies with existing distribution channels and large marketing resources who are well equipped to market and sell our products. It is our intent to have the marketing of our products undertaken by such partners, although we may seek to retain limited marketing rights in specific narrow markets where the product may be addressed by a specialty or niche sales force.

PATENTS, PROPRIETARY RIGHTS AND LICENSES

We believe that proprietary protection of our inventions will be of major importance to our future business. We have an aggressive program of vigorously seeking and protecting our intellectual property which we believe might be useful in connection with our products. We believe that our know-how will also provide a significant competitive advantage, and we intend to continue to develop and protect our proprietary know-how. We may also from time to time seek to acquire licenses to important externally developed technologies.

We have exclusive or non-exclusive rights to a portfolio of patents and patent applications related to various stem and progenitor cells and methods of deriving and using them. These patents and patent applications relate mainly to compositions of matter, methods of obtaining such cells, and methods for preparing, transplanting and utilizing such cells. Currently, our U.S. patent portfolio in the stem cell therapy area includes nineteen issued U.S. patents, six of which have issued within the last year. An additional thirteen patent applications are pending, one of which has been allowed.

We own or have filed patent applications which have been published for the following U.S. patents: Patent Number 5,968,829 (Human CNS neural stem cells); Patent Number 6,103,530 (Human CNS neural stem cells--culture media); Application Number WO 99/11758 (Cultures of human CNS neural stem cells); and Application Number WO 00/36091 (An animal model for identifying a common stem/progenitor to liver cells and pancreatic cells). We have licensed the following patents or pending patent applications from Neurospheres Holdings Ltd.: Patent Number 5,851,832 (In vitro proliferation); Patent Number 5,750,376 (In vitro genetic modification); Patent Number 5,981,165 (In vitro production of dopaminergic cells from mammalian central nervous system multipotent stem cell compositions); Patent Number 6,093,531 (Generation of hematopoietic cells from multipotent neural stem cells); Application Number WO 93/01275 (Mammalian central nervous system multipotent stem cell compositions); Application Number WO 94/09119 (Remyelination using mammalian central nervous

system multipotent stem cell compositions); Application Number WO 94/10292 (Biological factors useful in differentiating mammalian central nervous system multipotent stem cell compositions); Application Number WO 94/16718 (Genetically engineered mammalian central nervous system multipotent stem cell compositions); Application Number WO 96/15224 (Differentiation of mammalian central nervous system multipotent stem cell compositions); and Application Number WO 96/15226 (In vitro production of dopaminergic cells from mammalian central nervous system multipotent stem cell composition). We have licensed the following patents or pending patent applications from the University of California, San Diego: Patent Number 5,776,948 (Method of production of neuroblasts); Patent Number 6,013,521 (Method of production of neuroblasts); Patent Number 6,020,197 (Method of production of neuroblasts); and Application Number WO 94/16059 (Method of production of neuroblasts). We have licensed the following patents or pending patent applications from the California Institute of Technology: Patent Number 5,629,159 (Immortalization and disimmortalization of cells); Application Number WO 96/40877 (Immortalization and disimmortalization of cells); Patent Number 5,935,811 (Neuron restrictive silencer factor proteins); Application Number WO 96/27665 (Neuron restrictive silencer factor proteins); Patent Number 5,589,376 (Mammalian neural crest stem cells); Patent Number 5,824,489 (Methods for isolating mammalian multipotent neural crest stem cells); Application Number WO 94/02593 (Mammalian neural crest stem cells); Patent Number 5,654,183 (Genetically engineered mammalian neural crest stem cells); Patent Number 5,928,947 (Mammalian multipotent neural crest stem cells); Patent Number 5,693,482 (In vitro neural crest stem cell assay); Patent Number 6,001,654 (Methods for differentiating neural stem cells to neurons or smooth muscle cells (TGFb)); Application Number WO 98/48001 (Methods for differentiating neural stem cells to neurons or smooth muscle cells (TGFb)); Patent Number 5,672,499 (Methods for immortalizing multipotent neural crest stem cells); Patent Number 5,849,553 (Immortalizing and disimmortalizing multipotent neural crest stem cells); and Patent Number 6,033,906 (Differentiating mammalian neural stem cells to glial cells using neuregulins).

We also rely upon trade-secret protection for our confidential and proprietary information and take active measures to control access to that information.

Our policy is to require our employees, consultants and significant scientific collaborators and sponsored researchers to execute confidentiality agreements upon the commencement of an employment or consulting relationship with us. These agreements generally provide that all confidential information developed or made known to the individual by us during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees and consultants, the agreements generally provide that all inventions conceived by the individual in the course of rendering services to us shall be our exclusive property.

We have obtained rights from universities and research institutions to technologies, processes and compounds that we believe may be important to the development of our products. These agreements typically require us to pay license fees, meet certain diligence obligations and, upon commercial introduction of certain products, pay royalties. These include exclusive license agreements with NeuroSpheres, The Scripps Institute, the California Institute of Technology and the Oregon Health Sciences University, to certain patents and know-how regarding present and certain future developments in CNS and pancreas stem cells.

COMPETITION

The targeted disease states for our initial products in some instances currently have no effective long-term therapies. However, we do expect that our initial products will have to compete with a variety of therapeutic products and procedures. Major pharmaceutical companies currently offer a number of pharmaceutical products to treat neurodegenerative and liver diseases, diabetes and other diseases for which our technologies may be applicable. Many pharmaceutical and biotechnology

companies are investigating new drugs and therapeutic approaches for the same purposes, which may achieve new efficacy profiles, extend the therapeutic window for such products, alter the prognosis of these diseases, or prevent their onset. We believe that our products, when successfully developed, will compete with these products principally on the basis of improved and extended efficacy and safety and their overall economic benefit to the health care system.

The market for therapeutic products that address degenerative diseases is large, and competition is intense. We expect competition to increase. We believe that our most significant competitors will be fully integrated pharmaceutical companies and more established biotechnology companies. Smaller companies may also be significant competitors, particularly through collaborative arrangements with large pharmaceutical or biotechnology companies. Many of these competitors have significant products approved or in development that could be competitive with our potential products.

Competition for our stem and progenitor cell products may be in the form of existing and new drugs, other forms of cell transplantation, ablative and simulative procedures, and gene therapy. We believe that some of our competitors are also trying to develop stem and progenitor cell-based technologies. We expect that all of these products will compete with our potential stem and progenitor cell products based on efficacy, safety, cost and intellectual property positions.

We may also face competition from companies that have filed patent applications relating to the use of genetically modified cells to treat disease, disorder or injury. We may be required to seek licenses from these competitors in order to commercialize certain of our proposed products.

Once our products are developed and receive regulatory approval, they must then compete for market acceptance and market share. For certain of our potential products, an important success factor will be the timing of market introduction of competitive products. This is a function of the relative speed with which we and our competitors can develop products, complete the clinical testing and approval processes, and supply commercial quantities of a product to market. These competitive products may also impact the timing of clinical testing and approval processes by limiting the number of clinical investigators and patients available to test our potential products.

While we believe that the primary competitive factors will be product efficacy, safety, and the timing and scope of regulatory approvals, other factors include, in certain instances, obtaining marketing exclusivity under the Orphan Drug Act, availability of supply, marketing and sales capability, reimbursement coverage, price, and patent and technology position.

GOVERNMENT REGULATION

Our research and development activities and the future manufacturing and marketing of our potential products are, and will continue to be, subject to regulation for safety and efficacy by numerous governmental authorities in the United States and other countries.

In the United States, pharmaceuticals, biologicals and medical devices are subject to rigorous Food and Drug Administration, or FDA, regulation. The Federal Food, Drug and Cosmetic Act, as amended, and the Public Health Service Act, as amended, the regulations promulgated thereunder, and other Federal and state statutes and regulations govern, among other things, the testing, manufacture, safety, efficacy, labeling, storage, export, record keeping, approval, marketing, advertising and promotion of our potential products.

Product development and approval within this regulatory framework takes a number of years and involves significant uncertainty combined with the expenditure of substantial resources. In addition, the federal, state, and other jurisdictions have restrictions on the use of fetal tissue.

FDA APPROVAL

The steps required before our potential products may be marketed in the United States include:

STEPS	CONSIDERATIONS
1. Preclinical laboratory and animal tests	Preclinical tests include laboratory evaluation of the product and animal studies in specific disease models to assess the potential safety and efficacy of the product and our formulation as well as the quality and consistency of the manufacturing process.
2. Submission to the FDA of an application for an Investigational New Drug Exemption, or IND, which must become effective before U.S. human clinical trials may commence	The results of the preclinical tests are submitted to the FDA as part of an IND, and the IND becomes effective 30 days following its receipt by the FDA, as long as there are no questions, requests for delay or objections from the FDA.
3. Adequate and well-controlled human clinical trials to establish the safety and efficacy of the product	Clinical trials involve the evaluation of the product in healthy volunteers or, as may be the case with our potential products, in a small number of patients under the supervision of a qualified physician. Clinical trials are conducted in accordance with protocols that detail the objectives of the study, the parameters to be used to monitor safety and the efficacy criteria to be evaluated. Any product administered in a U.S. clinical trial must be manufactured in accordance with clinical Good Manufacturing Practices, or cGMP, determined by the FDA. Each protocol is submitted to the FDA as part of the IND. The protocol for each clinical study must be approved by an independent Institutional Review Board, or IRB, at the institution at which the study is conducted and the informed consent of all participants must be obtained. The IRB will consider, among other things, the existing information on the product, ethical factors, the safety of human subjects, the potential benefits of the therapy and the possible liability of the institution. Clinical development is traditionally conducted in three sequential phases, which may overlap: - In Phase I, products are typically introduced into healthy human subjects or into selected patient populations to test for adverse reactions, dosage tolerance, absorption and distribution, metabolism, excretion and clinical pharmacology.

	- Phase II involves studies in a limited patient population to (i) determine the efficacy of the product for specific targeted indications and populations, (ii) determine optimal dosage and dosage tolerance and (iii) identify possible adverse effects and safety risks. When a dose is chosen and a candidate product is found to be effective and to have an acceptable safety profile in Phase II evaluations, Phase III trials begin. - Phase III trials are undertaken to conclusively demonstrate clinical efficacy and to test further for safety within an expanded patient population, generally at multiple study sites. The FDA continually reviews the clinical trial plans and results and may suggest changes or may require discontinuance of the trials at any time if significant safety issues arise.
4. Submission to the FDA of marketing authorization applications	The results of the preclinical studies and clinical studies are submitted to the FDA in the form of marketing approval authorization applications.
5. FDA approval of the application(s) prior to any commercial sale or shipment of the drug. Biologic product manufacturing establishments located in certain states also may be subject to separate regulatory and licensing requirement	The testing and approval process will require substantial time, effort and expense. The time for approval is affected by a number of factors, including relative risks and benefits demonstrated in clinical trials, the availability of alternative treatments and the severity of the disease. Additional animal studies or clinical trials may be requested during the FDA review period which might add to that time.

After FDA approval for the initial indications and requisite approval of the manufacturing facility, further clinical trials may be required to gain approval for the use of the product for additional indications. The FDA may also require unusual or restrictive post-marketing testing and surveillance to monitor for adverse effects, which could involve significant expense, or may elect to grant only conditional approvals.

FDA MANUFACTURING REQUIREMENTS

Among the conditions for product licensure is the requirement that the prospective manufacturer's quality control and manufacturing procedures conform to the FDA's cGMP requirement. Even after product licensure approval, the manufacturer must comply with cGMP on a continuing basis, and what constitutes cGMP may change as the state of the art of manufacturing changes. Domestic manufacturing facilities are subject to regular FDA inspections for cGMP compliance which are normally held at least every two years. Foreign manufacturing facilities are subject to periodic FDA inspections or inspections by the foreign regulatory authorities with reciprocal inspection agreements with the FDA. Domestic manufacturing facilities may also be subject to inspection by foreign authorities.

ORPHAN DRUG ACT

The Orphan Drug Act provides incentives to drug manufacturers to develop and manufacture drugs for the treatment of diseases or conditions that affect fewer than 200,000 individuals in the United States. Orphan drug status can also be sought for treatments for diseases or conditions that

affect more than 200,000 individuals in the United States if the sponsor does not realistically anticipate its product becoming profitable from sales in the United States. We may apply for orphan drug status for certain of our therapies.

Under the Orphan Drug Act, a manufacturer of a designated orphan product can seek tax benefits, and the holder of the first FDA approval of a designated orphan product will be granted a seven-year period of marketing exclusivity in the United States for that product for the orphan indication. While the marketing exclusivity of an orphan drug would prevent other sponsors from obtaining approval of the same compound for the same indication, it would not prevent other types of products from being approved for the same use including, in some cases, slight variations on the originally designated orphan product.

PROPOSED FDA REGULATIONS

Proposed regulations of the FDA and other governmental agencies would place restrictions, including disclosure requirements, on researchers who have a financial interest in the outcome of their research. Under the proposed regulations, the FDA could also apply heightened scrutiny to, or exclude the results of, studies conducted by such researchers when reviewing applications to the FDA, which contain such research. Certain of our collaborators have stock options or other equity interests in us that could subject such collaborators and us to the proposed regulations.

Our research and development is based on the use of human stem and progenitor cells. The FDA has published a "Proposed Approach to Regulation of Cellular and Tissue-Based Products" which relates to the use of human cells. We cannot now determine the effects of that approach or what regulatory actions might be taken from it. Restrictions exist on the testing or use of cells, whether human or non-human.

OTHER REGULATIONS

In addition to safety regulations enforced by the FDA, we are also subject to regulations under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act and other present and potential future foreign, Federal, state and local regulations.

Outside the United States, we will be subject to regulations which govern the import of drug products from the United States or other manufacturing sites and foreign regulatory requirements governing human clinical trials and marketing approval for our products. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursements vary widely from country to country. In particular, the European Union, or EU, is revising its regulatory approach to high tech products, and representatives from the United States, Japan and the EU are in the process of harmonizing and making more uniform the regulations for the registration of pharmaceutical products in these three markets.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

On December 29, 2000, our investment in 126,193 shares of Modex Therapeutics Ltd. Stock was valued at $16,356,333 based on the per share price of $129.61, which we converted from a market price of 210.00 Swiss francs. Our value in this investment is subject to both equity price risk and foreign currency exchange risk. Modex shares were offered in an IPO on the Swiss Neue Market on June 23, 2000 at a price of 168.00 Swiss francs. From the date of the IPO to the date of this prospectus, the Modex closing share price has fluctuated from a low of 150.50 Swiss francs on January 16, 2001 to a high of 390.00 Swiss francs on October 6, 2000. The market price of the Modex stock on January 2, 2001 was 210.00 Swiss francs, which converts to $130.39 using exchange rates on that date, which represents an estimated fair market value of $16,453,825 for our holdings on that date. On January 9, 2001, we sold 22,616 Modex shares for a net price of 182.00 Swiss francs per share, which converts to $112.76 per share, for total proceeds of $2,550,230.27. In connection with this sale, we agreed not to resell any more of our Modex shares until April 12, 2001. If we were to seek to liquidate all or part of our remaining 103,577 Modex shares, our proceeds would depend on the share price and foreign currency exchange rates at the time of conversion. Additionally, if we sell a sizable portion of our holdings, we may have to sell these shares at a discount to market price.

The company's sole market risk sensitive instrument is:

NO. OF SHARES	DESCRIPTION	ASSOCIATED RISKS	MARKET VALUE AT DECEMBER 29, 2000	EXPECTED FUTURE CASH FLOWS
126,193	Modex Therapeutics	Equity/Foreign Currency Translation	$16,356,333	(1)

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(1) Although we have not formally adopted a liquidation plan for this investment, liquidation may be necessary to meet operating cash flow requirements. Under the agreement with Modex, we had been restricted from selling our holding through December 23, 2000 and, as noted above, we sold 22,616 shares on January 9, 2001 and agreed not to sell any more shares until April 12, 2001. If we sell some but not all of our remaining 103,577 shares, we likely would have to agree, in connection with the sale, to refrain from selling additional shares for several months.

REIMBURSEMENT AND HEALTH CARE COST CONTROL

Reimbursement for the costs of treatments and products such as ours from government health administration authorities, private health insurers and others both in the United States and abroad is a key element in the success of new health care products. Significant uncertainty often exists as to the reimbursement status of newly approved health care products.

The revenues and profitability of some health care-related companies have been affected by the continuing efforts of governmental and third party payers to contain or reduce the cost of health care through various means. Payers are increasingly attempting to limit both coverage and the level of reimbursement for new therapeutic products approved for marketing by the FDA, and are refusing, in some cases, to provide any coverage for uses of approved products for disease indications for which the FDA has not granted marketing approval. For example, in certain foreign markets, pricing or profitability of prescription pharmaceuticals is subject to government control. In the United States, there have been a number of Federal and state proposals to implement government control over health care costs.

EMPLOYEES

As of December 31, 2000, we had twenty-six full-time employees, of whom six have Ph.D. degrees, as well as two half-time employees. The equivalent of fifteen full-time employees work in research and development and laboratory support services. A number of our employees have held positions with other biotechnology or pharmaceutical companies or have worked in university research programs. No employees are covered by collective bargaining agreements.

SCIENTIFIC ADVISORY BOARD

Members of our Scientific Advisory Board provide us with strategic guidance in regard to our research and product development programs, as well as assistance in recruiting employees and collaborators. Each Scientific Advisory Board member has entered into a consulting agreement with us. These consulting agreements specify the compensation to be paid to the consultant and require that all information about our products and technology be kept confidential. All of the Scientific Advisory Board members are employed by employers other than us and may have commitments to or consulting or advising agreements with other entities that limit their availability to us. The Scientific Advisory Board members have generally agreed, however, for so long as they serve as consultants to us, not to provide any services to any other entities which would conflict with the services the member provides to us. Members of the Scientific Advisory Board offer consultation on specific issues encountered by us as well as general advice on the directions of appropriate scientific inquiry for us. In addition, Scientific Advisory Board members assist us in assessing the appropriateness of moving our projects to more advanced stages. The following persons are members of our Scientific Advisory Board:

- Irving L. Weissman, M.D., is the Karel and Avice Beekhuis Professor of Cancer Biology, Professor of Pathology and Professor of Developmental Biology at Stanford University. Dr. Weissman was a cofounder of SyStemix, Inc., and Chairman of its Scientific Advisory Board. He has served on the Scientific Advisory Boards of Amgen Inc., DNAX and T-Cell Sciences, Inc. Dr. Weissman is Chairman of the Scientific Advisory Board of StemCells, Inc.

- David J. Anderson, Ph.D., is Professor of Biology, California Institute of Technology, Pasadena, California and Investigator, Howard Hughes Medical Institute.

- Fred H. Gage, Ph.D., is Professor, Laboratory of Genetics, The Salk Institute for Biological Studies, La Jolla, California and Adjunct Professor, Department of Neurosciences, University of California, San Diego, California.

The following table sets forth the name, age and position of each of our executive officers, key members of management, and directors.

NAME	AGE	POSITION
John J. Schwartz, Ph.D.	66	Director, Chairman of the Board
Martin M. McGlynn	54	President and Chief Executive Officer
Mark J. Levin	50	Director
Roger M. Perlmutter M.D., Ph.D.	48	Director
Irving L. Weissman, M.D.	60	Director

- John J. Schwartz, Ph.D., was elected to the board of directors in December 1998 and was elected Chairman of the board at the same time. He was formerly Senior Vice President and General Counsel of SyStemix, Inc. from 1993 to 1995, and then President and Chief Executive Officer of SyStemix, Inc. from 1995 to 1997. Dr. Schwartz is currently President of Quantum Strategies Management Company, a registered investment advisor located in Atherton, California. Prior to his positions at SyStemix, he served as Assistant Professor and a Vice President and General Counsel at Stanford University in California. Dr. Schwartz graduated from Harvard Law School in 1958 and received his Ph.D. in physics from the University of Rochester in 1966.

- Martin M. McGlynn joined the company on January 15, 2001 when he was appointed President and Chief Executive Officer of the company and of its wholly-owned subsidiary, StemCells California, Inc. From 1994 until he joined the company, Mr. McGlynn was President and Chief Executive Officer of Pharmadigm, Inc., a privately held company in Salt Lake City, Utah, engaged in research and development in the fields of inflammation and genetic immunization. Mr. McGlynn received a bachelor of commerce degree from University College, Dublin, Ireland in 1968, a diploma in industrial engineering from the Irish Institute of Industrial Engineering in 1970, and a diploma in production planning from the University of Birmingham, England in 1971.

- Mark J. Levin is a founder of the company and has served as a director since the company's inception. From inception until January 1990 and from May 1990 until February 1991, Mr. Levin served as the company's President and acting Chief Executive Officer. From November 1991 until March 1992, he served as Chief Executive Officer of Tularik, Inc., a biotechnology company. From August 1991 until August 1993, Mr. Levin was Chief Executive Officer and a director of Focal, Inc., a biomedical company. Mr. Levin is currently the Chairman of the Board and Chief Executive Officer of Millennium Pharmaceuticals, Inc., a biotechnology company. Mr. Levin is also currently on the Board of Directors of Tularik, Inc.

- Roger M. Perlmutter, M.D., Ph.D., was elected to the board of directors in December 2000. Dr. Perlmutter is Executive Vice President, Research and Development, of Amgen, Inc., a position he has held since January 2001. Prior to joining Amgen, Dr. Perlmutter was Executive Vice President, Worldwide Basic Research and Preclinical Development, Merck Research Laboratories, a division of Merck & Co., Inc., a position he held since August 1999. He joined Merck in February 1997 as Senior Vice President, Merck Research Laboratories, from February 1997 to December 1998 and as Executive Vice President from February 1999 to July 1999. Prior to joining Merck, Dr. Perlmutter was a professor in the Department of Immunology, Biochemistry and Medicine at the University of Washington from January 1991 to

January 1997 and served as chairman of the Department of Immunology at the University of Washington from May 1989 to January 1997. He also was an Investigator at the Howard Hughes Medical Institute from October 1991 to January 1997. Dr Perlmutter has been a member of the board of directors of The Irvington Institute for Immunological Research since 1997 and of the Institute for Systems Biology since 1999. He also serves as President of the Merck Genome Research Institute, a position he has held since March 2000. Dr. Perlmutter is licensed to practice medicine in the State of California and the State of Washington. He was graduated from Reed College in 1973 and received his M.D. and Ph.D. from Washington University, St. Louis, Missouri in 1979.

- Irving L. Weissman, M.D., Director, is the Karel and Avice Beekhuis Professor of Cancer Biology, Professor of Pathology and Professor of Developmental Biology at Stanford University. Stanford has employed Dr. Weissman since July 1967, and he has been a Faculty member since January 1969. He has been a full professor of pathology since September 1987, and also of developmental biology since July 1989. Since October 1990, Dr. Weissman has also served as a professor of biology (by courtesy). He has been Chairman of the Stanford University Immunology Program since 1986. Dr. Weissman was a cofounder of SyStemix, Inc., and Chairman of its Scientific Advisory Board. He has served on the Scientific Advisory Boards of Amgen Inc., DNAX and T-Cell Sciences, Inc. Dr. Weissman is a member of the National Academy of Sciences and also serves as Chairman of our Scientific Advisory Board. He also serves as Chief Executive Officer and a member of the Board of Managers of Celtrans, LLC.

Our Restated Certificate of Incorporation and Amended and Restated By-laws provide for the classification of the board of directors into three classes, as nearly equal in number as possible, with the term of office of one class expiring each year. There are no family relationships between any of our directors or executive officers. Our executive officers are elected by, and serve at the discretion of, the board of directors.

COMMITTEES OF THE BOARD OF DIRECTORS

Our board of directors has an audit committee and compensation committee. The board may also establish other committees to assist in the discharge of its responsibilities.

The audit committee oversees our financial reporting process on behalf of the board of directors, makes recommendations to the board regarding the independent auditors to be nominated for election by the stockholders, reviews the independence of such auditors, approves the scope of their annual audit activities, reviews their audit results, assures that our financial reporting is of high quality, and reviews the interim financial statements with our management and the independent auditors prior to the filing of our Quarterly Report on Form 10-Q. Dr. Schwartz and Dr. Perlmutter make up the audit committee.

The duties of the compensation committee are to make recommendations to the board and our management concerning salaries in general, determine executive compensation, and approve incentive compensation. The compensation committee is currently comprised of Mr. Levin and Dr. Schwartz.

EXECUTIVE COMPENSATION

The following table sets forth the compensation paid by us to our Chief Executive Officer during the fiscal years ended December 31, 1999, 1998 and 1997 and the two other most highly compensated executive officers who served in such capacities during the fiscal year ended December 31, 1999 but who were not serving in such capacities as of the end of such fiscal year. There were no other persons serving as executive officers at the end of such fiscal year.

SUMMARY COMPENSATION TABLE

		ANNUAL COMPENSATION			AWARDS		
					LONG TERM COMPENSATION		
NAME AND PRINCIPAL POSITION	YEAR	SALARY($)	BONUS($)	OTHER ANNUAL COMPENSATION ($)	RESTRICTED STOCK AWARDS($)	SECURITIES UNDERLYING OPTIONS (#)	ALL OTHER COMPENSATION
Richard M. Rose M.D.....	1999	279,974	0	0	0	0	4667(2)
Chief Executive	1998	286,553	0	0	0	150,000(3)	11,330(4)
Officer(1)	1997	68,750	0	0	0	300,000(5)	76,268(6)
Phillip K. Yachmetz.....	1999	406,731(8)	0	0	0	12,000	71,355(9)
Senior Vice President	1998	155,780	10,000	0	0	75,000	86,695(10)
And General Counsel Acting Chief Financial Officer and Treasurer(7)							
Moses Goddard, M.D.....	1999	195,176(12)	0	0	0	18,000	7,921(13)
Vice President, Chief	1998	188,957	0	0	0	67,875(14)	0
Technical Officer Cell Encapsulation (11)							

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(1) Dr. Rose became Chief Executive Officer on September 26, 1997. Dr. Rose resigned as a director and officer of the company and its wholly owned subsidiary effective as of January 31, 2000.

(2) Represents the personal portion of the use of a company vehicle, as well as $5,000 of fair market value of our matching contributions of common stock to Dr. Rose's account in the company's 401(k) Plan.

(3) Represents the regrant of an option in the original amount of 200,000 shares which was reduced to 150,000 shares as a result of the employee equity incentive repricing plan approved by the Board of Directors on July 10,1998.

(4) Represents $4,666.56 of fair market value of the company matching contributions of common stock to Dr. Rose's account in our 401(k)Plan.

(5) One option grant for 200,000 shares was reduced to 150,000 shares upon there pricing of the grant effective as of July 10, 1998 at a price of $1.28 per share.

(6) Represents advance for relocation expenses of $75,000 and fair market value of $1,268 of our matching contributions of common stock to Dr. Rose's account in our 401(k) plan.

(7) Mr. Yachmetz was appointed Acting Chief Financial Officer and Treasurer effective as of April 2, 1999. The term of Mr. Yachmetz' Employment Agreement expired on October 31, 1999.

(8) Includes $204,807 of compensation and accrued and unused vacation paid upon the expiration of Mr. Yachmetz' Employment Agreement in accordance with the terms of such agreement.

(9) Represents $15,304 as the fair market value of 9,601 shares of our common stock earned in 1998 and issued in 1999, $3,990 of fair market value of our matching contributions of common stock to Mr. Yachmetz' account in our 401(k) Plan and $52,061 of temporary living and relocation expenses adjusted for taxes.

(10) Represents $14,724 of temporary living and relocation expenses adjusted for taxes paid to Mr. Yachmetz and personal use of a company vehicle. Also represents $1,827 of fair market value of our matching contributions of common stock to Mr. Yachmetz' account in our 401(k) Plan.

(11) Dr. Goddard resigned as a director and officer of the company effective as of August 30, 1999 and served as a consultant to the company through March 28, 2000.

(12) Includes $70,945 of compensation paid to Dr. Goddard in accordance with the severance agreement entered into with us.

(13) Represents the fair market value of 4,687 shares of our common stock granted to Dr. Goddard through our 1992 Equity Incentive Plan.

(14) Represents the regrant of options in the total original amount of 90,500 shares which was reduced to 67,875 shares as a result of the employee equity incentive repricing plan approved by the Board of Directors on July 10, 1998.

SELLING STOCKHOLDERS

SALES BY NEUROSPHERES, LTD.

NeuroSpheres, Ltd. will be selling shares of common stock in this offering. We entered into a license agreement with NeuroSpheres on October 30, 2000 expanding our rights to the intellectual property covered by the license agreement. See "Business--License Agreements and Sponsored Research Agreements--NeuroSpheres, Ltd." Under that license agreement, on October 30, 2000, we issued 65,000 shares of our common stock to NeuroSpheres and we agreed to file a registration statement covering the resale of those shares by NeuroSpheres.

SECURITY OWNERSHIP OF THE SELLING STOCKHOLDERS, CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table shows information regarding the beneficial ownership of our common stock as of December 31, 2000 for:

- each person or group of affiliated persons known by us to own beneficially more than 5% of the outstanding shares of common stock;
- each selling stockholder;
- each director and named executive officer; and
- all directors and executive officers as a group.

The address for each listed director and officer is c/o StemCells, Inc., 525 Del Rey Avenue, Suite C, Sunnyvale, CA 94085.

We have determined beneficial ownership in the table in accordance with the rules of the Securities and Exchange Commission. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have deemed to be outstanding shares of common stock subject to options or warrants held by that person that are currently exercisable or will become exercisable within 60 days of December 31, 2000, assuming that this offering occurs in that 60-day period, but we have not deemed these shares to be outstanding for computing the percentage ownership of any other person. The shares listed below for the selling stockholders represent all of the shares that each selling stockholder currently beneficially owns, the number of shares each of them may offer and the number of shares each of them will own after the offering assuming they sell all of the shares. To our knowledge, except as set forth in the footnotes below, each stockholder identified in the table possesses sole voting and investment power with respect to all shares of common stock shown as beneficially owned by that stockholder. Beneficial ownership percentage is based on 20,953,887 shares of our common stock outstanding on December 31, 2000 and as adjusted for unexercised options and warrants as of that date as noted below and 180,914 shares and 19,900 warrants issued to one of the Selling Shareholders on August 30, 2000.

The selling stockholders may offer all or some of their shares. All numbers in the following table are based on information obtained by questionnaires received by the company.

	SHARES OF COMMON STOCK BENEFICIALLY OWNED PRIOR TO THIS OFFERING		SHARES OF COMMON STOCK OFFERED HEREBY	SHARES OF COMMON STOCK BENEFICIALLY OWNED AFTER THIS OFFERING	
NAME OF BENEFICIAL OWNER	NUMBER OF SHARES	PERCENTAGE	NUMBER OF SHARES	NUMBER OF SHARES	PERCENTAGE
Donald Kennedy, Ph.D.	10,225(1)	*	--	10,225	*
Mark J. Levin	376,525(2)	1.7	--	376,525(3)	1.7
John J. Schwartz, Ph.D.	95,857(4)	0.4	--	95,857(5)	0.4
Irving Weissman, M.D.	328,184(6)	1.5	--	328,184	1.5
George W. Dunbar, Jr.	43,031(7)	0.2	--	43,031	0.2
All directors and executive officers as a group (5 persons)	853,822(8)	3.8	--	853,822(3)(5)	3.8
Millennium Partners, L.P.**	1,927,891(9)	8.7	--	1,927,891(10)	8.7
NeuroSpheres, Ltd	65,000	0.3	65,000	--	--

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* Less than 0.1%

** Millennium Partners, L.P., a Cayman Islands limited partnership, is a private investment partnership whose general partners are Millennium Management, L.L.C., a Delaware limited

liability company whose managing member is Israel A. Englander, and Englander (Cayman Islands) Limited, a Cayman Islands exempted company. Both Millennium Management, L.L.C., and Englander (Cayman Islands) Limited are controlled by Mr. Englander.

(1) Includes 10,225 shares issuable upon exercise of stock options exercisable within 60 days. Dr. Kennedy subsequently resigned from the board of directors.

(2) Includes 28,650 shares issuable upon exercise of stock options exercisable within 60 days. Includes 198,871 shares issuable upon conversion of cumulative convertible preferred shares at the currently applicable conversion price, and a warrant to purchase 37,500 shares.

(3) Does not include shares previously registered for resale (Form S-1, Registration No. 333-45496). Because the number of shares of common stock issuable to Mr. Levin upon exercise of warrants or conversion of preferred stock held by Mr. Levin may fluctuate, we previously registered for resale by Mr. Levin a number of shares of common stock that is greater than the number of shares of common stock currently beneficially owned by Mr. Levin.

(4) Includes 95,857 shares issuable upon exercise of stock options exercisable within 60 days.

(5) Does not include shares previously registered for resale (Form S-1, Registration No. 333-45496). Because the number of shares of common stock issuable to Dr. Weissman upon exercise of warrants or conversion of preferred stock held by Dr. Weissman may fluctuate, we previously registered for resale by Dr. Weissman a number of shares of common stock that is greater than the number of shares of common stock currently beneficially owned by Dr. Weissman.

(6) Includes 33,862 shares issuable upon exercise of stock options exercisable within 60 days and 7,160 shares issuable upon exercise of warrants exercisable within 60 days. Includes 198,871 shares issuable upon conversion of 6% cumulative convertible preferred shares at the currently applicable conversion price. Includes a total of 50,791 shares owned by trusts for the benefit of Dr. Weissman's children as to which he disclaims beneficial ownership. Also includes a warrant to purchase 37,500 shares.

(7) Includes 43,031 shares issuable upon exercise of stock options exercisable within 60 days. Mr. Dunbar was appointed Acting President and Chief Executive Officer of our wholly owned subsidiary, StemCells California, Inc., effective as of November 8, 1999, and was appointed Acting President and Chief Executive Officer of the company effective as of February 1, 2000. On January 15, 2001, Martin McGlynn became President and Chief Executive Officer of the Company.

(8) Includes 291,479 shares issuable upon exercise of warrants and stock options exercisable within 60 days.

(9) Includes 180,914 shares issued as of August 30, 2000 and 19,900 shares issuable upon exercise of warrants issued together with those shares. Includes 101,587 shares issuable upon exercise of warrants issued August 3, 2000. Includes 463,369 shares currently issuable upon exercise of the adjustable warrant but does not include other shares issuable upon exercise of adjustable warrants because such number of shares cannot be determined until the dates of determination set forth in the adjustable warrant and will be based on fluctuations in the market price of our common stock prior to determination. Does not include shares issuable upon exercise of option to purchase up to $2 million of additional shares because such number of shares cannot be determined unless and until the option is exercised and will be based on the average market price at the time of exercise.

(10) Does not include shares previously registered for resale (Form S-1, Registration No. 333-45496). Because the number of shares of common stock issuable to Millennium Partners, L.P. upon exercise of adjustable warrants may fluctuate, we previously registered for resale by Millennium Partners, L.P. a number of shares of common stock that is greater than the number of shares of common stock currently beneficially owned by Millennium Partners, L.P.

Dr. Schwartz, a member and Chairman of the Board of Directors, was retained in July 1998 to serve as a consultant to us rendering strategic business advice and consulting services, including assistance in the negotiation and consummation of strategic collaboration transactions specified by us. Under terms of an agreement dated December 19, 1998, and amended as of July 1, 1999 (the "Letter Agreement") Dr. Schwartz agreed to serve as a Director and Chairman of the Board of Directors of the Company for a term expiring at the 2001 Annual Meeting of Stockholders. The Letter Agreement incorporates certain payments provided for under a consulting services agreement dated July 27, 1998, and amended as of December 19, 1998 (the "Consulting Services Agreement"). As a result, Dr. Schwartz is entitled to a retainer of $192,000 per year plus $1,500 for each Board meeting or Committee meeting (if held at a date and time separate from the Board meeting) physically attended and $500 for each Board meeting or Committee meeting (if held at a date and time separate from the Board meeting) held by conference call, payable quarterly in arrears. Dr. Schwartz is obligated to spend no less than thirty business days per calendar quarter devoted to the performance of his duties under the Letter Agreement. In the event Dr. Schwartz devotes more than thirty business days in any calendar quarter to the performance of his duties, Dr. Schwartz is entitled to receive additional compensation at the rate of $1,500 per day. Under the Letter Agreement, Dr. Schwartz was granted a stock option covering 40,000 shares of Common Stock that vests in equal portions on the last day of each of the 29 months of the term of the Letter Agreement. By virtue of provisions incorporated from the Consulting Services Agreement, Dr. Schwartz also holds an option to purchase 76,000 shares of the Company's Common Stock at $1.281 per share, the fair market value of the Company's Common Stock at the time the option was granted, vesting at a rate of 3,167 shares per month for the ensuing 23 months after the date of the grant, with a final vesting of 3,159 shares in the 24th month, plus another option to purchase 48,000 shares of Common Stock at the then current fair market value of the Company's Common Stock on July 27, 1999, vesting at a rate of 2,000 shares per month. In the event Dr. Schwartz ceases to be Chairman of the Board of Directors, either as a result of an affirmative vote of the Board of Directors for reasons other than cause or due to his disability or his resignation from such position, but remains a Director, his cash compensation and remaining unvested portion of the 40,000-share time-based stock option will be reduced to the then current rate for a Director of the Company, plus $5,000 per month pursuant to the Consulting Services Agreement. In the event Dr. Schwartz ceases to be Chairman of the Board of Directors, either as a result of an affirmative vote of the Board of Directors for reasons other than cause or due to his disability or his resignation from such position, and then he resigns as a Director or is removed as a Director pursuant to the Company's By-laws, the Company shall have no further obligation to pay cash compensation to Dr. Schwartz under the Letter Agreement but he would receive $5,000 per month pursuant to the Consulting Services Agreement. Dr. Schwartz shall have one year from such date to exercise the vested portion of the 40,000-share time-based option and any unvested portion of that option shall lapse. In the event Dr. Schwartz is removed from his positions as Director and Chairman of the Board of Directors for cause, as defined in the Letter Agreement, the Company shall have no further obligation to pay cash compensation to Dr. Schwartz under the Letter Agreement, any unvested portion of the 40,000-share time-based option shall lapse and the exercise of any vested portion shall be governed by the terms of the Company's 1992 Equity Incentive Plan. The termination of the Letter Agreement for any reason shall have no effect on the Consulting Services Agreement, which had an initial term through July 27, 2000 and was renewed on a month-to-month basis, and Dr. Schwartz shall serve as a consultant to the Company rendering strategic business advice and counseling services, including assistance in the negotiation and consummation of strategic collaboration transactions specified by the Company as provided therein. At a meeting of the Board on February 23, 2000, in order to conserve cash and demonstrate his continuing confidence in the Company's future, the Board of Directors, upon the suggestion of Dr. Schwartz, approved a resolution revising the compensation arrangement between Dr. Schwartz and the Company, for the period commencing January 1, 2000. Under this resolution, Dr. Schwartz waives any and all cash payments which may accrue to him for his retainer, monthly and meeting fees, and agrees to take, in lieu of such cash payments, compensation in the form of options to

purchase shares of the Company's common stock at below-market prices ($0.25 per share). To effectuate the intention of Dr. Schwartz and other members of the Board to change the form but not the amount of compensation, Dr. Schwartz will be granted options covering a number of shares of the Company's common stock such that the difference between the aggregate exercise price of such options and the aggregate market value of the shares underlying such options (using the closing price of the Company's common stock for the date of the subject Board or Committee meeting (if such Committee meeting is not held contemporaneously with a Board meeting) or, with respect to the quarterly or monthly retainer payments of $33,000 and $5,000 respectively, the closing price for the last business day of the quarter or month) is equal to the compensation he is entitled to receive. All options so issued to Dr. Schwartz vest immediately. The Consulting Services Agreement expired under its terms on July 27, 2000 and the board of directors renewed it on a month-to-month basis on September 19, 2000.

Dr. Weissman, a member of the Board of Directors, was retained in September 1997 to serve as a consultant to us. Pursuant to his Consulting Agreement, Dr. Weissman has agreed to provide consulting services to us and serve on our Scientific Advisory Board. We agreed to pay Dr. Weissman $50,000 per year for his services and granted him an option to purchase 500,000 shares of Common Stock for $5.25 per share, of which 31,250 shares vested at the date of grant. Originally, the remainder of the option would have vested upon the occurrence of certain milestones related to the Company's stem cell research program and in the event of certain changes of control. We agreed to amend the option on October 27, 2000 so that the shares would become exercisable over eight years from the original grant date (so the option is currently exercisable for 200,000 shares) or in the event of certain changes of control. We expect to incur a charge of approximately $800,000 during the fourth quarter of 2000 as a result of this change in the vested portion of the option. The deferred compensation expense associated with the unvested portion of the grants was determined to be approximately $1.4 million. We plan to revalue the options using the Black-Scholes method on a quarterly basis and recognize additional compensation expense accordingly. The Company also agreed to nominate Dr. Weissman for a position on the Board of Directors. The Consulting Agreement contains confidentiality, noncompetition, and assignment of invention provisions and is for a term of fifteen years, subject to earlier termination by us for cause or frustration of purpose and earlier termination by Dr. Weissman for good reason. Dr. Weissman initially received no compensation as a member of the Board of Directors or for attending meetings of the Board or its committees or meetings of our Scientific Advisory Board, but was reimbursed for reasonable expenses he incurred in attending such meetings. In December 2000, we agreed with Dr. Weissman that we would pay him the same compensation paid to other members of the Board.

Martin McGlynn joined the company as President and Chief Executive Officer on January 15, 2001. Under the terms of an agreement between Mr. McGlynn and us, Mr. McGlynn is entitled to an annual base salary of $275,000 per year, reviewable annually by the Board of Directors, and a bonus, in the Board's sole discretion, of up to 25% of his base salary. Mr. McGlynn was granted an option to purchase 400,000 shares of Common Stock with an exercise price equal to the fair market value of the Common Stock on the date of his employment. One-fourth of these options will vest on the first anniversary of his employment and the remaining three-fourths will vest in equal monthly installments during his second through fourth years of employment. The Board may, in its sole discretion, grant Mr. McGlynn a bonus option to purchase up to an additional 25,000 shares. The vesting under the option is subject to acceleration in the event of certain changes of control. We also agreed to pay Mr. McGlynn a $50,000 relocation bonus and reimburse him for relocation expenses. Our agreement with Mr. McGlynn provides that if his employment is terminated by the Company without cause or by Mr. McGlynn for good reason, he will be entitled to severance payments equal to one year's base salary and he will receive healthcare benefits under our plans for one year after termination. If Mr. McGlynn's employment is terminated as a result of his disability, he will receive up to six months' base salary. If we terminate Mr. McGlynn's employment for cause or if he resigns, he will not be entitled to any severance or other benefits.

George W. Dunbar, Jr., Acting President and Chief Executive Officer from February 1, 2000 to January 15, 2001, was a founding member of iCEO, LLC ("iCEO") in September 1999. Mr. Dunbar joined the company as Acting President of StemCells California, Inc., our wholly owned subsidiary, and he held this position until January 15, 2001. Under the terms of two agreements dated as of November 17, 1999 and effective as of November 8, 1999, the first between us and iCEO and the second between us and Mr. Dunbar, Mr. Dunbar agreed to serve as Acting President of StemCells California, Inc., our wholly owned subsidiary. Pursuant to the terms of his agreement with us, Mr. Dunbar was entitled to an annual salary of $175,000 and was granted a stock option to purchase 48,000 shares of our common stock that vested at the rate of 4,000 shares per month commencing on December 6, 1999 and continuing until fully vested so long as he served as Acting President. The vesting under the option was subject to acceleration in the event of certain changes of control. Additionally, the agreement provided that the Board would consider once per quarter the grant of an option for an additional 3,000 shares if it is determined that the services rendered by Mr. Dunbar during the preceding quarter exceeded expectations. The agreement with Mr. Dunbar had no provisions for any severance payments or other benefits upon Mr. Dunbar's resignation or termination. Pursuant to the terms of the agreement between iCEO and us, iCEO was entitled to receive annual compensation of $75,000 for so long as Mr. Dunbar continued to serve in his role as Acting President of StemCells California, Inc. or in any other interim role with the Company. In addition, iCEO was granted a stock option to purchase 48,000 shares of our common stock that vested at the rate of 4,000 shares per month commencing on December 6, 1999 and continuing until fully vested so long as Mr. Dunbar served as Acting President of StemCells California, Inc. or in any other interim role with the company. Additionally, the iCEO agreement provided that the Board would consider once per quarter the grant of an option to iCEO for an additional 3,000 shares if it is determined that the services rendered by Mr. Dunbar during the preceding quarter exceeded expectations. As a member of iCEO, Mr. Dunbar was entitled to receive, once annually, a distribution of his assigned allocable percentage of net taxable income and net long-term gain with respect to the pooled income and gain from shares of stock or exercised options received by iCEO from its clients, including that received from us. When Mr. Dunbar was appointed Acting President and Chief Executive Officer effective as of February 1, 2000, there was no adjustment to his or iCEO's compensation or stock options. In the event that during the period of his service as Acting President and Chief Executive Officer or within 120 days from the termination of such services, Mr. Dunbar were to become a permanent employee in any capacity, we would be obligated under the iCEO agreement to pay iCEO a fee equal to one-third of the then targeted first year's compensation for Mr. Dunbar. Our agreements with Mr. Dunbar and iCEO expired in November 2000 and at that time we paid Mr. Dunbar a bonus of $50,000 and granted him an immediately exercisable option to purchase 12,031 shares of common stock. We continued to employ Mr. Dunbar in the same capacity until January 15, 2001 at an annual salary of $250,000, and also granted him an option to purchase 8,000 shares of common stock for each additional month, or pro rata portion of a month, of his employment.

In April 2000, we sold 750 shares of our 6% cumulative convertible preferred stock plus a warrant to purchase 37,500 shares of our common stock to each of Dr. Weissman and Mr. Levin for $750,000, for a total of $1,500,000, on terms more favorable to us than we were able to obtain from outside investors. The face value of the shares is convertible at the option of the holder into common stock at $3.77 per share. The holders of the preferred stock have liquidation rights equal to their original investments plus accrued but unpaid dividends. The investors would be entitled to make additional investments in our securities on the same terms as those on which we complete offerings of our securities with third parties within 6 months, if any such offerings are completed. If offerings totaling at least $6 million are not completed during the 6 months, the investors have the right to acquire up to a total of 1,126 additional shares of convertible preferred stock the face value of which is convertible at the option of the holder into common stock at $6.33 per share. Any unconverted preferred stock will be converted into common stock on April 13, 2002 in the case of the original stock issued and two years after the first acquisition of any of the additional 1,126 shares, if any are acquired. The warrants expire on April 13, 2005.

DESCRIPTION OF CAPITAL STOCK

GENERAL MATTERS

Upon completion of this offering, the total amount of our authorized capital stock will consist of 45,000,000 shares of common stock, $.01 par value per share, and 1,000,000 shares of undesignated preferred stock, $.01 par value per share, to be issued from time to time in one or more series, with such designations, powers, preferences, rights, qualifications, limitations and restrictions as our board of directors may determine. As of December 31, 2000, we had outstanding 20,953,887 shares of common stock and 1,500 shares of 6% cumulative convertible preferred stock.

As of December 31, 2000, we had 277 stockholders of record with respect to our common stock and outstanding options to purchase 2,653,354 shares of our common stock, of which 656,625 were currently exercisable. The following summary of provisions of our capital stock describes all material provisions of, but does not purport to be complete and is subject to, and qualified in its entirety by, our restated certificate of incorporation and our amended and restated by-laws, which are included as exhibits to the registration statement of which this prospectus forms a part, and by the provisions of applicable law.

COMMON STOCK

The issued and outstanding shares of common stock are, and the shares of common stock to be issued by us in connection with the offering will be, validly issued, fully paid and nonassessable. Holders of our common stock are entitled to any and all dividends as such dividends are declared by the Board of Directors. This right is not cumulative, and no right shall accrue to holders of common stock by reason of the fact that dividends on said shares were not declared in any prior period. The shares of common stock are not convertible and the holders thereof have no preemptive or subscription rights to purchase any of our securities. Upon liquidation, dissolution or winding up of our company, the holders of common stock are entitled to an amount equal to $1.00 per share, subject to the rights of the holders of the preferred stock. After payment to the holders of the common stock of the full preferential amounts due to them, the holders of common stock have the right to share equally in the distribution of the entire remaining assets of the company legally available for distribution, subject to the rights of the holders of the preferred stock. Each outstanding share of common stock is entitled to one vote on all matters submitted to a vote of stockholders, such voting rights to be counted together with all other shares of capital stock having voting powers and not as a separate class, except as otherwise required by law.

Our common stock is traded on the Nasdaq National Market under the symbol "STEM."

PREFERRED STOCK

Our board of directors may from time to time direct the issuance of shares of preferred stock in series and may, at the time of issuance, determine the rights, preferences and limitations of each series. Shares of preferred stock of any one series shall be identical with each other in all respects except as to the dates from which dividends shall accrue and/or cumulate. In the event of any liquidation, dissolution or winding up of the company, the holders of undesignated preferred stock of each series are entitled to receive an amount fixed by the company's Restated Certificate of Incorporation or by the resolution(s) of the board of directors providing for the issuance of such series.

The board of directors designated 2,626 shares, $.01 par value per share, as 6% cumulative convertible preferred stock, 1,500 shares of which are issued and outstanding. The holders of these preferred shares are entitled to receive cumulative dividends at a per share rate of 6% of the liquidation preference of each share, per annum accruing daily and compounding quarterly, with priority over payment of any dividend on common stock or any other class or series of equity security

of the company. In the event of any liquidation, dissolution or winding up of the company, the holders of the 6% cumulative convertible preferred stock are entitled to receive in preference to holders of any other class or series of equity securities, an amount equal to $1,000 per share plus (i) dividends added to the liquidation preference, (ii) all accrued but unpaid dividends and (iii) all "Monthly Delay Payments" under the Registration Rights Agreement. The 6% cumulative convertible preferred stock was issued pursuant to a Securities Purchase Agreement. Each holder of the 6% cumulative convertible preferred stock has at any time the right to convert any or all 6% cumulative convertible preferred stock held by such holder into fully paid, validly issued and nonassessable shares of common stock, $.01 par value per share, at which point the rights of the holders of converted 6% cumulative convertible preferred stock shall be treated as having become the owners of such common stock. The affirmative vote of a majority in interest of the outstanding 6% cumulative convertible preferred stock is required for (i) any amendment, modification or repeal of the Certificate of Designations, Certificate of Incorporation or by-laws that may amend or change or adversely affect any of the rights or preference of the 6% cumulative convertible preferred stock; provided, however, that the holders of 6% cumulative convertible preferred stock who are affiliates of the company shall not participate in such votes, and such shares shall be deemed not to be outstanding for purposes of such votes. We have no current intention to issue any more of our unissued, authorized shares of undesignated preferred stock. However, the issuance of any shares of undesignated preferred stock in the future could adversely affect the rights of the holders of common stock.

WARRANTS

As of September 30, 2000, we had outstanding warrants to purchase 296,487 shares of common stock at an average exercise price of $5.3876 per share, subject to customary antidilution adjustment. The warrants were issued at various times during this year to eight different parties as described below.

As of April 13, 2000, we issued to each of Irving Weissman and Mark Levin a warrant in connection with a Securities Purchase Agreement dated as of April 13, 2000. Each warrant is to purchase 37,500 shares of our common stock at an exercise price of $6.58125 per share. Each warrant is exercisable, in whole or in part, at any time on or after April 13, 2000 and on or prior to April 13, 2005. The exercise price is subject to adjustment for subdivisions, combinations, stock dividends, reorganizations and various other issuances. Under the terms of the warrants, during any time that the warrant shares are not subject to an effective registration statement, each investor may elect to receive a reduced number of warrant shares in lieu of tendering the exercise price in cash. Each investor is not entitled to any rights as a shareholder until he exercises the warrant. In the event of a transaction by us in which more than 50% of our voting power is disposed of, each investor shall have the right to purchase, by exercise of the warrant and payment of the exercise price, the kind and amount of shares and other securities and property which he would have owned or have been entitled to receive after the occurrence of the transaction had the warrant been exercised immediately prior thereto, subject to the adjustment of the exercise price as described in the warrant and above. We may, at any time during the term of the warrant, reduce the exercise price to any amount for any period of time deemed appropriate by our Board of Directors. Under the terms of the warrants, the number of shares of common stock that each investor may acquire upon exercise cannot exceed a number that, when added to the total number of shares of common stock the investor is deemed to beneficially own, together with all shares of common stock deemed beneficially owned by the investor's affiliates (as defined by Rule 144 of the Securities Act of 1933), would exceed 9.99% of the total issued and outstanding shares of the common stock.

We issued a warrant to Millennium Partners L.P. on August 3, 2000, which may entitle them to receive additional shares of common stock on eight dates beginning six months from that date and every three months thereafter. On August 30, 2000 we issued a second warrant to Millennium which may entitle them to receive additional shares of common stock on eight dates beginning six months

from August 30, 2000 and every three months thereafter. On November 1, 2000, we agreed with Millennium to cancel the adjustable warrant issued on August 30, 2000 and to decrease the number of shares for which the adjustable warrant issued on August 3, 2000 may be exercisable. The number of additional shares Millennium will be entitled to receive on each date will be based on the number of shares of common stock Millennium continues to hold on each date and the market price of our common stock over a period prior to each date. We will have the right, under certain circumstances, to limit the number of additional shares by purchasing part of the entitlement from Millennium. The remaining warrant is exercisable, in whole or in part, at any time on or prior to 30 days after the last date which may entitle Millennium to receive additional shares. This warrant is subject to adjustment for subdivisions, combinations, stock dividends, reorganizations and various other issuances of common stock. During any period of time that the shares of common stock underlying this warrant are not subject to an effective registration statement, Millennium may elect to exercise the warrant by receiving a reduced number of shares in lieu of tendering the exercise price in cash. In the event of certain mergers, asset sales and tender or exchange offers, Millennium shall have the right to purchase, by exercise of this warrant and payment of the exercise price, the kind and amount of shares and other securities and property it would have owned or have been entitled to receive after the occurrence of the transaction had the warrant been exercised immediately before the transaction, subject to the adjustment of the exercise price as described in the warrant and above, or, if applicable, the right to receive a substitute warrant after a merger or the right to tender the warrant for the consideration that would have been received if the warrant had been exercised and the shares issued upon exercise had been tendered. Under the terms of this warrant, the number of shares of common stock that Millennium may acquire upon exercise cannot exceed a number that, when added to the total number of shares of common stock Millennium is deemed to beneficially own, together with all shares of common stock deemed beneficially owned by Millennium's affiliates (as defined by Rule 144 of the Securities Act of 1933), would exceed 9.99% of the total issued and outstanding shares of the common stock.

Millennium also received a warrant on August 3, 2000 to purchase up to 101,587 shares of common stock at $4.725 per share, which is callable by us at $7.875 per underlying share. On August 30, 2000 we issued an additional warrant to purchase up to 19,900 shares of common stock at $6.03 per share which is callable by us at $10.05 per underlying share. Each callable warrant is exercisable, in whole or in part, at any time on or after the issuance date and on or prior to the fifth year anniversary of the issuance date. The exercise price and number of shares are subject to adjustment for subdivisions, combinations, stock dividends, reorganizations and various other issuances. Under the terms of the callable warrants, during any time that the warrant shares are not subject to an effective registration statement, Millennium may elect to receive a reduced number of warrant shares in lieu of tendering the exercise price in cash. Millennium is not entitled to any rights as a shareholder until it exercises the warrant. In the event of certain mergers, asset sales and tender or exchange offers, Millennium shall have the right to purchase, by exercise of the callable warrant and payment of the exercise price, the kind and amount of shares and other securities and property it would have owned or have been entitled to receive after the occurrence of the transaction had the warrant been exercised immediately prior thereto, subject to the adjustment of the exercise price as described in the warrant and above, or, if applicable, the right to receive a substitute warrant after a merger or the right to tender the warrant for the consideration that would have been received if the warrant had been exercised and the shares issued upon exercise had been tendered. Under the terms of the callable warrants, the number of shares of common stock that Millennium may acquire upon exercise cannot exceed a number that, when added to the total number of shares of common stock Millennium is deemed to beneficially own, together with all shares of common stock deemed beneficially owned by Millennium's affiliates (as defined by Rule 144 of the Securities Act of 1933), would exceed 9.99% of the total issued and outstanding shares of the common stock.

On August 3, 2000 we issued a warrant to the May Davis Group and four of its affiliates to purchase up to 100,000 shares of common stock at $5.0375 per share. The warrant is exercisable, in whole or in part, at any time on or after the issuance date and on or prior to the fifth year anniversary of the issuance date. The exercise price and number of shares are subject to adjustment for subdivisions, combinations, stock dividends, reorganizations and various other issuances.

PROVISIONS OF DELAWARE LAW GOVERNING BUSINESS COMBINATIONS

We are subject to the "business combination" provisions of the Delaware General Corporation Law. In general, such provisions prohibit a publicly held Delaware corporation from engaging in various "business combination" transactions with any "interested stockholder" for a period of three years after the date of the transaction in which the person became an "interested stockholder," unless:

- the transaction is approved by the board of directors prior to the date the "interested stockholder" obtained such status;

- upon consummation of the transaction which resulted in the stockholder becoming an "interested stockholder," the "interested stockholder" owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned by (a) persons who are directors and also officers and (b) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- on or subsequent to such date the "business combination" is approved by the board of directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the "interested stockholder."

A "business combination" is defined to include mergers, asset sales and other transactions resulting in financial benefit to a stockholder. In general, an "interested stockholder" is a person who, together with affiliates and associates, owns 15% or more of a corporation's voting stock or within three years did own 15% or more of a corporation's voting stock. The statute could prohibit or delay mergers or other takeover or change in control attempts.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for our common stock is EquiServe L.P.

PLAN OF DISTRIBUTION

We will not receive any of the proceeds from the sale by the selling stockholders of the common stock offered hereby.

The shares of the common stock offered hereby may be sold from time to time by the selling stockholders, or by pledgees, donees, transferees or other successors in interest (i) to or through underwriters or dealers, (ii) directly to one or more other purchasers, (iii) through agents on a best-efforts basis, or (iv) through a combination of any such methods of sale. Such sales may be made on one or more exchanges or in the over-the-counter market, or otherwise at prices and at terms then prevailing or at prices related to the then current market price, or in privately negotiated transactions. The shares may be sold by one or more of the following: (a) a block trade in which the broker or dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction; (b) purchases by a broker or dealer as principal and resale by such broker or dealer for its account pursuant to this prospectus; (c) an exchange distribution in accordance with the rules of such exchange; and (d) ordinary brokerage transactions and transactions in which the broker solicits purchasers; and (e) privately negotiated transactions without a broker or dealer. In effecting sales, brokers or dealers engaged by the selling stockholders may arrange for other brokers or dealers to participate. Brokers or dealers will receive commissions or discounts from selling stockholders in amounts to be negotiated prior to the sale. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 may be sold under Rule 144 rather than pursuant to this prospectus.

In addition, the selling stockholders may engage in short sales and other transactions in the common stock or derivatives thereof, and may pledge, sell, deliver or otherwise transfer the common stock offered under this prospectus in connection with such transactions.

If we are notified by a selling stockholder that a material arrangement has been entered into with a broker-dealer for the sale of shares through a block trade, special offering, exchange distribution or secondary distribution, or a purchase by a broker-dealer as a principal, a supplemental prospectus will be filed listing:

- the name of each selling stockholder and of the participating broker-dealer(s);
- the number of shares involved;
- the price at which such shares were sold;
- the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable; and
- other facts material to the transaction.

We have agreed to pay the cost of registering the shares covered by this prospectus and the costs of preparing this prospectus and the registration statement under which it is filed. We will provide the estimated total of these expenses by amendment.

We and the selling stockholders have agreed to indemnify each other against certain liabilities, including liabilities arising under the Securities Act.

LEGAL MATTERS

The validity of the shares of our common stock offered hereby will be passed upon for us by Ropes & Gray, Boston, Massachusetts.

EXPERTS

Ernst & Young LLP, independent auditors, have audited our consolidated financial statements at December 31, 1999 and 1998, and for each of the three years in the period ended December 31, 1999, as set forth in their report. We have included our financial statements in the prospectus and elsewhere in the Registration Statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common stock to be sold in this offering. This prospectus does not contain all the information included in the registration statement and the related exhibits and schedules. You will find additional information about us and our common stock in the registration statement. The registration statement and the related exhibits and schedules may be inspected and copied at the public reference facilities maintained by the SEC at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549, and at the public reference facilities of the SEC's Regional Offices: New York Regional Office, Seven World Trade Center, Suite 1300, New York, New York 10048; and Chicago Regional Office, Citicorp Center, 500 West Madison Street, Chicago, Illinois 60661. Copies of this material may also be obtained from the Public Reference Section of the SEC at 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. You can obtain information on the operation of the public reference facilities by calling 1-800-SEC-0330. The SEC also maintains a site on the World Wide Web (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding registrants, including us, that file electronically with the SEC. Statements made in this prospectus about legal documents may not necessarily be complete and you should read the documents which are filed as exhibits or schedules to the registration statement or otherwise filed with the SEC.

STEMCELLS, INC. (FORMERLY CYTOTHERAPEUTICS, INC.)

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Additional schedules are not provided either because they are inapplicable or because the required information is included in the accompanying financial statements.

REPORT OF INDEPENDENT AUDITORS

Stockholders and Board of Directors
StemCells, Inc., (formerly CytoTherapeutics, Inc.)

We have audited the accompanying consolidated balance sheets of StemCells, Inc. (formerly CytoTherapeutics, Inc.) as of December 31, 1999 and 1998, and the related consolidated statements of operations, changes in redeemable common stock and stockholders' equity, and cash flows for each of the three years in the period ended December 31, 1999. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of StemCells, Inc. (formerly CytoTherapeutics, Inc.) at December 31, 1999 and 1998, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 1999, in conformity with accounting principles generally accepted in the United States.

ERNST & YOUNG LLP

Providence, Rhode Island
April 14, 2000

STEMCELLS, INC. (FORMERLY CYTOTHERAPEUTICS, INC.)

CONSOLIDATED BALANCE SHEETS

	DECEMBER 31,	
	1999	1998
ASSETS		
Current assets:		
Cash and cash equivalents	$ 4,760,064	$ 7,864,788
Marketable securities	--	9,520,939
Accrued interest receivable	42,212	206,609
Technology sale receivable	3,000,000	--
Debt service fund	609,905	--
Other current assets	558,674	841,674
Total current assets	8,970,855	18,434,010
Property held for sale	3,203,491	--
Property, plant and equipment, net	1,747,885	8,356,009
Other assets, net	1,858,768	6,075,663
Total assets	$ 15,780,999	$ 32,865,682
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 631,315	$ 710,622
Accrued expenses	2,605,068	1,020,119
Deferred revenue	--	2,500,000
Current maturities of capitalized lease obligations	324,167	317,083
Current maturities of long-term debt	--	1,000,000
Total current liabilities	3,560,550	5,547,824
Capitalized lease obligations, less current maturities	2,937,083	3,261,667
Long-term debt, less current maturities	--	500,000
Deposits	26,000	--
Deferred Rent	502,353	222,673
Commitments and contingencies		
Redeemable common stock, $.01 par value; 524,337 shares issued and outstanding at December 31, 1999 and 1998	5,248,610	5,248,610
Common stock to be issued	--	187,500
Stockholders' equity:		
Convertible preferred stock, $.01 par value; 1,000,000 shares authorized; no shares issued and outstanding	--	--
Common stock, $.01 par value; 45,000,000 shares authorized; 18,635,565 and 17,800,323 shares issued and outstanding at December 31, 1999 and 1998, respectively	186,355	178,003
Additional paid-in capital	123,917,758	122,861,606
Accumulated deficit	(119,372,710)	(103,664,084)
Unrealized losses on marketable securities	--	(5,198)
Accumulated total comprehensive loss	(119,372,710)	(103,669,282)
Deferred compensation	(1,225,000)	(1,472,919)
Total stockholders' equity	3,506,403	17,897,408
Total liabilities and stockholders' equity	$ 15,780,999	$ 32,865,682

See accompanying notes to consolidated financial statements.

STEMCELLS, INC. (FORMERLY CYTOTHERAPEUTICS, INC.)

CONSOLIDATED STATEMENTS OF OPERATIONS

	YEAR ENDED DECEMBER 31,		
	1999	1998	1997
Revenue from collaborative agreements	$ 5,021,707	$ 8,803,163	$ 10,617,443
Operating expenses:			
Research and development	9,984,027	17,658,530	18,603,523
Acquired research and development	--	--	8,343,684
General and administrative	4,927,303	4,602,758	6,158,410
Encapsulated cell therapy wind down and corporate relocation	6,047,806	--	--
	20,959,136	22,261,288	33,105,617
Loss from operations	(15,937,429)	(13,458,125)	(22,488,174)
Other income (expense):			
Interest income	564,006	1,253,781	1,931,260
Interest expense	(335,203)	(472,400)	(437,991)
Gain on partial sale of Modex	--	--	3,386,808
Loss on sale/leaseback	--	--	(342,014)
Loss on equity investment	--	--	(105,931)
Other income (expense)	--	48,914	(57,538)
	228,803	830,295	4,374,594
Net loss	$(15,708,626)	$(12,627,830)	$(18,113,580)
Basic and diluted net loss per share	$ (.84)	$ (.69)	$ (1.08)
Shares used in computing basic and diluted net loss per share	18,705,838	18,290,548	16,704,144

See accompanying notes to consolidated financial statements.

STEMCELLS, INC. (FORMERLY CYTOTHERAPEUTICS, INC.)

CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE COMMON STOCK AND STOCKHOLDERS' EQUITY

	REDEEMABLE COMMON STOCK		COMMON STOCK		ADDITIONAL PAID-IN
	SHARES	AMOUNT	SHARES	AMOUNT	CAPITAL
Balances, December 31, 1996	815,065	$ 8,158,798	15,614,333	$156,144	$107,649,659
Issuance of common stock	--	--	307,548	3,074	1,552,432
Issuance of common stock under the stock purchase plan	--	--	31,822	319	180,103
Deferred compensation recorded in connection with the granting of stock options	--	--	--	--	1,750,000
Common stock issued pursuant to employee benefit plan	--	--	25,588	256	169,196
Issuance of common stock--StemCells	--	--	1,219,381	12,194	7,381,206
Redeemable common stock lapses	(257,311)	(2,575,688)	257,311	2,573	2,573,115
Exercise of stock options	--	--	75,237	752	244,427
Deferred compensation--amortization and cancellations	--	--	(5,000)	(50)	(27,294)
Change in unrealized losses on marketable securities	--	--	--	--	--
Change in cumulative translation adjustment	--	--	--	--	--
Net loss	--	--	--	--	--
Comprehensive loss					
Balances, December 31, 1997	557,754	$ 5,583,110	17,526,220	$175,262	$121,472,844
Issuance of common stock	--	--	--	--	--
Issuance of common stock under the stock purchase plan	--	--	43,542	436	83,622
Deferred compensation recorded in connection with the granting of stock options	--	--	--	--	--
Common stock issued pursuant to employee benefit plan	--	--	84,812	848	143,025
Issuance of common stock--StemCells	--	--	101,320	1,013	505,587
Redeemable common stock lapses	(33,417)	(334,500)	33,417	334	334,166
Exercise of stock options	--	--	11,012	110	1,254
Deferred compensation--amortization and cancellations	--	--	--	--	321,108
Change in unrealized losses on marketable securities	--	--	--	--	--
Net loss	--	--	--	--	--
Comprehensive loss					
Balances, December 31, 1998	524,337	$ 5,248,610	17,800,323	$178,003	$122,861,606
Issuance of common stock	--	--	196,213	1,962	318,221
Issuance of common stock under the stock purchase plan	--	--	57,398	574	41,619
Deferred compensation recorded in connection with the granting of stock options	--	--	--	--	--
Common stock issued pursuant to employee benefit plan	--	--	90,798	908	102,502
Issuance of common stock--StemCells	--	--	--	--	--
Redeemable common stock lapses	--	--	--	--	
Exercise of stock options	--	--	490,833	4,908	513,534
Deferred compensation--amortization and cancellations	--	--	--	--	80,276
Change in unrealized losses on marketable securities	--	--	--	--	--
Net loss	--	--	--	--	--
Comprehensive loss					
Balances, December 31, 1999	524,337	$ 5,248,610	18,635,565	$186,355	$123,917,758

		OTHER COMPREHENSIVE INCOME		
	ACCUMULATED DEFICIT	UNREALIZED GAINS (LOSSES) ON MARKETABLE SECURITIES	CUMULATIVE TRANSLATION ADJUSTMENTS	DEFERRED COMPENSATION
Balances, December 31, 1996	$ (72,922,674)	$ 14,760	$(60,416)	$ (90,118)
Issuance of common stock	--	--	--	--
Issuance of common stock under the stock purchase plan	--	--	--	--
Deferred compensation recorded in connection with the granting of stock options	--	--	--	(1,750,000)
Common stock issued pursuant to employee benefit plan	--	--	--	--
Issuance of common stock--StemCells	--	--	--	--
Redeemable common stock lapses	--	--	--	--
Exercise of stock options	--	--	--	--
Deferred compensation--amortization and cancellations	--	--	--	137,298
Change in unrealized losses on marketable securities	--	(23,637)	--	--
Change in cumulative translation adjustment	--	--	60,416	--
Net loss	(18,113,580)	--	--	--
Comprehensive loss				
Balances, December 31, 1997	$ (91,036,254)	$ (8,877)	$ --	$(1,702,820)
Issuance of common stock	--	--	--	--
Issuance of common stock under the stock purchase plan			--	
Deferred compensation recorded in connection with the granting of stock options	--	--	--	--
Common stock issued pursuant to employee benefit plan	--	--	--	--
Issuance of common stock--StemCells	--	--	--	--
Redeemable common stock lapses	--	--	--	--
Exercise of stock options	--	--	--	--
Deferred compensation--amortization and cancellations	--	--	--	229,901
Change in unrealized losses on marketable securities	--	3,679	--	--
Net loss	(12,627,830)	--	--	--

Comprehensive loss				
Balances, December 31, 1998	$(103,664,084)	$ (5,198)	$ --	$(1,472,919)
Issuance of common stock	--	--	--	--
Issuance of common stock under the stock purchase plan		--		42,193
Deferred compensation recorded in connection with the granting of stock options	--	--	--	--
Common stock issued pursuant to employee benefit plan	--	--	--	--
Issuance of common stock--StemCells	--	--	--	--
Redeemable common stock lapses			--	
Exercise of stock options	--	--	--	--
Deferred compensation--amortization and cancellations	--	--	--	247,919
Change in unrealized losses on marketable securities	--	5,198	--	--
Net loss	(15,708,626)	--	--	--
Comprehensive loss				--
Balances, December 31, 1999	$(119,372,710)	$ --	$ --	$(1,225,000)

	TOTAL STOCKHOLDERS' EQUITY
Balances, December 31, 1996	$ 34,747,355
Issuance of common stock	1,555,506
Issuance of common stock under the stock purchase plan	180,422
Deferred compensation recorded in connection with the granting of stock options	--
Common stock issued pursuant to employee benefit plan	169,452
Issuance of common stock--StemCells	7,393,400
Redeemable common stock lapses	2,575,688
Exercise of stock options	245,179
Deferred compensation--amortization and cancellations	109,954
Change in unrealized losses on marketable securities	(23,637)
Change in cumulative translation adjustment	60,416
Net loss	(18,113,580)
Comprehensive loss	(18,076,081)
Balances, December 31, 1997	$ 28,900,155
Issuance of common stock	--
Issuance of common stock under the stock purchase plan	84,058
Deferred compensation recorded in connection with the granting of stock options	--
Common stock issued pursuant to employee benefit plan	143,873
Issuance of common stock--StemCells	506,600
Redeemable common stock lapses	334,500
Exercise of stock options	1,364
Deferred compensation--amortization and cancellations	551,009
Change in unrealized losses on marketable securities	3,679
Net loss	(12,627,830)
Comprehensive loss	(12,624,151)
Balances, December 31, 1998	$ 17,897,408
Issuance of common stock	320,183
Issuance of common stock under the stock purchase plan	
Deferred compensation recorded in connection with the granting of stock options	--
Common stock issued pursuant to employee benefit plan	103,410
Issuance of common stock--StemCells	--
Redeemable common stock lapses	
Exercise of stock options	518,442
Deferred compensation--amortization and cancellations	328,195
Change in unrealized losses on marketable securities	5,198
Net loss	(15,708,626)
Comprehensive loss	(15,703,428)
Balances, December 31, 1999	$ 3,506,403

See accompanying notes to consolidated financial statements.

STEMCELLS, INC. (FORMERLY CYTOTHERAPEUTICS, INC.)

CONSOLIDATED STATEMENTS OF CASH FLOWS

	YEAR ENDED DECEMBER 31,		
	1999	1998	1997
Cash flows from operating Activities:			
Net loss	$(15,708,626)	$(12,627,830)	$(18,113,580)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,717,975	2,244,146	1,968,234
Acquired research and development	--	551,009	8,343,684
Amortization of deferred compensation	328,195	--	109,954
Fair market adjustment for property held for sale	300,000	--	--
Other non-cash charges	320,183	410,173	105,931
Gain on investment	--	--	(3,386,808)
Loss on sale of fixed assets	1,117,286	--	413,856
Loss on sale of intangibles	440,486		
Changes in operating assets and liabilities:			
Accrued interest receivable	164,397	346,577	100,004
Other current assets	283,000	(265,665)	(232,604)
Accounts payable and accrued expenses	1,344,142	(2,378,613)	(1,233,501)
Deferred rent	279,680	--	--
Deferred revenue	(2,500,000)	2,483,856	(1,842,948)
Net cash used in operating activities	(11,913,282)	(9,236,347)	(13,767,778)
Cash flows from investing activities:			
Proceeds from sale of Modex, net of cash disposed	--	--	2,958,199
Purchases of marketable securities	(4,397,676)	(18,982,387)	(14,182,521)
Proceeds from sales of marketable securities	13,923,813	22,573,625	23,736,242
Purchases of property, plant and equipment	(192,747)	(2,153,525)	(7,710,126)
Proceeds on sale of fixed assets	746,448	--	8,003,926
Purchase of other investment	--	--	(250,000)
Acquisition of other assets	(558,311)	(400,219)	(1,599,418)
Disposal of other assets	440,486	--	--
Acquisition of StemCells assets	--	--	(640,490)
Advance to Cognetix	--	--	(250,000)
Repayment from Cognetix	--	--	250,000
Net cash provided by investing activities	9,962,013	1,037,494	10,315,812
Cash flows from financing activities:			
Proceeds from issuance of redeemable common stock	--	--	--
Proceeds from issuance of common stock	145,603	227,931	1,905,380
Proceeds from the exercise of stock options and warrants	518,442	1,364	245,179
Proceeds from debt financings	--	1,259,300	--
Repayments of debt and lease obligations	(1,817,500)	(1,366,655)	(2,496,849)
Net cash provided by (used in) financing activities	(1,153,455)	121,940	(346,290)
Effect of exchange rate changes on cash and cash equivalents	--	--	(181,627)
Decrease in cash and cash equivalents	(3,104,724)	(8,076,913)	(3,979,883)
Cash and cash equivalents, January 1	7,864,788	15,941,701	19,921,584
Cash and cash equivalents, December 31	$ 4,760,064	$ 7,864,788	$ 15,941,701
Supplemental disclosure of cash flow information:			
Interest paid	$ 335,203	$ 444,047	$ 436,461

NON-CASH TRANSACTION:

In December 1999, the Company sold intellectual property related to its encapsulated cell technology. In association with the transaction, the Company recorded a receivable of $3,000,000 and reduced intangible assets.

See accompanying notes to consolidated financial statements.

1. NATURE OF BUSINESS

StemCells, Inc. (formerly CytoTherapeutics, Inc.) (the "Company") is a biopharmaceutical company engaged in the development of novel stem cell therapies designed to treat human diseases and disorders.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include accounts of the Company and StemCells California, Inc., a wholly owned subsidiary. Significant intercompany accounts have been eliminated in consolidation.

USE OF ESTIMATES

The preparation of the consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

CASH EQUIVALENTS AND MARKETABLE SECURITIES

Cash equivalents include funds held in investments with original maturities of three months or less when purchased. The Company's policy regarding selection of investments, pending their use, is to ensure safety, liquidity, and capital reservation while obtaining a reasonable rate of return. Marketable securities consist of investments in agencies of the U.S. government, investment grade corporate notes and money market funds. The fair values for marketable securities are based on quoted market prices.

The Company determines the appropriate classification of cash equivalents and marketable securities at the time of purchase and reevaluates such designation as of each balance sheet date. The Company classifies such holdings as available-for-sale securities, which are carried at fair value, with unrealized gains and losses reported as a separate component of stockholders' equity.

PROPERTY HELD FOR SALE

As a result of the Company's decision to exit the encapsulated cell technology and relocate its corporate headquarters to Sunnyvale, CA, certain property considered by management to no longer be necessary has been made available for sale or lease. The aggregate carrying value of such property has been reviewed by management, subject to appraisal and adjusted downward to estimated market value.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment, including that held under capitalized lease obligations, is stated at cost and depreciated using the straight-line method over the estimated life of the respective asset, as follows:

Building and improvements	3 -- 15 years
Machinery and equipment	3 -- 10 years
Furniture and fixtures	3 -- 10 years

PATENT COSTS

The Company capitalizes certain patent costs related to patent applications. Accumulated costs are amortized over the estimated economic life of the patents, not to exceed 17 years, using the straight-line method, commencing at the time the patent is issued. Costs related to patent applications are written off to expense at the time such patents are deemed to have no continuing value. At December 31, 1999 and 1998, total costs capitalized were $718,000 and $4,285,000 and the related accumulated amortization were $9,000 and $347,000, respectively. Patent expense totaled $539,000, $3,000, and $365,000 in 1999, 1998 and 1997, respectively.

In December 1999, the Company sold its Encapsulated Cell Technology ("ECT") to Neurotech, S.A. for an initial payment of $3,000,000, royalties on future product sales, and a portion of certain Neurotech revenues from third parties, in return for the assignment to Neurotech of intellectual property assets relating to ECT. In addition, the Company retained certain non-exclusive rights to use ECT in combination with its proprietary stem cell technology and in the field of vaccines for prevention and treatment of infectious diseases. The patent portfolio that was sold had a net book value of $3,180,000. The loss on this transaction and expenses related to the write-down of ECT are included in wind-down expenses on the Company's Consolidated Statement of Operations.

STOCK BASED COMPENSATION

The Company grants qualified stock options for a fixed number of shares to employees with an exercise price equal to the fair market value of the shares at the date of grant. The Company accounts for stock option grants in accordance with APB Opinion No. 25, ACCOUNTING FOR STOCK ISSUED TO EMPLOYEES, and, accordingly, recognizes no compensation expense for qualified stock option grants.

For certain non-qualified stock options granted to non-employees, the Company accounts for these grants in accordance with FAS No. 123--ACCOUNTING FOR STOCK-BASED COMPENSATION and EITF96-18--ACCOUNTING FOR EQUITY INSTRUMENTS THAT ARE ISSUED TO OTHER THAN EMPLOYEES FOR ACQUIRING, OR IN CONJUNCTION WITH SELLING, GOODS OR SERVICES, and accordingly, recognizes as consulting expenses the estimated fair value of such options as calculated using the Black-Scholes valuation model. Fair value is determined using methodologies allowable by FAS No. 123. The cost is amortized over the vesting period of each option or the recipient's contractual arrangement, if shorter.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

INCOME TAXES

The liability method is used to account for income taxes. Deferred tax assets and liabilities are determined based on differences between financial reporting and income tax bases of assets and liabilities, as well as net operating loss carry forwards, and are measured using the enacted tax rates and rates under laws that are expected to be in effect when the differences reverse. Deferred tax assets may be reduced by a valuation allowance to reflect the uncertainty associated with their ultimate realization.

REVENUE FROM COLLABORATIVE AGREEMENTS

Revenues from collaborative agreements are recognized as earned upon either the incurring of reimbursable expenses directly related to the particular research plan or the achievement of certain development milestones as defined within the terms of the collaborative agreement. Payments received in advance of research performed are designated as deferred revenue. Recorded revenues are not refundable in the event research efforts are considered unsuccessful.

RESEARCH AND DEVELOPMENT COSTS

The company expenses all research and development costs as incurred.

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.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

The Securities Exchange Commission's recently issued Staff Accounting Bulletin No. 101 provides guidance on revenue recognition that may impact the Company's future reporting relative to recognizing revenues received from collaborative and similar agreements. The Company does not expect this guidance to result in significant changes to its existing revenue recognition policy, subject to the specific terms of each individual collaborative agreement.

3. SALE OF 6% CUMULATIVE CONVERTIBLE PREFERRED STOCK

On April 13, 2000, the Company completed arrangements to sell 1,500 shares of 6% cumulative convertible preferred stock plus a warrant for 75,000 shares of the Company's common stock to two members of its Board of Directors for $1,500,000, on terms more favorable to the Company than it was then able to obtain from outside investors. The shares are convertible at the option of the holders into common stock at $3.77 per share (based on the face value of the preferred shares). The conversion price may be below the trading market price of the stock at the time of conversion. The Company has valued the beneficial conversion feature using the intrinsic value method reflecting the April 13, 2000 commitment date and the most beneficial per share discount available to the preferred shareholders. Such value was $265,000 and will be treated as a deemed dividend as of the commitment date. The holders of the preferred stock have liquidation rights equal to their original investment plus accrued

3. SALE OF 6% CUMULATIVE CONVERTIBLE PREFERRED STOCK (CONTINUED)
but unpaid dividends. The investors would be entitled to make additional investments in the Company on the same terms as those on which the Company completes offerings of its securities with third parties within 6 months, if any such offerings are completed. If offerings totaling at least $6 million are not completed during the 6 months, the investors have the right to acquire up to 1,126 additional shares of convertible preferred stock at $6.33 per share. Any unconverted preferred stock is converted (based on the face value of the shares), at the applicable conversion price, on April 13, 2002 in the case of the original stock and two years after the first acquisition of any of the additional 1,126 shares, if any are acquired. The warrant expires on April 13, 2005.

4. WIND-DOWN OF ENCAPSULATED CELL TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM

Until mid-1999, the Company engaged in research and development in encapsulated cell therapy technology, including a pain control program funded by AstraZeneca Group plc. The results from the 85-patient double-blind, placebo-controlled trial of our encapsulated bovine cell implant for the treatment of severe, chronic pain in cancer patients did not, however, meet the criteria AstraZeneca had established for continuing trials for the therapy, and in June 1999 AstraZeneca terminated the collaboration, as allowed under the terms of the original collaborative agreement signed in 1995.

As a result of termination, management determined in July 1999 to restructure its research operations to abandon all further encapsulated cell technology research and concentrate its resources on the research and development of its proprietary platform of stem cell technologies.

The Company wound down its research and manufacturing operations in Lincoln, Rhode Island, and relocated its remaining research and development activities, and its corporate headquarters, to the facilities of its wholly owned subsidiary, StemCells California, Inc., in Sunnyvale, California, in October 1999. The Company terminated legal, professional and consulting contractual arrangements in support of ECT research. The Company had used these legal, professional and consulting contractual arrangements to meet regulatory requirements in support of its research work, to support contractual arrangements with clinical sites, to provide assistance at clinical sites in administrating therapy and documenting activities, and to assist in compliance with FDA and other regulations regarding its clinical trials. ECT related patent law work was also terminated. The Company also engaged professional consultants in connection with the determination to exit its ECT activities and restructure its operations, which concluded with the exit from ECT activities and relocation of its corporate headquarters to California. The Company reduced its workforce by approximately 58 employees who had been focused on ECT programs and 10 administrative employees. As a result, the Company sold excess furniture and equipment in December 1999 and is seeking to sublease the science and administrative facility and to sell the pilot manufacturing facility.

Wind-down expenses totaled approximately $6,048,000 for the year ended December 31, 1999; no such expenses were incurred in 1998 and 1997. These expenses relate to the wind-down of the Company's encapsulated cell technology research and development program and the Company's other Rhode Island operations, and the transfer of the Company's corporate headquarters to Sunnyvale, California.

4. WIND-DOWN OF ENCAPSULATED CELL TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM (CONTINUED)

A description of these expenses, including the amounts and periods of recognition, are as follows:

	THIRD QUARTER 1999	FOURTH QUARTER 1999	TOTAL WIND-DOWN EXPENSE
Employee severance costs	$1,554,000	$ --	$1,554,000
Impairment losses(1):			
Fixed assets	800,000	--	800,000
ECT patents	260,000	--	260,000
	1,060,000	--	1,060,000
Rhode Island facilities carrying costs(2):			
Corporate headquarters	702,000	--	702,000
Pilot manufacturing plant	562,000	--	562,000
	1,264,000	--	1,264,000
Employee outplacement	200,000	--	200,000
RIPSAT settlement(3)	--	1,172,000	1,172,000
Loss on sale of assets(4):			
Fixed assets	--	318,000	318,000
ECT patents	--	180,000	180,000
	--	498,000	498,000
Write-down of pilot plant(5)	--	300,000	300,000
	$4,078,000	$1,970,000	$6,048,000

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(1) Management's estimate of the fixed asset impairment was derived from communications with an outside auction house. The patent impairment loss was based on preliminary negotiations with parties interested in acquiring the patents.

(2) Facilities carrying costs include operating lease payments, utilities, property taxes, insurance, maintenance, interest and other non-employee related expenses necessary to maintaining these facilities through the expected date of disposition (June 30, 2000).

(3) The Company originally received funding from the Rhode Island Partnership for Science and Technology (RIPSAT) for purposes of conducting ECT activities conditioned upon maintaining the operation within the state. RIPSAT claimed that the Company's decision to exit ECT activities and close the Rhode Island operation was in violation of the funding arrangement and that the Company was obligated to return a portion of the funding proceeds. Although the Company disputed these claims, during the fourth quarter of 1999, management determined it was in the best interest of the Company to settle the issue.

(4) The Company held an auction to sell all ECT fixed assets. Proceeds from that sale resulted in a loss, which was related to machinery and equipment ($292,000), and furniture and fixtures ($26,000).

4. WIND-DOWN OF ENCAPSULATED CELL TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM (CONTINUED)

(5) The write-down of the pilot plant was based on an independent property appraisal, which was not available during the third quarter, when the Company reached a decision to exit ECT activities and relocate the corporate headquarters.

At December 31, 1999, the Company's $1.6 million wind-down reserve included approximately $1.2 million for the RIPSAT settlement and approximately $0.4 million for Rhode Island facility costs.

Property held for sale at December 31, 1999, consisted of $3.2 million relating to the Company's pilot plant facility located in Lincoln, Rhode Island. The Company suspended depreciation of these assets totalling approximately $140,000 for the quarter ended December 31, 1999. The balance reflected the $300,000 write-down included as part of the additional wind-down expenses recognized during the fourth quarter, in accordance with Financial Accounting Standards Board Statement 121, which requires that long-lived assets be reviewed for impairment whenever events or circumstances indicate that the carrying value of the asset may not be recoverable. There were no such assets at December 31, 1998.

5. STEMCELLS CALIFORNIA, INC.

In September 1997, a merger of a wholly owned subsidiary of the company and StemCells California, Inc. was completed in the form of a purchase. Through the merger, the Company acquired StemCells California, Inc. for a purchase price totaling approximately $9,475,000, consisting of 1,320,691 shares of the Company's common stock, valued at $6,600,000 and options and warrants for the purchase of 259,296 common shares at nominal consideration, valued at $1,300,000, the assumption of certain liabilities of $934,000 and transaction costs of $641,000. Options and warrants were valued utilizing the intrinsic method; the resultant value approximated the value determined using the Black-Scholes method. The purchase price was allocated, based upon an asset valuation study using income approach methods, to license agreements valued at $1,131,000 to be amortized over three years and acquired research and development of $8,344,000, which was expensed. The acquired research and development had not reached scientific feasibility and had no alternative future uses. As part of the acquisition of StemCells, Richard M. Rose, M.D., became President, Chief Executive Officer and director of the Company and Dr. Irving Weissman became a director of the Company.

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. Additionally, in connection with the merger, the Company was granted an option by the former shareholders of StemCells to repurchase 500,000 of the Company's shares of Common Stock exchanged for StemCells shares, upon the occurrence of certain events.

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, the quoted market price at the grant date. Under the original grants, approximately 100,000 of these options were exercisable immediately on the date of grant, 1,031,000 of these options would vest and become exercisable only upon the achievement of specified milestones related to the Company's stem cell development program and the remaining 469,000 options would vest over eight years. The

5. STEMCELLS CALIFORNIA, INC. (CONTINUED)
expense associated with the grants that vested immediately was considered non-employee compensation and was based on the fair value of the options granted. The expense was considered immaterial. In connection with the 469,000 options issued to a non-employee, Dr. Anderson, the Company recorded deferred compensation of $1,750,000, the fair value of such options at the date of grant, which will be amortized over an eight-year period. The fair value was determined using the Black-Scholes method with the following inputs: volatility .594, expected life 8 years, dividend yield 0.0%, risk free rate 5.98%. If the milestones specified relating to the 1,031,000 option granted to non-employees Drs. Weissman and Gage are achieved, at that time the company will record compensation expense for the fair market value of such options determined using the Black-Scholes method. 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 cell program.

Stem cell research is 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 cell 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. However, the Company will retain the option of (i) ceasing or reducing brain stem cell research even if all research plan goals are met, but will be required to accelerate the vesting of all still-achievable performance based stock options, and (ii) ceasing or reducing non-brain 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-brain 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 prior Company funding for such research, plus royalty payments.

6. MODEX

In October 1997, the Company completed a series of transactions, which resulted in the establishment of its previously 50%-owned Swiss subsidiary, Modex Therapeutics, Ltd., (Modex) 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 $463,000 due from Modex to the Company. The Company recorded a gain on the transactions of $3,387,000.

In April 1998, Modex completed an additional equity offering, in which the Company did not participate. This resulted in a reduction in the Company's ownership to less than 20% ownership; therefore, the Company accounted for this investment under the cost method at December 31, 1999.

The pre-existing royalty-bearing Cross License Agreement between the Company and Modex was assigned by the Company to Neurotech S.A., a privately held French company, as part of the sale of the intellectual property assets related to the Company's encapsulated cell therapy technology to Neurotech. Under the terms of the sale to Neurotech, the Company will receive a portion of revenues Neurotech receives from Modex under the Cross License Agreement.

7. MARKETABLE SECURITIES

During 1999, the Company sold all of its remaining marketable equitable securities. At December 31, 1999, all of the Company's available funds were held in cash and cash equivalents. The following is a summary of available-for-sale securities held at December 31, 1998:

	DECEMBER 31, 1998			
	COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	ESTIMATED FAIR VALUE
U.S. government securities	$ 1,500,994	$1,720	$ (504)	$ 1,502,210
U.S. corporate securities	9,225,095	3,244	(9,658)	9,218,681
Total debt securities	$10,726,089	$4,964	$(10,162)	10,720,891
Debt securities included in cash and cash equivalents				(1,199,952)
Debt securities included in marketable securities				$ 9,520,939

8. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consists of the following:

	DECEMBER 31,	
	1999	1998
Building and improvements	$ 665,890	$ 5,665,077
Machinery and equipment	1,691,096	9,887,251
Furniture and fixtures	219,260	869,831
	2,576,286	16,422,159
Less accumulated depreciation and amortization	828,401	8,066,150
	$1,747,885	$ 8,356,009

Depreciation and amortization expense was $1,436,000, $1,720,000, and $1,778,000 for the years ending December 31, 1999, 1998 and 1997, respectively.

As part of the Company's restructuring of its operations, sale of its encapsulated cell technology ("ECT"), and relocation of its corporate headquarters to Sunnyvale, California, the Company identified machinery and equipment and furniture and fixtures associated with the ECT or otherwise no longer needed. In December of 1999, the Company disposed of these excess fixed assets, realizing proceeds of approximately $746,000. At the time of the sale, these assets had a net book value of approximately $1,063,000 after a third quarter 1999 write-down of $800,000, which was based on management's estimate of expected sale proceeds. The third quarter write-down and actual fourth quarter loss were included in wind-down expenses.

Certain property, plant and equipment have been acquired under capitalized lease obligations. These assets totaled $5,827,000 and $6,587,000, at December 31, 1999 and 1998, respectively, with related accumulated amortization of $2,747,000 and $2,860,000 at December 31, 1999 and 1998,

8. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)
respectively. As a result of the Company's decision to exit ECT and relocate to Sunnyvale, CA, this property has been classified as held for sale at December 31, 1999.

9. OTHER ASSETS

Other assets are as follows:

	DECEMBER 31,	
	1999	1998
Patents, net	$ 708,823	$3,938,755
License agreements, net	282,750	659,750
Security deposit--building lease	750,000	750,000
Restricted cash	--	603,467
Deferred financing costs, net	117,195	123,701
	$1,858,768	$6,075,663

The decrease in patents from 1999 to 1998 was primarily due to management's decision to exit encapsulated cell technology and dispose of the related intellectual property. Management reached this decision during the third quarter of 1999, and established a reserve that included $260,000 directly related to the write-down of encapsulated cell technology patents. During the fourth quarter, management established an additional reserve that included a $180,000 loss associated with the sale of encapsulated cell technology patents worth $3,180,000.

At December 31, 1999 and 1998, accumulated amortization was $857,000 and $818,000, respectively, for patents and license agreements.

10. ACCRUED EXPENSES

Accrued expenses are as follows:

	DECEMBER 31,	
	1999	1998
Wind-down expenses	$1,634,522	$ --
External services	97,439	412,253
Employee compensation	306,342	262,679
Collaborative research	222,140	196,505
Other	344,625	148,682
	$2,605,068	$1,020,119

The reserve for wind-down expenses included approximately $1,172,000 relating to the RIPSAT settlement (Notes 4 and 11) and approximately $463,000 for the estimated six months of lease payments and operating costs for the Rhode Island facilities through an expected disposal date of June 30, 2000.

11. LEASES

The Company has undertaken direct financing transactions with the State of Rhode Island and received proceeds from the issuance of industrial revenue bonds totaling $5,000,000 to finance the construction of its pilot manufacturing facility. The related leases are structured such that lease payments will fully fund all semiannual interest payments and annual principal payments through maturity in August 2014. Fixed interest rates vary with the respective bonds' maturities, ranging from 5.1% to 9.5%. The bonds contain certain restrictive covenants which limit, among other things, the payment of cash dividends and the sale of the related assets. In addition, the Company was required to maintain a debt service reserve until December 1999. On March 3, 2000 the Company entered into a settlement agreement with RIPSAT, the Rhode Island Industrial Recreational Building Authority ("IRBA") and the Rhode Island Industrial Facilities Corporation ("RIIFC"). The Company agreed to pay RIPSAT $1,172,000 in full satisfaction of all obligations of the Company to RIPSAT under the Funding Agreement dated as of June 22, 1989. On execution and delivery of this Agreement, IRBA agreed to return to the Company the full amount of the Company's debt service reserve ("Reserve Funds"), approximately $610,000 of principal and interest, relating to the bonds the Company has with IRBA and RIIFC. Such amount has been classified as debt service funds in current assets of the consolidated balance sheet. In order to avoid the loss of interest on the Reserve Funds due to early termination of certain investments, the parties agreed that the Company would render a net payment to RIPSAT in the amount of approximately $562,000.

In 1997, the Company completed construction of a new headquarters and laboratory facility. In November 1997, the Company entered into sale and leaseback agreements with a real estate investment trust. Under the terms of these agreements, the Company sold its new facility for $8,000,000, incurring a $342,000 loss on the sale. The Company simultaneously entered into a fifteen-year lease for the facility. The lease agreement calls for minimum rent of $750,000 for the first five years, $937,500 for years six to ten, $1,171,900 for years eleven to fourteen and $1,465,000 in year fifteen, with a $750,000 security deposit held for the term of the lease. The Company is recognizing rent expense on a straight line basis. At December 31, 1999, the Company had incurred $426,790 in deferred rent expense.

11. LEASES (CONTINUED)

Future minimum capitalized lease obligations with non-cancelable terms in excess of one year at December 31, 1999, are as follows:

2000	$ 606,268
2001	589,217
2002	519,719
2003	436,909
2004	425,713
Thereafter	2,577,826
Total minimum lease payments	5,302,407
Less amounts representing interest	2,041,157
Present value of minimum lease payments	3,261,250
Less current maturities	324,167
Capitalized lease obligations, less current maturities	$2,937,083

Rent expense for the years ended December 31, 1999, 1998 and 1997, was $947,000, $1,052,000 and $499,000, respectively.

12. LONG-TERM DEBT

Long-term debt is as follows:

	DECEMBER 31, 1999	DECEMBER 31, 1998
Term note payable, interest at the prime rate plus 1/2% (8.75% at December 31, 1998), principal payments commence in August 1998, due ratably through May 2000; secured by certain equipment (prepaid during 1999)	$ --	$1,500,000
Current maturities of long-term debt	--	1,000,000
Long-term debt, less current maturities	$ --	$ 500,000

13. REDEEMABLE COMMON STOCK

In November 1996, the Company signed certain collaborative development and licensing agreements with Genentech, Inc, including one under which Genentech purchased 829,171 shares of redeemable common stock for $8.3 million to fund development of products to treat Parkinson's disease. The Agreement also provided that Genentech had the right, at its discretion, to terminate the Parkinson's program at specified milestones in the program, and that if the program were terminated, Genentech had the right to require the Company to repurchase from Genentech the shares of the Company's common stock having a value equal to the amount by which the $8.3 million exceeded the expenses incurred by the Company in connection with such program by more than $1 million, based upon the share price paid by Genentech. Accordingly, the common stock is classified as redeemable common stock until such time as the related funds are expended. At December 31, 1998, $3,051,000 had been spent on the collaboration with Genentech and, accordingly, the Company has reclassified

13. REDEEMABLE COMMON STOCK (CONTINUED)
those common shares and related value to stockholders' equity. On May 21, 1998, Genentech exercised its right to terminate the collaboration and negotiations ensued with respect to the amount of redeemable common stock to be redeemed in accordance with the agreement and the method of such redemption. In March 2000, the Company reached a settlement of this matter with Genentech. Under the settlement agreement, Genentech released the Company from any obligation to redeem any shares of the Company's Common Stock held by Genentech. Accordingly, the Company reclassified the amount recorded at December 31, 1999 as Redeemable Common Stock ($5,248,000) to Stockholders' Equity in March 2000. The Company and Genentech also agreed that all of the agreements between them were terminated and that neither had any claim to the intellectual property of the other.

14. COMMON STOCK TO BE ISSUED

In 1998, the Company entered into an agreement with a Company advisor, under which the advisor prepared a strategic and business overview and provided related implementation support for the Company. The advisor agreed to accept cash and the Company's common stock as partial payment for its services. In 1999, the Company issued the $187,500 of common stock due to the advisor.

15. STOCKHOLDERS' EQUITY

STOCK OPTION AND EMPLOYEE STOCK PURCHASE PLANS

The Company has adopted several stock plans that provide for the issuance of incentive and nonqualified stock options, performance awards and stock appreciation rights, at prices to be determined by the Board of Directors, as well as the purchase of Common Stock under an employee stock purchase plan at a discount to the market price. In the case of incentive stock options, such price will not be less than the fair market value on the date of grant. Options generally vest ratably over four years and are exercisable for ten years from the date of grant or within three months of termination. At December 31, 1999, the Company had reserved 2,603,736 shares of common stock for the exercise of stock options.

The following table presents the combined activity of the Company's stock option plans (exclusive of the plans noted below) for the years ended December 31:

	1999		1998		1997	
	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE
Outstanding at January 1.....	1,654,126	$3.62	2,446,573	$7.48	2,423,025	$8.34
Granted.....	536,078	1.08	1,174,118	1.70	679,074	5.33
Exercised.....	(604,362)	1.50	(11,012)	.12	(82,737)	2.96
Canceled.....	(646,507)	5.31	(1,955,553)	7.08	(572,789)	9.21
Outstanding at December 31....	939,335	$2.65	1,654,126	$3.62	2,446,573	$7.48
Options exercisable at December 31.....	594,216	$3.44	1,108,936	$4.33	1,338,163	$7.79

15. STOCKHOLDERS' EQUITY (CONTINUED)

On July 10, 1998, the Company re-priced 751,018 outstanding stock options. No compensation expense was recorded since the re-priced options carried an exercise price equal to the market price of the Company's common stock on the date of the re-pricing.

In addition to the options noted above, in conjunction with the StemCells California merger, StemCells California options originally issued under a prior StemCells California options plan were exchanged for options to purchase 250,344 shares of the Company's common stock at $.01 per share; 75,384 of these options are exercisable at December 31, 1997, 96,750 of these options vest and become exercisable only upon achievement of specified milestones, and the remaining 78,210 options vest over three years from the date of grant. The value of such options utilizing the intrinsic method, which approximated the value determined using the Black-Scholes method, was accounted for as part of the StemCells California acquisition price. Additionally, the Company adopted the 1997 CytoTherapeutics, Inc. StemCells California Research Stock Option Plan (the StemCells California Research Plan) whereby an additional 2,000,000 shares of Common Stock have been reserved. During 1997, the Company awarded options under the StemCells Research Plan to purchase 1.6 million shares of the Company's common stock to the Chief Executive Officer and scientific founders of StemCells at an exercise price of $5.25 per share. Under the original grants, approximately 100,000 of these options were exercisable immediately on the date of grant, 1,031,000 of these options would vest and become exercisable only upon achievement of specified milestones and the remaining 469,000 options would vest over eight years. Options granted to Dr. Rose, in his capacity as Chief Executive Officer, were valued using the intrinsic value method, in accordance with the provisions of APB 25, ACCOUNTING FOR STOCK ISSUED TO EMPLOYEES. Options granted to non-employees Drs. Weissman, Gage and Anderson were accounted for using the fair value method in accordance with the provisions of Statement of Financial Accounting Standards No. 123, ACCOUNTING FOR STOCK-BASED COMPENSATION.

FAS 123 DISCLOSURES

The Company has adopted the disclosure provisions only of Statement of Financial Accounting Standards No. 123, ACCOUNTING FOR STOCK-BASED COMPENSATION ("FAS 123") and accounts for its stock option plans in accordance with the provisions of APB 25, ACCOUNTING FOR STOCK ISSUED TO EMPLOYEES.

The following table presents weighted average price and life information about significant option groups outstanding at December 31, 1999:

	OPTIONS OUTSTANDING			OPTIONS EXERCISABLE	
RANGE OF EXERCISE PRICES	NUMBER OUTSTANDING	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (YRS.)	WEIGHTED AVERAGE EXERCISE PRICE	NUMBER EXERCISABLE	WEIGHTED AVERAGE EXERCISE PRICE
Less than $5.00	755,398	8.50	$ 1.12	411,945	$ 1.02
$5.01-$10.00	90,687	4.56	6.55	89,021	6.55
Greater than $10.00	93,250	2.54	11.18	93,250	11.18
	939,335			594,216	

15. STOCKHOLDERS' EQUITY (CONTINUED)

Pursuant to the requirements of FAS 123, the following are the pro forma net loss and net loss per share amounts for 1999, 1998, and 1997, as if the compensation cost for the option plans and the stock purchase plan had been determined based on the fair value at the grant date for grants in 1999, 1998, and 1997, consistent with the provisions of FAS 123:

	1999		1998		1997	
	AS REPORTED	PRO FORMA	AS REPORTED	PRO FORMA	AS REPORTED	PRO FORMA
Net loss.....	$(15,708,626)	$(15,764,569)	$(12,627,830)	$(14,919,389)	$(18,113,580)	$(19,924,437)
Net loss per share...	$(.84)	$(.84)	$(.69)	$(.82)	$(1.08)	$(1.19)

The weighted average fair value per share of options granted during 1999, 1998 and 1997 was $.88, $.82 and $3.40, respectively. The fair value of options and shares issued pursuant to the stock purchase plan at the date of grant were estimated using the Black-Scholes model with the following weighted average assumptions:

	OPTIONS			STOCK PURCHASE PLAN		
	1999	1998	1997	1999	1998	1997
Expected life (years).....	5	5	5	5	.5	.5
Interest rate.....	5.5%	5.2%	6.2%	5.0%	4.64%	5.5%
Volatility.....	96.7%	63.5%	59.0%	96.7%	63.5%	59.0%

The Company has never declared nor paid dividends on any of its capital stock and does not expect to do so in the foreseeable future.

The effects on 1999, 1998 and 1997 pro forma net loss and net loss per share of expensing the estimated fair value of stock options and shares issued pursuant to the stock purchase plan are not necessarily representative of the effects on reporting the results of operations for future years as the period presented includes only four, three or two years, respectively, of option grants under the Company's plans. As required by FAS 123, the Company has used the Black-Scholes model for option valuation, which method may not accurately value the options described.

STOCK WARRANTS

In conjunction with the StemCells California merger, the Company exchanged StemCells California warrants for warrants to purchase 8,952 shares of Company common stock at $4.71 per share; such warrants were valued using the intrinsic value method which approximated the value determined using the Black-Scholes method and were accounted for as part of the purchase price. In conjunction with various equipment leasing agreements, the Company had outstanding warrants to purchase 31,545 shares of common stock at prices ranging from $4.00 to $9.00 per share. The warrants expired in October 2000.

In connection with a public offering of common stock in April 1995, the Company issued warrants to purchase 434,500 shares of common stock at $8 per share. The warrants are nontransferable and expired in April 2000, subject to certain required exercise provisions. In addition to the foregoing rights, the holder of such warrants has the right, in the event the Company issues additional shares of common stock or other securities convertible into common stock, to purchase at the then market price

15. STOCKHOLDERS' EQUITY (CONTINUED)
of such common stock, sufficient additional shares of common stock to maintain the warrant holder's percentage ownership of the Company's common stock at 15%. This right, subject to certain conditions and limitations, expired in April 2000.

COMMON STOCK RESERVED

The Company has reserved 6,461,846 shares of common stock for the exercise of options, warrants and other contingent issuances of common stock.

16. RESEARCH AGREEMENTS

In November 1997, StemCells California, Inc., a wholly owned subsidiary of the Company, signed a Research Funding and Option Agreement with The Scripps Research Institute ("Scripps") relating to certain stem cell research. Under the terms of the Agreement, StemCells agreed to fund research in the total amount of approximately $931,000 at Scripps over a period of three years. StemCells paid Scripps approximately $77,000 in 1997, $307,000 in 1998, and $309,000 in 1999. In addition, the Company agreed to issue to Scripps 4,837 shares of the Company's common stock and a stock option to purchase 9,674 shares of the Company's Common Stock with an exercise price of $.01 per share upon the achievement of specified milestones. Under the Agreement, StemCells has an option for an exclusive license to the inventions resulting from the sponsored research, subject to the payment of royalties and certain other amounts, and is obligated to make payments totaling $425,000 for achievement of certain milestones.

In April 1997, the Company entered into an agreement with Neurospheres, Ltd., which superseded all previous licensing agreements and settled a dispute with Neurospheres. Under the terms of the settlement, the Company has an exclusive royalty bearing license for growth-factor responsive stem cells for transplantation. Neurospheres had an option to acquire co-exclusive rights but did not exercise by the April 1998 deadline. The Company retains exclusive rights for transplantation. The parties have no further research obligations to each other, and the Company is under no obligation to provide additional funding.

In February 1997, the Company and Cognetix, Inc. entered into a Collaboration and Development Agreement related to the Company's former encapsulated cell technology. As part of the agreement with Cognetix, the Company purchased $250,000 of Cognetix preferred stock and, subject to certain milestones, was obligated to purchase as much as $1,500,000 of additional 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 October 1998, the Company sold the $250,000 of preferred stock back to Cognetix for $298,914. The Company is under no obligation to provide funding under this agreement.

In 1996, the Company signed certain collaborative development and licensing agreements with Genentech, Inc. Under the terms of one of those agreements, Genentech purchased 829,171 shares of redeemable common stock for $8.3 million to fund development of products to treat Parkinson's disease. Genentech had the right, at its discretion, to terminate the Parkinson's program at specified milestones in the program. The Agreement also provided that if the Parkinson's program were terminated and the funds the Company received from the sale of stock to Genentech pursuant to the Parkinson's agreement exceeded the expenses incurred by the Company in connection with such program by more than $1 million, Genentech had the right to require the Company to repurchase from

16. RESEARCH AGREEMENTS (CONTINUED)
Genentech shares of the Company's common stock having a value equal to the over funding, based upon the share price paid by Genentech. As such, the common stock purchased by Genentech has been classified as redeemable common stock until the funds are expended on the program. On May 21, 1998, Genentech exercised its right to terminate the collaboration and negotiations ensued with respect to the amount of redeemable common stock to be redeemed in accordance with the agreement and the method of such redemption. In March 2000 the Company announced the settlement of this matter with Genentech and at that time the redeemable common stock was reclassified to common stock. The Company is under no obligation to provide additional funding to Genentech, Inc.

In March 1995, the Company signed a collaborative research and development agreement with AstraZeneca for the development and marketing of certain encapsulated-cell products to treat pain. AstraZeneca made an initial, nonrefundable payment of $5,000,000, included in revenue from collaborative agreements in 1995, a milestone payment of $3,000,000 in 1997 and was to remit up to an additional $13,000,000 subject to achievement of certain development milestones. Under the agreement, the Company was 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 originally expected to receive annual payments of $5 million to $7 million from AstraZeneca, which was to approximate the research and development costs incurred by the Company under the plan. Subject to the successful development of such products and obtaining necessary regulatory approvals, AstraZeneca was obligated to conduct all clinical trials of products arising from the collaboration and to seek approval for their sale and use. AstraZeneca had the exclusive worldwide right to market products covered by the agreement. Until the later of either the expiration of all patents included in the licensed technology or a specified fixed term, the Company was entitled to a royalty on the worldwide net sales of such products in return for the marketing license granted to AstraZeneca and the Company's obligation to manufacture and supply products. AstraZeneca had the right to terminate the original agreement beginning April 1, 1998. On June 24, 1999, AstraZeneca informed the Company of the results of AstraZeneca's analysis of the double-blind, placebo-controlled trial of the Company's encapsulated bovine cell implant for the treatment of severe, chronic pain in cancer patients. AstraZeneca determined that, based on criteria it established, the results from the 85-patient trial did not meet the minimum statistical significance for efficacy established as a basis for continuing worldwide trials for the therapy. AstraZeneca therefore indicated that it did not intend to continue the trials of the bovine cell-containing implant therapy and executed its right to terminate the agreement. The Company has no additional funding obligations with AstraZeneca.

The Company has entered into other collaborative research agreements whereby the Company funds specific research programs. Pursuant to such agreements, the Company is typically granted rights to the related intellectual property or an option to obtain such rights on terms to be agreed, in exchange for research funding and specified royalties on any resulting product revenue. The Company's principal academic collaborations had been with Brown University and Dr. Aebischer and Centre Hospitalier Universitaire Vaudois in Switzerland. However, with the termination of the Company's encapsulated cell technology program and its new focus on the stem cell field, its principal academic collaborations are now with Scripps Institute and the Oregon Health Science University. Research and development expenses incurred under these collaborations amounted to approximately $868,000, $1,259,000, and $1,326,000 for the years ended December 31, 1999, 1998 and 1997, respectively. The Company has no other significant collaborative research funding obligations.

17. INCOME TAXES

Due to net losses incurred by the Company in each year since inception, no provision for income taxes has been recorded. At December 31, 1999, the Company had tax net operating loss carry forwards of $96,195,000 and research and development tax credit carry forwards of $4,035,000 which expire at various times through 2019. Due to the "change in ownership" provisions of the Tax Reform Act of 1986, the Company's utilization of its net operating loss carry forwards and tax credits may be subject to annual limitation in future periods.

Significant components of the Company's deferred tax assets and liabilities are as follows:

	DECEMBER 31,	
	1999	1998
Deferred tax assets:		
Capitalized research and development costs	$ 4,331,000	$ 28,124,000
Net operating losses	38,478,000	10,786,000
Research and development credits	4,035,000	3,646,000
Other	928,000	235,000
	47,772,000	42,791,000
Deferred tax liabilities:		
Patents	(246,000)	(1,537,000)
	47,526,000	41,254,000
Valuation allowance	(47,526,000)	(41,254,000)
Net deferred tax assets	$ --	$ --

Since there is uncertainty relating to the ultimate use of the loss carry forwards and tax credits, a valuation allowance has been recognized at December 31, 1999 and 1998, to fully offset the Company's deferred tax assets. The valuation allowance increased $6,272,000 in 1999, due primarily to the increases in net operating loss carry forwards and tax credits offset by reduction in capitalized research and development costs.

18. EMPLOYEE RETIREMENT PLAN

The Company has a qualified defined contribution plan covering substantially all employees. Participants are allowed to contribute a fixed percentage of their annual compensation to the plan and the Company may match a percentage of that contribution. The Company matches 50% of employee contributions, up to 6% of employee compensation, with the Company's common stock. The related expense was $103,000, $146,000, and $169,000 for the years ended December 31, 1999, 1998 and 1997, respectively.

19. CONTINGENCIES

The Company is routinely involved in arbitration, litigation and other matters as part of the ordinary course of its business. While the resolution of any matter may have an impact on the Company's financial results for a particular reporting period, management believes the ultimate

19. CONTINGENCIES (CONTINUED)
disposition of these matters will not have a materially adverse effect on the Company's consolidated financial position or results of operations.

20. SUBSEQUENT EVENTS

On April 13, 2000, the Company completed arrangements to sell 1,500 shares of 6% cumulative convertible preferred stock plus a warrant for 75,000 shares of the Company's common stock to two members of its Board of Directors for $1,500,000, on terms more favorable than it was then able to obtain from outside investors. (SEE NOTE 3--"SALE OF 6% CUMULATIVE CONVERTIBLE PREFERRED STOCK.")

STEMCELLS, INC. (FORMERLY CYTOTHERAPEUTICS, INC.)

CONDENSED CONSOLIDATED BALANCE SHEETS

	SEPTEMBER 30, 2000 (UNAUDITED)	DECEMBER 31, 1999 (NOTE 1)
ASSETS		
Current assets:		
Cash and cash equivalents	$ 7,247,077	$ 4,760,064
Technology sale receivable	200,000	3,000,000
Other current assets	768,521	1,210,791
Total current assets	8,215,598	8,970,855
Restricted Investments	27,204,333	--
Property held for sale	3,203,491	3,203,491
Property, plant and equipment, net	1,517,564	1,747,885
Intangible assets, net	740,543	1,108,768
Other assets	750,000	750,000
Total assets	$ 41,631,529	$ 15,780,999
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 234,444	$ 631,315
Accrued expenses	574,267	2,605,068
Current maturities of capitalized lease obligations	327,083	324,167
Total current liabilities	1,135,794	3,560,550
Capitalized lease obligations, less current maturities	2,692,500	2,937,083
Deposits	26,000	26,000
Deferred rent	650,984	502,353
Redeemable stock	--	5,248,610
Stockholders' equity		
Convertible Preferred Stock	1,500,000	--
Common stock	208,818	186,355
Additional paid in capital	134,698,668	123,917,758
Stock Subscription Receivable	(1,250,004)	--
Accumulated deficit	(124,237,900)	(119,372,710)
Accumulated other comprehensive income	27,204,333	--
Deferred compensation	(997,664)	(1,225,000)
Total stockholders' equity	37,126,251	3,506,403
Total liabilities and stockholders' equity	$ 41,631,529	$ 15,780,999

See accompanying notes to condensed consolidated financial statements.

STEMCELLS, INC. (FORMERLY CYTOTHERAPEUTICS, INC.)

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(UNAUDITED)

	NINE MONTHS ENDED SEPTEMBER 30	
	2000	1999
Revenue from collaborative arrangements	$ --	$ 5,021,707
Operating expenses:		
Research and development	3,350,101	8,432,262
General and administrative	2,172,137	3,195,672
Encapsulated Cell Therapy wind down and corporate relocation	768,733	4,078,034
	6,290,971	15,705,968
Loss from operations	(6,290,971)	(10,684,261)
Other income (expense):		
Investment income	218,480	504,114
Interest expense	(209,287)	(236,836)
Gain on sale of Modex shares	1,427,686	--
Loss on disposal of fixed assets	(11,098)	(66,777)
	1,425,781	200,501
Net loss	$ (4,865,190)	$ (10,483,760)
Deemed dividend (Note 2)	(265,000)	--
Net loss applicable to common shareholders	$ (5,130,190)	$ (10,483,760)
Basic and diluted net loss per common share	$ (0.26)	$ (0.56)
Shares used in computing basic and diluted net loss per common share	19,682,590	18,560,675

See accompanying notes to condensed consolidated financial statements.

STEMCELLS, INC. (FORMERLY CYTOTHERAPEUTICS, INC.)

CONDENSED STATEMENTS OF CASH FLOWS

(UNAUDITED)

	NINE MONTHS ENDED SEPTEMBER 30,	
	2000	1999
Cash flows from operating activities:		
Net loss	$(4,865,190)	$(10,483,760)
Gain on sale of Modex shares	(1,427,686)	--
Adjustments to reconcile net loss to net cash used for operating activities:		
Depreciation and amortization	617,447	1,603,691
Write down of fixed assets	--	800,000
Deferred stock compensation	464,363	244,337
Loss on sale of fixed assets	--	66,777
Net changes in operating assets and liabilities	(3,086,775)	(1,978,807)
Net cash used in operating activities	(8,297,841)	(9,747,762)
Cash flows from investing activities:		
Proceeds from marketable securities	--	11,317,482
Purchases of marketable securities	--	(4,397,676)
Proceeds from sale of encapsulated cell technology	2,800,000	--
Purchase of property, plant and equipment, net	(18,901)	(47,210)
Proceeds from sale of Modex shares	1,427,686	--
Acquisition of other assets	--	(138,090)
Net cash provided by investing activities	4,208,785	6,734,505
Cash flows from financing activities:		
Proceeds from the exercise of stock options	553,586	548,225
Proceeds from issuance of common stock	4,764,150	--
Proceeds from issuance of preferred stock	1,500,000	--
Principal payments under capitalized lease obligations and mortgage payable	(241,667)	(1,710,833)
Net cash provided by (used by) financing activities	6,576,069	(1,162,608)
Net increase (decrease) in cash and cash equivalents	2,487,013	(4,175,865)
Cash and cash equivalents, beginning of period	4,760,064	7,864,788
Cash and cash equivalents, end of period	$ 7,247,077	$ 3,688,923
Non-cash item:		
Stock subscription receivable	$ 1,250,004	--

See accompanying notes to condensed financial statements.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

SEPTEMBER 30, 2000 AND 1999

NOTE 1. BASIS OF PRESENTATION

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

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

NOTE 2. NET LOSS PER SHARE

Net loss-per-share is computed using the weighted-average number of shares of common stock outstanding. The value associated with the beneficial conversion feature of certain preferred stock has been treated as a deemed dividend in the computation of earnings per share (see Note 6 "Beneficial Conversion Value of 6% Cumulative Convertible Preferred Stock.) Common equivalent shares from stock options and warrants are excluded, as their effect is antidilutive.

NOTE 3. COMPREHENSIVE INCOME

For the nine months ended September 30, 2000 and 1999, total comprehensive income/(loss) was $22,339,143 and ($10,483,760) respectively. The reported net loss for the nine months ended September 30, 2000 and 1999 was $4,865,190 and $10,483,760.

NOTE 4. INVESTMENTS

At September 30, 2000, the Company owned 126,193 shares of Modex Therapeutics Ltd. ("Modex"). This Swiss biotechnology company made an initial public offering of shares on the Swiss Exchange on June 23, 2000. Accordingly, with an established market value, the investment is recorded as available-for-sale at an estimated fair market value The market price of Modex shares was 372 Swiss Francs per share on September 30, 2000, which converts to $215.58 per share and results in an estimated fair value of $27,204,333 for the Company's holdings on that date. The unrealized gain was reported in other comprehensive income. On January 2, 2001 the market price of Modex shares was 210.00 Swiss Francs per share, which converts to $130.39 per share and results in an estimated fair value of $16,453,825 for the Company's holdings. On January 19, 2001, the Company sold 22,616

NOTE 4. INVESTMENTS (CONTINUED)
Modex shares for a net price of 182.00 Swiss Francs per share, which converts to $112.76 per share, for total proceeds of $2,550,230.27.

COST	GROSS UNREALIZED GAIN	FAIR VALUE SEPTEMBER 30, 2000
$ 0	$27,204,333	$27,204,333

NOTE 5. WIND-DOWN OF ENCAPSULATED CELL TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM

As previously reported, in 1999 the Company restructured its operations to abandon all further encapsulated cell technology research and concentrate its resources on the research and development of its proprietary platform of stem cell technologies. The Company relocated its remaining research and development activities and its corporate headquarters to California, and has been seeking to dispose of its former science and administrative and pilot manufacturing facilities in Rhode Island.

During the first six months of 2000 we incurred $288,646 of costs in excess of the amounts reserved as of December 31, 1999 for the carrying costs of the Rhode Island facilities. During the third quarter we incurred an additional $480,087 in carrying costs, including lease payments, property taxes and utilities, for the Rhode Island facilities, as we were unable to dispose of them by June 30, 2000, as expected. These amounts were previously included in general and administrative expense, and have been reclassified to be separately disclosed as encapsulated cell therapy wind down and corporate relocation expense because they were directly related to the wind down and relocation. We anticipate that we will incur a similar amount in the fourth quarter of 2000 and in every quarter thereafter until we dispose of these facilities. We do not currently have a projected date for such disposal and there can be no assurance that we will be able to dispose of these facilities in a reasonable time, if at all.

Some additional items that were more properly included in research and development were also reclassified out of general and administrative expense, and facilities costs were more accurately spread between research and development and general and administrative expense.

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

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

NOTE 7. SALE OF SECURITIES

On August 3, 2000, the Company completed a $4 million common stock financing transaction with Millennium Partners, LP (the "Fund"). StemCells received $3 million of the purchase price at the

NOTE 7. SALE OF SECURITIES (CONTINUED)
closing and received the remaining $1 million upon effectiveness of a registration statement covering the shares owned by the Fund. The Fund purchased the Company's common stock and warrants at $4.33 per share. As set forth in an adjustable warrant issued to the Fund on the closing date, the Fund may be entitled to receive additional shares of common stock on eight dates beginning six months from the closing and every three months thereafter. The adjustable warrant may be exercised at any time prior to the thirtieth day after the last of such dates. The number of additional shares the Fund may be entitled to on each date will be based on the number of shares of common stock the Fund continues to hold on each date and the market price of the Company's common stock over a period prior to each date. The exercise price per share under the adjustable warrant is $0.01. Such warrants provide the Fund with the opportunity to acquire additional common shares at a nominal value if the value of the common stock that the Fund holds decreases. The Company will have the right, under certain circumstances, to cap the number of additional shares by purchasing part of the entitlement from the Fund at a purchase price based on the market price of such shares. No portion of the sale proceeds was assigned to the adjustable warrants, as the ultimate number of shares issuable upon exercise of the warrants was not determinable and the net impact on the Company's equity from any such allocation of proceeds would have been zero. The Fund also received a five-year warrant to purchase up to 101,587 shares of common stock at $4.725 per share. This warrant is callable at any time by StemCells at $7.875 per underlying share. The calculated value of this callable warrant using the Black-Scholes method is $376,888, which was treated as a credit to paid in capital stockholders' equity. The Company accounts for the sale of the stock and warrants or the exercise of warrants by adding that portion of the proceeds equal to the par value of the new shares to common stock and the balance, including the value of the warrants, to paid in capital. In addition, any repurchase of the shares or warrants by the Company would also be accounted for through paid in capital.

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

The adjustable warrant contains provisions regarding the adjustment or replacement of the warrants in the event of stock splits, mergers, tender offers and other similar events. The adjustable

NOTE 7. SALE OF SECURITIES (CONTINUED)
warrant also limits the number of shares that can be beneficially owned by the Fund to 9.99% of the total number of outstanding shares of Common Stock.

NOTE 8. SUBSEQUENT EVENTS

As previously reported, in conjunction with the StemCells California merger, the Company adopted the 1997 CytoTherapeutics, Inc. StemCells California Research Stock Option Plan whereby an additional 2,000,000 shares of Common Stock have been reserved. During 1997, the Company awarded options under this plan to purchase 1.6 million shares of the Company's common stock to the Chief Executive Officer and scientific founders of StemCells California, Inc. at an exercise price of $5.25 per share. Under the original grants, approximately 100,000 of these options were exercisable immediately on the date of the grant, 1,031,000 of these options would vest and become exercisable only upon achievement of specified milestones and the remaining 469,000 options would vest over eight years. The Company agreed on October 27, 2000 with Irving Weissman, M.D. and Fred H. Gage, Ph.D., two of the grant recipients, to amend their options. In exchange for the revision of the options, Dr. Weissman and Dr. Gage agreed to rescind their Conduct of Research Agreement with the Company, in all respects, including their right under the Agreement to reacquire certain technology under certain circumstances. Instead of vesting based on performance milestones, Dr. Weissman's and Dr. Gage's options will vest over eight years from the date of the original grant, on the same schedule as the option granted to the third founder, Dr. David Anderson. 168,750 shares vested upon the revision and the remaining 300,000 shares will vest at 50,000 shares on each September 25 until September 25, 2005, when the final 100,000 shares will vest. The exercise price for the revised options remains $5.25 per share. We expect to incur a charge of approximately $1,600,000 during the fourth quarter of 2000 relating to the vested portion of the options. The deferred compensation expense associated with the unvested portion of the grants was determined to be approximately $2.8 million. The Company plans to revalue the options using the Black-Scholes method on a quarterly basis and recognize additional compensation expense, accordingly.

Under a 1997 License Agreement with NeuroSpheres, Ltd., the Company obtained an exclusive patent license in the field of transplantation. The Company entered into an additional license agreement with NeuroSpheres as of October 31, 2000, under which the Company obtained an exclusive license in the field of non-transplant uses, such as drug discovery and drug testing, so that together the licenses are exclusive for all uses of the technology. The Company made up-front payments to NeuroSpheres of 65,000 shares of its common stock and $50,000, and will make additional cash payments when milestones are achieved in the non-transplant field, or in any products employing NeuroSpheres patents for generating cells of the blood and immune system from neural stem cells. Milestone payments would total $500,000 for each product that is approved for market.

On December 20, 2000, the Company announced that Donald Kennedy, Ph.D., had resigned from its board of directors. The Company reported that Dr. Kennedy resigned in connection with his becoming Editor-in-Chief of Science magazine. On that date the Company also announced that Roger M. Perlmutter had become a member of the Board.

NOTE 9. RECENT ACCOUNTING PRONOUNCEMENTS

In June 1998, The Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Financial Instruments and for Hedging Activities" ("SFAS 133"), which provides a comprehensive and consistent standard for the recognition and measurement of derivatives and hedging activities. SFAS 133 is effective for fiscal years beginning after June 15, 2000 and is not anticipated to have an impact on results of operations or financial condition when adopted as we hold no derivative financial and instruments and do not currently engage in hedging activities.

In December 1999, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 101 ("SAB101"). SAB 101 summarizes the SEC's views in applying generally accepted accounting principles to revenue recognition. The adoption of SAB 101 had no significant impact on our revenue recognition policy or results of operations.

In March 2000, the FASB issued interpretation No. 44, ("FIN44"), "Accounting for Certain Transactions Involving Stock Compensation - an Interpretation of APB 25. "This interpretation clarifies (a) the definition of employee for purposes of applying Opinion 25, (b) the criteria for determining whether a plan qualifies as a noncompensatory plan, (c) the accounting consequence of various modifications to the terms of a previously fixed stock option or award and (d) the accounting for an exchange of stock compensation awards in a business combination. This interpretation is effective July 1, 2000, but certain conclusions in this Interpretation cover specific events that occur after either December 15, 1998, or January 12, 2000. To the extent that this Interpretation covers events occurring during the period after December 15, 1998, or January 12, 2000, but before the effective date of July 1, 2000, the effects of applying this interpretation are recognized on a prospective basis from July 1, 2000. The adoption of FIN 44 does not have a material impact on our financial statements.

PRO FORMA FINANCIAL INFORMATION

During the third quarter of 1999, management reached a decision to exit the Company's Encapsulated Cell Therapy (ECT) activities, dispose of the related intellectual property, facilities and equipment and relocate the Lincoln, RI corporate headquarters to Sunnyvale, CA. The Company terminated legal, professional and consulting contractual arrangements in support of ECT research. The Company had used these legal, professional and consulting contractual arrangements to meet regulatory requirements in support of its research work, to support contractual arrangements with clinical sites, to provide assistance at clinical sites in administrating therapy and documenting activities, and to assist in compliance with FDA and other regulations regarding its clinical trials. ECT related patent law work was also terminated. The Company also engaged professional consultants in connection with the determination to exit its ECT activities and restructure its operations, which concluded with the exit from ECT activities and relocation of its corporate headquarters to California. The Company reduced its workforce by approximately 58 employees who had been focused on ECT programs and 10 administrative employees. At the same time, the Company accrued various estimated expenses associated with the exit and wind-down of the ECT activities, disposal of the related property and relocation of the corporate headquarters. Additional accruals were provided in December 1999 for expenses relating to settlement of a 1989 funding arrangement with the Rhode Island Partnership for Science and Technology resulting from the Company's move out of Rhode Island, further adjustment to asset carrying values and estimated carrying costs associated with the Rhode Island facilities through the expected disposition date. In addition, during December 1999, the Company liquidated certain ECT equipment and sold its ECT intellectual property to Neurotech, S.A. for $3,000,000. The tabular unaudited pro forma consolidated statement of operations presents the effects of the sale, wind-down and relocation, as if they had occurred at January 1, 1999. The pro forma effects and adjustments were determined based on available information and certain allocations that management believes are reasonable. The pro forma financial information does not purport to represent what the Company's operating results would have been had the sale occurred at January 1, 1999 and may not be indicative of the Company's financial position or operating results for any future date or period.

PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS (UNAUDITED)

	HISTORICAL CONSOLIDATED 12/31/1999	ADJUSTMENTS(A)	PRO FORMA CONSOLIDATED 12/31/1999
Revenue from collaborative agreements	$ 5,021,707	$ (5,021,707)(1)	$ --
Operating expenses:			
Research and development	9,984,027	(5,332,331)(2)	4,571,696
		(80,000)(5)	
General and administrative	4,927,303	(2,309,315)(3)	2,697,988
		80,000 (5)	
Encapsulated Cell Therapy wind down and corporate relocation	6,047,806	(6,047,806)(4)	--
	20,959,136	(13,689,452)	7,269,684
Loss from operations	(15,937,429)	8,667,745	(7,269,684)
Other income (expense):			
Interest income	564,006	--	564,006
Interest expense	(335,203)	--	(335,203)
	228,803	--	228,803
Net loss	$(15,708,626)	$ 8,667,745	$(7,040,881)
Basic and diluted net loss per share	$ (0.84)	$ (0.46)	$ (0.38)
Shares used in computing basic and diluted net loss per share	18,705,838	18,705,838	18,705,838

NOTES TO PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS

NOTE A--PRO FORMA ADJUSTMENTS

(1) To eliminate Encapsulated Cell Therapy collaborative revenue arrangements.

(2) To eliminate research and development expenses, including employee compensation ($1,566,479), external professional services ($875,818) facilities and other supplies ($2,890,035) and various other expenses directly relating to encapsulated cell therapy activities. These expenses were determined based on an individual account analysis and internal employee tracking records.

(3) To eliminate general and administrative expenses, including employee compensation ($761,000), legal, professional and consulting fees ($963,000), facilities costs ($306,000), amortization ($158,000) and various other expenses ($121,000), directly relating to encapsulated cell therapy. The expenses were determined based on an individual account analysis.

(4) To eliminate Encapsulated Cell Therapy wind-down and corporate relocation expenses, including Rhode Island facility carrying costs, employee severance arrangements and the related settlement of a 1989 funding arrangement with the Rhode Island Partnership for Science and Technology. These expenses related to the Company's decision to eliminate 68 employees, relocate all remaining research and development and the Company's headquarters to Sunnyvale, California as a result of a decision to exit Encapsulated Cell Technology, and were included in wind-down expenses. The wind-down expenses include employee severance costs of approximately $1,554,000, losses and reserves for the write-down of related patents and fixed assets of approximately $1,858,000, an accrual of approximately $1,172,000 of costs relating to settlement of a 1989 funding agreement with the Rhode Island Partnership for Science and Technology ("RIPSAT") associated with the Company's pilot manufacturing facility, approximately $1,264,000 relating to carrying costs, including lease payments, interest, utilities, taxes and other related expenses associated with resolving the disposition of the Rhode Island facilities and $200,000 of employee outplacement fees. The RIPSAT claim related directly to funding the Company had received from RIPSAT. When the Company reached the decision to exit its Encapsulated Cell Technology and relocate all remaining research and the Company's corporate headquarter's from Rhode Island to Sunnyvale, California. RIPSAT claimed the Company had violated terms of the funding arrangement. The Company did not agree with this claim, however, management determined it was in the Company's best interest to settle the issue. As a result, the costs associated with the settlement were included in the wind-down amount.

(5) To allocate facilities cost to general and administrative expense from conversion of the former research and development facility in Sunnyvale, CA to the Company's Corporate headquarters.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the costs and expenses payable by the Registrant in connection with the sale of the securities being registered. All amounts shown are estimates except the SEC registration fee and the NASDAQ listing fee.

SEC registration fee	$ 53
NASDAQ listing fee	$ 650
Printing and engraving expenses	$10,000
Legal fees and expenses	$10,000
Accounting fees and expenses	$10,000
Blue sky fees and expenses	$ 250
Transfer agent and registrar fees	$ 1,000
Miscellaneous	$ 1,000
Total	$32,953

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the Delaware General Corporation Law provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, other than an action by or in the right of the corporation, by reason of the fact that the person is or was a director, officer, employee or agent of the corporation or is or was serving at the corporation's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with the action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The power to indemnify applies to actions brought by or in the right of the corporation as well, but only to the extent of expenses, including attorneys' fees but excluding judgments, fines and amounts paid in settlement, actually and reasonably incurred by the person in connection with the defense or settlement of the action or suit and with the further limitation that in these actions no indemnification shall be made in the event of any adjudication of negligence or misconduct in the performance of his duties to the corporation, unless a court believes that in light of all the circumstances indemnification should apply.

Section Ten of our Restated Certificate of Incorporation provides that we shall, to the maximum extent legally permitted, indemnify and upon request advance expenses to each person who is or was a party or is threatened to be made a party to any threatened, pending or completed action, suit proceeding, or claim (civil, criminal, administrative or investigative) by reason of the fact that he is or was, or has agreed to become, a director or officer of the Company, or is or was serving, or has agreed to serve, at the request of the Company, as a director, officer, partner, employee, agent or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprises, provided, however, that the Company is not required to indemnify or advance expenses to any person in connection with any action, suit, proceeding, claim or counterclaim initiated by or on behalf of such person. The indemnification provided for in Section Ten is expressly not exclusive of any other rights to which those seeking indemnification may be entitled under any by-law, agreement or vote of directors

or stockholders or otherwise, and shall inure to the benefit of the heirs and legal representatives of such persons.

Section 145(g) of the Delaware General Corporation Law provides that the Company shall have the power to purchase and maintain insurance on behalf of its officers, directors, employees and agents, against any liability asserted against and incurred by such persons in any such capacity.

We have obtained insurance covering our directors and officers against certain liabilities.

Section 102(b)(7) of the General Corporation Law of the State of Delaware provides that a corporation may eliminate or limit the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provisions shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the General Corporation Law of the State of Delaware, or (iv) for any transaction from which the director derived an improper personal benefit. No such provision shall eliminate or limit the liability of a director for any act or omission occurring prior to the date when such provision becomes effective.

Pursuant to the Delaware General Corporation Law, Section Nine of the Company's Restated Certificate of Incorporation eliminates a director's personal liability for monetary damages for breach of fiduciary duty as a director, except in circumstances involving a breach of the director's duty of loyalty to StemCells, Inc. or its shareholders, acts or omissions not in good faith, intentional misconduct, knowing violations of the law, self-dealing or the unlawful payment of dividends or repurchase of stock.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES.

The shares of capital stock and other securities issued in the following transactions were offered and sold in reliance upon the following exemptions: (i) in the case of the transactions described in (a) below, Section 4(2) of a the Securities Act or Regulation D promulgated thereunder relative to sales by an issuer not involving a public offering; and (ii) in the case of the transactions (b) below, Section 3(b) of the Securities Act and Rule 701 promulgated thereunder relative to sales pursuant to certain compensatory benefits plans.

(a) On April 13, 2000, the Registrant sold 1,500 shares of 6% cumulative convertible preferred stock plus warrants for a total of 75,000 shares of the Registrant's common stock to two members of its Board of Directors for $1,500,000, on terms more favorable than it was then able to obtain from outside investors. The sale was made in reliance on Rule 506 of Regulation D promulgated under the Securities Act of 1933, as amended. The shares of preferred stock are convertible at the option of the holders into common stock at $3.77 per share (based on the face value of the shares). The holders of the preferred stock have liquidation rights equal to their original investments plus accrued but unpaid dividends. The investors would be entitled to make additional investments in the Company on the same terms as those on which the Registrant completes offerings of its securities with third parties within 6 months, if any such offerings are completed. They have waived that right with respect to the common stock transactions described in Note 8, Subsequent Events. If offerings totaling at least $6 million are not completed during the 6 months, the investors have the right to acquire up to a total of 1,126 additional shares of convertible preferred stock, the face value of which is convertible to common stock at $6.33 per share. Any unconverted preferred stock is converted, at the applicable conversion price, on April 13, 2002 in the case of the original stock and two years after the first acquisition of any of the additional 1,126 shares, if any are acquired. The warrants, which are exercisable at $6.58 per share, expire on April 13, 2005.

On August 3, 2000, the Registrant completed a $4 million common stock financing transaction with Millennium Partners, LP, or the Fund. The sale was made in reliance on Rule 506 of Regulation D promulgated under the Securities Act of 1933, as amended. The Registrant received $3 million of the purchase price at the closing and received the remaining $1 million upon effectiveness of a registration statement covering the shares owned by the Fund. The Fund purchased the Registrant's common stock at $4.33 per share. The Fund may be entitled, pursuant to an adjustable warrant issued in connection with the sale of common stock to the Fund, to receive additional shares of common stock on eight dates beginning six months from the closing and every three months thereafter. The number of additional shares the Fund may be entitled to on each date will be based on the number of shares of common stock the Fund continues to hold on each date and the market price of the Registrant's common stock over a period prior to each date. The Registrant will have the right, under certain circumstances, to cap the number of additional shares by purchasing part of the entitlement from the Fund. The Fund also received a warrant to purchase up to 101,587 shares of common stock at $4.725 per share. This warrant is callable by the Registrant at $7.875 per underlying share.

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

We entered into a license agreement with NeuroSpheres, Ltd. on October 30, 2000 expanding our rights to the intellectual property covered by the license agreement. See "Business--License Agreements and Sponsored Research Agreements--Neurospheres, Ltd." Under that license agreement, on October 30, 2000, we issued 65,000 shares of our common stock to NeuroSpheres and we agreed to file a registration statement covering the resale of those shares by NeuroSpheres.

(b) On May 25, 2000 we issued 2,800 shares of unregistered Rule 144 common stock to the California Institute of Technology.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) EXHIBITS. The following exhibits are filed as part of this registration statement [NEED TO UPDATE]:

NUMBER	DESCRIPTION
3.1*	Restated Certificate of Incorporation of the Registrant
3.2++	Amended and Restated By-Laws of the Registrant.
4.1*	Specimen Common Stock Certificate.
4.2++++	Form of Warrant Certificate issued to a certain purchaser of the Registrant's Common Stock in April 1995.
4.3X	Warrant to Purchase Common Stock--Mark Angelo
4.4X	Warrant to Purchase Common Stock--Robert Farrell
4.5X	Warrant to Purchase Common Stock--Joseph Donahue

NUMBER	DESCRIPTION
4.6X	Warrant to Purchase Common Stock--Hunter Singer
4.7X	Warrant to Purchase Common Stock--May Davis
4.8X	Common Stock Purchase Warrant
4.9X	Callable Warrant
10.1*	Amendment to Registration Rights dated as of February 14, 1992 among the Registrant and certain of its stockholders.
10.2*	Form of at-will Employment Agreement between the Registrant and most of its employees.
10.3*	Form of Agreement for Consulting Services between the Registrant and members of its Scientific Advisory Board.
10.4*	Form of Nondisclosure Agreement between the Registrant and its Contractors.
10.5*	Master Lease and Warrant Agreement dated April 23, 1991 between the Registrant and PacifiCorp Credit, Inc.
10.6*	1988 Stock Option Plan.
10.7*	1992 Equity Incentive Plan.
10.8*	1992 Stock Option Plan for Non-Employee Directors.
10.9**!!!!	1992 Employee Stock Purchase Plan.
10.12++	Research Agreement dated as of March 16, 1994 between NeuroSpheres, Ltd. and Registrant.
10.13++	Term Loan Agreement dated as of September 30, 1994 between The First National Bank of Boston and Registrant.
10.14++	Lease Agreement between the Registrant and Rhode Island Industrial Facilities Corporation, dated as of August 1, 1992.
10.15++	First Amendment to Lease Agreement between Registrant and The Rhode Island Industrial Facilities Corporation dated as of September 15, 1994.
10.17**++++	Development, Marketing and License Agreement, dated as of March 30, 1995 between Registrant and Astra AB.
10.18++++	Form of Unit Purchase Agreement to be executed by the purchasers of the Common Stock and Warrants offered in April 1995.
10.19+++	Form of Common Stock Purchase Agreement to be executed among the Registrant and certain purchasers of the Registrant's Common Stock.
10.22###	Lease Agreement dated as of November 21, 1997 by and between Hub RI Properties Trust, as Landlord, and CytoTherapeutics, Inc., as Tenant.
10.24!!	CTI individual stockholders option agreement dated as of July 10, 1996 among the Company and the individuals listed therein.
10.25!!	CTI Valoria option agreement dated of July 10, 1996 between the Company and the Societe Financiere Valoria SA.

NUMBER	DESCRIPTION
10.26!!!	Term Loan Agreement dated as of October 22, 1996 between The First National Bank of Boston and the Registrant.
10.27***	Agreement and Plan of Merger dated as of August 13, 1997 among StemCells, Inc., the Registrant and CTI Acquisition Corp.
10.28***	Consulting Agreement dated as of September 25, 1997 between Dr. Irving Weissman and the Registrant.
10.29###	Letter Agreement among each of Dr. Irving Weissman and Dr. Fred H. Gage and the Registrant.
10.32****	StemCells, Inc. 1996 Stock Option Plan.
10.33****	1997 StemCells Research Stock Option Plan (the "1997 Plan")
10.34****	Form of Performance-Based Incentive Option Agreement issued under the 1997 Plan.
10.35###	Employment Agreement dated as of September 25, 1997 between Dr. Richard M. Rose and the Registrant.
10.38[*]	Rights Agreement, dated as of July 27, 1998 between Bank Boston, N.A. as Rights Agent and the Registrant.
10.40Section**	Consulting Services Agreement dated as of July 27, 1998, as amended December 19, 1998 between Dr. John J. Schwartz and the Registrant.
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10.46**	License Agreement dated as of June 1999 between The Scripps Research Institute and the Registrant.
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10.49X	Subscription Agreement dated as of July 31, 2000 between StemCells, Inc. and Millennium Partners, L.P.
21X	Subsidiaries of the Registrant.
23.1	Consent of Ernst & Young LLP, Independent Auditors.

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++ Previously filed with the Commission as Exhibits to, and incorporated herein by reference to, the Registrant's Registration Statement on Form S-1, File No. 33-85494.

+++ Previously filed with the Commission as Exhibits to, and incorporated herein by reference to, the Registrant's Registration Statement on Form S-3, File No. 33-97272.

++++ Previously filed with the Commission as Exhibits to, and incorporated herein by reference to, the Registrant's Registration Statement on Form S-1, File No. 33-91228.

* Previously filed with the Commission as Exhibits to, and incorporated herein by reference to, Registration Statement on Form S-1, File No. 33-45739.

Previously filed with the Commission as Exhibits to, and incorporated herein by reference to, the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 1992 and filed March 30, 1993.

** Confidential treatment requested as to certain portions. The term "confidential treatment" and the mark "**" as used throughout the indicated Exhibits mean that material has been omitted and separately filed with the Commission.

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ITEM 17. UNDERTAKINGS.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described under Item 14 above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial BONA FIDE offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) To file a post-effective amendment to the Registration Statement to include any financial statements required by section 10(a)(3) of the Securities Act.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Sunnyvale, State of California, on the 31st day of January, 2001.

STEMCELLS, INC.

BY: /S/ GEORGE KOSHY*

Martin M. McGlynn
Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Amendment No. 1 to the Registration Statement has been signed by the following persons in the capacities indicated on January 31, 2001.

SIGNATURE	TITLE
/s/ GEORGE KOSHY*	Martin M. McGlynn, President, Chief Executive Officer (Principal Executive Officer)
/s/ GEORGE KOSHY	George Koshy, Controller and Acting Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
/s/ GEORGE KOSHY*	John J. Schwartz, Ph. D. Director
/s/ GEORGE KOSHY*	Roger M. Perlmutter, M.D., Ph.D. Director
/s/ GEORGE KOSHY*	Mark J. Levin Director
/s/ GEORGE KOSHY*	Irving Weissman, M.D. Director

* Attorney-in-fact

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NUMBER	DESCRIPTION
23.1	Consent of Ernst & Young LLP, Independent Auditors.

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X Previously filed with the Commission as an Exhibit to, and incorporated herein by reference to, the Registrant's Registration Statement on Form S-1, File No. 333-45496.

Exhibit 23.1

CONSENT OF INDEPENDENT AUDITORS

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated April 14, 2000 in Amendment No. 1 to the Registration Statement (Form S-1 No. 333-54208) and related Prospectus of StemCells, Inc. (formerly CytoTherapeutics, Inc.) for the registration of 65,000 shares of its common stock.

/s/ ERNST & YOUNG LLP

Providence, Rhode Island
January 30, 2001