

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

STEMCELLS, INC.

(Exact name of registrant as specified in its charter)

DELAWARE
(State or Other Jurisdiction
of Incorporation or
Organization)

94-3078125
(I.R.S. Employer
Identification No.)

3155 PORTER DRIVE
PALO ALTO, CA 94304
(650) 475-3100

(Address of Principal Executive Offices)

2001 EQUITY INCENTIVE PLAN
(Full Title of the Plans)

IRIS BREST, ESQ.
STEMCELLS, INC.
3155 PORTER DRIVE
PALO ALTO, CA 94304
(605) 475-3100

(Name, Address and Telephone Number, including Area Code, of Agent for Service)

CALCULATION OF REGISTRATION FEE

TITLE OF SECURITIES	AMOUNT PROPOSED
MAXIMUM PROPOSED	
MAXIMUM AMOUNT OF TO	
BE TO BE OFFERING	
PRICE PER AGGREGATE	
OFFERING REGISTRATION	
REGISTERED REGISTERED	
SHARE(1) PRICE(2) FEE	
Common Stock, Par	
Value	
\$0.01.....	
3,000,000 shares	
\$3.10-\$4.275	
\$12,768,304	\$3,192

(1) The offering price for shares subject to options on the date hereof is the actual exercise price of such options. Of the 3,000,000 shares to be registered hereunder, 74,500 are subject to options at an exercise price of \$3.10 per share and 82,249 are subject to options at an exercise price of \$4.65 per share. The offering price for the remaining 2,843,251 shares not subject to options on the date hereof of \$4.275 per share has been estimated solely for the purpose of determining the registration fee pursuant to

Rule 457(h) on the basis of the average of the high and low prices of StemCells, Inc., Common Stock, par value \$0.01 per share, reported on the Nasdaq National Market on August 2, 2001.

- (2) The maximum aggregate offering price consists of \$230,950 payable in respect of 74,500 shares subject to options at an exercise price of \$3.10 per share, \$382,456 payable in respect of 82,249 shares subject to options at an exercise price of \$4.65 per share, plus \$12,154,898 payable in respect of 2,843,251 shares not subject to options on the date hereof.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

StemCells, Inc., (the "Registrant" or the "Company") hereby incorporates the following documents herein by reference:

- (a) The Registrant's latest Annual Report on Form 10-K for the year ended December 31, 2000, as filed with the Securities and Exchange Commission (the "Commission") pursuant to Section 13 under the Exchange Act of 1934 (the "Exchange Act"), on April 2, 2001, and as amended on April 30, 2001.
- (b) Quarterly Report on Form 10-Q for the quarter ended March 31, 2001, as filed with the Commission pursuant to Section 13 under the Exchange Act on May 8, 2001. Current Report on Form 8-K, as filed with the Commission pursuant to Section 13 of the Exchange Act on May 14, 2001; Current Report on Form 8-K, as filed with the Commission pursuant to Section 13 of the Exchange Act on May 8, 2001.
- (c) The description of the common stock of the Registrant contained in the Registrant's Registration Statement on Form 8-A (File No. 1-19871), including all amendments and reports filed for the purpose of updating such description.

All documents subsequently filed by the Registrant pursuant to Section 13(a), Section 13(c), Section 14 and Section 15(d) of the Exchange Act, prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered have been sold or which de-registers all securities then remaining unsold, shall be deemed to be incorporated herein by reference from the date of filing of such documents.

ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

Not applicable.

ITEM 6. 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 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS.

EXHIBIT -

- 4.1 2001

Equity

Incentive

Plan

(Previously

filed as

Annex A to

the Proxy

Statement

filed with

the

Commission,

pursuant

to Section

14(a) of

the

Exchange

Act, on

April 30,

2001). 5.1

Opinion of

Ropes &

Gray.

23.1.

Consent of

ITEM 9. UNDERTAKINGS.

(a) 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;

(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 this Registration Statement;

PROVIDED, HOWEVER, that paragraphs (a)(1)(i) and (a)(1)(ii) above shall not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Securities and Exchange Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment 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.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in the Registration Statement 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.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, 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 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 Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement on Form S-8 to be signed on its behalf by the undersigned, thereunto duly authorized, in Palo Alto, California on this the 3d day of August, 2001.

STEMCELLS, INC.

By: /s/ MARTIN M. MCGLYNN

Martin M. McGlynn
DIRECTOR, PRESIDENT AND
CHIEF EXECUTIVE OFFICER

Each person whose signature appears below constitutes and appoints Martin M. McGlynn and Iris Brest, and each of them singly, his true and lawful attorney-in-fact and agent with full power of substitution and re-substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8 to be filed by StemCells, Inc., and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitutes, may lawfully do or cause to be done by virtue hereof.

PURSUANT TO THE REQUIREMENTS OF THE SECURITIES ACT OF 1933, THIS REGISTRATION STATEMENT HAS BEEN SIGNED BY THE FOLLOWING PERSONS IN THE CAPACITIES AND ON THE DATES INDICATED.

SIGNATURES
TITLE DATE

/s/ MARTIN
M. MCGLYNN

Director,
President
and August
3, 2001
Martin M.
McGlynn
Chief
Executive
Officer
Controller
and Acting
Chief
Financial
Officer
/s/ GEORGE
KOSHY
(Principal

Financial
Officer
and August
3, 2001
George
Koshy
Principal

Accounting
Officer)
/s/ MARK
J. LEVIN -

--

Director
August 3,
2001 Mark
J. Levin
/s/ ROGER
M.
PERLMUTTER

Director
August 3,
2001 Roger
M.
Perlmutter
M.D.,
Ph.D. /s/
JOHN J.
SCHWARTZ -

Director
August 3,
2001 John
J.
Schwartz,
Ph.D. -----

Director
August 3,
2001
Irving L.
Weissman,
M.D.

EXHIBIT INDEX

EXHIBIT
NUMBER
TITLE OF
EXHIBIT -

-- 4.1
2001
Equity
Incentive
Plan
(Previously
filed as
Annex A to
the Proxy
Statement
filed with
the
Commission,
pursuant

to Section
14(a) of
the
Exchange
Act, on
April 30,
2001). 5.1
Opinion of
Ropes &
Gray.
23.1.

Consent of
Ropes &
Gray (See
Exhibit
5.1).
23.2.

Consent of
Ernst &
Young LLP,
Independent
Auditors.

24. Power
of
Attorney
(Included
on
Signature
Page).

August 3, 2001

StemCells, Inc.
3155 Porter Drive
Palo Alto, CA 94304

Ladies and Gentlemen:

This opinion is furnished to you in connection with a registration statement on Form S-8 (the "Registration Statement"), filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended, on or about the date hereof for the registration of 3,000,000 shares of Common Stock, \$.01 par value (the "Shares"), of StemCells, Inc., a Delaware corporation (the "Company"). The Shares are issuable under the Company's 2001 Equity Incentive Plan (the "Plan").

We are familiar with the actions taken by the Company in connection with the Plan. For purposes of our opinion, we have examined and relied upon such documents, records, certificates and other instruments as we have deemed necessary.

Based on the foregoing, we are of the opinion that, when the Shares have been issued and sold and consideration received therefor by the Company in accordance with the terms of the Plan, the Shares will be validly issued, fully paid and non-assessable.

We hereby consent to your filing of this opinion as an exhibit to the Registration Statement.

It is understood that this opinion is to be used only in connection with the offer and sale of Shares while the Registration Statement is in effect.

Very truly yours,

/s/ Ropes & Gray

Ropes & Gray

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the incorporation by reference in this Registration Statement on Form S-8, pertaining to the StemCells, Inc., 2001 Equity Incentive Plan, of our report dated February 23, 2001 with respect to the consolidated financial statements of StemCells, Inc., included in its Annual Report on Form 10-K/A for the year ended December 31, 2000 filed with the Securities and Exchange Commission.

Ernst & Young LLP

Palo Alto, California
August 2, 2001