As filed with the Commission on June 16, 1997 File No. 333-___

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

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

CYTOTHERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware

94-3078125

(State or other jurisdiction of (IRS Employer Identification No.) incorporation or organization)

Two Richmond Square Providence, Rhode Island 02906

(Address of principal executive offices, including zip code)

1992 EMPLOYEE STOCK PURCHASE PLAN (Full title of the plan)

Frederic A. Eustis, III, Esq. Secretary CytoTherapeutics, Inc. Two Richmond Square Providence, Rhode Island 02906

(410) 272-3310

(Name, address and telephone number of agent for service)

CALCULATION OF REGISTRATION FEE

Title of Securities to be registered

Amount to be registered

Proposed maximum offering price per

Proposed maximum aggregate offering Amount of registration fee

Common Stock,

100,000 shares

share

price \$5,375,000

\$163.00

par value \$0.01

\$5.375

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 CytoTherapeutics, Inc. Common Stock, par value \$0.01, reported on NASDAQ/NMS on June 10, 1997.

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PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Incorporation by Reference

Pursuant to General Instruction E to Form S-8, the contents of the Registrant's Registration Statement on Form S-8 (File Number 33-49524) are incorporated herein by reference thereto.

Item 8. Exhibits.

Exhibit

- 4.1 Specimen Stock Certificate (incorporated by reference to Exhibit 4 of the Registrant's Registration Statement on Form S-1, File No. 33-45739).
- 5.1 Opinion of Ropes & Gray.
- 23.1 Consent of Ernst & Young LLP.
- 23.2 Consent of Ropes & Gray (contained in the opinion filed as Exhibit 5 to this registration statement).
- 24.1 Powers of Attorney (included in Part II of this registration statement under the caption "Signatures").

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 Providence, Rhode Island, on May 30, 1997.

By /s/ Seth A. Rudnick

Seth A. Rudnick Chairman and Chief Executive Officer and Director

Each person whose signature appears below constitutes and appoints Seth A. Rudnick and Frederic A. Eustis, and each of them singly, his or her true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for him or her and in his or her 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 CytoTherapeutics, 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 on Form S-8 has been signed below by the following persons in the capacities shown.

Signature	Capacity	Date
/s/ Seth A. Rudnick Seth A. Rudnick	Chairman, Chief Executive Officer and Director (principal executive officer)	May 30, 1997
/s/ Frederic A. Eustis Frederic A. Eustis	Acting Chief Financial Officer, Vice President, General Counsel, Secretary and Treasurer (principal financial officer)	May 30, 1997
/s/ Suzanne Fleming Suzanne Fleming	Controller (principal accounting officer)	May 30, 1997

Signature	Capacity	Date
/s/ Edwin C. Cadman	Director	May 30, 1997
Edwin C. Cadman		
/s/ Donald R. Conklin	Director	May 30, 1997
Donald R. Conklin /s/ Patrick Aebischer		
Patrick Aebischer	Director	May 30, 1997
/s/ Mark J. Levin	Director	May 30, 1997
Mark J. Levin	DITECTO	May 30, 1991
/s/ Richard J. Ramsden	Director	May 30, 1997
Richard J. Ramsden	51 1 00 co1	nay 667 1667
/s/ Peter K. Simon	Director	May 30, 1997
Peter K. Simon		. , ,
/s/ Sandra Nusinoff Lehrman	Director	May 30, 1997
Sandra Nusinoff Lehrman		

June 16, 1997

CytoTherapeutics, Inc. 2 Richmond Square Providence, RI 02906

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 (the "Commission") under the Securities Act of 1933, as amended, for the registration of 100,000 shares of common stock, \$.01 par value (the "Shares"), of CytoTherapeutics, Inc. (the "Company") issuable under the Company's 1992 Employee Stock Purchase Plan (the "Plan").

We have acted as counsel for the Company in connection with the Plan and are familiar with the actions taken by the Company in connection therewith. For purposes of this opinion we have examined the Registration Statement, the Plan, and such other documents as we deemed appropriate.

Based upon the foregoing, we are of the opinion that the Shares have been duly authorized, and the Shares, when issued and sold in accordance with the terms of the Plan, will be validly issued, fully paid and non-assessable.

We hereby consent to your filing this opinion as an exhibit to the Registration Statement and to all references to our firm included in or made a part of this Registration Statement.

Very truly yours,
/s/ Ropes & Gray
Ropes & Gray

CONSENT OF INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 1992 Employee Stock Purchase Plan of CytoTherapeutics, Inc. of our report dated February 6, 1997, except for Note 17, as to which the date is February 13, 1997, with respect to the consolidated financial statements of CytoTherapeutics, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 1996, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

ERNST & YOUNG LLP

Boston, Massachusetts June 9, 1997