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

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FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

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

Delaware  
(State or other jurisdiction of  
incorporation or organization)

94-3171943  
(I.R.S. Employer  
Identification No.)

350 South Main Street, Suite 307, Doylestown, Pennsylvania 18901  
(Address of Principal Executive Offices) (Zip Code)

Discovery Laboratories, Inc. 401(k) Plan  
(Full title of the plan)

Robert J. Capetola, Ph.D., Chief Executive Officer  
Discovery Laboratories, Inc.  
350 South Main Street, Suite 307  
Doylestown, Pennsylvania 18901  
(Name and address of agent for service)

(215) 340-4699  
(Telephone Number, Including Area Code, of Agent for Service)

Copies to:  
Ira L. Kotel, Esq.  
Dickstein Shapiro Morin & Oshinsky LLP  
1177 Avenue of the Americas, 41st Floor  
New York, New York 10036

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered (1)	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(3)	Proposed Maximum Aggregate Offering Price(3)	Amount of Registration Fee(3)
Common Stock, \$.001 par value	150,000	\$6.965	\$1,044,750	\$84.52

(1) Pursuant to Rule 416(c) under the Securities Act of 1933, this registration statement also covers an indeterminate amount of interests to be offered or sold pursuant to the employee benefit plan described herein.

(2) Pursuant to Rule 416 (a) under the Securities Act of 1933, the registration statement shall be deemed to cover any additional shares of Common Stock, par value \$0.001 per share, that become issuable under the Discovery Laboratories, Inc., 401(k) Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction.

(3) Pursuant to Rule 457 (c) and (h) of the Securities Act of 1933, the proposed maximum offering price per share of the shares of common stock being offered in this Registration Statement is estimated solely for the purpose of determining the registration fee the registration fee was completed on the basis of the average of the high and low prices of the registrant's Common Stock on the NASDAQ SmallCap Market on November 11, 2003.

PROPOSED SALE TO TAKE PLACE AS SOON AFTER THE EFFECTIVE DATE OF THE REGISTRATION STATEMENT AS SHARES OF COMMON STOCK ISSUED UNDER THE PLAN VEST IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE PLAN.

EXPLANATORY NOTES

This registration statement is being filed by Discovery Laboratories, Inc. (the "Company" or the "Registrant"), and relates to 150,000 shares of the Company's Common Stock, par value \$0.001 per share (the "Common Stock"), that may be issued, from time to time, by the Company under the Company's 401(k) Plan (the "Plan") pursuant to discretionary matching contributions by the Company of Common Stock to employees participating in the Plan. The information called for

in Part I of Form S-8 is not being prepared with or included in this Form S-8 (by incorporation by reference or otherwise) in accordance with the rules and regulations of the Securities and Exchange Commission ("Commission").

The foregoing capitalized terms that are not otherwise defined herein shall have the meanings ascribed to such terms in the Plan.

## PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### Item 3. Incorporation of Documents by Reference

The following documents previously filed with the Commission by the Registrant, are incorporated by reference in this Registration Statement:

1. The Registrant's Annual Report on Form 10-K filed with the Commission on March 31, 2003, for the fiscal year ended December 31, 2002, as amended on Form 10-K/A filed with the Commission on April 30, 2003, including any documents or portions thereof incorporated by reference therein;
2. The Registrant's Quarterly Reports on Form 10-Q filed with the Commission on: (i) May 15, 2003, for the quarterly period ending March 31, 2003; and (ii) August 14, 2003, for the quarterly period ending June 30, 2003;
3. The Registrant's Definitive Proxy Statement dated May 30, 2003, for the Annual Meeting of Shareholders held on July 15, 2003, including any documents or portions thereof incorporated by reference therein;
4. The Registrant's Current Reports on Form 8-K filed with the Commission on: (i) February 26, 2003; (ii) May 21, 2003; (iii) June 5, 2003; (iv) June 20, 2003; (v) August 13, 2003; and (vi) October 3, 2003; and

5. The Registrant's description of its capital stock contained in its Registration Statement on Form 8-A filed with the Commission on July 13, 1995.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all such securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be part hereof from the date of filing of such documents. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Named Experts and Counsel

The validity of the securities being registered hereunder is being passed upon for the Registrant by Dickstein Shapiro Morin & Oshinsky LLP. Attorneys of Dickstein Shapiro Morin & Oshinsky LLP beneficially own shares of the Common Stock and warrants exercisable for shares of Common Stock with an aggregate value in excess of \$50,000.

Item 6. Indemnification of Directors and Officers

Article Eighth of the Registrant's Certificate of Incorporation limits the liability of directors to the maximum extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except for liability for (i) any breach of their duty of loyalty to the corporation or its stockholders, (ii) acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (iii) unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law or (iv) any transaction from which the director derives an improper personal benefit. The Registrant's By-Laws provide that the Registrant shall indemnify its directors and officers, the directors and officers of any subsidiary of the Registrant and any other individuals acting as directors or officers of any other corporation at the request of the Registrant, to the fullest extent permitted by law.

The Registrant has entered into indemnification agreements with certain of its executive officers containing provisions that may require the Registrant, among other things, to indemnify such officers against liabilities that may arise by reason of their status or service as officers other than liabilities arising from willful misconduct of a culpable nature and to advance certain expenses incurred as a result of any proceeding against them as to which they could be indemnified. Registrant has obtained directors' and officers' liability insurance. These provisions in the Certificate of Incorporation and the By-Laws do not eliminate the officers' and directors' fiduciary duty, and in appropriate circumstances, equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each officer and director will continue to be subject to liability for breach of the officer's or director's duty of loyalty to the Registrant for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for actions leading to improper personal benefit to the officer or director and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provisions also do not affect an officer's or director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

Item 7. Exemption from Registration Claimed

Not Applicable.

Item 8. Exhibits.

Number	Description
5.1	Opinion of Dickstein Shapiro Morin & Oshinsky LLP, regarding the validity of the securities being registered.
23.1	Consent of Dickstein Shapiro Morin & Oshinsky LLP (included in its opinion filed as Exhibit 5.1 hereto).
23.2	Consent of Ernst & Young LLP, Independent Auditors.
23.3	Consent of Eisner LLP independent auditors.
24.1	Power of Attorney (included on signature pages hereto).

Item 9. Undertakings.

We, the undersigned Registrant hereby undertake:

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

(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) that individually or in the aggregate represent a fundamental change in the information set forth in the Registration Statement; and

(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;

provided, however, that paragraphs (i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, 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.

(4) 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 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to 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.

(5) 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 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Doylestown, Commonwealth of Pennsylvania on this 12th day of November, 2003.

DISCOVERY LABORATORIES, INC.

By: /s/ Robert J. Capetola

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Name: Robert J. Capetola, Ph.D.  
Title: President and  
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below under the heading "Signature" constitutes and appoints Robert J. Capetola, Ph.D. and David L. Lopez, CPA, Esq. his true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities to sign any or all amendments to this Registration Statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the United States Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, each acting alone, or his substitute or 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.

Signature -----	Name & Title -----	Date ----
/s/ Robert J. Capetola -----	Robert J. Capetola, Ph.D. President, Chief Executive Officer and Director (Principal Executive Officer)	November 12, 2003
/s/ John G. Cooper -----	John G. Cooper Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	November 12, 2003

/s/ Herbert McDade - -----	Herbert McDade, Jr. Chairman of the Board of Directors	November 12, 2003
/s/ Max Link - -----	Max Link, Ph.D. Director	November 12, 2003
- -----	Antonio Esteve, Ph.D. Director	November 12, 2003
/s/ Marvin E. Rosenthale - -----	Marvin E. Rosenthale, Ph.D. Director	November 12, 2003

Discovery Laboratories, Inc.  
Form S-8  
Index to Exhibits

Exhibit No. -----	Description -----
5.1	Opinion of Dickstein Shapiro Morin & Oshinsky LLP, legal counsel.
23.1	Consent of Dickstein Shapiro Morin & Oshinsky LLP, legal counsel (included in Exhibit 5.1).
23.2	Consent of Ernst & Young LLP, independent auditors.
23.3	Consent of Eisner LLP independent auditors.
24.1	Powers of Attorney (included in Signature Pages to this Registration Statement on Form S-3).



[Dickstein Shapiro Morin & Oshinsky LLP Letterhead]

November 12, 2003

Board of Directors  
Discovery Laboratories, Inc.  
350 South Main Street, Suite 307  
Doylestown, Pennsylvania 18901

Discovery Laboratories, Inc.--  
401(k) Plan

Ladies and Gentlemen:

We have acted as counsel for Discovery Laboratories, Inc., a Delaware corporation (the "Company"), in connection with the preparation of the Company's registration statement on Form S-8, and any amendments thereto (the "Registration Statement"), as filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933 (the "Securities Act"), for the registration under the Securities Act of up to 150,000 shares (the "Shares") of the Company's common stock, par value \$0.001 per share (the "Common Stock"), to be issued as matching contributions by the Company to the accounts of such of employees that participate in the Company's 401(k) Plan (the "Plan"). Capitalized terms used and not defined in this opinion have the meanings ascribed to them in the Registration Statement. You have requested that we furnish our opinion as to matters hereinafter set forth.

In rendering this opinion, we have relied upon, among other things, our examination of certain records of the Company, including, without limitation, the Company's Restated Certificate of Incorporation, the Company's Bylaws, as amended, and resolutions of the Board of Directors. We have also examined certificates of the Company's officers and of public officials and have reviewed such questions of law and made such other inquiries, as we have deemed necessary or appropriate for the purpose of rendering this opinion. As to various questions of fact material to this opinion, we have also relied upon representations and warranties of the Company and upon such certificates and other instruments of officers of the Company and public officials furnished to us by the Company, in each case without independent investigation or verification.

In addition, without any independent investigation or verification, we have assumed (i) the genuineness of all signatures, (ii) the authenticity of all documents submitted to us as originals and the conformity with the original documents of all documents submitted to us as certified, conformed or photostatic copies, (iii) the authority of all persons signing any document other than the officers of the Company, where applicable, signing in their capacity as such, (iv) the enforceability of all the documents we have reviewed in accordance with their respective terms against the parties thereto, and (v) the truth and accuracy of all matters of fact set forth in all certificates and other instruments furnished to us.

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Based upon the foregoing, and subject to the limitations, qualifications and assumptions set forth herein, we are of the opinion that the Shares offered by the Company pursuant to the Registration Statement, when issued and paid for in accordance with the Plan, will be validly issued, fully paid and nonassessable.

No opinion is expressed herein with respect to any laws other than the General Corporation Law and the Constitution of the State of Delaware. No opinion is expressed as to the effect that the law of any other jurisdiction may have upon the subject matter of the opinion expressed herein under conflicts of law principles, rules and regulations or otherwise. We assume no obligation to supplement this letter if any applicable laws change after the date hereof or if we become aware of any new facts that might effect any view expressed herein after the date hereof.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement. In giving this consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Securities Act or the rules and regulations promulgated thereunder by the Commission.

The foregoing opinion is delivered to the Board of Directors of the Company in connection with the Registration Statement, and may not be relied upon by any other person or for any other purpose.

We wish to call your attention to the fact that the fair market value of all securities of the Company that are beneficially owned by attorneys of this Firm exceeds \$50,000.

Very truly yours,

/s/ Dickstein Shapiro Morin & Oshinsky LLP

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Consent of Independent Auditors

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 33-xxxxx) to be filed on or about November 7, 2003, pertaining to Discovery Laboratories, Inc. 401(k) Plan of our report dated February 26, 2003, with respect to the consolidated financial statements of Discovery Laboratories, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2002, filed with the Securities and Exchange Commission.

/s/ Ernst & Young, LLP

Philadelphia, Pennsylvania  
November 7, 2003

## INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in the Registration Statement on Form S-8 to be filed on or about November 10, 2003 pertaining to the Discovery Laboratories, Inc. 401(k) Plan of our report dated February 25, 2000, with respect to our audits of the consolidated financial statements for the period from May 18, 1993 (inception) through December 31, 1999, not presented separately, included in Discovery Laboratories, Inc.'s annual report on Form 10-K and Form 10-K/A for the year ended December 31, 2002, filed with the Securities and Exchange Commission.

/s/ Eisner LLP  
New York, New York  
November 7, 2003