

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

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

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.)

2600 Kelly Road, Suite 100, Warrington, Pennsylvania
(Address of Principal Executive Offices)

18976-3622
(Zip Code)

Discovery Laboratories, Inc. 2007 Long-Term Incentive Plan
(Full title of the plan)

David L. Lopez, C.P.A., Esq.
Executive Vice President, General Counsel
Discovery Laboratories, Inc.
2600 Kelly Road, Suite 100
Warrington, Pennsylvania 18976-3622
(215) 488-9300
(Name, address and telephone number of agent for service)

Copies to:

Ira L. Kotel, Esq.
Dickstein Shapiro LLP
1177 Avenue of the Americas, 47th Floor
New York, New York 10036-2714
(212) 277-6500

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee(1)(2)
Common Stock, \$.001 par value	8,500,000	\$2.65	\$22,525,000	\$691.52

(1) Represents shares of Common Stock, par value \$0.001 per share, issuable under the Discovery Laboratories, Inc. 2007 Long-Term Incentive Plan, (the "2007 Plan"), which was approved by a requisite vote of the stockholders of Discovery Laboratories, Inc. on June 21, 2007. The plan qualifies as an employee benefit plan as defined under Rule 405 of Regulation C. This Registration Statement shall also cover any additional shares of Common Stock which become issuable under the Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without The Company's receipt of consideration, which results in an increase in the number of the outstanding shares of registrant's Common Stock.

(2) Pursuant to paragraphs (c) and (h) of Rule 457 of the Securities Act of 1933, as amended, the proposed maximum offering price per share of such shares of Common Stock is estimated solely for the purpose of determining the registration fee and is based upon the average of the high and low prices per share of The Company's shares of Common Stock reported on The Nasdaq Global Market on December 11, 2007.

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information specified in Part I, Items 1 and 2, will be delivered to each of the participants in accordance with Rule 428 under the Securities Act of 1933, as amended ("Securities Act"), and the Note to Part I of Form S-8. Those documents do not need to be filed with the Securities and Exchange Commission (the "Commission") either as part of this Registration Statement or as Prospectuses or Prospectus supplements pursuant to Rule 424 under the Securities Act. These documents and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Part II of this Registration Statement, taken together, constitute a Prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The following documents have been filed by the Company with the Commission and are hereby incorporated by reference in this Registration Statement:

- (a) The Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007, as filed with the Commission;
- (b) The Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, as filed with the Commission;
- (c) The Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007, as filed with the Commission;
- (d) The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2006, as filed with the Commission;
- (e) Our Current Reports on Form 8-K filed with the SEC on January 22, 2007, February 28, 2007 (excluding the matters in Item 2.01 and Exhibit 99.1 therein, which are not incorporated by reference herein), April 3, 2007, April 6, 2007, April 9, 2007, April 27, 2007, May 3, 2007 (excluding the matters in Item 2.01 and Exhibit 99.1 therein, which are not incorporated by reference herein), May 24, 2007, June 28, 2007, August 7, 2007 (excluding the matters in Item 2.01 and Exhibit 99.1 therein, which are not incorporated by reference herein), October 4, 2007, November 2, 2007, November 5, 2007, November 6, 2007 (excluding the matters in Item 2.01 and Exhibit 99.1 therein, which are not incorporated by reference herein), December 4, 2007 and December 7, 2007; and
- (f) The description of the Company's Common Stock as set forth in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2006, as filed with the Commission.

All documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended, 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.

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Article Eighth of the Company'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 General Corporation Law of the State of Delaware or (iv) any transaction from which the director derives an improper personal benefit.

The Company's By-Laws provide that the Company shall indemnify its directors and officers, the directors and officers of any of its subsidiaries and any other individuals acting as directors or officers of any other corporation at the Company's request, to the fullest extent permitted by law.

The Company has entered into indemnification agreements with certain of its executive and other officers containing provisions that may require the Company, 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. The Company has obtained limited directors' and officers' liability insurance.

These provisions in the Company's Certificate of Incorporation and 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 his or her duty of loyalty to the Company 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

Exhibits are listed on the Index to Exhibits at the end of this Registration Statement. The exhibits required by Item 601 of Regulation S-K, listed on such Index in response to this Item, are incorporated herein by reference.

Exhibit No.	Description	Method of Filing
4.1	Shareholder Rights Agreement, dated as of February 6, 2004, by and between Discovery and Continental Stock Transfer & Trust Company.	Incorporated by reference to Exhibit 10.1 to Discovery's Current Report on Form 8-K, as filed with the SEC on February 6, 2004.
4.2	Form of Class A Investor Warrant.	Incorporated by reference to Exhibit 4.1 to Discovery's Current Report on Form 8-K, as filed with the SEC on June 20, 2003.
4.3	Class B Investor Warrant dated July 7, 2004, issued to Kingsbridge Capital Limited.	Incorporated by reference to Exhibit 4.1 to Discovery's Current Report on Form 8-K as filed with the SEC on July 9, 2004.
4.4	Warrant Agreement, dated as of November 3, 2004, by and between Discovery and QFinance, Inc.	Incorporated by reference to Exhibit 4.1 of Discovery's Quarterly Report on Form 10-Q, as filed with the SEC on November 9, 2004.
4.5	Class C Investor Warrant, dated April 17, 2006, issued to Kingsbridge Capital Limited	Incorporated by reference to Exhibit 4.1 to Discovery's Current Report on Form 8-K, as filed with the SEC on April 21, 2006.
4.6	Second Amended and Restated Promissory Note, dated as of October 25, 2006, issued to PharmaBio Development Inc. (PharmaBio)	Incorporated by reference to Exhibit 4.1 to Discovery's Current Report on Form 8-K, as filed with the SEC on October 26, 2006.
4.7	Warrant Agreement, dated as of October 25, 2006, by and between Discovery and PharmaBio	Incorporated by reference to Exhibit 4.2 to Discovery's Current Report on Form 8-K, as filed with the SEC on October 26, 2006.
4.8	Warrant Agreement, dated November 22, 2006	Incorporated by reference to Exhibit 4.1 to Discovery's Current Report on Form 8-K, as filed with the SEC on November 22, 2006.
4.9	2007 Long-Term Incentive Plan	Incorporated by reference to Exhibit 1.1 to the Applicant's Current Report on Form 8-K, as filed with the SEC on June 28, 2007.
5.1	Opinion of Dickstein Shapiro LLP, legal counsel.	Filed herewith.
23.1	Consent of Dickstein Shapiro LLP (included in its opinion filed as Exhibit 5.1 to this registration statement).	Filed herewith.
23.2	Consent of Ernst & Young LLP, independent registered public accounting firm.	Filed herewith.
24.1	Powers of Attorney (included in signature page to this registration statement).	Filed herewith.

ITEM 9.**UNDERTAKINGS.**

(a) The Company 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;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of this 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 this 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 a 20% 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 this 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 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 Company 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 hereby which remain unsold at the termination of the offering.

(b) The Company hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Company's annual report pursuant to section 13(a) or section 15(d) of the Exchange Act that is incorporated by reference in this 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 may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been advised that in the opinion of the 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 Registrant of expenses incurred or paid by a director, officer or controlling person of the Company 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 Company 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, The Company 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 Warrington, Commonwealth of Pennsylvania on this 11th day of December, 2007.

DISCOVERY LABORATORIES, INC.
(Registrant)

By: /s/ Robert J. Capetola, Ph.D.

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

POWER OF ATTORNEY

We, the undersigned officers and directors of Discovery Laboratories, Inc., and each of us, do hereby constitute and appoint each of Robert J. Capetola, Ph.D., and David L. Lopez, CPA., Esq., or any of them, each acting alone, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, to do any and all acts and things in our name, place and stead, in any and all capacities, in connection with this registration statement on Form S-8 under the Securities Act of 1933, as amended, or any registration statement for the same offering that is to be effective upon filing under the Securities Act of 1933, as amended, including, without limitation, to sign for us or any of us in our names in the capacities indicated below any and all amendments or supplements to this registration statement, including any and all stickers and post-effective amendments to the registration statement, and to sign any and all additional registration statements relating to the same offering of securities as this registration statement that are filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission and any applicable securities exchange or securities self-regulatory body, 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 to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitutes or substitute, 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 indicated on the dates indicated.

Signature	Name & Title	Date
/s/ Robert J. Capetola	Robert J. Capetola, Ph.D. President, Chief Executive Officer and Director	December 11, 2007
/s/ John G. Cooper	John G. Cooper Executive Vice President and Chief Financial Officer	December 11, 2007
/s/Kathleen A. McGowan	Kathleen A. McGowan Controller (Principal Accounting Officer)	December 11, 2007
/s/ W. Thomas Amick	W. Thomas Amick Chairman of the Board of Directors	December 11, 2007
/s/ Herbert McDade	Herbert McDade, Jr. Director	December 11, 2007
/s/ Max Link	Max Link, Ph.D. Director	December 11, 2007
/s/ Antonio Esteve	Antonio Esteve, Ph.D. Director	December 11, 2007
/s/ Marvin E. Rosenthale	Marvin E. Rosenthale, Ph.D. Director	December 11, 2007

[Letterhead of Dickstein Shapiro LLP]

December 12, 2007

Board of Directors
Discovery Laboratories, Inc.
2600 Kelly Road, Suite 100
Warrington, Pennsylvania 18976-3622

Discovery Laboratories, Inc.--
2007 Stock Incentive 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, as amended (the "Securities Act"), for the registration under the Securities Act of up to 8,500,000 shares (the "Shares") of the Company's common stock, par value \$0.001 per share (the "Common Stock"), issuable under the 2007 Stock Incentive Plan (the "Plan"). You have requested that we furnish our opinion as to matters hereinafter set forth.

In connection with this opinion, we have examined originals or copies, certified or otherwise identified to our satisfaction, of (i) the Company's Restated Certificate of Incorporation, as amended; (ii) the Company's Amended and Restated By-Laws; and (iii) resolutions adopted by the Company's Board of Directors on December 11, 2007. We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such records of the Company and such agreements, certificates of public officials, certificates of officers or other representatives of the Company, and such other documents, certificates and records as we have deemed necessary or appropriate as a basis for the opinions set forth herein. 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 of their accuracy.

In our examination, we have assumed (i) the genuineness of all signatures; (ii) the authenticity of all documents submitted to us as originals; (iii) the conformity to original documents of all documents submitted to us as certified, conformed or photostatic, electronic or facsimile copies and the authenticity of the originals of such documents; (iv) the authority of all persons signing any document; (v) the enforceability of all the documents and agreements we have reviewed in accordance with their respective terms against the parties thereto; and (vi) the truth and accuracy of all matters of fact set forth in all certificates and other instruments furnished to us.

Based upon the foregoing, and subject to the assumptions, qualifications and limitations 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 non-assessable.

No opinion is expressed herein with respect to any laws other than the General Corporation Law 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.

This opinion is expressed as of the date hereof. 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 hereby 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 not for any other purpose.

Very truly yours,

/s/ Dickstein Shapiro LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-000000) pertaining to the Discovery Laboratories, Inc. 2007 Stock Incentive Plan of our reports dated March 7, 2007, 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, 2006, Discovery Laboratories, Inc. management's assessment of the effectiveness of internal control over financial reporting, and the effectiveness of internal control over financial reporting of Discovery Laboratories, Inc., filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Philadelphia, Pennsylvania
December 10, 2007
