

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

**FORM S-8
REGISTRATION STATEMENT
under the
SECURITIES ACT OF 1933**

Cyclacel Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
*(State or Other Jurisdiction
of Incorporation or Organization)*

91-1707622
*I.R.S. Employer
Identification No.)*

**200 Connell Drive
Suite 1500
Berkeley Heights, NJ 07922**

(Address, Including Zip Code, of Principal Executive Offices)

Cyclacel Pharmaceuticals, Inc. 2006 Equity Incentive Plan

(Full Titles of the Plan)

**Spiro Rombotis
President and Chief Executive Officer
Cyclacel Pharmaceuticals, Inc.
200 Connell Drive
Suite 1500
Berkeley Heights, NJ 07922
(908) 517-7330**

*(Name, Address and Telephone Number, Including
Area Code, of Agent For Service)*

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
Common Stock, \$0.001 par value	1,575,481shares	\$6.75	\$10,634,496.75	\$326.48
	<u>1,424,519shares</u>	\$7.65	\$10,897,570.35	<u>\$334.56</u>
	3,000,000shares			\$661.04

- (1) The number of shares of common stock, par value \$0.001 per share ("Common Stock"), stated above consists of the aggregate number of shares which may be sold (i) upon the exercise of options which have been granted and/or (ii) upon the exercise of options or issuances of stock awards which may hereafter be granted under the Cyclacel Pharmaceuticals, Inc. 2006 Equity Incentive Plan (the "Plan"). The maximum number of shares which may be sold upon the exercise of such options or issuance of stock awards granted under the Plan is subject to adjustment in accordance with certain anti-dilution and other provisions of the Plan. Accordingly, pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement covers, in addition to the number of shares stated above, an indeterminate number of shares which may be subject to grant or otherwise issuable after the operation of any such anti-dilution and other provisions.
- (2) This calculation is made solely for the purpose of determining the registration fee pursuant to the provisions of Rule 457(c) and (h) under the Securities Act as follows: (i) in the case of shares of Common Stock which may be purchased upon exercise of outstanding options, the fee is calculated on the basis of the price at which the options may be exercised; and (ii) in the case of shares of Common Stock for which options and or stock awards have not yet been granted and the option price of which is therefore unknown, the fee is calculated on the basis of the average of the high and low sale prices per share of the Common Stock on The Nasdaq Global Market as of a date (June 14, 2007) within five business days prior to filing this Registration Statement.

EXPLANATORY NOTE

In accordance with the instructional Note to Part I of Form S-8 as promulgated by the Securities and Exchange Commission, the information specified by Part I of Form S-8 has been omitted from this Registration Statement on Form S-8 for offers of Common Stock pursuant to the Plan.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Certain Documents by Reference.

The following documents filed by the Registrant with the Commission are incorporated herein by reference:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2006 (Filing Date March 16, 2007).
- (b) The Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2007 (Filing Date May 9, 2007).
- (c) The Registrant's Current Report on Form 8-K/A (Filing Date March 20, 2007).
- (d) The Registrant's Current Report on Form 8-K (Filing Date April 5, 2007).
- (e) The description of our common stock contained in our Registration Statement on Form 8-A, filed on March 8, 2004 (File No. 000-50626), which incorporates by reference the description of the shares of our common stock contained in our Registration Statement on Form S-1 (File No. 333-109653), and any amendment or reports filed for the purposes of updating such description.

All reports and other documents filed by the Registrant after the date hereof 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 hereby have been sold or which deregisters all 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 reports and documents.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

The validity of the issuance of the shares of Common Stock registered under this Registration Statement has been passed upon for the Registrant by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

Item 6. Indemnification of Directors and Officers.

Incorporated by reference from the Registrant's Registration Statement on Form S-3, No. 333-140034, as amended, filed on January 17, 2007 and declared effective on February 12, 2007.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

- (4.1) Specimen of Common Stock Certificate, filed as Exhibit 4.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2005 (File No. 000-50626) and incorporated herein by reference.
- (5.1) Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. as to the legality of shares being registered.
- (23.1) Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in opinion of counsel filed as Exhibit 5.1).
- (23.2) Consent of Ernst & Young LLP.
- (24.1) Power of Attorney to file future amendments (set forth on the signature page of this Registration Statement.).

1

-
- (99.1) Cyclacel Pharmaceuticals, Inc. 2006 Equity Incentive Plan (as filed as Appendix B to the Registrant's Revised Definitive Proxy Statement on Form 14A, filed with the Commission on April 9, 2007 and incorporated herein by reference).

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. 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) (§ 230.424(b) of this chapter) 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 the registration statement or any material change to such information in the registration statement;

Provided, however, That:

Paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) that are incorporated by reference in this 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.

- (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 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 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

2

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.

3

SIGNATURES

The Registrant. 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 Berkeley Heights, New Jersey on June 15, 2007.

Cyclacel Pharmaceuticals, Inc

By: /s/ Paul McBarron
 Paul McBarron
 Chief Operating Officer &
 Executive Vice President, Finance

Each person whose signature appears below constitutes and appoints Spiro Rombotis and Paul McBarron, and each of them singly, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them singly, for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8 of Cyclacel Pharmaceuticals, Inc. and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting to the attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in or about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that the attorneys-in-fact and agents or any of each of them or their 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 and on the dates indicated.

Signature	Title	Date
<u>/s/ Spiro Rombotis</u> Spiro Rombotis	President and Chief Executive Officer (Principal Executive Officer) and Director	June 15, 2007
<u>/s/ Paul McBarron</u> Paul McBarron	Chief Operating Officer & Executive Vice President, Finance (Principal Financial and Accounting Officer)	June 15, 2007
<u>/s/ Dr. David U'Prichard</u> Dr. David U'Prichard	Chairman of the Board	June 15, 2007
<u>/s/ Sir John Banham</u> Sir John Banham	Director	June 15, 2007
<u>/s/ Dr. Christopher Henney</u> Dr. Christopher Henney	Director	June 15, 2007
<u>/s/ Pierre Legault</u> Pierre Legault	Director	June 15, 2007

1

Signature	Title	Date
/s/ Prof. Gordon McVie Prof. Gordon McVie	Director	June 15, 2007
/s/ Daniel Spiegelman Daniel Spiegelman	Director	June 15, 2007

CYCLACEL PHARMACEUTICALS, INC.

**INDEX TO EXHIBITS FILED WITH
FORM S-8 REGISTRATION STATEMENT**

Exhibit Number	Description
(4.1)	Specimen of Common Stock Certificate, filed as Exhibit 4.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2005 (File No. 000-50626) and incorporated herein by reference.
(5.1)	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. as to the legality of shares being registered.
(23.1)	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in opinion of counsel filed as Exhibit 5.1).
(23.2)	Consent of Ernst & Young LLP.
(24.1)	Power of Attorney to file future amendments (set forth on the signature page of this Registration Statement.)
(99.1)	Cyclacel Pharmaceuticals, Inc. 2006 Equity Incentive Plan (as filed as Appendix B to the Registrant's Revised Definitive Proxy Statement on Form 14A, filed with the Commission on April 9, 2007 and incorporated herein by reference).

[Letterhead of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.]

June 15, 2007

Cyclacel Pharmaceuticals, Inc.
200 Connelly Drive, Suite 1500
Berkeley Heights, New Jersey 07922

Ladies and Gentlemen:

We have acted as counsel to Cyclacel Pharmaceuticals, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission of a Registration Statement on Form S-8 (the "Registration Statement"), pursuant to which the Company is registering the issuance under the Securities Act of 1933, as amended, of a total of 3,000,000 shares (the "Shares") of its common stock, \$0.001 par value per share (the "Common Stock"). This opinion is being rendered in connection with the filing of the Registration Statement. All capitalized terms used herein and not otherwise defined shall have the respective meanings given to them in the Registration Statement.

In connection with this opinion, we have examined the Company's Certificate of Incorporation, and By-Laws, as amended, both as currently in effect; such other records of the corporate proceedings of the Company and certificates of the Company's officers as we have deemed relevant; and the Registration Statement and the exhibits thereto.

In our examination, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such copies.

Based upon the foregoing, we are of the opinion that (i) the Shares have been duly and validly authorized by the Company and (ii) the Shares, when sold, will have been duly and validly issued, fully paid and non assessable shares of the Common Stock, free of preemptive rights.

Our opinion is limited to the applicable provisions of the law of Delaware and the reported judicial decisions interpreting those laws, and we express no opinion with respect to the laws of any other jurisdiction. No opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or any foreign jurisdiction.

We understand that you wish to file this opinion as an exhibit to the Registration Statement, and we hereby consent thereto.

Very truly yours,

/s/ Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

Mintz, Levin, Cohn, Ferris,
Glovsky and Popeo, P.C.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2006 Equity Incentive Plan of Cyclacel Pharmaceuticals, Inc. of our reports dated March 16, 2007, with respect to the consolidated financial statements of Cyclacel Pharmaceuticals, Inc., Cyclacel Pharmaceuticals, Inc.'s management's assessment of the effectiveness of internal control over financial reporting, and the effectiveness of internal control over financial reporting of Cyclacel Pharmaceuticals, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2006, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

London, England
June 15, 2007
