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

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

PHARMACYCLICS, INC.

(Exact name of registrant as specified in its charter)

Delaware 94-3148201

(State or other jurisdiction of incorporation or organization)

(IRS Employer Identification No.)

995 East Arques Avenue Sunnyvale, California 94085-4521

(Address, including Zip Code, of Registrant's of Principal Executive Offices)

Pharmacyclics, Inc. 1995 Stock Option Plan

(Full title of the Plan)

Richard A. Miller, M.D.
President and Chief Executive Officer
Pharmacyclics, Inc.
995 East Arques Avenue
Sunnyvale, California 94085-4521
(408) 774-0330

Copy to: Laura I. Bushnell, Esq. Latham & Watkins LLP

135 Commonwealth Drive Menlo Park, California 94025 (650) 328-4600

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

CALCULATION OF REGISTRATION FEE **Proposed Proposed** Maximum Maximum Amount Offering Aggregate Amount of Title of Each Class of Offering Registration to be Price Securities to be Registered Registered (2) Per Share Price (3) Fee Common Stock, par value \$0.001 per share (1): To be issued under the 1995 Stock 163,077 shares \$12.205 \$1,990,354.78 \$252.18 Option Plan

- Associated with the Pharmacyclics, Inc. common stock are preferred stock purchase rights which will not be exercisable or be evidenced separately from the common stock prior to the occurrence of certain events.
- (2) This Registration Statement shall also cover any additional shares of Pharmacyclics, Inc. Common Stock which become issuable under the 1995 Stock Option Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the Registrant's receipt of consideration which results in an increase in the number of the outstanding shares of Common Stock of Pharmacyclics, Inc.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h)(1) registered hereunder based on the average of the high and low selling prices per share of Pharmacyclics, Inc. Common Stock on May 3, 2004 as reported by the Nasdaq National Market.

Proposed sale to take place as soon after the effective date of the Registration Statement as options under the Stock Plan are exercised.

PART I

The information called for in Part 1 of the Form S-8 is not being filed 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 (the "Commission").

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Pharmacyclics, Inc. (the "Company") filed with the Commission the following Registration Statements on Form S-8 relating to shares of the Company's common stock, par value \$0.001 per share (the "Common Stock") to be offered and sold under the Company's 1995 Stock Option Plan (the "Stock Plan"), and pursuant to General Instruction E of Form S-8 the contents of such prior Stock Plan Registration Statements are incorporated in this Registration Statement by reference to the extent not modified or superseded hereby or by any subsequently filed document which is incorporated by reference herein or therein: (1) Registration Statement on Form S-8, filed February 11, 1997 (File No. 333-21551); (2) Registration Statement on Form S-8, filed May 15, 1998 (File No. 333-52881); (3) Registration Statement on Form S-8, filed February 14, 2001 (File No. 333-55592); (5) Registration Statement on Form S-8, filed January 31, 2002 (File No. 333-81870); and (6) Registration Statement on Form S-8, filed February 12, 2003 (File No. 333-103113).

Item 3. Incorporation of Documents by Reference

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

- (a) The Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2003;
- (b) The Company's Quarterly Report on Form 10-Q for the period ended September 30, 2003;
- (c) The Company's Quarterly Report on Form 10-Q for the period ended December 31, 2003;
- (d) The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2004;
- (e) All other reports filed by the Company pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") (other than information contained in Current Reports on Form 8-K that is deemed furnished and not filed), since the fiscal year covered by the annual report referred to in (a) above; and
- (f) The description of the Company's Common Stock contained in its registration statement on Form 8-A filed with the Commission on October 20, 1995, including any amendment or report filed for the purpose of updating that description, and the description of the Company's Series A junior participating preferred stock contained in our registration statement on Form 8-A filed with the Commission May 21, 2002, including any amendment or report filed for the purpose of updating that description.

All documents filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act on or after the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof 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

Under Section 145 of the Delaware General Corporation Law, the Registrant has broad powers to indemnify its directors and officers against liabilities they may incur in such capacities, including liabilities under the Securities Act of 1933, as amended (the "1933 Act"). The Registrant's Bylaws (the "Bylaws") provide that the Registrant shall indemnify its directors and officers if such officer or director acted (i) in good faith, (ii) in a manner reasonably believed to be in or not opposed to the best interests of the Registrant, and (iii) with respect to any criminal action or proceeding, had no reasonable cause to believe such conduct was unlawful. The Registrant believes that indemnification under its Bylaws covers at least negligence and gross negligence, and requires the Registrant to advance litigation expenses in the case of stockholder derivative actions or other actions, against an undertaking by the directors and officers to repay such advances if it is ultimately determined that the director is not entitled to indemnification. The Bylaws further provide that rights conferred under such Bylaws shall not be deemed to be exclusive of any other right such persons may have or acquire under any agreement, vote of stockholders or disinterested directors, or otherwise.

In addition, the Registrant's Certificate of Incorporation (the "Certificate of Incorporation") provides that, pursuant to Delaware law, none of its directors shall be liable for monetary damages for breach of his or her fiduciary duty of care to the Registrant and its stockholders. This provision in the Certificate of Incorporation does not eliminate the duty of care, 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 director will continue to be subject to liability for breach of the 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 director, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws. The Certificate of Incorporation further provides that the Registrant shall indemnify its directors and officers to the fullest extent permitted by law and requires the Registrant to advance litigation expenses in the case of stockholder derivative actions or other actions, against an undertaking by the director to repay such advances if it is ultimately determined that the director is not entitled to indemnification. The Certificate of Incorporation also provides that rights conferred under such Certificate of Incorporation shall not be deemed to be exclusive of any other right such persons may have or acquire under any statute, the Certificate of Incorporation, the Bylaws, agreement, vote of stockholders or disinterested directors, or otherwise.

The Registrant has obtained a liability insurance policy for the officers and directors that, subject to certain limitations, terms and conditions, will insure them against losses arising from wrongful acts (as defined by the policy) in their capacity as directors or officers.

In addition, the Registrant has entered into agreements to indemnify its directors and certain of its officers in addition to the indemnification provided for in the Certificate of Incorporation and Bylaws. These agreements, among other things, indemnify the Registrant's directors and certain of its officers for certain expenses (including attorneys fees), judgments, fines and settlement amounts incurred by such person in any action or proceeding, including any action by or in the right of the Registrant, on account of services as a director or officer of the Registrant or as a director or officer of any other company or enterprise that the person provides services to at the request of the Registrant.

Item 7. Exemption from Registration Claimed

Not Applicable.

Item 8. Exhibits

| Exhibit Number | Description |
|-------------------|--|
| 4.1 | 1995 Stock Option Plan, as amended and restated effective January 1, 2004. |
| 5.1 | Opinion of Latham & Watkins LLP. |
| 23.1 | Consent of Independent Accountants. |
| 23.2 | Consent of Latham & Watkins LLP (included in Exhibit 5.1 hereto). |

24.1 Power of Attorney (included in the signature page hereto).

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 of 1933, as amended (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 and 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 20 percent 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 the undertakings set forth in paragraphs (a)(1)(i) and (a)(1)(ii) above do not apply if the Registration Statement is on Form S-3, Form S-8 or Form F-3, and 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 Commission by the Company pursuant to Section 13 or 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 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 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to 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 the Company 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, as amended, 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 Sunnyvale, State of California, on this 4th day of May, 2004.

PHARMACYCLICS, INC.

(Registrant)

By: /s/ Richard A. Miller, M.D.

Richard A. Miller, M.D.

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENT, that each person whose signature appears below constitutes and appoints Richard A. Miller, M.D. and Leiv Lea, and each of them, his true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, 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, 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, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in order to effectuate the same as fully, to all intents and purposes, as he might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents, or any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities indicated on the dates indicated.

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|---|--|-------------|
| /s/ RICHARD A. MILLER, M.D. Richard A. Miller, M.D. | President and Chief Executive Officer and Director (Principal Executive Officer) | May 4, 2004 |
| /s/ LEIV LEA Leiv Lea | Vice President, Finance and Administration and Chief Financial Officer (Principal Accounting Officer) | May 4, 2004 |
| /s/ MILES R. GILBURNE Miles R. Gilburne | Director | May 4, 2004 |
| /s/ LORETTA M. ITRI, M.D. Loretta M. Itri, M.D. | Director | May 4, 2004 |
| /s/ RICHARD M. LEVY, PH.D. Richard M. Levy, Ph.D. | Director | May 4, 2004 |
| /s/ WILLIAM R. ROHN William R. Rohn | Director | May 4, 2004 |
| /s/ CRAIG C. TAYLOR Craig C. Taylor | Director | May 4, 2004 |
| | | |

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C.

EXHIBITS

TO

FORM S-8

UNDER

SECURITIES ACT OF 1933

PHARMACYCLICS, INC.

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