
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

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

A.P. Pharma, Inc.
(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

94-2875566
(I.R.S. Employer
Identification No.)

123 Saginaw Drive, Redwood City, California 94063
(Address of Principal Executive Offices)

1997 Employee Stock Purchase Plan
(Full Title of the Plan)

Ronald J. Prentki
President and Chief Executive Officer
A.P. Pharma, Inc.
123 Saginaw Drive
Redwood City, California 94063
(Name and Address of Agent for Service)

(650) 366-2626
(Telephone Number, Including Area Code, of Agent for Service)

Copy to:

Cindy F. Leeper, Esq.
Latham & Watkins LLP
140 Scott Drive
Menlo Park, California 94025
(650) 328-4600

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check One)

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

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, par value \$0.01	200,000	\$0.87	\$174, 000	\$9.71

- (1) The 1997 Employee Stock Purchase Plan (the "Purchase Plan") authorizes the issuance of 500,000 shares of common stock, par value \$0.01 per share (the "Common Stock"), of A.P. Pharma, Inc. (the "Registrant"), of which 200,000 additional shares issuable upon exercise of purchase rights granted under the Purchase Plan are being registered hereunder. This Registration Statement shall also cover any additional shares that become issuable by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without the receipt of consideration which results in an increase in the number of the Registrant's outstanding shares of Common Stock, or any anti-dilution provisions of such plans.
- (2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) promulgated under the Securities Act 1933, as amended (the "Securities Act"). Pursuant to Rule 457(c) under the Securities Act, the price per share and aggregate offering price are based upon the average of the high and low prices of the Registrant's Common Stock as reported on the Nasdaq Global Market on October 20, 2009.

This Registration Statement will become effective upon filing in accordance with Rule 462 under the Securities Act.

REGISTRATION OF ADDITIONAL SECURITIES

On September 8, 1997, A.P. Pharma, Inc., a Delaware corporation (the "Company") filed a Registration Statement on Form S-8, Registration No. 333-35151 (the "First Purchase Plan Registration Statement"), with the Securities and Exchange Commission (the "Commission") relating to an aggregate of 400,000 shares of the Company's common stock, par value \$0.01 per share (the "Common Stock") for issuance from time to time in connection with the 1997 Employee Stock Purchase Plan (as amended, "the Purchase Plan"). On August 25, 2004, the Company filed a Registration Statement on Form S-8, Registration No. 333-118546 (the "Second Purchase Plan Registration Statement"), with the Commission relating to an additional 100,000 shares of Common Stock issuable under the Purchase Plan. On August 15, 2005, the Company filed a Registration Statement on Form S-8, Registration No. 333-127574 (the "Third Purchase Plan Registration Statement"), with the Commission relating to an additional 150,000 shares of Common Stock issuable under the Purchase Plan. On October 11, 2006, the Company filed a Registration Statement on Form S-8, Registration No. 333-137954 (the "Fourth Purchase Plan Registration Statement"), with the Commission relating to an additional 150,000 shares of Common Stock issuable under the Purchase Plan. On January 14, 2008, the Company filed a Registration Statement on Form S-8, Registration No. 333-148660 (the "Fifth Purchase Plan Registration Statement"), with the Commission relating to an additional 100,000 shares of Common Stock issuable under the Purchase Plan. The Purchase Plan authorizes the issuance of 500,000 shares of Common Stock. The authorization of the issuance of a maximum of 500,000 shares of Common Stock under the Plan reflects the 1-for-4 reverse stock split effected by the Company on May 23, 2007. Under this Registration Statement, the Company is hereby registering an additional 200,000 shares of Common Stock issuable under the Purchase Plan, none of which have been issued as of the date of this Registration Statement.

Pursuant to Instruction E of Form S-8, the contents of the First Purchase Plan Registration Statement, Second Purchase Plan Registration Statement, Third Purchase Plan Registration Statement, Fourth Purchase Plan Registration Statement and Fifth Purchase Plan Registration Statement are incorporated by reference in this Registration Statement on Form S-8.

PART I

The information called for in Part 1 of Form S-8 is not being filed with or included in this Registration Statement on Form S-8 (by incorporation, by reference or otherwise) in accordance with the rules and regulations of the Securities and Exchange Commission.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

The following documents filed or to be filed with the Commission by the Registrant are incorporated by reference in this Registration Statement:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2008;

(b) The Registrant's Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2009 and June 30, 2009;

(c) The Registrant's Current Reports on Form 8-K filed with the Commission on February 9, 2009, February 25, 2009, April 8, 2009, April 10, 2009, May 20, 2009, June 2, 2009, June 3, 2009, July 20, 2009, July 20, 2009, September 18, 2009, September 21, 2009 and September 30, 2009;

(d) The description of the Registrant's Common Stock contained in the registration statement on Form 8-A filed with the Commission on August 7, 1987 pursuant to Section 12 of the Exchange Act of 1934, as amended (the "Exchange Act"), including any amendment or report filed for the purpose of updating that description; and

(e) 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 hereby have been sold or which deregisters all securities then remaining unsold.

Any statement contained 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 or is 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. Under no circumstances will any information filed under items 2.02 or 7.01 of Form 8-K be deemed to be incorporated by reference unless such Form 8-K expressly provides to the contrary.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Named Experts and Counsel

Not applicable.

Item 6. Indemnification of Directors and Officers

The Registrant has the power to indemnify its officers and directors against liability for certain acts pursuant to Section 145 of the General Corporation Law of the State of Delaware. Section B of Article VI of the Registrant's Certificate of Incorporation provides:

"(1) Right to Indemnification. Each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a "proceeding"), by reason of the fact that he or she, or a person of whom he or she is the legal representative, is or was a director or officer, of the Corporation or is or was serving at the request of the Corporation, as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, whether the basis of such proceeding is alleged action in an official capacity as a director, officer, employee or agent or in any other capacity while serving as a director, officer, employee or agent, shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the General Corporation Law of the State of Delaware, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than said law permitted the Corporation to provide prior to such amendment), against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid or to be paid in settlement) reasonably incurred or suffered by such person in connection therewith and such

indemnification shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of his or her heirs, executors and administrators; provided, however, that, the Corporation shall indemnify any such person seeking indemnification in connection with a proceeding (or part thereof) initiated by such person only if such proceeding (or part thereof) was authorized by the board of directors of the Corporation. The right to indemnification conferred in this Section B shall be a contract right and shall include the right to be paid by the Corporation the expenses incurred in defending any such proceeding in advance of its final disposition; provided, however, that, if the General Corporation Law of the State of Delaware requires, the payment of such expenses incurred by a director or officer in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such person while a director or officer, including, without limitation, service to an employee benefit plan) in advance of the final disposition of a proceeding, shall be made only upon delivery to the Corporation of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it shall ultimately be determined that such director or officer is not entitled to be indemnified under this Section or otherwise. The Corporation may, by action of its Board of Directors, provide indemnification to employees and agents of the Corporation with the same scope and effect as the foregoing indemnification of directors and officers.

(2) Non-Exclusivity of Rights. The right to indemnification and the payment of expenses incurred in defending a proceeding in advance of its final disposition conferred in this Section B shall not be exclusive of any other rights which any person may have or hereafter acquire under any statute, provisions of this Certificate of Incorporation, Bylaw, agreement, vote of stockholders or disinterested directors or otherwise.

(3) Insurance. The Corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any such expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under Delaware General Corporation Law.”

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 and officers.

In addition, the Registrant has entered into agreements to indemnify its directors and certain 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 subsidiary 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

A list of exhibits filed with this Registration Statement is set forth in the Exhibit Index and is 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, as amended (the "Securities Act");

(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 SEC 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; 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 A(1)(i) and A(1)(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 with or furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the 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 undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act 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.

C. Insofar as indemnification for liabilities arising under the Securities Act 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 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 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 Securities Act and will be governed by the final adjudication of such issue.

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENT, that each person whose signature appears below does hereby constitute and appoint Ronald J. Prentki and John B. Whelan, or either of them, with full power of substitution, such person's true and lawful attorneys-in-fact and agents for such person in such person's name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) to this Registration Statement on Form S-8 and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Commission, granting unto said attorneys-in-fact and agents 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 in order to effectuate the same as fully, to all intents and purposes, as he or such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents 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 by the following persons in the capacities and on the dates indicated.

<u>/s/ RONALD J. PRENTKI</u> Ronald J. Prentki	President and Chief Executive Officer, Director (Principal Executive Officer)	October 21, 2009
<u>/s/ JOHN B. WHELAN</u> John B. Whelan	Vice-President and Chief Financial Officer (Principal Financial and Accounting Officer)	October 21, 2009
<u>/s/ PAUL GODDARD</u> Paul Goddard	Chairman of the Board of Directors	October 21, 2009
<u>/s/ TOBY ROSENBLATT</u> Toby Rosenblatt	Director	October 21, 2009
<u>/s/ KEVIN C. TANG</u> Kevin C. Tang	Director	October 21, 2009
<u>/s/ GREGORY TURNBULL</u> Gregory Turnbull	Director	October 21, 2009
<u>/s/ ROBERT ZERBE</u> Robert Zerbe	Director	October 21, 2009

INDEX TO EXHIBITS

<u>Item No.</u>	<u>Description of Item</u>
4.2	1997 Employee Stock Purchase Plan (as amended, included in the Registrant's definitive proxy statement (File Number 001-33221), filed with the Commission on April 21, 2009, incorporated herein by reference)
5.1	Opinion of Latham & Watkins LLP
23.1	Consent of Odenberg Ullakko Muranishi & Co. LLP
23.2	Consent of Latham & Watkins LLP (included in Exhibit 5.1 hereto)
24.1	Power of Attorney (included in the signature page hereto)

October 21, 2009

A.P. Pharma, Inc.
123 Saginaw Drive
Redwood City, CA 94063

Re: Registration of 200,000 shares of common stock, par value \$0.01 per share, of A.P. Pharma, Inc., pursuant to a Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as special counsel to A.P. Pharma, Inc., a Delaware corporation (the "Company"), in connection with the proposed issuance of up to an aggregate of 200,000 shares of common stock (the "Shares"), \$0.01 par value per share, issuable under the Company's 1997 Employee Stock Purchase Plan (as amended, the "Plan"). The Shares are included in a registration statement on Form S-8 under the Securities Act of 1933, as amended (the "Act"), filed with the Securities and Exchange Commission (the "Commission") on October 21, 2009 (the "Registration Statement"). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or related Prospectus, other than as expressly stated herein with respect to the issue of the Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to General Corporation Law of the State of Delaware, and we express no opinion with respect to any other laws.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the terms (including the terms of the offering) are determined by resolution of the Company's Board of Directors, or a duly authorized committee thereof, in accordance with the Plan, and upon execution, issuance and delivery of certificates representing the Shares (and notation of such issuance in the stock transfer records of the Company) and receipt of payment for such Shares in the manner contemplated by the Plan in an amount in cash or other legal consideration of not less than the aggregate par value for such Shares, and assuming the Company completes all other actions and proceedings required on its part to be taken prior to the issuance and delivery of the Shares pursuant to the terms of the Plan, the issuance and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Latham & Watkins LLP

Latham & Watkins LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 pertaining to the 1997 Employee Stock Purchase Plan (as amended, included in the Registrant's definitive proxy statement (File Number 001-33221) of our report dated March 27, 2009 relating to the financial statements and financial statement schedule of A.P. Pharma, Inc., which appear in its Annual Report on Form 10-K for the year ended December 31, 2008, filed with the Securities and Exchange Commission.

/s/ ODENBERG, ULLAKKO, MURANISHI & CO. LLP

San Francisco, California
October 19, 2009