UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported) May 18, 2009

A.P. Pharma, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-33221 (Commission File Number) 94-2875566 (I.R.S. Employer Identification No.)

123 Saginaw Drive Redwood City, CA 94063 (Address of principal executive offices)

(650) 366-2626 Registrant's telephone number, including area code

N/A

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01 Other Events.

On May 18, 2009, A.P. Pharma, Inc. (the "Company") announced that it has submitted a New Drug Application (the "NDA") to the U.S. Food and Drug Administration (the "FDA") requesting approval of APF530 for the prevention of chemotherapy-induced nausea and vomiting ("CINV"). The NDA was submitted under section 505(b)(2) of the Federal Food, Drug and Cosmetic Act, whereby the Company can rely upon the FDA's prior safety and efficacy findings for APF530's active ingredient, granisetron. The FDA is expected to determine whether to accept the NDA for filing within 60 days, and to notify the Company of its determination within 14 days thereafter. If the NDA is accepted for filing, under the Prescription Drug User Fee Act guidelines, it is expected that the FDA would complete its review and provide an action letter with respect to the NDA within 10 months following the NDA submission.

Forward-Looking Statements

This current report contains forward-looking statements, including statements related to the potential use of APF530 for the prevention of CINV. These forward-looking statements are based on the Company's current expectations and involve risks and uncertainties. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, risks related to difficulties or delays in seeking or obtaining regulatory approval and other risks details in the Company's filings with the Securities and Exchange Commission, including the Annual Report on Form 10-K for the year ended December 31, 2008 and periodic reports on Form 10-Q and Form 8-K. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this current report. All forward-looking statements are qualified in their entirety by this cautionary statement.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

A.P. Pharma, Inc.

Date: May 19, 2009

/s/ Ronald J. Prentki

Ronald J. Prentki

President, Chief Executive Officer and Director