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 29, 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 29, 2009, A.P. Pharma, Inc. (the "Company") announced that it has implemented a plan to reduce its work force by approximately 34%, or a total of 11 employees. The Company expects one-time costs associated with this headcount reduction to be approximately \$350,000, which will be recorded in the second quarter of 2009. The actions are being taken to allow the Company to provide the resources needed to continue advancing its lead program, APF530, towards regulatory approval and commercialization.

Forward-Looking Statements

This current report contains forward-looking statements, including statements related to expected costs associated with the headcount reduction and the advancement of APF530 towards regulatory approval and commercialization. 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: June 2, 2009 /s/ Ronald J. Prentki

Ronald J. Prentki

President, Chief Executive Officer and Director