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 24, 2011

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 (Address of principal executive offices)

94063 (Zip Code)

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

 $N\!/\!A$ Former name or former address, if changed since last report)

(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 1.02 Termination of Material Definitive Agreement

On May 24, 2011, A.P. Pharma, Inc. (the "Company") received a letter from Merial LLC ("Merial") providing notice of Merial's intent to terminate that certain Development and License Agreement, dated September 4, 2009, by and between the Company and Merial (the "Agreement"). Pursuant to the notice, the Agreement will terminate effective as of August 21, 2011. Merial had been developing a long-acting pain management product for use in treating cats and dogs. In terminating the Agreement, Merial indicated concerns about the commercial potential of the product under development in the animal health market. The Company will continue to focus its resources on its lead product candidate, APF530, for treating chemotherapy-induced nausea and vomiting.

SIGNATURE

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 31, 2011

/s/ John B. Whelan

John B. Whelan

President and Chief Executive Officer