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) March 31, 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 (Address of principal executive offices)

94063 (Zip Code)

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

N/A

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))

INFORMATION TO BE INCLUDED IN THE REPORT

ITEM 2.02 Results of Operations and Financial Condition

On March 31, 2009, A.P. Pharma, Inc. (the "Company") reported its results of operations for the quarter and year ended December 31, 2008. A copy of the press release announcing the Company's results of operation is furnished herewith as Exhibit 99.1 and is incorporated herein by reference. The press release should be read in conjunction with the note regarding forward-looking statements, which is included in the text of the press release.

The information in this Item 2.02 and attached as Exhibit 99.1 to this Report will not be treated as "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section. This information will not be incorporated by reference into any filing under the Securities Act of 1933, as amended, or into another filing under the Exchange Act, unless that filing expressly incorporates this information by reference.

ITEM 9.01 Financial Statements and Exhibits.

(d) Exhibits. The following material is filed as an exhibit to this Current Report on Form 8-K:

Exhibit No.	Document Description			
99.1	Press Release of A.P. Pharma, Inc., dated March 31, 2009.			

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: March 31, 2009

/S/ Ronald J. Prentki

Ronald J. Prentki

President, Chief Executive Officer and Director



For Immediate Release

A.P. Pharma Announces Fourth Quarter and Year-End 2008 Financial Results and Provides Update on APF530 NDA

REDWOOD CITY, Calif. – March 31, 2009 — A.P. Pharma, Inc. (NASDAQ: APPA), a specialty pharmaceutical company, today reported financial results for its fourth quarter and full year ended December 31, 2008. In addition, the Company provided an update on the status of its new drug application (NDA) for APF530. APF530, the Company's proprietary, sustained-release formulation of granisetron, is being developed for the prevention of chemotherapy-induced nausea and vomiting (CINV). The Company is in the final stages of preparing its submission and expects to file the NDA with the U.S. Food and Drug Administration (FDA) during the second quarter of 2009. The Company also continues to pursue corporate partnering opportunities for APF530.

"2008 was an important year for A.P. Pharma. We advanced our lead program, APF530, for the treatment of chemotherapy-induced nausea and vomiting, including completion of our pivotal Phase 3 study and announcement of positive results from the trial," stated Ronald Prentki, A.P. Pharma's president and chief executive officer. "The Company also implemented a significant reduction in its workforce and curtailed other development programs to focus resources on preparing the new drug application for APF530."

Mr. Prentki continued, "Submitting a comprehensive and high-quality NDA for APF530 that facilitates a timely review and approval by the FDA is the Company's number-one priority. Our regulatory, CMC and clinical experts are focused on producing the best possible submission and have proactively included additional charts, tables and reports with the objective of creating a superior package to facilitate the FDA's review. We anticipate filing the NDA in the second quarter of this year and are optimistic that such diligent efforts will increase the probability of a decision from the FDA in the first half of 2010."

Results of Operations

Our net loss for the fourth quarter of 2008 was \$3.9 million, or \$0.13 per share, compared with a net loss of \$7.7 million, or \$0.25 per share, for the fourth quarter of 2007. Our decreased net loss for the fourth quarter of 2008 was principally due to completion of our Phase 3 clinical study for our lead product, APF530.

For the full year 2008, our net loss was \$23.1 million, or \$0.75 per share, versus a net loss of \$20.2 million, or \$1.04 per share, for 2007. The major factor contributing to this difference was the recognition of a gain in 2007 of \$2.5 million, upon attainment of a performance milestone related to the sale of our rights to receive royalties from two out-licensed products. Additionally, the differential between the two years was increased by higher interest income in 2007, due both to higher interest rates and higher levels of cash.

Contract revenues related to the development program utilizing our proprietary Biochronomer[™] technology with a major animal healthcare company were \$20,000 in the fourth quarter of 2008, and \$369,000 for all of 2008, compared with \$131,000 and \$412,000, respectively for 2007. The decrease in revenues for the fourth quarter of 2008 reflects the completion of the proof-of-concept phase of the agreement. We are currently in discussions regarding next steps.

Cash, cash equivalents and marketable securities as of December 31, 2008 were \$10.5 million, compared with \$35.1 million at December 31, 2007. We believe our cash, cash equivalents and marketable securities as of December 31, 2008 will enable us to fund our operations into the fourth quarter of 2009, based on our anticipated spending levels and certain expected positive cash inflows.

On March 30, 2009, the Company filed with the SEC an Annual Report on Form 10-K in which the Company's auditors included a "going concern" explanatory paragraph in its audit opinion. The Company intends to seek to raise additional capital through a corporate partnership or other alternatives and pursue further reductions in expenses to ensure its ongoing financial viability. Based on multiple factors, including market conditions and the going-concern designation, the Company may not be able to obtain adequate financing.

About APF530

A.P. Pharma's lead product, APF530, is being developed for the prevention of both acute and delayed onset CINV. APF530 is delivered by a single subcutaneous injection and contains the 5HT₃ antagonist, granisetron. Injections and oral tablets containing granisetron are approved for the prevention of acute onset CINV, but not for delayed onset CINV. Granisetron was selected because it has a well-established record of safety and efficacy with physicians. In June 2008, A.P. Pharma completed patient enrollment and later reported positive results from its pivotal Phase 3 study. The 1,395 patient trial compared the efficacy of APF530 with Aloxi® for the prevention of CINV following moderate or highly emetogenic chemotherapy.

About CINV

Prevention and control of nausea and vomiting, or emesis, are very important in the treatment of cancer patients. The majority of patients receiving chemotherapy will experience some degree of emesis if not prevented with an anti-emetic, typically administered just prior to chemotherapy.

Chemotherapy treatments can be classified as moderately emetogenic, meaning that 30% to 90% of patients experience CINV, or highly emetogenic, meaning that more than 90% of patients experience CINV, if they do not receive an anti-emetic. Acute onset CINV occurs within the first 24 hours following chemotherapy treatment. Delayed onset CINV occurs more than 24 hours after treatment and may persist for several days. Prevention of CINV is important because the distress caused by CINV can severely disrupt patient quality of life and can lead some patients to delay or discontinue chemotherapy.

About A.P. Pharma

A.P. Pharma is a specialty pharmaceutical company developing products using our proprietary Biochronomer™ polymer-based drug delivery technology. Our primary focus is on our lead product candidate, APF530, which has completed a pivotal Phase 3 clinical trial for the prevention of CINV. The Company has additional clinical and preclinical stage programs in the area of pain management, all of which utilize its bioerodible injectable and implantable delivery systems. For further information, visit the Company's web site at www.appharma.com.

(financial tables follow)

AP PHARMA, INC.

Income Statement Highlights

(in thousands, except per share data)

(Unaudited)

	Three	Months Ended	Twelve N	Twelve Months Ended		
	December 31, 2008	December 31, 2007	December 31, 2008	December 31, 2007		
Contract revenues	\$ 20	\$ 131	\$ 369	\$ 412		
Operating expenses:						
Research & development	2,759	6,020	19,507	19,364		
General & administrative	1,093	1,928	4,307	4,681		
Total operating expenses	3,852	7,948	23,814	24,045		
Operating loss	(3,832	(7,817)	(23,445)	(23,633)		
Interest income	41	459	587	1,326		
Gain on sale of interest in royalties	0	0	0	2,500		
Other income (expense)	(75) 9	(67)	7		
Loss from continuing operations	(3,866	(7,349)	(22,925)	(19,800)		
Loss from discontinued operations	(80	(357)	(200)	(342)		
Gain on disposition of discontinued operations	0	1	0	20		
Loss before income taxes	(3,946	(7,705)	(23,125)	(20,122)		
Tax provision	0	4	0	(41)		
Net loss	\$ (3,946	\$ (7,701)	\$ (23,125)	\$ (20,163)		
Basic & diluted loss per common share:						
Loss from continuing operations	\$ (0.13	\$ (0.24)	\$ (0.74)	\$ (1.02)		
Net loss	\$ (0.13	\$ (0.25)	\$ (0.75)	\$ (1.04)		
Shares used in calculating basic & diluted loss	30,853	30,754	30,811	19,358		

AP PHARMA, INC.

Balance Sheet Highlights

(in thousands)

	Decei	mber 31, 2008	December 31, 2007 ⁽¹⁾	
Assets				
Cash, cash equivalents and marketable securities	\$	10,538	\$	35,062
Accounts receivable, net		32		152
Other current assets		246		582
Total current assets		10,816		35,796
Property and equipment, net		881		1,079
Other non-current assets		103		75
Total assets	\$	11,800	\$	36,950
Liabilities and Stockholders' Equity				
Total liabilities	\$	4,202	\$	7,476
Stockholders' equity		7,598		29,474
Total liabilities and stockholders' equity	\$	11,800	\$	36,950

⁽¹⁾ Derived from our audited financial statements for the year ended December 31, 2007 included in the Company's 2007 Annual Report on Form 10-K filed with the Securities and Exchange Commission.

Forward-looking Statements

This news release contains "forward-looking statements" as defined by the Private Securities Litigation Reform Act of 1995. These forward-looking statements involve risks and uncertainties, including uncertainties associated with timely development, approval, launch and acceptance of new products, satisfactory completion of clinical studies, establishment of new corporate alliances, progress in research and development programs and other risks and uncertainties identified in the Company's filings with the Securities and Exchange Commission. We caution investors that forward-looking statements reflect our analysis only on their stated date. We do not intend to update them except as required by law.

Contacts

Corporate Contact:

A.P. Pharma, Inc. John B. Whelan, Vice President, Finance and Chief Financial Officer 650-366-2626

and

Investor and Media Relations:

Corporate Communications Alliance, LLC Edie DeVine, President 209-814-9564

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