

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 8, 2007**

A.P. Pharma, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

000-16109
(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)

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))
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INFORMATION TO BE INCLUDED IN THE REPORT

ITEM 2.02 Results of Operations and Financial Condition

On May 8, 2007, the Registrant issued a press release announcing its financial results for the first quarter ended March 31, 2007. The press release is attached as Exhibit 99.1.

The information in this Current Report on Form 8-K, including the exhibit, is furnished pursuant to Item 2.02 and shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities under that Section. Furthermore, the information in the Current Report on Form 8-K, including the exhibit, shall not be deemed to be incorporated by reference into the filings of the Company under the Securities Act of 1933, as amended.

ITEM 9.01 Financial Statements and Exhibits.

(C) Exhibits

99.1 Press release dated May 8, 2007.

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 8, 2007

/S/ Stephen C. Whiteford
Stephen C. Whiteford
Vice President, Finance and Chief Financial Officer

EXHIBIT INDEX

99.1 Press release dated May 8, 2007

News Release

A.P. PHARMA REPORTS RESULTS FOR THE FIRST QUARTER 2007; UPDATES PROGRESS OF APF530 PROGRAM

REDWOOD CITY, Calif. (May 8, 2007) – A.P. Pharma, Inc. (NASDAQ: APPA), a specialty pharmaceutical company, today reported financial results for its first quarter ended March 31, 2007.

Highlights

- APF530 Development:
 - Patient enrollment rates remain steady and lead to an NDA filing in 2008
 - Held successful Clinical Investigators meeting
- Filed an S-1 registration statement to raise additional capital of up to \$28.8 million.
- Cash, cash equivalents and marketable securities \$9.4 million at March 31.

Results of Operations

In this news release, the “Company”, “we”, “us”, and “our” refer to A.P. Pharma, Inc.

We have generated no revenue since the fourth quarter of 2005, when we sold our rights to receive royalties on certain former products. Accordingly, our total operating expenses of \$6.1 million this quarter vs. \$4.4 million in the first quarter of 2006 are directly reflected as operating losses. Our research and development (“R&D”) expenses increased by 44%, from \$3.5 million to \$5.0 million, reflecting higher costs associated with our pivotal Phase 3 trial for APF530, which we began in the second quarter of 2006. In the first quarter of 2006, our R&D expense reflected costs associated with our lower cost Phase 2 study for APF530. Our general and administrative expenses increased by 20% to \$1.1 million, primarily due to legal expenses associated with our current fund raising activities. In total, our operating loss widened by \$1.7 million to \$6.1 million from \$4.4 million.

Following interest income of \$148,000 and certain smaller items below our operating loss line, which netted to a charge against income of \$44,000, we reported a net loss of \$6.0 million or 24 cents per share. In last year’s first quarter, we recorded a gain of \$23.4 million on the sale of our rights to receive royalties on former products. As a result, we reported net income of \$19.3 million or 76 cents per share. (All references to per share are to diluted amounts)

Operations Update

In December we announced that because of the extended timeline for patient enrollment, we now expect to file the New Drug Application (NDA) for APF530 in 2008, assuming successful completion of our financing plans. Currently APF530 is in pivotal Phase 3 clinical trials, with more than 80% of the planned 80 clinical sites for the trial now active, following the closure of several previously established sites that were deemed nonproductive. Patient enrollment in the trial continues at a steady pace. We recently completed a clinical investigators’ meeting to address the complexity of our study and to stimulate patient enrollment. Over 80% of the sites were represented. We believe that one of the outcomes of this meeting will be enhanced involvement and enthusiasm of participating centers, which will lead to improved patient enrollment rates.

On April 5, 2007, we filed with the Securities and Exchange Commission (the “SEC”) a registration statement on Form S-1 for a proposed public offering of up to \$28.8 million of our common stock. We plan to use the proceeds from this offering to complete the clinical development of APF530, the development and clinical testing of other product candidates, and for working capital, capital expenditures and general corporate purposes.

About APF530

Our lead product candidate using our proprietary Biochronomer™ technology is APF530, which contains granisetron, a drug approved for the prevention of chemotherapy-induced nausea and vomiting, or CINV. We selected granisetron because it is a potent drug which blocks a specific receptor found in the gut that is responsible for triggering CINV. Additionally, the applicable granisetron patent will expire in the United States on December 29, 2007. APF530 is designed to provide at least five days prevention of CINV. In September 2005, we completed a Phase 2 human clinical trial of APF530 that achieved all of its primary and secondary endpoints. In May 2006, we initiated our pivotal Phase 3 clinical trial of APF530. We believe that this clinical trial will lead to regulatory approval of APF530 for the prevention of acute and delayed onset CINV for patients undergoing both moderately and highly emetogenic, or vomit-inducing, chemotherapy.

Our pivotal Phase 3 clinical trial, initiated in May 2006, is a multicenter, randomized, observer-blind, actively-controlled, double-dummy, parallel group study that will compare the efficacy of APF530 with Aloxi®. The trial will include approximately 1,350 patients, stratified in two groups, one receiving moderately and the other receiving highly emetogenic chemotherapeutic agents. In each group, the patients are randomized to receive in the first chemotherapy treatment cycle either APF530 high dose (10 mg), APF530 low dose (5 mg) or the currently approved dose of Aloxi. In subsequent treatment cycles (up to three additional cycles), the patients are re-randomized to either of the two APF530 doses.

Market Assessment

We commissioned Timely Data Resources, Inc., or TDR, to conduct market research to determine oncologists' and oncology nurses' perceptions of current antiemetics for CINV. This survey, completed in August 2006, was intended to assess the market opportunity for APF530 for the prevention of CINV. TDR interviewed 75 randomly selected medical oncologists and 25 oncology nurses from across the United States. The survey concluded that there is significant unmet need in the treatment of CINV, especially delayed onset CINV. 84% of the surveyed oncologists and oncology nurses currently use Aloxi and continue to have patients who experience CINV, particularly delayed onset CINV.

Conference call

Management will host an investment-community conference call today beginning at 11:00 a.m. Eastern time (8:00 a.m. Pacific time) to discuss the financial results, to provide a business update and to answer questions.

To participate in the live call by telephone, please dial (888) 803-8275 from the U.S. or (706) 634-1287 from outside the U.S. A telephone replay will be available for 48 hours by dialing (800) 642-1687 from the U.S. or (706) 645-9291 from outside the U.S., and entering reservation number 6645110. The call will also be broadcast live on A.P. Pharma's website, www.appharma.com. A replay will be available for 30 days.

About A.P. Pharma

We are a specialty pharmaceutical company focused on developing pharmaceutical products using our proprietary Biochronomer polymer-based drug delivery technology. Our product development philosophy is based on incorporating approved therapeutics into our proprietary bioerodible drug delivery technology to create controlled release pharmaceuticals to improve treatments for diseases or conditions. Our lead product candidate, APF530, is currently in a pivotal Phase 3 clinical trial for the prevention of acute and delayed onset chemotherapy-induced nausea and vomiting, or CINV. We expect to complete enrollment of our pivotal Phase 3 clinical trial in the first half of 2008 and to announce results of that trial in the third quarter of 2008. We expect to file our new drug application, or NDA, for approval of APF530 in the fourth quarter of 2008.

Our primary focus is to advance our proprietary Biochronomer technology, consisting of bioerodible polymers designed to release drugs over a defined period. We have completed over 100 in vivo and in vitro studies demonstrating that our Biochronomer technology is potentially applicable to a range of therapeutic areas, including pain management, prevention of nausea and vomiting, control of inflammation and treatment of ophthalmic diseases. We have also completed comprehensive animal and human toxicology studies that have established that our Biochronomer polymers are safe and well tolerated. Furthermore, our Biochronomer technology can be designed to deliver drugs over periods varying from days to several months.

Forward-looking Statements

This news release contains “forward-looking statements” as defined by the Private Securities 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.

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(Financial tables follow)

A.P. PHARMA, INC.
Statement of Operations Highlights
(in thousands, except per share data)
(Unaudited)

	Three Months Ended	
	March 31, 2007	March 31, 2006
Revenue	\$ -	\$ -
Operating Expenses:		
Research & Development	4,987	3,469
General & Administrative	1,118	932
Total Operating Expenses	<u>6,105</u>	<u>4,401</u>
Operating Loss	(6,105)	(4,401)
Interest Income, Net	148	262
Gain on Sale of Interest in Royalties	-	23,421
Other Income, Net	<u>-</u>	<u>10</u>
Income (Loss) from Continuing Operations	(5,957)	19,292
Loss from Discontinued Operations	(24)	-
Gain on Disposition of Discontinued Operations	<u>16</u>	<u>7</u>
Income (Loss) before Income Taxes	(5,965)	19,299
Tax Provision	<u>36</u>	<u>-</u>
Net Income (Loss)	<u>\$ (6,001)</u>	<u>\$ 19,299</u>
Diluted Earnings (Loss) Per Common Share:		
Income (Loss) from Continuing Operations	<u>\$ (0.24)</u>	<u>\$ 0.76</u>
Net Income (Loss)	<u>\$ (0.24)</u>	<u>\$ 0.76</u>
Shares used in Calculating Diluted Earnings (Loss) Per Share:	<u>25,324</u>	<u>25,483</u>

A.P. PHARMA, INC.
Balance Sheet Highlights
(in thousands)

	March 31, 2007 (unaudited)	December 31, 2006 (1)
Assets		
Cash, Cash Equivalents and Marketable Securities	\$ 9,362	\$ 15,522
Accounts Receivable, Net	125	75
Other Current Assets	522	609
Total Current Assets	10,009	16,206
Property and Equipment, Net	883	958
Other Non-Current Assets	70	87
Total Assets	\$ 10,962	\$ 17,251
Liabilities and Stockholders' Equity		
Total Liabilities	\$ 4,735	\$ 5,192
Stockholders' Equity	6,227	12,059
Total Liabilities and Stockholders' Equity	\$ 10,962	\$ 17,251

(1) Derived from our audited financial statements for the year ended December 31, 2006 included in the Company's 2006 Annual Report on Form 10-K filed with the Securities and Exchange Commission.

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