

**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) August 16, 2010

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)

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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ITEM 2.02 Results of Operations and Financial Condition

On August 16, 2010, the Company issued a press release announcing its financial results for the quarter ended June 30, 2010. A copy of this press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K (the "Report"). 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

99.1 Press Release of A. P. Pharma, Inc., dated August 16, 2010

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.

Date: August 16, 2010

A.P. Pharma, Inc.

/s/ John B. Whelan

John B. Whelan
Acting Chief Executive Officer and Chief Financial Officer

EXHIBIT INDEX

Exhibit	Description
99.1	Press Release of A. P. Pharma, Inc., dated August 16, 2010



A.P. Pharma Announces Second Quarter 2010 Financial Results

REDWOOD CITY, Calif. – August 16, 2010 – A.P. Pharma, Inc. (NASDAQ: APPA), a specialty pharmaceutical company, today reported financial results for its second quarter ended June 30, 2010.

Operational Highlights

In May, the Company engaged a leading regulatory consulting group to lead the U.S. Food and Drug Administration (FDA) review process and assist in preparing its resubmission of a New Drug Application (NDA) for APF530. The Company continues to work diligently toward the NDA resubmission and plans to meet with the FDA prior to resubmitting the NDA.

"A.P. Pharma is committed to addressing the issues raised in the FDA's Complete Response Letter in a thorough and thoughtful manner," said John Whelan, A.P. Pharma's acting chief executive officer. "We are working expeditiously to complete the work needed to prepare for a meeting with the FDA. Once the necessary information is available, we will request an End of Review meeting to discuss the next steps for the APF530 New Drug Application."

"APF530 has the potential to be the first drug to treat both acute-onset and delayed-onset chemotherapy-induced nausea and vomiting with a single, subcutaneous injection," said Paul Goddard, Ph.D., A.P. Pharma's board chairman. "We believe APF530 could become an important alternative for patients and physicians dealing with one of the major morbidities associated with chemotherapy, namely nausea and vomiting."

Results of Operations

A.P. Pharma's net loss for the second quarter of 2010 was \$3.6 million, or \$0.09 per share, compared with a net loss of \$3.9 million, or \$0.13 per share, for the second quarter of 2009. Net loss was slightly lower due to lower clinical trial spending and continuing cost containment actions undertaken by the Company, offset in part by expenses related to the resignation of the Company's former chief executive officer during the second quarter of 2010.

Contract revenue was \$530,000 in the second quarter of 2010 compared with \$14,000 for the second quarter of 2009. The increase in revenue in 2010 was primarily related to research and development work performed under an agreement with Merial Limited entered into in September 2009 for a long-acting pain management product for companion animals.

Cash and cash equivalents as of June 30, 2010 were \$5.7 million, compared with \$7.6 million at December 31, 2009. On March 19, 2010, A.P. Pharma announced the receipt of a Complete Response Letter from the FDA on the APF530 NDA. In the letter, the FDA raised questions that preclude the approval of the APF530 NDA in its current form. The full extent of activities, costs and time required to address the FDA's questions is not currently known; however, A.P. Pharma expects to clarify the actions required for resubmission and approval of its NDA at an End of Review meeting. Based on a current analysis of anticipated expenses to prepare for an End of Review meeting, the Company now believes it has sufficient cash resources to fund operations through the end of 2010. A.P. Pharma plans to seek debt or equity financing to fund operations beyond the end of 2010. Multiple factors, including market conditions, may prevent the Company from obtaining adequate financing to support its operations. The sale of additional equity or convertible debt securities in the future may be dilutive to the Company's stockholders, and debt financing arrangements may require it to pledge certain assets and enter into covenants that could restrict certain business activities or the Company's ability to incur further indebtedness and may contain other terms that are not favorable to A.P. Pharma or its stockholders.

About APF530

A.P. Pharma's lead product, APF530, prevents both acute-onset and delayed-onset chemotherapy-induced nausea and vomiting (CINV). APF530 contains the 5-HT₃ antagonist, granisetron, formulated in the Company's proprietary Biochronomer™ drug delivery system, which allows therapeutic drug levels to be maintained for five days with a single subcutaneous injection. Intravenous and oral formulations containing granisetron are approved for the prevention of acute-onset CINV, but not for delayed-onset CINV. Granisetron was selected because it is widely prescribed by physicians based on a well-established record of safety and efficacy.

About A.P. Pharma

A.P. Pharma is a specialty pharmaceutical company developing products using its proprietary Biochronomer™ polymer-based drug delivery technology. The Company's primary focus is on its lead product, APF530, for the prevention of CINV. A.P. Pharma received a Complete Response Letter on the APF530 NDA in March 2010 and is in the process of preparing a resubmission responsive to the deficiencies listed in the Complete Response Letter. 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. Further work on these programs has been deferred while the Company focuses on the approval of APF530. For further information, visit the Company's web site at www.appharma.com.

(financial tables follow)

A.P. Pharma, Inc.
Condensed Statements of Operations
(in thousands, except per share amounts)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	<u>2010</u>	<u>2009</u>	<u>2010</u>	<u>2009</u>
Contract revenue	\$ 530	\$ 14	\$ 771	\$ 22
Operating expenses:				
Research and development	1,890	2,908	4,221	4,958
General and administrative	2,335	1,066	3,116	1,993
Total operating expenses	<u>4,225</u>	<u>3,974</u>	<u>7,337</u>	<u>6,951</u>
Operating loss	(3,695)	(3,960)	(6,566)	(6,929)
Gain on sale of royalty interest	-	-	2,500	-
Interest income, net	-	19	-	28
Loss from continuing operations	<u>(3,695)</u>	<u>(3,941)</u>	<u>(4,066)</u>	<u>(6,901)</u>
Income (loss) from discontinued operations	<u>112</u>	<u>-</u>	<u>(12)</u>	<u>-</u>
Net loss	<u>\$ (3,583)</u>	<u>\$ (3,941)</u>	<u>\$ (4,078)</u>	<u>\$ (6,901)</u>
Basic and diluted net loss per share:				
Loss from continuing operations	<u>\$ (0.09)</u>	<u>\$ (0.13)</u>	<u>\$ (0.10)</u>	<u>\$ (0.22)</u>
Net loss	<u>\$ (0.09)</u>	<u>\$ (0.13)</u>	<u>\$ (0.10)</u>	<u>\$ (0.22)</u>
Weighted-average common shares outstanding—basic and diluted	<u>39,493</u>	<u>31,016</u>	<u>39,470</u>	<u>30,943</u>

A.P. Pharma, Inc.
Condensed Balance Sheets
(in thousands)
(unaudited)

	June 30, 2010	December 31, 2009
Assets		
Current assets:		
Cash and cash equivalents	\$ 5,736	\$ 7,593
Accounts receivable	356	171
Prepaid expenses and other current assets	308	549
Total current assets	<u>6,400</u>	<u>8,313</u>
Property and equipment, net	399	510
Other long-term assets	53	128
Total assets	<u>\$ 6,852</u>	<u>\$ 8,951</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 128	\$ 162
Accrued compensation	1,192	367
Accrued expenses	653	713
Deferred revenue	112	92
Accrued disposition costs	565	553
Total current liabilities	<u>2,650</u>	<u>1,887</u>
Deferred revenue	196	268
Total liabilities	<u>2,846</u>	<u>2,155</u>
Stockholders' equity:		
Common stock	401	394
Additional paid-in capital	148,762	147,481
Accumulated deficit	(145,157)	(141,079)
Total stockholders' equity	<u>4,006</u>	<u>6,796</u>
Total liabilities and stockholders' equity	<u>\$ 6,852</u>	<u>\$ 8,951</u>

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 capital resources and liquidity, timely development and regulatory approval of product candidates, satisfactory completion of clinical studies, progress in research and development programs, launch and acceptance of new products 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:

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and

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