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): April 27, 2004

A.P. PHARMA, INC.
(Exact name of Registrant as specified in its charter)

DELAWARE	1-16109	94-2875566
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

123 SAGINAW DRIVE, REDWOOD CITY, CALIFORNIA 94063
(Address of principal executive offices) (Zip code)

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

N/A
(Former Name or Former Address, if Changed Since Last Report)

INFORMATION TO BE INCLUDED IN THE REPORT

ITEM 7. Financial Statements, Pro Forma Financial Information and Exhibits.

(c) Exhibits

99.1 Press release dated April 28, 2004.

ITEM 12. Results of Operations and Financial Condition.

The following information is disclosed pursuant to Item 12 of Form 8-K:

On April 28, 2004, the Registrant issued a press release announcing its financial results for the fiscal quarter ended March 31, 2004. The press release is attached hereto as Exhibit 99.1 and incorporated herein by reference.

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: April 28, 2004

By: /S/ Michael O'Connell
Michael P. J. O'Connell,
President and Chief
Executive Officer

EXHIBIT INDEX

99.1 Press release dated April 28, 2004.

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Exhibit 99.1

A.P. Pharma Logo

News Release

A.P. PHARMA REPORTS FIRST QUARTER RESULTS

- Human clinical trials underway with two product candidates -

REDWOOD CITY, Calif. (April 28, 2004) - A.P. Pharma, Inc. (NASDAQ NM: APPA), a specialty pharmaceutical company, today reported financial results for the three months ended March 31, 2004.

Current and Financial Highlights

* A Phase 2 human clinical trial is ongoing with APF112 for the treatment of post-surgical pain.
* Pre-clinical studies with APF530 for the treatment of chemotherapy-induced nausea and vomiting (CINV) are completed.
* A Phase 1 human clinical trial is underway in the U.K. with APF530 for the treatment of CINV.
* First quarter 2004 royalty income increased by 12% to $1.2 million, reflecting sales growth in both Retin-A Micro(R) and Carac(TM).
* A study conducted at MIT indicating a Biochronomer(TM) formulation could advance DNA vaccine usage against viral infections and cancers was reported in the February 2004 issue of Nature Materials.
* Net cash burn for the first quarter of 2004 was $1.7 million.
* Cash, cash equivalents and short-term investments were $7.7 million at March 31, 2004.

Financial Results

The Company reported royalties for the first quarter of 2004 of $1,154,000, compared with $1,032,000 for the first quarter of 2003. Royalties on sales of Retin-A Micro grew by 16% over the first quarter of 2003 and royalties on sales of Carac grew by 4% over the first quarter of 2003. Total revenues for the first quarter of 2004 increased 7% to $1,180,000 compared with $1,106,000 in the comparable year-ago period. Royalties represented 98% of total revenues in the first quarter of 2004, compared with 93% of total revenues in the first quarter of 2003.

Research and development expense for the first quarter of 2004 increased by $833,000 or 38% to $3,035,000, reflecting the costs of clinical and pre-clinical studies on two product candidates incorporating the Company's proprietary Biochronomer bioerodible drug delivery system.

Part 2 of the Phase 2 human clinical study using APF112 for the treatment of post-surgical pain is ongoing. The product is designed to provide pain relief for a sustained period of time following surgery, and to reduce or eliminate the need for opioid-like products. APF112 contains the local anesthetic mepivacaine and has been shown in Part 1 of the Phase 2 clinical study to sustain blood drug levels for up to 72 hours. Wound healing in all patients was observed to be normal and no adverse events were reported. The second part of the Phase 2 trial is a 90-patient blinded study comparing two doses of APF112 with current standard treatments for post-surgical pain. The end points for the trial include a visual analog score of pain intensity, the standard means of measuring pain, and reduction in use of opioid-type medication by patients.

The Company also completed pre-clinical studies and has initiated a Phase 1 human clinical trial in the U.K. using APF530 for the treatment of chemotherapy-induced nausea and vomiting. APF530 contains the anti-emetic granisetron, and is designed to provide three to five days of continuous relief from chemotherapy-induced nausea and vomiting following a single subcutaneous injection.

The loss from continuing operations in the first quarter of 2004 was $2,550,000, compared with a loss from continuing operations in the first quarter of 2003 of $1,798,000. The gain on disposition of discontinued operations in the first quarter of

2003 represents the net gain on the sale of the Company's Analytical Standards division.

Conference Call Information

Management will be hosting an investment community conference call beginning at 11:00 a.m. Eastern Time (8:00 a.m. Pacific Time) today, April 28, 2004, to discuss this announcement 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 6968039.

Individuals interested in listening to the conference call via the Internet may do so by visiting www.appharma.com. A replay will be available on the Company's Web site for 30 days.

About A.P. Pharma

A.P. Pharma is a specialty pharmaceutical company focused on the development of ethical (prescription) pharmaceuticals utilizing its proprietary polymer-based drug delivery systems. The Company's primary focus is the development and commercialization of its bioerodible injectable and implantable systems under the trade name Biochronomer. Initial target areas of application for the Company's drug delivery technology include pain management, anti-nausea, inflammation, oncology and ophthalmology applications. The Company's product development programs are funded by royalties from topical products currently marketed by pharmaceutical partners, by proceeds from the divestitures of its cosmeceutical and analytical standards product lines and by fees it receives from collaborative partners. For further information visit the Company's Web site at www.appharma.com.

Forward-looking Statements

Except for historical information, this news release contains certain forward-looking statements that involve risks and uncertainties including, among others, uncertainty associated with timely development, approval, launch and acceptance of new products, establishment of new corporate alliances and progress in research and development programs. Other risks and uncertainties associated with the Company's business and prospects are identified in the Company's filings with the Securities and Exchange Commission. The Company does not undertake to revise these forward-looking statements to reflect events or circumstances occurring in the future.

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(Financial tables follow)

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

	Three Months Ended March 31, 2004	March 31, 2003
Royalties	$ 1,154	$ 1,032
Contract Revenues	26	74

Total Revenues	1,180	1,106
Operating Expenses:		
Research & Development	3,035	2,202
General & Administrative	724	778
Total Operating Expenses	3,759	2,980
Operating Loss	(2,579)	(1,874)
Interest and Other, Net	29	76
Loss from Continuing Operations	(2,550)	(1,798)
Loss from Discontinued Operations	(50)	(54)
Gain on Disposition of Discontinued Operations	1	1,886
Net Income (Loss)	$(2,599)	$ 34
Basic and Diluted Earnings (Loss) Per Share:		
Loss from Continuing Operations	$ (0.12)	$ (0.09)
Net Income (Loss)	$ (0.13)	$ 0.00
Shares used in Calculating Earnings (Loss) Per Share:		
Basic	20,653	20,475
Diluted	20,653	20,516

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

	March 31, 2004 (Unaudited)	December 31, 2003
Assets		
Cash, Cash Equivalents and Marketable Securities	$ 7,744	$ 9,484
Accounts Receivable, Net	1,466	1,340
Other Current Assets	421	434
Total Current Assets	9,631	11,258
Property, Plant & Equipment, Net	1,349	1,430
Other Non-Current Assets	287	467
Total Assets	$11,267	$13,155
Liabilities and Stockholders' Equity		
Current Liabilities	$ 2,519	$ 1,892
Stockholders' Equity	8,748	11,263
Total Liabilities and Stockholders' Equity	$11,267	$13,155