

PROSPECTUS SUPPLEMENT NO. 2

A.P. PHARMA, INC.

240,000,011 shares of Common Stock

This prospectus supplement amends the prospectus dated April 2, 2012 (as supplemented on May 10, 2012) to allow certain stockholders or their pledgees, donees, transferees, or other successors in interest (the "Selling Stockholders"), to sell, from time to time, up to 240,000,011 shares of our common stock (the "Common Stock"). The Common Stock covered by this prospectus consists of (i) 160,000,006 shares of Common Stock which were issued pursuant to a Securities Purchase Agreement we entered into on June 29, 2011 and (ii) 80,000,005 shares of Common Stock issuable upon exercise of warrants issued pursuant to the Securities Purchase Agreement (the "Warrants").

We would not receive any proceeds from any such sale of these Shares. To the extent any of the warrants are exercised for cash, if at all, we will receive the exercise price for those warrants.

This prospectus supplement is being filed to include the information set forth in the Current Report on Form 10-Q filed on August 9, 2012, which is set forth below. This prospectus supplement should be read in conjunction with the prospectus dated April 2, 2012 and any supplements thereto, which are to be delivered with this prospectus supplement.

Our Common Stock is quoted on the OTC Bulletin Board under the symbol "APPA.OB". On August 8, 2012, the last reported sale price per share of our Common Stock on the OTC Bulletin Board was \$0.68. Our principal executive offices are located at 123 Saginaw Drive, Redwood City, California 94063, and our telephone number is (650) 366-2626.

Investing in our securities involves risks. You should carefully consider the risk factors beginning on page 2 of the prospectus before you make an investment in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

THE DATE OF THIS PROSPECTUS SUPPLEMENT NO. 2 IS AUGUST 9, 2012

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 10-Q

Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the quarterly period ended June 30, 2012

OR

Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from _____ to _____

Commission File Number 001-33221

A.P. PHARMA, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation)

94-2875566

(I.R.S. Employer Identification No.)

123 Saginaw Drive, Redwood City, CA

(Address of principal executive offices)

94063

(Zip Code)

(650) 366-2626

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Small reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.) Yes No

As of July 31, 2012, 302,205,555 shares of the registrant's Common Stock, \$0.01 par value per share, were outstanding.

[Table of Contents](#)

Table of Contents

A.P. Pharma, Inc.

INDEX

	<u>Page No.</u>
PART I.	3
FINANCIAL INFORMATION	3
Item 1. Financial Statements (unaudited):	3
Condensed Balance Sheets as of June 30, 2012 and December 31, 2011	3
Condensed Statements of Operations for the three and six months ended June 30, 2012 and 2011	4
Condensed Statements of Cash Flows for the six months ended June 30, 2012 and 2011	5
Notes to Condensed Financial Statements	6
Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations	13
Item 3. Quantitative and Qualitative Disclosures about Market Risk	17
Item 4. Controls and Procedures	17
PART II.	17
OTHER INFORMATION	17
Item 1. Legal Proceedings	17
Item 1A. Risk Factors	17
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	17
Item 3. Defaults Upon Senior Securities	17
Item 4. Mine Safety Disclosures	17
Item 5. Other Information	17
Item 6. Exhibits	17
Signatures	19

PART I. Financial Information.**Item 1. Financial Statements.****A.P. Pharma, Inc.
Condensed Balance Sheets
(in thousands)**

	<u>June 30, 2012</u> (Unaudited)	<u>December 31, 2011</u> (Note 1)
Assets		
Current assets:		
Cash and cash equivalents	\$ 12,442	\$ 17,974
Prepaid expenses and other current assets	557	266
Total current assets	<u>12,999</u>	<u>18,240</u>
Property and equipment, net	1,102	1,075
Other long-term assets	130	130
Total assets	<u>\$ 14,231</u>	<u>\$ 19,445</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 605	\$ 1,010
Accrued expenses	1,056	1,498
Accrued disposition costs	1,216	1,082
Convertible notes payable to related parties, net of discount	239	103
Total current liabilities	<u>3,116</u>	<u>3,693</u>
Stockholders' equity:		
Common stock	2,004	2,002
Additional paid-in capital	178,840	173,989
Accumulated deficit	(169,729)	(160,239)
Total stockholders' equity	<u>11,115</u>	<u>15,752</u>
Total liabilities and stockholders' equity	<u>\$ 14,231</u>	<u>\$ 19,445</u>

See accompanying notes to condensed financial statements.

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

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2012	2011	2012	2011
Contract revenue	\$ —	\$ 251	\$ —	\$ 646
Operating expenses:				
Research and development	3,067	1,282	6,396	2,423
General and administrative	1,313	509	2,753	1,078
Total operating expenses	4,380	1,791	9,149	3,501
Operating loss	(4,380)	(1,540)	(9,149)	(2,855)
Interest expense, net	(146)	(263)	(207)	(264)
Loss from continuing operations	(4,526)	(1,803)	(9,356)	(3,119)
Loss from discontinued operations	(43)	(129)	(134)	(232)
Net loss	<u>\$ (4,569)</u>	<u>\$ (1,932)</u>	<u>\$ (9,490)</u>	<u>\$ (3,351)</u>
Basic and diluted net loss per share:				
Loss from continuing operations	<u>\$ (0.02)</u>	<u>\$ (0.05)</u>	<u>\$ (0.05)</u>	<u>\$ (0.08)</u>
Net loss	<u>\$ (0.02)</u>	<u>\$ (0.05)</u>	<u>\$ (0.05)</u>	<u>\$ (0.08)</u>
Shares used to compute basic and diluted net loss per share	<u>200,112</u>	<u>40,016</u>	<u>200,079</u>	<u>40,062</u>

See accompanying notes to condensed financial statements.

A.P. Pharma, Inc.
Condensed Statements of Cash Flows
(in thousands)
(Unaudited)

	<u>Six Months Ended June 30,</u>	
	<u>2012</u>	<u>2011</u>
Cash flows from operating activities:		
Net loss	\$ (9,490)	\$ (3,351)
Adjustments to reconcile net loss to net cash used in operating activities:		
Loss from discontinued operations	134	232
Depreciation and amortization	94	94
Stock-based compensation	1,793	345
Amortization of debt discount	136	25
Changes in operating assets and liabilities:		
Accounts receivable	—	110
Prepaid expenses and other current assets	(291)	(192)
Accounts payable	(74)	130
Accrued expenses	(380)	291
Deferred revenue	—	(272)
Net cash used in operating activities	<u>(8,078)</u>	<u>(2,588)</u>
Cash flows from investing activities:		
Purchases of property and equipment	(467)	—
Net cash used in investing activities	<u>(467)</u>	<u>—</u>
Cash flows from financing activities:		
Advance proceeds from private placement units	—	20,300
Proceeds from convertible note financing	3,000	1,500
Proceeds from the issuance of shares under the Employee Stock Purchase Plan	13	10
Net cash provided by financing activities	<u>3,013</u>	<u>21,810</u>
Net increase (decrease) in cash and cash equivalents	(5,532)	19,222
Cash and cash equivalents, beginning of period	17,974	2,109
Cash and cash equivalents, end of period	<u>\$ 12,442</u>	<u>\$ 21,331</u>

See accompanying notes to condensed financial statements.

A.P. Pharma, Inc.
Notes to Condensed Financial Statements
(unaudited)

(1) BUSINESS AND BASIS OF PRESENTATION

A.P. Pharma, Inc. (the “Company,” “we,” “us” and “our”) is a specialty pharmaceutical company developing products using its proprietary Biochronomer™ polymer-based drug delivery platform. This drug delivery platform is designed to improve the therapeutic profile of injectable pharmaceuticals by converting them from products that must be injected once or twice per day to products that need to be injected only once every one or two weeks.

The Company’s lead product candidate, APF530, is being developed for the prevention of both acute- and delayed-onset chemotherapy-induced nausea and vomiting (CINV). One of the most debilitating side effects of cancer chemotherapy, CINV is a leading cause of premature discontinuation of treatment. There is only one injectable 5-HT3 antagonist approved for the prevention of delayed-onset CINV, so this indication represents an area of particular unmet medical need. 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. This five-day range is designed to cover the delayed phase of CINV, whereas currently available intravenous and oral formulations of granisetron are approved only for the prevention of acute-onset CINV. Granisetron was selected for APF530 because it is widely prescribed by physicians based on a well-established record of safety and efficacy.

In May 2009, we filed a New Drug Application (NDA) with the U.S. Food and Drug Administration (FDA) seeking approval for APF530. The FDA issued a Complete Response Letter for APF530 in March 2010. We have been working to address the issues raised by the FDA and met with the FDA in February and March 2011 to clarify the work needed to resubmit the NDA. Based on our discussions with the FDA and our assessment of the work remaining, we plan to resubmit our NDA to the FDA in September 2012.

We own worldwide rights to APF530 and are in the early stages of building the commercial infrastructure necessary to commercialize APF530 in the U.S. on our own. We are seeking corporate partners to commercialize APF530 in markets outside of the U.S.

The accompanying unaudited condensed financial statements have been prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP) for interim financial information and with the instructions to Form 10-Q and Article 8 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. All adjustments (all of which are of a normal recurring nature) considered necessary for a fair presentation have been included. We have evaluated subsequent events through the date that these financial statements were issued. Operating results for the three and six months ended June 30, 2012 are not necessarily indicative of the results that may be expected for the year ending December 31, 2012 or for any other period. The condensed balance sheet as of December 31, 2011 has been derived from the audited financial statements as of that date, but it does not include all of the information and notes required by U.S. GAAP. These unaudited condensed financial statements and the notes thereto should be read in conjunction with the audited financial statements and notes thereto, included in our Annual Report on Form 10-K for the year ended December 31, 2011 filed with the Securities and Exchange Commission (SEC) on March 26, 2012 (2011 10-K).

Liquidity

We have incurred significant operating losses and negative cash flows from operations and have an accumulated deficit of \$169.7 million as of June 30, 2012. During 2011, we entered into two financing agreements, which provided us capital to fund operations. In April 2011, we entered into definitive agreements for a convertible note financing, which served as a bridge loan to fund the Company’s operations until additional financing was secured. The initial cash received from the bridge loan financing was approximately \$1.3 million, net of issuance costs. In June 2011, we entered into definitive agreements for a private placement of units, which comprised of common stock and warrants. The unit financing, which closed in July 2011, provided the Company with approximately \$22.8 million of proceeds, net of issuance costs. In May 2012, we received \$3.0 million of cash through the issuance of additional convertible notes as a result of the purchasers who participated in the April 2011 convertible note financing exercising their rights to purchase

A.P. Pharma, Inc.
Notes to Condensed Financial Statements—(Continued)
(unaudited)

additional convertible notes. As of June 30, 2012, we had cash and cash equivalents of \$12.4 million. In July 2012, the Company closed a common stock financing whereby the Company received approximately \$53.6 million of proceeds, prior to deducting issuance costs (See Note 11). The Company believes that its current capital is sufficient to fund its planned operations through the anticipated product launch of APF530 in 2013.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. GAAP requires our management to make estimates and assumptions about future events that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ materially from those estimates. We evaluate our critical accounting policies and estimates on an ongoing basis. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. Our critical accounting policies and estimates are discussed in our 2011 10-K.

Recent Accounting Pronouncements

There have been no recent accounting pronouncements or changes in accounting pronouncements during the six months ended June 30, 2012, as compared to the recent accounting pronouncements described in our 2011 10-K, that are of significance, or potential significance to us.

(2) CASH EQUIVALENTS

Our available-for-sale securities as of June 30, 2012 and December 31, 2011 consisted of money market funds primarily containing U.S. government-backed securities, with original maturities of ninety days or less. The carrying value of our money market funds is included in cash equivalents and approximates their fair value. The Company's bank accounts have been placed under a control agreement in accordance with the April 2011 convertible note financing (see Note 9).

(3) FAIR VALUE MEASUREMENTS

The three-tier fair value hierarchy utilized prioritizes the inputs used in measuring fair value as follows: Level 1) observable inputs such as quoted prices in active markets; Level 2) inputs other than the quoted prices in active markets that are observable either directly or indirectly; and Level 3) unobservable inputs in which there is little or no market data, which require us to develop our own assumptions. The hierarchy requires us to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. On a recurring basis, we measure our available-for-sale securities at fair value. We used quoted prices in active markets (Level 1) to measure the fair value of our cash equivalents on our Condensed Balance Sheets as of June 30, 2012 and December 31, 2011. Cash equivalents consist of highly rated money market funds with maturities of ninety days or less. Due to the high ratings and short-term nature of these funds, we consider the inputs used to value all cash equivalents as Level 1 inputs.

(4) NET LOSS PER SHARE

Basic and diluted net loss per share is computed by dividing net loss by the weighted average number of common shares outstanding for the applicable period. Diluted net loss per share excludes the effect of outstanding potentially dilutive securities because they are anti-dilutive. The following table shows the outstanding potentially dilutive options, unvested restricted stock awards, warrants and convertible notes for the six months ended June 30, 2012 and 2011 (in thousands):

	Six Months Ended June 30,	
	2012	2011
Options outstanding	63,662	2,139
Warrants outstanding	83,977	3,977
Common stock underlying convertible notes outstanding	115,520	37,500

A.P. Pharma, Inc.
Notes to Condensed Financial Statements—(Continued)
(unaudited)

(5) STOCK-BASED COMPENSATION

The following table summarizes the stock-based compensation expense for all awards (in thousands, except per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
Operating expenses:				
Research and development	\$ 360	\$ 73	\$ 664	\$ 148
General and administrative	655	33	1,129	197
Total stock-based compensation expense	<u>\$ 1,015</u>	<u>\$ 106</u>	<u>\$ 1,793</u>	<u>\$ 345</u>
Impact on basic and diluted net loss per common share	<u>\$ 0.01</u>	<u>\$ —</u>	<u>\$ 0.01</u>	<u>\$ 0.01</u>

The following table summarizes stock option activity for the six months ended June 30, 2012:

	Shares (in thousands)	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (Years)
Outstanding at January 1, 2012	50,106	\$ 0.31	9.42
Granted	14,650	\$ 0.56	
Exercised	—		
Expired and forfeited	(1,094)	\$ 0.81	
Outstanding at June 30, 2012	<u>63,662</u>	\$ 0.36	8.34

Employee Stock Purchase Plan

We adopted an Employee Stock Purchase Plan (Purchase Plan) in 1997. Qualified employees may elect to have a certain percentage of their salary withheld to purchase shares of our common stock under the Purchase Plan. In June 2011, our stockholders authorized an increase in the number of shares reserved for issuance under the Purchase Plan by 500,000, for a total of 1,000,000 shares reserved at June 30, 2012. The purchase price per share is equal to 85% of the fair market value of the stock on specified dates. Sales under the Purchase Plan during the six months ended June 30, 2012 and 2011 consisted of 58,571 and 49,486 shares at an average price of \$0.21 and \$0.20, respectively. Shares available for future purchase under the Purchase Plan were 472,605 at June 30, 2012.

(6) COMPREHENSIVE LOSS

Comprehensive loss for the periods reported was comprised solely of our net loss. The comprehensive loss for the three and six months ended June 30, 2012 was \$4.6 million and \$9.5 million, respectively. The comprehensive loss for the three and six months ended June 30, 2011 was \$1.9 million and \$3.4 million, respectively. There were no other changes in equity that were excluded from our net loss for all periods.

A.P. Pharma, Inc.
Notes to Condensed Financial Statements—(Continued)
(unaudited)

(7) DISCONTINUED OPERATIONS***Cosmeceutical and Toiletry Business***

On July 25, 2000, we completed the sale of certain technology rights for our cosmeceutical and toiletry business to RP Scherer Corporation (RP Scherer), a subsidiary of Cardinal Health, Inc. Under the terms of the agreement with RP Scherer, we guaranteed a minimum gross profit percentage on RP Scherer's combined sales of products to Ortho Dermatologics (Ortho) and Dermik Laboratories, Inc. (Dermik) (Gross Profit Guaranty). In July 2011, Valeant Pharmaceuticals announced that it was acquiring both Ortho and Dermik. The guaranty period initially commenced on July 1, 2000 and was to end on the earlier of: (i) July 1, 2010; or (ii) the end of two consecutive guaranty periods where the combined gross profit on sales to Ortho and Dermik equaled or exceeded the guaranteed gross profit (Two Period Test). The Gross Profit Guaranty expense totaled \$944,000 for the first seven guaranty years and in those years profits did not meet the Two Period Test. Effective March 2007, in conjunction with a sale of assets by RP Scherer's successor company to an Amcol International subsidiary (Amcol), a new agreement was signed between us and Amcol, in order to provide continuity of product supply to Ortho and Dermik. This new agreement potentially extends the Gross Profit Guaranty period an additional three years to July 1, 2013, unless it is terminated earlier with the Two Period Test. Amcol has indicated that its costs to produce the products differ from those it historically charged to the RP Scherer successor company. We have requested documentation from Amcol to substantiate actual costs. Until we receive confirmation of these amounts, we have accrued the full amount Amcol represents it is currently owed. As there is no minimum amount of Gross Profit Guaranty due, no accrual for the guaranty is estimable for future years. A liability of \$1.2 million related to the current amount due under the Gross Profit Guaranty is recorded as accrued disposition costs on our Condensed Balance Sheet as of June 30, 2012. To date, we have not paid this amount, due to our inability to substantiate the amounts claimed by Amcol. As of the date of filing of this report, our dispute with Amcol over the Gross Profit Guaranty has been submitted to an independent accountant for resolution.

The cosmeceutical and toiletry business is reported as discontinued operations for all periods presented in our accompanying Condensed Statements of Operations.

Loss from discontinued operations primarily represents the loss attributable to changes in estimates of our cosmeceutical and toiletry business that was sold to RP Scherer on July 25, 2000, as follows (in thousands):

	<u>Three Months Ended</u> <u>June 30,</u>		<u>Six Months Ended</u> <u>June 30,</u>	
	<u>2012</u>	<u>2011</u>	<u>2012</u>	<u>2011</u>
<u>Cosmeceutical and Toiletry Business</u>				
Change in estimates for gross profit guarantees	<u>\$ (43)</u>	<u>\$ (129)</u>	<u>\$ (134)</u>	<u>\$ (232)</u>

There was no material basic and diluted loss per common share resulting from discontinued operations for the three and six months ended June 30, 2012 and 2011.

(8) SIGNIFICANT AGREEMENTS***Merial Limited***

In September 2009, we entered into a world-wide license and development agreement with Merial Limited (Merial), a leading animal health company, for a long-acting pain management product for cats and dogs. Under the terms of the agreement, we received a nonrefundable upfront license fee and would receive development funding and potential future milestones, in addition to royalties following commercialization. Under the license and development agreement, we were obligated to perform reimbursable development services and provide any improvements related to the licensed technology during the six-year development period. We recognized the upfront license fee ratably over the development period, and recognized revenue from the development services when the services were rendered.

A.P. Pharma, Inc.
Notes to Condensed Financial Statements—(Continued)
(unaudited)

In May 2011, we received notice of termination from Merial due to their concerns about the commercial potential of the product under development in the animal health market. We recognized \$0.0 and \$0.1 million of revenue related to development services provided to Merial in the three months ended June 30, 2012 and 2011, respectively, and \$0.0 and \$0.5 million of revenue for the six months ended June 30, 2012 and 2011, respectively. The remaining balance of deferred revenue related to the upfront license fee of \$0.1 million was recognized as revenue in the quarter ended June 30, 2011, upon termination of the licensing agreement by Merial.

(9) CONVERTIBLE NOTES TO RELATED PARTIES

In April 2011, we entered into a Securities Purchase Agreement (Purchase Agreement) with certain institutional investors (Purchasers), including a fund affiliated with Kevin C. Tang, who is one of our directors, for a private placement of up to \$4.5 million in Senior Secured Convertible Notes due 2021 (Notes). The Purchase Agreement provided for the Purchasers to purchase \$1.5 million aggregate principal amount of Notes at the initial closing. Pursuant to the Purchase Agreement, the Purchasers had the option to purchase an additional \$3.0 million aggregate principal amount of Notes at any time until May 2, 2013 (Purchase Option). The Notes are convertible into shares of the Company's common stock at a rate of 25,000 shares for every \$1,000 of principal and accrued interest due under the Notes (Conversion Shares).

The cash received from the initial closing of the Note financing, which resulted in the issuance of \$1.5 million aggregate principal amount of Notes, was approximately \$1.3 million, net of issuance costs. In May 2012, the Purchasers exercised their Purchase Option, and we received \$3.0 million of cash through the issuance of the remaining \$3.0 million aggregate principal amount of Notes. As a result of the exercise of the Purchase Option, the Purchasers have purchased the full amount of Notes that the Company was obligated to sell under the Purchase Agreement. If the \$4.5 million principal amount of Notes are converted, the Company would issue 112.5 million shares of its common stock.

The Notes are secured by substantially all of the assets of the Company, including placing our bank accounts under a control agreement. The Notes initially bore interest at 20% per annum, payable quarterly in cash or in additional principal amount of Notes at the election of the Purchasers. In June 2011, the Notes were amended to reduce the interest rate to 6% per annum effective July 1, 2011. The Notes mature on May 2, 2021; however, the holders of the Notes may require prepayment of the Notes at any time beginning on or after May 2, 2012, at each holder's option.

There is no right to convert the Notes to the extent that, after giving effect to such conversion, the holder would beneficially own in excess of 9.99% of the Company's outstanding common stock. Each holder of the Notes can increase or decrease this beneficial ownership conversion limit by written notice to the Company, which will not be effective until 61 days after delivery of the notice.

The Company is in compliance with all debt-related covenants at June 30, 2012. Upon the occurrence of an event of default under the Notes, the holders of the Notes have the right to require the Company to redeem all or a portion of their Notes.

Pursuant to the Purchase Agreement, the Company agreed to file a registration statement registering the Conversion Shares for resale. In May 2011, the Company filed a registration statement on Form S-1 registering these shares for resale. The registration statement was declared effective on July 29, 2011. For the Notes issued in May 2012, the Purchasers have agreed to waive their right to require the Company to register the shares underlying the additional Notes until they provide notice otherwise.

Concurrent with the approval of the offer and sale of the Notes, our board of directors approved the termination of the Company's Preferred Shares Rights Agreement (Rights Agreement), effective immediately prior to the Purchase Agreement's initial closing date. Under the Rights Agreement, preferred stock purchase rights were distributed to stockholders of record as of January 2, 2007 and to each person who acquires the Company's common stock thereafter. The rights were exercisable only upon the acquisition, or the acquisition of the right to acquire, by a person or group of affiliated or associated persons, of 20% or more (34% for Tang Capital Partners, LP and 30% for Baker Brothers Investments) of the outstanding shares of the Company's common stock. These rights were terminated as a result of the termination of the Rights Agreement. The Rights Agreement had not been triggered as of that date.

The Notes contain an embedded conversion feature that was in-the-money on both issuance dates. Based on an effective fixed conversion rate of 25,000 shares for every \$1,000 of principal and accrued interest due under the Notes, the total

A.P. Pharma, Inc.
Notes to Condensed Financial Statements—(Continued)
(unaudited)

conversion benefit at issuance exceeded the loan proceeds. Therefore, a full debt discount was recorded in an amount equal to the face value of the Notes on the issuance dates, and the Company began amortizing the resultant debt discount over the respective 10-year or remaining term of the Notes. During the three and six months ended June 30, 2012, accrued interest of approximately \$24,000 and \$48,000 was paid-in-kind and rolled into the principal balance of the Notes, which resulted in an additional full debt discount for the respective periods. For the three and six months ended June 30, 2012, interest expense relating to the stated rate of the Notes was approximately \$51,000 and \$75,000, respectively. Interest expense relating to the amortization of debt discount for the three and six months ended June 30, 2012 was approximately \$96,000 and \$136,000, respectively.

As of June 30, 2012, the carrying value of the Notes was approximately \$239,000, which is comprised of the \$4,621,000 principal amount of the Notes outstanding, less debt discount of \$4,381,000. Accrued interest on the principal balance was \$51,000 at June 30, 2012.

(10) STOCKHOLDERS' EQUITY

Amendments to Articles of Incorporation

In June 2011, we amended our certificate of incorporation to increase the number of shares of authorized common stock to 1,500,000,000, par value \$0.01 per share. Prior to the amendment, the number of shares of authorized common stock was 100,000,000, par value \$0.01 per share. The certificate of amendment was approved by a majority of our stockholders on June 29, 2011.

Stock Plans

At our annual meeting in June 2011, our stockholders approved an amendment to our 2007 Equity Incentive Plan to increase the maximum number of shares of common stock available for grant by 90,000,000 shares of common stock, resulting in an aggregate of 95,000,000 shares of common stock authorized for issuance pursuant to awards granted under our 2007 Equity Incentive Plan. The stockholders also approved an amendment to our 1997 Employee Stock Purchase Plan to increase the number of shares of common stock reserved for issuance under the plan by 500,000, for a total of 1,000,000 shares reserved as of June 30, 2012.

Private Placement

In June 2011, the Company entered into a securities purchase agreement with certain purchasers (Securities Purchase Agreement), pursuant to which the Company agreed to sell for an aggregate price of \$24.0 million, 160,000,006 shares of its common stock (Shares) and warrants to purchase 80,000,005 shares of its common stock (Warrants) at an exercise price of \$0.18 per share (Private Placement). The Private Placement closed on July 1, 2011. For each Share purchased, the investors received one Warrant to purchase 0.5 shares of common stock (together with a Share, a Unit), at a purchase price of \$0.15 per Unit. The Warrants were immediately exercisable and expire on the fifth anniversary of the closing date of July 1, 2011. The Warrants may be exercised for cash only or, if a registration statement is not then effective and available for the resale of the shares of common stock issuable upon exercise of the Warrants, by surrender of such Warrant, or a portion of such Warrant, by way of cashless exercise. There is no right to exercise the Warrants to the extent that after giving effect to such exercise the holder would beneficially own in excess of 9.99% of our outstanding shares of common stock (or such other limit as may be designated by any particular purchaser). Each holder of the Warrants can amend or waive the foregoing limitation by written notice to the Company, with such waiver taking effect only upon the expiration of a 61-day notice period.

Under the terms of the Securities Purchase Agreement, on July 29, 2011, the Company filed a registration statement with the SEC to register for resale the Shares and the shares of common stock issuable upon the exercise of the Warrants (collectively, the Registrable Securities). The registration statement was declared effective on August 4, 2011. If the Company fails to keep the registration statement continuously effective for a designated time (with limited exceptions), the Company may be obligated to pay to the holders of the Registrable Securities liquidated damages in an amount equal to 1.0% per month of such holder's pro rata interest in the total purchase price of the Private Placement.

The Company received advance proceeds of approximately \$20.3 million as of June 30, 2011. The remaining \$3.7 million was received in July 2011 when the Private Placement closed. Total proceeds were recorded net of issuance costs of approximately \$1.2 million. The Shares and Warrants were recorded as equity at their fair values on the issuance date.

A.P. Pharma, Inc.
Notes to Condensed Financial Statements—(Continued)
(unaudited)

(11) SUBSEQUENT EVENTS

On July 25, 2012, the Company entered into a securities purchase agreement with certain purchasers, pursuant to which the Company agreed to sell 102,000,000 shares of its common stock for an aggregate price of approximately \$53.6 million, at a purchase price of \$0.525 per share of common stock (2012 Private Placement). The 2012 Private Placement closed on July 30, 2012. The proceeds to the Company from the offering, net of selling commissions, were approximately \$50.7 million.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Forward-looking Statements

This Form 10-Q 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: the progress of our research, development and clinical programs; the possibility that the FDA will require us to take additional steps before resubmitting our NDA for APF530, which will require substantial time and expense on our part; the timing of regulatory approval and commercial introduction of APF530 and future product candidates; our ability to market, commercialize and achieve market acceptance for APF530 or other future product candidates; our ability to establish collaborations for our technology, APF530 and other future product candidates; our estimates for future performance; our estimates regarding our capital requirements and our needs for additional financing; our ability to protect or enforce our intellectual property rights; volatility in the trading price or our common stock; and other risks and uncertainties identified in our 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.

Overview

We are a specialty pharmaceutical company developing products using our proprietary Biochronomer™ polymer-based drug delivery platform. This drug delivery platform is designed to improve the therapeutic profile of injectable pharmaceuticals by converting them from products that must be injected once or twice per day to products that need to be injected only once every one or two weeks.

The Company’s lead product candidate, APF530, is being developed for the prevention of both acute- and delayed-onset chemotherapy-induced nausea and vomiting (CINV). One of the most debilitating side effects of cancer chemotherapy, CINV is a leading cause of premature discontinuation of treatment. There is only one injectable 5-HT3 antagonist approved for the prevention of delayed-onset CINV, so this indication represents an area of particular unmet medical need. 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. This five-day range is designed to cover the delayed phase of CINV, whereas currently available intravenous and oral formulations of granisetron are approved only for the prevention of acute-onset CINV. Granisetron was selected for APF530 because it is widely prescribed by physicians based on a well-established record of safety and efficacy.

In May 2009, we filed a New Drug Application (NDA) with the U.S. Food and Drug Administration (FDA) seeking approval for APF530. The FDA issued a Complete Response Letter for APF530 in March 2010. We have been working to address the issues raised by the FDA and met with the FDA in February and March 2011 to clarify the work needed to resubmit the NDA. Based on our discussions with the FDA and our assessment of the work remaining, we plan to resubmit our NDA to the FDA in September 2012.

We own worldwide rights to APF530 and are in the early stages of building the commercial infrastructure necessary to commercialize APF530 in the U.S. on our own. We are seeking corporate partners to commercialize APF530 in markets outside of the U.S.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in accordance with U.S. generally accepted accounting principles, which requires management to make estimates and assumptions. Management bases these estimates and assumptions on historical results and known trends as well as management forecasts. Actual results could differ from these estimates and assumptions. See our Annual Report on Form 10-K for the year ended December 31, 2011 (2011 10-K), Part II, Item 7 — “Management’s Discussion and Analysis of Financial Condition and Results of Operations-Critical Accounting Policies and Estimates.”

Recent Accounting Pronouncements

There have been no recent accounting pronouncements or changes in accounting pronouncements during the six months ended June 30, 2012, as compared to the recent accounting pronouncements described in our 2011 10-K, that are of significance, or potential significance to us.

Results of Operations for the Three and Six Months Ended June 30, 2012 and 2011

Contract revenue, which is derived from work performed under collaborative research and development arrangements, was \$0 for both the three and six months ended June 30, 2012, and \$0.3 million and \$0.6 million for the three and six months ended June 30, 2011, respectively. All of our contract revenue for the three and six months ended June 30, 2011 was derived from an agreement with Merial Limited (Merial) that we entered into in September 2009 for a long-acting pain management product for companion animals. In May 2011, we received notice of termination from Merial, as they did not see the commercial potential of the product under development in the animal health market.

Our research and development costs consist primarily of employee salaries and other personnel-related expenses, facility-related expenses, laboratory consumables, development manufacturing, and clinical and pre-clinical related services performed by clinical research organizations, research institutions and other outside service providers.

Research and development expenses under collaborative agreements approximate the revenue recognized, excluding milestone and up-front payments received under such arrangements.

Research and development expense for the three months ended June 30, 2012 increased by \$1.8 million to \$3.1 million, from \$1.3 million for the three months ended June 30, 2011. Research and development expense for the six months ended June 30, 2012 increased by \$4.0 million to \$6.4 million, from \$2.4 million for the six months ended June 30, 2011. Compared to the prior year periods, headcount-related costs, including stock compensation expense, and project spending for APF530 were higher in the current year periods, as we worked to address the issues raised by the FDA in the Complete Response Letter. Research and development expense for the year 2012 is expected to be higher as compared to 2011 due to project-related expenses and additional resources required for the NDA resubmission.

Our general and administrative costs consist of salaries and related expenses, professional fees, directors' fees, investor relations costs, insurance expense and related overhead cost allocation.

General and administrative expense for the three months ended June 30, 2012 increased by \$0.8 million to \$1.3 million, from \$0.5 million for the three months ended June 30, 2011. General and administrative expense for the six months ended June 30, 2012 increased by \$1.7 million to \$2.8 million, from \$1.1 million for the six months ended June 30, 2011. The increase in the current fiscal periods was primarily due to higher stock compensation expense, consulting costs and professional fees. General and administrative expense for the year 2012 is expected to be higher as compared to 2011 due to increased support activities related to the NDA resubmission.

Interest expense, net was \$0.1 million and \$0.3 million for the three months ended June 30, 2012 and 2011, respectively. Interest expense, net was \$0.2 million and \$0.3 million for the six months ended June 30, 2012 and 2011, respectively. Interest expense, net consists primarily of interest expense and amortization of debt discount related to the convertible note financing. In the prior fiscal periods, interest expense also included debt issuance costs related to the convertible note financing.

Loss from discontinued operations represents the loss attributable to the gross profit guaranty associated with the sale of our cosmeceutical and toiletry business. The loss from discontinued operations was \$0.0 million and \$0.1 million for the three months ended June 30, 2012 and 2011, respectively. The loss from discontinued operations was \$0.1 million and \$0.2 million for the six months ended June 30, 2012 and 2011, respectively. See Note 7 of Notes to Condensed Financial Statements included in Item 1 of this Quarterly Report on Form 10-Q for additional information.

Capital Resources and Liquidity

We had cash and cash equivalents of \$12.4 million at June 30, 2012. Cash and cash equivalents decreased by \$5.5 million from December 31, 2011 to June 30, 2012, due primarily to cash used in operations and equipment purchases, which was partially offset by \$3.0 million of cash proceeds received in May 2012 for the issuance of additional convertible notes resulting from the exercise of purchase rights by note holders.

Net cash used in operating activities for the six months ended June 30, 2012 was \$8.1 million, compared to net cash used in operating activities of \$2.6 million for the six months ended June 30, 2011. The \$5.5 million increase in net cash used was primarily due to the increase in operating loss.

Net cash used in investing activities for the six months ended June 30, 2012 was \$0.5 million, which was used for purchases of property and equipment. Net cash used in investing activities for the six months ended June 30, 2011 was \$0.0 million.

[Table of Contents](#)

Net cash provided by financing activities for the six months ended June 30, 2012 was \$3.0 million compared to \$21.8 million in the six months ended June 30, 2011. The decrease of \$18.8 million was due to \$21.8 million in proceeds received in the prior year from the convertible note financing that closed in April of 2011 and the advance receipt of proceeds from the June 2011 private placement, which was partially offset by the \$3.0 million of proceeds from the issuance of convertible notes in the current fiscal year.

Historically, we have financed our operations, including technology and product research and development, primarily through sales of our common stock and other securities, royalties received on sales of Retin-A Micro and Carac, the sale of our rights to royalties on sales of Retin-A Micro and Carac, income from collaborative research and development fees, proceeds received from the sales of our Analytical Standards division and our cosmeceutical and toiletry business and interest earned on short-term investments.

In April 2011, we entered into definitive agreements for a convertible note financing of up to \$4.5 million, which served as a bridge loan to fund the Company's operations until additional financing was secured. The initial funding from the bridge loan was approximately \$1.3 million, net of issuance costs, whereby \$1.5 million aggregate principal amount of convertible notes was issued. In May 2012, the purchasers exercised their rights to purchase the remaining \$3.0 million aggregate principal amount of convertible notes, and we received the additional \$3.0 million of proceeds.

In June 2011, we entered into definitive agreements for a private placement of units comprised of common stock and warrants, for which we received advance proceeds of \$20.3 million as of June 30, 2011. The financing closed in July 2011, at which time the remaining \$3.7 million was received.

In July 2012, we closed a common stock financing whereby the Company received approximately \$53.6 million of proceeds, prior to deducting issuance costs (see Note 11 of Notes to Condensed Financial Statements included in Item 1 of this Quarterly Report on Form 10-Q).

We believe that our current cash resources are sufficient to fund planned operations through the anticipated product launch of APF530 in 2013.

In May 2009, we filed a New Drug Application (NDA) with the U.S. Food and Drug Administration (FDA) seeking approval for APF530. The FDA issued a Complete Response Letter for APF530 in March 2010. We have been working to address the issues raised by the FDA and met with the FDA in February and March 2011 to clarify the work needed to resubmit the NDA. Based on our discussions with the FDA and our assessment of the work remaining, we plan to resubmit our NDA to the FDA in September 2012. We own worldwide rights to APF530 and are in the early stages of building the commercial infrastructure necessary to commercialize APF530 in the U.S. on our own. We are seeking corporate partners to commercialize APF530 in markets outside of the U.S.

Our capital requirements going forward will depend on numerous factors including: the timing of and cost that will be required to launch APF530, if approved; the number and characteristics of product development programs we pursue and the pace of each program; the scope, rate of progress, results and costs of preclinical testing and clinical trials; the time, cost and outcome involved in seeking regulatory approvals; scientific progress in our research and development programs; the magnitude and scope of our research and development programs; our ability to establish and maintain strategic collaborations or partnerships for research, development, clinical testing; manufacturing and marketing of our product candidates; the cost and timing of establishing sales, marketing and distribution capabilities for a specialty sales force if we commercialize any products independently; the cost of establishing clinical and commercial supplies of our product candidates and any products that we may develop; and general market conditions.

We may not be able to raise sufficient additional capital when we need it or to raise capital on favorable terms. The sale of additional equity in the future may be dilutive to our stockholders. If we are unable to obtain adequate funds on reasonable terms, we may be required to curtail operations significantly or to obtain funds by entering into financing, supply or collaboration agreements on unattractive terms.

[Table of Contents](#)

Contractual Obligations

Below is a summary of fixed payments related to certain contractual obligations (in millions), consisting solely of our operating lease obligations. This table excludes amounts already recorded on our balance sheet as current liabilities as of June 30, 2012.

	<u>Total</u>	<u>Less than 1 year</u>	<u>2 to 3 years</u>	<u>4 to 5 years</u>	<u>More than 5 years</u>
Other operating leases	<u>\$3.3</u>	<u>\$ 0.7</u>	<u>\$1.5</u>	<u>\$1.1</u>	<u>\$ —</u>

Under the terms of the agreement with RP Scherer, we guaranteed a minimum gross profit percentage on RP Scherer's combined sales of products to Ortho and Dermik. See Note 7 of Notes to Condensed Financial Statements included in Item 1 of this Quarterly Report on Form 10-Q.

The holders of the convertible notes issued in May 2011 and May 2012 may require prepayment of the Notes at any time beginning on or after May 2, 2012 at each holder's option. See Note 9 of Notes to Condensed Financial Statements included in Item 1 of this Quarterly Report on Form 10-Q.

Off-Balance Sheet Arrangements

As of June 30, 2012 we did not have any off-balance sheet arrangements.

[Table of Contents](#)

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Not applicable.

Item 4. Controls and Procedures

Evaluation of disclosure controls and procedures: We carried out an evaluation, under the supervision and with the participation of our management, including John B. Whelan, who serves as both our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures as defined in Rule 13a-15(e) and 15(d)-15(e) of the Securities and Exchange Act of 1934. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that as of June 30, 2012, the end of period covered by this report, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in internal controls: During the three months ended June 30, 2012, there have been no significant changes in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

Not applicable.

Item 1A. Risk Factors

Please see the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2011 (the "Annual Report"). The risk factors set forth in the Annual Report, along with those risks described above under "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere herein should be reviewed carefully, in conjunction with the other information contained in this Form 10-Q and our financial statements. These factors, among others, could cause actual results to differ materially from those currently anticipated and contained in forward-looking statements made in this Form 10-Q and presented elsewhere by our management from time to time. See the discussion of forward-looking statements in Part I, Item 2—"Management's Discussion and Analysis of Financial Condition and Results of Operations."

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Not applicable.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

Exhibit 10.1 - Securities Purchase Agreement, dated July 25, 2012, among A.P. Pharma, Inc. and the purchasers named therein. (1)

Exhibit 10.2 - Registration Rights Agreement, dated July 25, 2012, among A.P. Pharma, Inc. and the purchasers named therein. (1)

Exhibit 31.1 - Certification of Chief Executive Officer pursuant to Rule 13a-14(a) promulgated under the Securities Exchange Act of 1934 as amended.

Exhibit 31.2 - Certification of Chief Financial Officer pursuant to Rule 13a-14(a) promulgated under the Securities Exchange Act of 1934 as amended.

[Table of Contents](#)

Exhibit 32.1 - Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Exhibit 32.2 - Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Exhibit 101.INS† XBRL Instance Document

Exhibit 101.SCH† XBRL Taxonomy Extension Schema Document

Exhibit 101.CAL† XBRL Taxonomy Extension Calculation Linkbase Document

Exhibit 101.DEF† XBRL Extension Definition

Exhibit 101.LAB† XBRL Taxonomy Extension Label Linkbase Document

Exhibit 101.PRE† XBRL Taxonomy Extension Presentation Linkbase Document

† XBRL information is furnished and not filed or a part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Exchange Act of 1933, as amended, is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

(1) Previously filed with the Company's Current Report on Form 8-K, filed July 25, 2012 and incorporated by reference herein.

SIGNATURES

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 thereunto duly authorized.

A.P. PHARMA, INC.

/s/ JOHN B. WHELAN

John B. Whelan
President, Chief Executive Officer and Chief Financial Officer

Date: August 9, 2012

SECTION 302 CERTIFICATIONS

I, John B. Whelan, Chief Executive Officer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of A.P. Pharma, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant is made known to us by others, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 9, 2012

/s/ John B. Whelan

John B. Whelan
Chief Executive Officer

SECTION 302 CERTIFICATIONS

I, John B. Whelan, Chief Financial Officer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of A.P. Pharma, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant is made known to us by others, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 9, 2012

/s/ John B. Whelan

John B. Whelan

Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of A.P. Pharma, Inc. (the "Company") on Form 10-Q for the period ending June 30, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John B. Whelan, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 9, 2012

/s/ John B. Whelan

John B. Whelan
Chief Executive Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of A.P. Pharma, Inc. (the "Company") on Form 10-Q for the period ending June 30, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John B. Whelan, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 9, 2012

/s/ John B. Whelan

John B. Whelan
Chief Financial Officer