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

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

A.P. PHARMA, INC. (Name of Issuer)

COMMON STOCK (Title of Class of Securities)

00202J203 (CUSIP Number)

JULY 1, 2011

(Date of Event Which Requires Filing of this Statement)

| Check  | the a | ppropriate | box | to | designate | the | ru⊥e | pursuant | to | which | this | Schedule |
|--------|-------|------------|-----|----|-----------|-----|------|----------|----|-------|------|----------|
| is fil | ed:   |            |     |    |           |     |      |          |    |       |      |          |
|        |       |            |     |    |           |     |      |          |    |       |      |          |
| [X]    | Rule  | 13d-1(b)   |     |    |           |     |      |          |    |       |      |          |
| [_]    | Rule  | 13d-1(c)   |     |    |           |     |      |          |    |       |      |          |
| [_]    | Rule  | 13d-1(d)   |     |    |           |     |      |          |    |       |      |          |

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

PERSONS WHO ARE TO RESPOND TO THE COLLECTION OF INFORMATION CONTAINED IN THIS FORM ARE NOT REQUIRED TO RESPOND UNLESS THE FORM DISPLAYS A CURRENTLY VALID OMB CONTROL NUMBER.

SEC 1745 (12-02)

**BENEFICIALLY** 

| CUSIP No.    | 00202J203   | 13G                             | Page 2 of 7 Pages  |
|--------------|---|---------------------------------|--------------------|
|              | 1. NAMES OF REPORTING PERSON I.R.S. IDENTIFICATION NO. OF PERCEPTIVE ADVISORS LLC | S ABOVE PERSONS (ENTITIES ONLY) |                    |
|              | 2. CHECK THE APPROPRIATE BOX  | ( IF A GROUP*                   | (a) [ ]<br>(b) [ ] |
|              | 3. SEC USE ONLY   |                                 |                    |
|              | 4. CITIZENSHIP OR PLACE OF O  |                                 |                    |
| NUMBE<br>SHA |   | IG POWER                        | 0                  |

| OWNED BY  | 6. SHARED VOTING POWER                                   | 26,666,667* |  |  |  |
|---|--|-------------|--|--|--|
| EACH<br>REPORTING   | 7. SOLE DISPOSITIVE POWER                                | 0           |  |  |  |
| PERSON WITH:  | 8. SHARED DISPOSTIVE POWER                               | 26,666,667* |  |  |  |
| 9. AGGRI  | EGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | 26,666,667* |  |  |  |
|   |  |             |  |  |  |
| 10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) [ ] |  |             |  |  |  |
|   |  |             |  |  |  |
| 11. PER   | CENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)           | 13.3%*      |  |  |  |
| 12. TYPI  | E OF REPORTING PERSON (SEE INSTRUCTIONS)                 | IA          |  |  |  |

| CUSIP No. 0       | 0202J203   | 136                             | Page 3 of 7 Pages  |
|-------------------|--|---------------------------------|--------------------|
| I.R.              | 3. NAMES OF REPORTING PERSONS<br>S. IDENTIFICATION NO. OF ABOVE F<br>OSEPH EDELMAN | PERSONS (ENTITIES ONLY)         |                    |
| 1                 | 4. CHECK THE APPROPRIATE BOX IF  | A GROUP*                        | (a) [ ]<br>(b) [ ] |
| 1                 | 5. SEC USE ONLY  |                                 |                    |
|                   | 6. CITIZENSHIP OR PLACE OF ORGAN   | NIZATION                        |                    |
| NUMBER<br>SHARE   |  | )WER                            | 0                  |
| BENEFICI<br>OWNED |  | POWER                           | 26,666,667*        |
| EACH<br>REPORTI   |  | IVE POWER                       | 0                  |
| PERSON W          | ITH: 20. SHARED DISPOST  | TIVE POWER                      | 26,666,667*        |
| 2                 | 1. AGGREGATE AMOUNT BENEFICIALLY   | OWNED BY EACH REPORTING PERSO   | N 26,666,667*      |
| 22.               | CHECK BOX IF THE AGGREGATE AMOU  | UNT IN ROW (9) EXCLUDES CERTAIN | SHARES             |
| 2                 | 3. PERCENT OF CLASS REPRESENTED  | ` '                             | 13.3%*             |
| 2                 | 4. TYPE OF REPORTING PERSON (SEE   | INSTRUCTIONS)                   | IN                 |

TTEM 1.

(a) Name of Issuer: A.P. PHARMA, INC.

123 SAGINAW DRIVE

(b) Address of Issuer's Principal Executive Offices: REDWOOD CITY, CA 94063

ITEM 2.

THIS SCHEDULE 13G (THE "SCHEDULE") IS BEING FILED (a) Name of Person Filing: WITH RESPECT TO SHARES OF COMMON STOCK (AS OF A.P. PHARMA, INC. (THE ARE BENEFICIALLY OWNED BY BELOW) DEFINED "ISSUER") WHICH PERCEPTIVE ADVISORS LLC AND JOSEPH EDELMAN (TOGETHER, THE "REPORTING PERSONS").

SEE ITEM 4 BELOW.

(b) Address of Principal Business Office or, if none, Residence:

499 PARK AVENUE, 25TH FLOOR

NEW YORK, NY 10022

(c) Citizenship:

PERCEPTIVE ADVISORS LLC IS A DELAWARE LIMITED LIABILITY COMPANY AND JOSEPH

EDELMAN IS A UNITED STATES CITIZEN.

(d) Title of Securities: Class of COMMON STOCK

(e) CUSIP Number: 002021203

ITEM IF THIS STATEMENT IS FILED PURSUANT TO ss.ss.240.13D-1(B) OR 240.13D-2(B) OR (C), CHECK WHETHER THE PERSON FILING IS A:

- (a) [ ] Broker or dealer registered under section 15 of the Act (15 U.S.C.
- [] Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- [ ] Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). (
- d) [ ] Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8).
- [X] An investment adviser in accordance with (e) ss.240.13d-1(b)(1)(ii)(E);
- [ ] An employee benefit plan or endowment fund in accordance with ss.240.13d-1(b)(1)(ii)(F);
- (g) [ ] A parent holding company or control person in accordance with ss. 240.13d-1(b)(1)(ii)(G);
- [ ] A savings associations as defined in Section 3(b) of the Federal (h) Deposit Insurance Act (12 U.S.C. 1813);
- [ ] A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) [ ] Group, in accordance with ss.240.13d-1(b)(1)(ii)(J).

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ITEM 4. OWNERSHIP.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

The Reporting Persons beneficially own 26,666,667\* shares of Common Stock held by a private investment fund to which Perceptive Advisors LLC serves as the investment manager. Mr. Edelman is the managing member of Perceptive Advisors LLC.

The beneficial ownership of 13.3% is based on the sum of (i) 40,017,790 shares of Common Stock issued and outstanding as of June 30, 2011 as reflected on the Issuer's 8-K on June 30, 2011, and (ii) 160,000,006 shares of Common Stock issued pursuant to the Securities Purchase Agreement filed with the Issuer's 8-K on June 30, 2011.\*

\*Excludes 13,333,333.5 shares underlying Common Stock purchase warrants held by the Reporting Persons. The warrants are not presently exercisable due to an exercisability limitation included in the Warrant which provides that the warrants are not exercisable (i) while the holder is a beneficial owner of over 9.99 % of the shares of the Issuer or (ii) to the extent that such exercise would cause the holder's beneficial

ownership to exceed 9.99%.

(b) Percent of class:

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote:

0

(ii) Shared power to vote or to direct the vote:

26,666,667\*

(iii) Sole power to dispose or to direct the disposition of:

0

(iv) Shared power to dispose or to direct the disposition of:

26,666,667\*

ITEM 5 Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: [\_]. ITEM 6 Not Applicable

Filing of this statement by the Reporting Persons shall not be deemed an admission that they beneficially own the securities reported herein. The Reporting Persons expressly disclaim beneficial ownership of all securities reported herein.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY OR CONTROL PERSON.

Not applicable.

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ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP.

Not applicable.

ITEM 9. NOTICE OF DISSOLUTION OF GROUP.

Not applicable.

ITEM 10. CERTIFICATION

The following certification shall be included if the statement is filed pursuant to ss.240.13d-1(b):

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect. [X]

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**SIGNATURE** 

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

July 7, 2011 Date

PERCEPTIVE ADVISORS LLC

/s/ Joseph Edelman Signature

CUSIP No. 00202J203

Joseph Edelman/Managing Member Name/Title July 7, 2011 Date

/s/ Joseph Edelman Signature

Joseph Edelman Name/Title

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See ss.240.13d-7 for other parties for whom copies are to be sent.

ATTENTION: INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACT CONSTITUTE FEDERAL CRIMINAL VIOLATIONS (SEE 18 U.S.C. 1001)