

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 14A

PROXY STATEMENT PURSUANT TO SECTION 14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934
(AMENDMENT NO.)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

Preliminary Proxy Statement

Definitive Proxy Statement

Definitive Additional Materials

Soliciting Material Pursuant to §240.14a-12

Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

A. P. PHARMA, INC.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

1) Title of each class of securities to which transaction applies:

2) Aggregate number of securities to which transaction applies:

3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

4) Proposed maximum aggregate value of transaction:

5) Total fee paid:

Fee paid previously with preliminary materials.

Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

1) Amount Previously Paid:

2) Form, Schedule or Registration Statement No.:

3) Filing Party:

4) Date Filed:

A.P. PHARMA, INC.

Notice of Special Meeting of Stockholders

To Be Held September 19, 2013

To our Stockholders:

The Special Meeting of Stockholders of A.P. Pharma, Inc. ("Company," "we," "us" and "our") will be held on September 19, 2013 at 10:00 a.m. local time at our headquarters located at 123 Saginaw Drive, Redwood City, California 94063, for the following purposes, as more fully described in the accompanying Proxy Statement:

1. To approve an amendment to the Company's Certificate of Incorporation to implement a reverse stock split, within a range from 1-for-10 to 1-for-20, with the exact ratio of the reverse stock split to be determined by the Board of Directors of the Company.
2. To approve an amendment to the Company's Certificate of Incorporation, as amended, to change the name of the Company from A.P. Pharma, Inc. to "Heron Therapeutics, Inc."
3. To transact any other business as may properly come before the Special Meeting or any adjournment or postponement thereof.

Only stockholders of record at the close of business on August 20, 2013 will be entitled to notice of, and to vote at, the Special Meeting or any adjournments or postponements thereof. A list of stockholders entitled to vote at the meeting will be available for inspection at our offices located at 123 Saginaw Drive, Redwood City, California for at least ten days prior to the meeting and will also be available for inspection at the meeting.

BY ORDER OF THE BOARD OF DIRECTORS

Ryan A. Murr, Secretary

Redwood City, California
August [30], 2013

YOUR VOTE IS IMPORTANT

You are cordially invited to attend the Special Meeting. Whether or not you expect to attend the meeting, you are urged to mark, sign, date and return the enclosed proxy card as promptly as possible in the postage-prepaid envelope enclosed for that purpose or follow the instructions on the enclosed proxy card to vote by telephone or via the Internet. Submitting a proxy or voting instructions will not prevent you from attending the Special Meeting and voting in person, if you so desire. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain from the record holder a proxy issued in your name.

A.P. PHARMA, INC.
123 Saginaw Drive
Redwood City, California 94063
(650) 366-2626

PROXY STATEMENT

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS
FOR THE STOCKHOLDERS MEETING TO BE HELD ON SEPTEMBER 19, 2013**

THE PROXY STATEMENT IS AVAILABLE AT:

<http://www.edocumentview.com/APPA>

SPECIAL MEETING OF STOCKHOLDERS

The enclosed proxy is being solicited on behalf of our Board of Directors (the "Board") for use at the Special Meeting of Stockholders to be held on September 19, 2013 at 10:00 a.m. local time at our headquarters located at 123 Saginaw Drive, Redwood City, California 94063, or at any adjournments or postponements thereof (the "Special Meeting"). The proxy materials are being mailed to stockholders on or about August [30], 2013.

Only holders of our common stock as of the close of business on August 20, 2013 (the "Record Date") are entitled to notice of and to vote at the Special Meeting. Stockholders who hold our shares in "street name" may vote at the Special Meeting only if they hold a valid proxy from their broker.

As of the Record Date, there were [306,969,219] shares of common stock outstanding. A majority of the outstanding shares of common stock entitled to vote at the Special Meeting must be present in person or by proxy in order for there to be a quorum at the meeting. Stockholders of record who are present at the meeting in person or by proxy and who abstain from voting, including brokers holding customers' shares of record who cause abstentions to be recorded at the meeting, will be included in the number of stockholders present at the meeting for purposes of determining whether a quorum is present.

Each stockholder of record is entitled to one vote at the Special Meeting for each share of common stock held by such stockholder on the Record Date. Stockholders may vote their shares by using the proxy card enclosed with this Proxy Statement. All proxy cards received by us that are properly voted, whether by signed proxy card, telephonic or internet voting, which have not been revoked, will be voted in accordance with the instructions contained in the proxy cards. For shares held in "street name" through a broker or other nominee, the broker or nominee may not be permitted to exercise voting discretion with respect to some of the matters to be acted upon. Thus, if stockholders do not give their broker or nominee specific instructions, their shares may not be voted on those matters and will not be counted in determining the number of shares necessary for approval. This could result in a "broker non-vote" on such a proposal.

The proposals to approve amendments to the certificate of incorporation for the purpose of changing the name of the Company and effecting a reverse stock split both require the affirmative vote of a majority of the shares outstanding on the Record Date. Both of proposals one and two are considered routine matters on which a broker or other nominee is empowered to vote.

We are not aware, as of the date hereof, of any matters to be voted on at the Special Meeting other than those stated in this Proxy Statement and the accompanying Notice of Special Meeting of Stockholders. If any other matters are properly brought before the Special Meeting, the enclosed proxy card gives discretionary authority to the persons named as proxies to vote the shares represented by the proxy card in their discretion.

A stockholder of record may revoke a proxy at any time before it is voted at the Special Meeting by: (a) delivering a proxy revocation or another duly executed proxy bearing a later date to our Secretary at 123 Saginaw Drive, Redwood City, California 94063; or (b) attending the Special Meeting and voting in person. Attendance at the Special Meeting will not revoke a proxy unless the stockholder actually votes in person at the meeting.

The proxy card accompanying this Proxy Statement is solicited by our Board. We will pay all of the costs of soliciting proxies. In addition to solicitation by mail, our officers, directors and employees may solicit proxies personally, or by telephone, without receiving additional compensation. We, if requested, will also pay brokers, banks and other fiduciaries that hold shares of common stock for beneficial owners for their reasonable out-of-pocket expenses of forwarding these materials to stockholders.

SECURITY OWNERSHIP BY CERTAIN BENEFICIAL HOLDERS

The following table sets forth information regarding beneficial ownership of our common stock by: (i) each person known to us to own more than 5% of the outstanding shares of our common stock; (ii) each of our directors; (iii) each of our executive officers named in the summary compensation table of our most recent Annual Report on Form 10-K; and (iv) all directors and executive officers as a group. The number of shares reported in the table below is as of July 31, 2013, or the most recent date of available information, based on filings with the SEC or other information that we are aware of. The information in this table is based solely on statements in filings with the SEC or other reliable information. Unless otherwise indicated, the address of each of the named individuals is c/o A.P. Pharma, Inc., 123 Saginaw Drive, Redwood City, CA 94063. The percentage of ownership is based on 306,969,219 shares of common stock outstanding as of July 31, 2013. Beneficial ownership of shares is determined in accordance with the rules of the SEC and includes voting and investment power with respect to the shares. Shares of common stock subject to outstanding options and warrants and shares of common stock underlying convertible promissory notes that are exercisable or convertible, as the case may be, within 60 days of July 31, 2013 are deemed outstanding for computing the percentage of ownership of the person holding such options or warrants but are not deemed outstanding for computing the percentage of any other person. Except as otherwise noted, each person or entity has sole voting and investment power with respect to the shares shown. Unless otherwise noted, none of the shares shown as beneficially owned are subject to pledge.

Name	Number of Shares ⁽¹⁾	Percent of Class ⁽¹⁾
Tang Capital Partners, LP ⁽²⁾ 4747 Executive Drive, Suite 510 San Diego, California 92121	64,213,600	20.9%
Franklin Advisers, Inc. ⁽³⁾ One Franklin Parkway San Mateo, CA 94403	41,697,064	13.6%
Savitr Capital, LLC ⁽⁴⁾ One Market Plaza, Steuart Tower, Ste. 1400 San Francisco, CA 94105	38,095,238	12.4%
Baker Bros. Advisors, LLC and its affiliates ⁽⁵⁾ 667 Madison Avenue New York, NY 10065	30,655,851	10.0%
Perceptive Advisors LLC ⁽⁶⁾ 499 Park Avenue, 25 th Floor New York, NY 10022	31,504,199	9.9%
BVF Partners LP ⁽⁷⁾ 900 North Michigan Avenue, Suite 1100 Chicago, IL 60611	19,950,001	6.4%

Name		Number of Shares ⁽¹⁾	Percent of Class ⁽¹⁾
IsZo Capital LP ⁽⁸⁾ 415 Madison Avenue, 15th Floor New York, NY 10017		18,500,001	5.9%
Tekla Capital Management LLC ⁽⁹⁾ 2 Liberty Square, 9 th Floor Boston, MA 02109		16,306,333	5.3%
Broadfin Capital LLC ⁽¹⁰⁾ 237 Park Avenue, Suite 900 New York, NY 10017		15,523,810	5.1%
Kevin C. Tang ⁽²⁾	Chairman of the Board	71,579,785	23.3%
John B. Whelan ⁽¹¹⁾	Chief Financial Officer	21,001,041	6.4%
Stephen R. Davis ⁽¹²⁾	Executive Vice President and Chief Operating Officer, Director	1,531,623	*
Barry D. Quart, Pharm.D. ⁽¹³⁾	Chief Executive Officer, Director	1,520,777	*
Michael Adam, Ph.D. ⁽¹⁴⁾	Senior Vice President Regulatory Affairs	6,509,520	2.1%
Mark S. Gelder, MD ⁽¹⁵⁾	Senior Vice President and Chief Medical Officer	177,604	*
Robert Rosen ⁽¹⁶⁾	President, Director	2,581,069	*
Officers and Directors as a group (7 persons) ⁽¹⁷⁾		104,901,419	30.79%

* Less than 1%.

⁽¹⁾ Unless otherwise indicated in the footnotes below, based on 306,969,219 shares of common stock issued and outstanding as of July 31, 2013. Assumes the exercise of all outstanding options, warrants and rights to purchase common stock and conversion of all outstanding convertible promissory notes held by such person or group to the extent exercisable or convertible, as the case may be, within 60 days of July 31, 2013, and that no other person has exercised or converted any outstanding security that is exercisable for or convertible into common stock. Certain holders of more than 5% of our outstanding common stock also hold securities that are exercisable or convertible into our common stock. Such derivative securities have limits on the ability of these holders to exercise or convert these securities into our common stock if, after such exercise or conversion, the holder would beneficially own more than a stated percentage of our outstanding common stock (e.g., 9.99%). Where these limits are applicable as of July 31, 2013, the shares underlying these convertible securities that are not currently issuable have been excluded from the beneficial ownership calculations.

⁽²⁾ Based on information set forth in a Schedule 13D/A filed with the SEC on May 9, 2013 by Tang Capital Partners, LP and its affiliates ("Tang Capital") reporting beneficial ownership of 64,213,600 shares for Tang Capital Partners, LP and Tang Capital Management, LLC and beneficial ownership of 71,579,785 shares for Kevin C. Tang, in each case based on 306,969,219 shares of common stock outstanding as of July 31, 2013. In the case of Mr. Tang, the total shares reported on this table include 900,000 shares underlying stock options exercisable within 60 days of July 31, 2013. Tang Capital retains 7,939,000 shares of common stock in a securities margin brokerage account. Beneficial ownership for Tang Capital excludes shares of common stock that may be acquired upon the exercise of warrants and shares that are potentially issuable upon conversion of the principal amount of the Company's Senior Secured Convertible Notes due 2021 (the

- "Notes"). The warrants and the Notes have a limit on the ability of the holder to exercise or convert, to the extent that the holder would beneficially own greater than 9.99% of the Company's common stock following such exercise or conversion, provided that the holder has the ability to increase or decrease this limitation on exercise or conversion upon providing the Company with 61 days of prior written notice.
- (3) Based on information set forth in a Schedule 13G/A filed with the SEC on June 10, 2013 by Franklin Advisers, Inc. and its affiliates reporting beneficial ownership of 41,697,064 shares.
- (4) Based on information set forth in a Schedule 13G/A filed with the SEC on April 12, 2013 by Savitr Capital, LLC and its affiliates reporting beneficial ownership of 38,095,238 shares.
- (5) Based on information set forth in a Schedule 13G filed with the SEC on February 1, 2013 by Felix J. Baker and Julian C. Baker, reporting beneficial ownership of 30,655,851 shares, based on 302,205,555 shares of common stock outstanding as of the date of the Schedule 13G/A. Shares deemed beneficially owned by Messrs. Baker are held of record by 667, L.P., Baker Bros. Life Sciences, L.P., and 14159, L.P. (collectively, "Baker Bros"). Beneficial ownership for Baker Bros and Messrs. Baker includes 4,800,000 shares of common stock that may be acquired upon the exercise of warrants and the conversion of Notes. The warrants and Notes have a limit on the ability of the holder to exercise or convert, to the extent that the holder would beneficially own greater than 9.99% of the Company's common stock following the exercise or conversion, provided that the holder has the ability to increase or decrease this limitation on exercise or conversion upon providing the Company with 61 days of prior written notice.
- (6) Based on information set forth in a Schedule 13G/A filed with the SEC on February 14, 2013 by Perceptive Advisors LLC reporting beneficial ownership of 31,504,199 shares, which includes 18,352,404 shares of common stock and 13,151,795 shares underlying common stock purchase warrants, based on 302,205,555 shares of common stock outstanding as of the date of the Schedule 13G/A. The number of shares reported as beneficially owned excludes shares of common stock underlying warrants which are currently not exercisable. The warrants have a limit on the ability of the holder to exercise to the extent that the holder would beneficially own greater than 9.99% of the Company's common stock following the exercise, provided that the holder has the ability to increase or decrease this limitation on conversion upon providing the Company with 61 days of prior written notice.
- (7) Based on information set forth in a Schedule 13G/A filed with the SEC on February 10, 2012 by BVF Partners LP and its affiliates reporting beneficial ownership of 26,666,667 shares. Includes 6,666,667 shares of common stock currently issuable upon the exercise of warrants.
- (8) Based on information set forth in a Schedule 13G filed with the SEC on July 11, 2011 by IsZo Capital LP reporting beneficial ownership of 18,500,001 shares. Includes 6,166,667 shares of common stock currently issuable upon the exercise of warrants.
- (9) Based on information set forth in a Schedule 13G/A filed with the SEC on February 14, 2013 by Tekla Capital Management LLC (TCM) and its affiliates reporting beneficial ownership of 16,306,333 shares as a result of acting as investment adviser to H&Q Healthcare Investors ("HQH") and H&Q Life Sciences Investors ("HQL"), each of which is registered as an investment company pursuant to Section 8 of the Investment Company Act of 1940. Each of TCM and Daniel R. Omstead, through his control of TCM, has sole power to dispose of the 16,306,333 shares beneficially owned by HQH and HQL. Neither TCM nor Daniel R. Omstead has the sole power to vote or direct the vote of the shares beneficially owned by HQH and HQL, which power resides in each fund's Board of Trustees. TCM carries out the voting of the shares under written guidelines established by each fund's Board of Trustees.
- (10) Based on information set forth in a Schedule 13G filed with the SEC on December 31, 2012 by Broadfin Capital, LLC reporting beneficial ownership of 15,523,810 shares.

- (11) Includes 254,088 shares of common stock and 20,746,953 shares underlying stock options exercisable within 60 days of July 31, 2013.
- (12) Includes 47,946 shares of common stock and 1,483,677 shares underlying stock options exercisable within 60 days of July 31, 2013.
- (13) Includes 37,100 shares of common stock and 1,483,677 shares underlying stock options exercisable within 60 days of July 31, 2013.
- (14) Includes 53,269 shares of common stock and 6,456,251 shares underlying stock options exercisable within 60 days of July 31, 2013.
- (15) Includes 177,604 shares underlying stock options exercisable within 60 days of July 31, 2013.
- (16) Includes 52,813 shares of common stock and 2,528,256 shares underlying stock options exercisable within 60 days of July 31, 2013.
- (17) Includes 71,125,001 shares of common stock and 33,776,418 shares underlying stock options exercisable within 60 days of July 31, 2013.

PROPOSAL 1 — APPROVAL OF AN AMENDMENT TO THE COMPANY'S CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT

General

Our Board is proposing that our stockholders approve a proposal to authorize our Board to effect a reverse stock split of all outstanding shares of our common stock at any ratio at its discretion, from 1-for-10 to 1-for-20 and to grant the Board discretionary authority, within twelve months from the date of the Special Meeting, to determine whether to effect the split and the exact whole number ratio within the range at which the split will be effected. Further, the number of shares of common stock that are authorized for issuance under our certificate of incorporation would be reduced proportionately based on the exchange ratio of the reverse stock split. Our Board believes that approval of a proposal providing the Board with this generalized grant of authority with respect to setting the split ratio, rather than mere approval of a pre-defined reverse stock split, will give the Board flexibility to set the ratio in accordance with current market conditions and therefore allow the Board to act in the best interests of the Company and our stockholders.

If our stockholders grant the Board the authority to effect a reverse stock split, we would have the ability to file a certificate of amendment to the Company's certificate of incorporation with the Delaware Secretary of State to effect the proposed reverse stock split. The form of certificate of amendment is attached to this proxy statement as Appendix A, with the text of the reverse split amendment reflected therein in paragraphs "SECOND" and "THIRD", which text may be altered for any changes required by the Delaware Secretary of State and changes deemed necessary or advisable by the Board to give effect to this proposal. Our Board has approved and declared advisable the proposed certificate of amendment. If the proposed reverse stock split is implemented, then the number of issued and outstanding shares of our common stock would be reduced in accordance with the ratio selected by the Board.

Purpose of Proposed Reverse Stock Split

The Board's primary objective in asking for the authority to effect a reverse split is to increase the per share trading price of our common stock. The Board believes that a reverse stock split would put the Company in a better position to have its shares listed on The NASDAQ Capital Market, facilitate higher levels of institutional stock ownership (as investment policies generally prohibit investments in lower-priced securities) and better enable the Company to raise funds to finance development and operations.

Our common stock is currently quoted on the FINRA's OTC Bulletin Board ("OTCBB"). Although the OTCBB does not have any listing standards with respect to trading price of our common stock, we anticipate seeking to have our shares of common stock listed on The NASDAQ Capital Market ("Nasdaq") and Nasdaq does have minimum listing standards. To have our shares of common stock listed on Nasdaq, Nasdaq requires that we, among other things, have a minimum closing price of \$3 per share of our common stock for a certain period of time.

The Board also believes that a higher per share trading price of our common stock would improve the perception of our common stock as an investment security, reset our stock price to more normalized trading levels in the face of potentially extended market dislocation and reduce stockholder transaction costs because investors would pay lower commission to trade a fixed dollar amount of our stock if our stock price were higher than they would if our stock price were lower. Additionally, the Board believes that a higher per share trading price of our common stock may encourage investor interest and improve the market-

ability of our common stock to a broader range of investors, and thus improve liquidity. Because of the trading volatility often associated with low-priced stocks, many brokerage firms and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers. The Board believes that the anticipated higher trading price resulting from a reverse stock split may enable institutional investors and brokerage firms with policies and practices such as those described above to invest in our common stock.

The purpose of seeking stockholder approval of a range of whole number exchange ratios from 1-for-10 to 1-for-20 (rather than a fixed exchange ratio) is to provide the Company with the flexibility to achieve the desired results of the reverse stock split. If the stockholders approve this proposal, the Company would effect a reverse stock split only upon the Board determination that a reverse stock split would be in the best interests of the Company at that time. If the Company were to effect a reverse stock split, the Board would set the timing for such a split and select the specific ratio within the permitted range. No further action on the part of stockholders would be required to either implement or abandon the reverse stock split. If the stockholders approve the proposal, and the Board determines to effect the reverse stock split, we would communicate to the public, prior to the effective date of the certificate of amendment effecting the reverse stock split, additional details regarding the reverse split, including the specific ratio selected by the Board. If the Board does not decide to implement the reverse stock split within twelve months from the date of the Special Meeting, the authority granted in this proposal to implement the reverse stock split will terminate. The Board reserves its right to elect not to proceed with the reverse stock split if it determines, in its sole discretion, that this proposal is no longer in the best interests of the Company.

You should consider that, although our Board believes that a reverse stock split will in fact increase the price of our common stock, in many cases, because of variables outside of a company's control (such as market volatility, investor response to the news of a proposed reverse stock split and the general economic environment), the market price of a company's shares of common stock may in fact decline in value after a reverse stock split. You should also keep in mind that the implementation of a reverse stock split does not have an effect on the actual or intrinsic value of our business or a stockholder's proportional ownership in our Company. However, should the overall value of our common stock decline after the proposed reverse stock split, then the actual or intrinsic value of the shares of our common stock held by you will also proportionately decrease as a result of the overall decline in value.

Potential Effects of the Proposed Reverse Stock Split

The immediate effect of a reverse stock split would be to reduce the number of shares of our common stock outstanding and to increase the trading price of our common stock. Notwithstanding the decrease in the number of outstanding shares following the proposed reverse stock split, our Board does not intend for this transaction to be the first step in a "going private transaction" within the meaning of Rule 13e-3 of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

However, we cannot predict the effect of the reverse stock split upon the trading price of our common stock over an extended period, and in many cases, the trading price of a company's common stock following a reverse stock split declines. We cannot assure you that the trading price of our common stock after the reverse stock split will rise in an inverse proportion to the reduction in the number of shares of our common stock outstanding as a result of such reverse stock split. Also, we cannot assure you that a reverse stock split would lead to a sustained increase in the trading price of our common stock. The trading price of our common stock may change due to a variety of other factors, including our operating results and other factors related to our business and general market conditions.

Examples of Potential Reverse Stock Split at Various Ratios. The table below provides examples of a reverse stock split at various ratios between 1-for-10 and 1-for-20:

Shares Outstanding at July 31, 2013	Reverse Stock Split Ratio	Shares Outstanding After Reverse Stock Split	Reduction in Shares Outstanding
306,969,219	1-for-10	30,696,922	276,272,297
306,969,219	1-for-12	25,580,768	281,388,451
306,969,219	1-for-15	20,464,615	286,504,604
306,969,219	1-for-18	17,053,846	289,915,374
306,969,219	1-for-20	15,348,461	291,620,758

The resulting decrease in the number of shares of our common stock outstanding could potentially affect, in an adverse manner, the liquidity of our common stock, especially in the case of larger block trades.

Effects on Ownership by Individual Stockholders. If we implement a reverse stock split, the number of shares of our common stock held by each stockholder would be reduced by multiplying the number of shares held immediately before the reverse stock split by the appropriate ratio and then rounding down to the nearest whole share. We will pay cash to each stockholder in lieu of any fractional interest in a share to which each stockholder would otherwise be entitled as a result of the reverse stock split, as described in further detail below. The reverse stock split would not affect any stockholder's percentage ownership interest in our Company or proportionate voting power, except to the extent that interests in fractional shares would be paid in cash.

Effect on Options, Warrants and Convertible Notes. In addition to adjusting the number of shares of our common stock, we would adjust all shares underlying any of our outstanding options, warrants and convertible notes as a result of the reverse stock split, as required by the terms of these securities. In particular, we would reduce the conversion ratio for each instrument, and would increase the applicable exercise price or conversion price in accordance with the terms of each instrument and based on the 1-for-10 to 1-for-20 exchange ratio of the reverse stock split. Also, we would reduce the number of shares reserved for issuance under our existing stock option plans proportionately based on the exchange ratio of the reverse stock split. A reverse stock split would not otherwise affect any of the rights currently accruing to holders of our common stock, options or warrants exercisable for, or convertible notes convertible into, our common stock.

Other Effects on Outstanding Shares. If we implement a reverse stock split, the rights pertaining to the outstanding shares of our common stock would be unchanged after the reverse stock split. Each share of our common stock issued following a reverse stock split would be fully paid and non-assessable.

Any reverse stock split would result in some stockholders owning "odd-lots" of less than 100 shares of our common stock. Brokerage commissions and other costs of transactions in odd-lots are generally higher than the costs of transactions in "round-lots" of even multiples of 100 shares.

Our common stock is currently registered under the Exchange Act. As a result, we are subject to the periodic reporting and other requirements of the Exchange Act. The proposed reverse stock split would not affect the registration of our common stock under the Exchange Act.

Authorized Shares of Stock

The proposed reverse stock split would affect all issued and outstanding shares of our common stock and outstanding rights to acquire common stock. In addition, we would reduce the number of shares of common stock authorized for issuance under our certificate of incorporation at the same proportion as the exchange ratio of the reverse stock split. As of July 21, 2013, we had: (i) 1,500,000,000 shares of authorized common stock, of which 306,969,219 shares of common stock were issued and outstanding and (ii) 2,500,000 shares of authorized Preferred Stock, of which none were issued and outstanding. Furthermore, if we issue additional shares, the ownership interest of holders of common stock will be diluted.

We will reserve for issuance any authorized but unissued shares of common stock that would be made available as a result of the proposed reverse stock split.

Procedure for Effecting the Proposed Reverse Stock Split

If the stockholders approve the proposal, and our Board determines to effect a reverse stock split, we will file with the Delaware Secretary of State a certificate of amendment to our certificate of incorporation. The reverse stock split will become effective at the time and on the date of filing of, or at such later time as is specified in, the certificate of amendment, which we refer to as the "effective time" and "effective date," respectively. Beginning at the effective time, each book entry representing shares of common stock will be deemed for all corporate purposes to evidence ownership of the number of whole shares into which the shares previously represented by the book entry were combined pursuant to the reverse stock split.

Stockholders holding shares of our common stock in certificated form will be sent a transmittal letter by our transfer agent after the effective time. The letter of transmittal will contain instructions on how a stockholder should surrender his, her or its certificate(s) representing shares of our common stock (the "Old Certificates") to the transfer agent in exchange for certificates representing the appropriate number of whole shares of post-reverse stock split common stock (the "New Certificates"). No New Certificates will be issued to a stockholder until such stockholder has surrendered all Old Certificates, together with a properly completed and executed letter of transmittal, to the transfer agent. No stockholder will be required to pay a transfer or other fee to exchange his, her or its Old Certificates. Stockholders will then receive a New Certificate(s) representing the number of whole shares of common stock that they are entitled as a result of the reverse stock split, subject to the treatment of fractional shares described above. Until surrendered, we will deem outstanding Old Certificates held by stockholders to be cancelled and only to represent the number of whole shares of post-reverse stock split common stock to which these stockholders are entitled, subject to the treatment of fractional shares. Any Old Certificates submitted for exchange, whether because of a sale, transfer or other disposition of stock, will automatically be exchanged for New Certificates. If an Old Certificate has a restrictive legend on the back of the Old Certificate(s), the New Certificate will be issued with the same restrictive legends that are on the back of the Old Certificate(s). **STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATES AND SHOULD NOT SUBMIT ANY STOCK CERTIFICATES UNTIL REQUESTED TO DO SO.**

Upon the reverse stock split, we intend to treat stockholders holding our common stock in "street name," through a bank, broker or other nominee, in the same manner as registered stockholders whose shares are registered in their names. Banks, brokers or other nominees will be instructed to effect the reverse stock split for their beneficial holders holding our common stock in "street name." However, these banks, brokers or other nominees may have different procedures than registered stockholders for processing the reverse stock split. If you hold your shares with a bank, broker or other nominee and if you have any questions in this regard, we encourage you to contact your nominee.

Fractional Shares

We will not issue fractional shares in connection with the reverse stock split. Instead, any fractional share resulting from the reverse stock split because the stockholder owns a number of shares not evenly divisible by the exchange ratio will be cancelled, with the holder to receive cash in lieu of the fractional share. The cash amount to be paid to each stockholder will be equal to the resulting fractional interest in one share of our common stock to which the stockholder would otherwise be entitled, multiplied by the closing trading price of our common stock on the trading day immediately preceding the effective date of the reverse stock split. We do not anticipate that the aggregate cash amount paid by the Company for fractional interests will be material to the Company.

No Appraisal Rights

No appraisal rights are available under the Delaware Corporations Code or under our certificate of incorporation or our bylaws with respect to the reverse stock split. There may exist other rights or actions under state law for stockholders who are aggrieved by reverse stock splits generally.

Accounting Consequences

The par value of our common stock in effect at the time of the reverse stock split would remain unchanged after such reverse stock split. Also, our capital account would remain unchanged, and we do not anticipate that any other accounting consequences would arise as a result of the reverse stock split.

Certain Material U.S. Federal Income Tax Considerations

The following is a summary of the material U.S. federal income tax considerations with respect to a reverse stock split to holders of our shares of capital stock. This summary is based on the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), the Treasury regulations promulgated thereunder, and administrative rulings and court decisions in effect as of the date of this document, all of which may be subject to change, possibly with retroactive effect. This summary only addresses holders who hold their shares as capital assets within the meaning of the Internal Revenue Code and does not address all aspects of U.S. federal income taxation that may be relevant to holders subject to special tax treatment, such as financial institutions, dealers in securities, insurance companies, foreign persons and tax-exempt entities. In addition, this summary does not consider the effects of any applicable state, local, foreign or other tax laws.

We have not sought and will not seek any ruling from the Internal Revenue Service, or the IRS, or an opinion from counsel with respect to the U.S. federal income tax considerations discussed below. There can be no assurance that the tax considerations discussed below would be accepted by the IRS or a court. The tax treatment of the reverse stock split to holders may vary depending upon a holder's particular facts and circumstances.

We urge holders to consult with their own tax advisors as to any U.S. federal, state, local or foreign tax considerations applicable to them that could result from the reverse stock split.

Except as described below with respect to cash received in lieu of fractional shares, the receipt of common stock in the reverse stock split should not result in any taxable gain or loss to a holder for U.S. federal income tax purposes. The aggregate tax

basis of the common stock received by a holder as a result of the reverse stock split (including the basis of any fractional share to which a holder is entitled) will be equal to the aggregate basis of the existing common stock exchanged for such stock. A holder's holding period for the common stock received in the reverse stock split will include the holding period of the common stock exchanged therefor.

A holder who receives cash in lieu of a fractional share of common stock will be treated as first receiving such fractional share and then receiving cash in redemption of such fractional share. A holder will generally recognize capital gain or loss on such deemed redemption in an amount equal to the difference between the amount of cash received and the adjusted basis of such fractional share.

Vote Required

Approval of Proposal One requires the affirmative vote of a majority of the total shares outstanding on the Record Date. The amendment of a company's certificate of incorporation to effect a reverse split is a matter on which a broker is generally empowered to vote. Accordingly, no broker non-votes are expected for Proposal One.

The Board of Directors recommends a vote "FOR" the proposal to amend the Company's certificate of incorporation to effect a reverse stock split.

PROPOSAL 2 — APPROVAL OF AMENDMENT TO THE COMPANY'S CERTIFICATE OF INCORPORATION TO CHANGE THE NAME OF THE COMPANY

The Board is proposing that stockholders approve an amendment to our certificate of incorporation to change our name from A.P. Pharma, Inc. to Heron Therapeutics, Inc.

Summary

The Board has, subject to stockholder approval, approved a resolution to change the name of the Company to Heron Therapeutics, Inc. The name change is part of our recent corporate restructuring and rebranding of the Company. We are continuing to seek FDA approval of our New Drug Application for APF530, our lead candidate, and we believe the name change will emphasize our shift from a polymer development company to a commercial phase specialty pharmaceutical company, assuming approval of APF530.

Effect of the Proposed Amendment

The voting and other rights that accompany our securities will not be affected by the change in our corporate name. Our stock symbol, which is currently "APPA" and our CUSIP number will both change as a result of our name change, with the current expectation that our stock symbol would become "HRTX". Stockholders may, but need not, exchange their certificates to reflect the change in corporate name. Your existing certificate will continue to represent shares of our common stock as if our name had not changed. Our transfer agent will issue stock certificates with our new name as stock certificates are sent in upon transfers of shares by our existing stockholders.

Effective Date of Name Change

The effectiveness of the name change is conditioned upon the filing of the amendment to our certificate of incorporation with the Secretary of State of Delaware. A form of the amendment is attached hereto as Appendix A, with the text of the name change reflected in Section "FIRST."

Vote Required

Approval of Proposal Two requires the affirmative vote of at a majority of the total shares outstanding on the Record Date. The amendment of a company's certificate of incorporation to change its name is a matter on which a broker is generally empowered to vote. Accordingly, no broker non-votes are expected for Proposal Two.

The Board of Directors recommends a vote "FOR" the amendment to the Company's certificate of incorporation to change the name of the Company.

OTHER MATTERS

As of the time of preparation of this Proxy Statement, neither our Board nor management intends to bring before the meeting any business other than the matters referred to in the Notice of Special Meeting and this Proxy Statement. If any other business should properly come before the meeting, or any adjournment thereof, the persons named in the proxy will vote on such matters according to their best judgment.

STOCKHOLDERS SHARING THE SAME ADDRESS

In accordance with notices previously sent to many stockholders who hold their shares through a bank, broker or other holder of record (a "street-name stockholder") and share a single address, only one Annual Report and Proxy Statement is being delivered to that address unless contrary instructions from any stockholder at that address were received. This practice, known as "householding," is intended to reduce our printing and postage costs. However, any such street-name stockholder residing at the same address who wishes to receive a separate copy of this Proxy Statement and accompanying Annual Report to Stockholders may request a copy by contacting the bank, broker or other holder of record, or us by telephone at (650) 366-2626. The voting instruction sent to a street-name stockholder should provide information on how to request: (i) householding our future materials; or (ii) separate materials if only one set of documents is being sent to a household. If it does not, a stockholder who would like to make one of these requests should contact us as indicated above.

STOCKHOLDER PROPOSALS FOR 2014 SPECIAL MEETING

Under the rules of the SEC, stockholders who wish to submit proposals for inclusion in the Proxy Statement for the 2014 Annual Meeting of Stockholders must submit such proposals so as to be received by us at 123 Saginaw Drive, Redwood City, California 94063, on or before January 13, 2014. In addition, if we are not notified by March 29, 2014 of a proposal to be brought before the 2014 Annual Meeting by a stockholder, then the proxy card solicited by management for the meeting will confer discretionary authority to the persons named as proxies to vote the shares represented by the proxy card on the stockholder's proposal if it is properly brought before the meeting.

BY ORDER OF THE BOARD OF DIRECTORS

Ryan A. Murr, Secretary

Redwood City, California
August [30], 2013

Form of Certificate of Amendment to
Certificate of Incorporation of A.P. Pharma, Inc.

A.P. Pharma, Inc., a corporation duly organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), does hereby certify:

FIRST: That Article I of the Certificate of Incorporation of the Corporation is hereby amended in its entirety as follows:

"I: Name. The name of the corporation is Heron Therapeutics, Inc."

SECOND: That, upon the Effective Time, Section A of Article IV of the Certificate of Incorporation of the Corporation shall be amended and restated in its entirety as follows:

"A. Authorized Capital. The corporation is authorized to issue two classes of shares of stock to be designated, respectively, "preferred" and "common." The total number of shares which the corporation is authorized to issue is []. The number of common shares authorized to be issued is [], each such share to have a par value of \$0.01 ("Common Stock"), and the number of preferred shares authorized to be issued is Two Million Five Hundred Thousand (2,500,000), each such share to have a par value of \$0.01 ("Preferred Stock")."

THIRD: That, upon the Effective Time, Article IV of the Certificate of Incorporation of the Corporation shall be amended by adding at the end of the paragraph A the following new sentences:

"Effective as of the Effective Time, as defined in the Certificate of Amendment filed with the Delaware Secretary of State on [], 201[], each [] outstanding shares of Common Stock of the Corporation shall be combined and converted automatically into one share of Common Stock. In lieu of any fractional shares to which a holder would be otherwise entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of one share of Common Stock (pre-reverse-split), as determined by the Board of Directors of the Corporation. The Common Stock issued in this exchange (post-reverse stock split) shall have the same rights, preferences and privileges as the Common Stock (pre-reverse stock split)."

FOURTH: The amendment to the Certificate of Incorporation of the Corporation herein was duly adopted by this Corporation's Board of Directors in accordance with the applicable provisions of Section 242 of the General Corporation Law of the State of Delaware (the "DGCL"). A special meeting of stockholders was duly called upon notice in accordance with Section 222 of the DGCL and held on [], 2013, at which meeting the necessary number of shares were voted in favor of the proposed amendments. The stockholders of the Corporation duly adopted this Certificate of Amendment.

FIFTH: The amendment to the Certificate of Incorporation of the Corporation herein shall be effective [] (the "Effective Time").

IN WITNESS WHEREOF, said Corporation has caused this Certificate of Amendment to be executed by its duly authorized officer this [] day of [], 201[].

[Authorized Officer]

Important notice regarding the Internet availability of proxy materials for the Special Meeting of Stockholders, The Proxy Statement is available at: www.edocumentview.com/APPA

▼ IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼



Proxy — A.P. PHARMA, INC.

Proxy Solicited by the Board of Directors for the Special Meeting of Stockholders to be held September 19, 2013

The undersigned hereby appoints Barry D. Quart and Stephen R. Davis, or either of them, each with full power of substitution, as the proxyholder(s) of the undersigned to represent the undersigned and vote all the shares of the Common Stock of A.P. Pharma, Inc. (the "Company"), which the undersigned would be entitled to vote if personally present at the Special Meeting of Stockholders of the Company. The Special Meeting of Stockholders of A.P. Pharma, Inc. will be held on September 19, 2013 at 10:00 a.m. local time at the Company's headquarters located at 123 Saginaw Drive, Redwood City, California 94063, for the purposes stated herein, as more fully described in the accompanying Proxy Statement.

The Board of Directors recommends that you vote FOR proposals 1 and 2. This proxy, when properly executed, will be voted in the manner directed. WHEN NO CHOICE IS INDICATED THIS PROXY WILL BE VOTED IN ACCORDANCE WITH BOARD OF DIRECTORS' RECOMMENDATIONS AS STATED HEREIN. This proxy may be revoked by the undersigned at any time, prior to the time it is voted, by any of the means described in the accompanying proxy statement.

CONTINUED AND TO BE SIGNED ON REVERSE SIDE.

If you vote by telephone or the Internet, please DO NOT mail back this proxy card.