



DIVISION OF
CORPORATION FINANCE

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

May 31, 2011

John B. Whelan
Chief Executive Officer and Chief Financial Officer
AP Pharma, Inc.
123 Saginaw Drive
Redwood City, California 94063

**Re: AP Pharma, Inc.
Schedule 14A
Filed May 17, 2011
File No. 001-33221**

Dear Mr. Whelan:

We have limited our review of the above proxy statement to the issues identified below.

Please respond to this letter by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

1. We note that under "Proposal 2 – Approval in Increase in Number of Authorized Shares of Common Stock," the last sentence of the section entitled "Reasons for the Amendment," currently reads

...the Board of Directors has reserved 813,664,830 shares for issuance for the Conversion Shares related to the Securities Purchase Agreement...

We also note that page 6 of your registration statement on Form S-1, filed May 18, 2011, provides:

We are currently seeking stockholder approval at our 2011 Annual Meeting of Stockholders, to be held on June 29, 2011, to increase our authorized number of shares of common stock to a total of 1,500,000,000; until we increase our total authorized common stock, we do not have enough authorized common stock to allow the Notes to be fully converted.

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However, your proxy statement makes no mention of the fact that you do not have enough authorized common stock available to allow the Notes to be fully converted. Accordingly, please revise your disclosure in your proxy statement to make clear the lack of sufficient shares available to accommodate the conversion of the Conversion Shares as a reason for increasing the number of authorized shares of your common stock.

2. Please also revise your disclosure to include a discussion of the effects and consequences if shareholders do not elect to authorize additional shares of common stock.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Johnny Gharib at (202) 551-3170, Daniel Greenspan at (202) 551-3623 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: Ryan Murr, Esq.
Ropes & Gray LLP
Three Embarcadero Center
San Francisco, CA 94111