



DIVISION OF
CORPORATION FINANCE

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

December 19, 2014

Via E-mail

Dr. Lawrence Helson
Chief Executive Officer
SignPath Pharma, Inc.
1375 California Road
Quakertown, PA 18951

**Re: SignPath Pharma, Inc.
Amendment No. 4 to Registration Statement on Form S-1
Filed December 12, 2014
File No. 333-198110**

Dear Dr. Helson:

We have limited our review of your amended registration statement to the issues addressed in our comments. Please respond to this letter by amending your registration statement again and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe another amendment is appropriate, please tell us why in a response.

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

Risk Factors

Risks Related to Our Securities

"Meyers Associates, L.P. and its principals are subject to disciplinary proceedings from FINRA . . ." page 25

1. Please remove the word "erroneously" from your description of FINRA's allegation concerning whether one of your principal stockholders is a control person. This description of the allegation is not appropriate while the litigation remains pending.
2. Please amend this risk factor to reference all nine causes of action included in FINRA's complaint against Mr. Meyers and Meyers Associates. Please also list the specific FINRA and NASD regulations and federal securities laws the complaint cites in its allegations.

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Scot Foley at (202) 551-3383 or me at (202) 551-3715 with any questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler
Assistant Director

cc: Elliot H. Lutzker, Esq.
Davidoff Hutcher & Citron LLP
605 Third Avenue, 34th Floor
New York, New York 10158