



DIVISION OF
CORPORATION FINANCE

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

December 16, 2010

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

**Re: SignPath Pharma Inc.
Form 10-Q for the Quarter Ended June 30, 2010
Filed August 23, 2010
File No. 333-158474**

Dear Dr. Helson:

We have reviewed your November 11, 2010 response to our comment letter dated October 15, 2010 and have the following comment.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your response to our comment.

After reviewing your response, we may raise additional comments.

Note 9 – Restatement of Financial Statements, page 12

1. Refer to your response to comment two. We note that you apply ASC 815-40-15 (previously EITF 07-5) to the conversion price adjustment feature of convertible preferred stock. Since ASC 815-40-15-5 limits the scope of this guidance to the freestanding instruments or an embedded feature that is a derivative instrument in its entirety, please provide an analysis of the conversion feature under ASC 815-25-15-1 and ASC 815-10-15-83 supporting your accounting. Furthermore, please clarify whether you bifurcate the conversion feature from the host instrument (i.e. preferred stock) in recognizing the liability or whether you account for the entire convertible preferred stock as a liability. If you account for the entire instrument as a liability, please provide an analysis of the convertible preferred stock in its entirety under ASC 815-10-15-83 or reference the applicable accounting literature that supports your accounting.

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Please contact Kei Nakada, Staff Accountant, at (202) 551-3659 or Gus Rodriguez, Accounting Branch Chief, at (202) 551-3752 if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief Accountant