

Via Facsimile and U.S. Mail
Mail Stop 4720

December 22, 2009

Charles A. Reinhart III
Chief Financial Officer
PharmAthene, Inc.
One Park Place,
Suite 450
Annapolis, MD

**Re: PharmAthene, Inc.
Form 10-K for the Year Ended December 31, 2008
Form 10-Q for the Period Ended September 30, 2009
File No. 001-32587**

Dear Mr. Reinhart:

We have reviewed your filings and have the following comments. We have limited our review of your filings to your financial statements and related disclosures and do not intend to expand our review to other portions of your document. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, please explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filings.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Year Ended December 31, 2008

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 47

Results of Operations, page 49

Acquired In-Process Research and Development, page 52

1. Please disclose the following information relating to the in-process research and development acquired:
 - a. Disclose the specific nature and fair value of each significant in-process research and development project acquired.
 - b. Disclose the completeness, complexity and uniqueness of the projects at the acquisition date.
 - c. Disclose the nature, timing and estimated costs of the efforts necessary to complete the projects, and the anticipated completion dates.
 - d. Explain the risks and uncertainties associated with completing development on schedule, and consequences if it is not completed timely.
 - e. Disclose what appraisal method was used to value the projects.
 - f. Disclose the significant appraisal assumptions, such as:
 - i. the period in which material net cash inflows from significant projects are expected to commence;
 - ii. material anticipated changes from historical pricing, margins and expense levels; and
 - iii. the risk adjusted discount rate applied to the project's cash flows.
 - g. In periods after a significant write-off, discuss the status of efforts to complete the projects, and the impact of any delays on your expected investment return, results of operations and financial condition.

Index to Consolidated Financial Statements, page F-1

Note 2 - Summary of Significant Accounting Policies, F-10

Revenue Recognition, page F-14

2. Your disclosure of recognizing revenue from cost-plus-fee contracts “to the extent of costs incurred plus an estimate of the applicable fees” is vague. Please revise to clarify when revenue is recognized and how the amount is determined. Also disclose how costs incurred under these agreements are measured and how the applicable fees are estimated.

Form 10-Q for the Period Ended September 30, 2009

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 13

Liquidity and Capital Resources, page 19

Operating Activities, page 20

3. We note that your unbilled receivables increased \$12.9 million between December 31, 2008 and September 30, 2009. Please revise to disclose the billing terms and to explain why you believe that collectability of the unbilled receivable is assured.

* * *

Please provide us the information requested within 10 business days of the date of this letter or tell us when you will provide a response prior to the expiration of the 10-day period. Please furnish a letter with your responses that keys your response to our comments. Detailed letters greatly facilitate our review. You should furnish the letter on EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;

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- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

You may contact Tabatha Akins, Staff Accountant, at (202) 551-3658 or Mary Mast, Senior Staff Accountant, at (202) 551-3613, 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