PharmAthene, Inc.
One Park Place, Suite 450
Annapolis, MD 21401

VIA EDGAR

October 10, 2013

Jeffrey P. Riedler
Assistant Director
Division of Corporation Finance
United States Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: **PharmAthene, Inc.**
Registration Statement on Form S-4
Filed September 9, 2013
File No. 333-191055

Dear Mr. Riedler:

PharmAthene, Inc. (the "Company") submits this letter in response to a comment letter dated October 1, 2013 received from the Staff of the Securities and Exchange Commission (the “Commission”) with respect to the Registration Statement on Form S-4 (the “Registration Statement”) filed by the Company on September 9, 2013.

In order to facilitate your review of our responses, the numbered paragraphs set forth below correspond to the Staff’s comments, which are restated below in bold text.

Form S-4

Risk Factors, page 35

1. **We note your discussion on pages F-24 and F-62 that each of PharmAthene's and Theraclone's net operating loss carry forwards may be limited due to underlying ownership of the respective company's common stock. Please include a new risk factor that addresses the circumstances under which the completion of your proposed merger could result in an "ownership change" for purposes of Section 382 of the Internal Revenue Code for each of PharmAthene or Theraclone and the impact on existing U.S. federal net operating loss carry forwards and other tax credit carry forwards.**

To address the Staff's comment, the Company intends to add the following disclosure as a new risk factor on page 38 of the Registration Statement, under the sub-caption “Risks Related to the Proposed Merger.”

The combined company’s ability to utilize PharmAthene’s or Theraclone’s net operating loss and tax credit carryforwards in the future may be subject to substantial limitations and may be further limited as a result of the merger.

Under Section 382 of the Code, if a corporation undergoes an “ownership change” (generally defined as a greater than 50 percent change (by value) in its equity ownership over a three-year period), the corporation’s ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income may be limited. Further, if the historic business of PharmAthene or Theraclone is not treated as being continued by the combined entity for the two-year period beginning on the date of the merger (referred to as the “continuity of business requirement”), the pre-transaction net operating loss carryforward deductions of PharmAthene or Theraclone (as the case may be) may become substantially reduced or unavailable for use by the combined company. Prior to the merger, PharmAthene may have undergone an “ownership change”, and it is expected that the merger will likely result in an “ownership change” of PharmAthene. In addition, it is expected that the merger will result in an “ownership change” of Theraclone. Accordingly, the combined company’s ability to utilize PharmAthene’s and Theraclone’s net operating loss and tax credit carryforwards may be substantially limited. These limitations, in turn, could result in increased future tax payments for the combined company, which could have a material adverse effect on the business, financial condition or results of operations of the combined company.

Under Section 384 of the Code, available net operating loss carryovers of PharmAthene or Theraclone may not be available to offset certain gains arising after the merger from assets held by the other corporation at the effective time of the merger. This limitation will apply to the extent that the gain is attributable to an unrealized built-in-gain in the assets of PharmAthene or Theraclone existing at the effective time of the merger. To the extent that any such gains are recognized in the five-year period after the merger upon the disposition of any such assets, the net operating loss carryovers of the other corporation will not be available to offset such gains (but the net operating loss carryovers of the corporation that owned such assets will not be limited by Section 384 of the Code although they may be subject to other limitations under Section 382 of the Code as described above).

"All of PharmAthene's immediately foreseeable future revenues are contingent upon grants and contracts from the U.S. government…," page 46

2. We note your disclosure on page 47 that future funding levels for two of PharmAthene's key government customers, BARDA and DoD, are uncertain and may be subject to budget cuts as the U.S. Congress and the President look to reduce the nation's budget deficit. At the same time, however, we note that the Pandemic and All-Hazards Preparedness Reauthorization Act of 2013 authorized appropriation of $2.8 billion for the period of fiscal years 2014 to 2018, a substantial portion of which funding is allocated to BARDA. Please expand your disclosure to state how the Pandemic and All-Hazards Preparedness Reauthorization Act of 2013 relates to BARDA funding and future revenues that may be received by PharmAthene from BARDA, as well as the impact of the sequestration on the federal appropriations provided to BARDA under the Reauthorization Act.

In response to the Staff's comment, the Company proposes to revise the risk factor, by revising the seventh full paragraph of the risk factor, copied below in italicized text, as follows: (i) to delete the text shown as stricken text, as the U.S. government is now in a new fiscal year; and (ii) to add disclosure shown in underlined text to address the Pandemic and All-Hazards Preparedness Reauthorization Act of 2013 in relation to BARDA.

As of December 31, 2012, of the total $5.6 billion allotted under Project BioShield in 2004, over $2.6 billion in procurement contracts had been awarded and approximately $2.3 billion had been transferred out of the Project BioShield Special Reserve Fund, or SRF, for non-procurement related activities. Remaining funds in the SRF were approximately $500 million as of December 31, 2012. It is expected that BARDA, which administers the SRF, obligated these remaining funds as of the end of the fiscal year 2013 (i.e. September 30, 2013). Sequestration was applied to fiscal year 2013 funding only. As BARDA was funded through a transfer of the SRF advanced appropriation, and not fiscal year 2013 funds, its funding was not impacted. ~~Currently, the government is operating under a continuing resolution at the fiscal year 2012 level. As $415 million was the level of annual funding for BARDA operations in fiscal year 2012, that amount is being transferred from the SRF to cover fiscal year 2013 operating expenses, and thus will not be available for product purchases for the U.S. Strategic National Stockpile.~~ The Pandemic and All Hazards Preparedness Act Reauthorization ("PAHPA") signed into law in March 2013 authorized $2.8 billion in funding for the SRF for fiscal years 2014-2018. These funds are for the procurement of medical countermeasures. PAHPA also authorized $415 million in funding to BARDA for advanced development activities. However, actual funding for BARDA is dependent on annual congressional appropriations. Currently, Congress has not passed appropriation legislation for fiscal year 2014 and, until Congress reaches an agreement, it is premature to predict future funding to BARDA. Until Congress reaches an agreement on the budget for fiscal year 2014, the amount and nature of future federal budgets spending will be uncertain. Potential reductions in funding could severely limit PharmAthene’s ability to maintain, renew or enter into new contracts with respect to its business generally and therefore materially adversely impact PharmAthene’s business.

Opinion of Leerink Swann, page 94

3. We note your description of the analysis performed by Leerink Swann in rendering its fairness opinion, which included an estimate of future revenues that PharmAthene may derive from its pending litigation with SIGA Technologies. We further note that Leerink assumed that such future revenues will be equal to the damages awarded to PharmAthene by the Delaware Chancery Court in its judgment dated May 31, 2012. Please expand your description to disclose:

- **the dollar amount of estimated damages attributed to this pending litigation for purposes of Leerink's analysis and its valuation of PharmAthene; and**

- **the methodology used to derive the estimate of damages including, if applicable, the value attributed to the net profits from sales of SIGA's Arestvyr™**

To address the Staff's comment, the Company proposes to expand the disclosure in the Registration Statement under the sub-caption "Illustrative Sum of the Parts Analysis" on page 98, copied below in italicized text, to add the disclosure shown in underlined text and to delete the disclosure shown as stricken text.

Leerink performed an illustrative sum of the parts analysis on PharmAthene consisting of (i) a discounted cash flow analysis of PharmAthene's existing products using the financial forecasts for PharmAthene provided by management of PharmAthene, calculated based on the forecasted free cash flows of each product from 2013 through 2021, discounted to present value using a discount rate of 15% and applying a range of probabilities of success to such forecasts, (ii) ~~an estimate~~ a discounted cash flow analysis of the future cash flows to ~~revenues~~ PharmAthene which may result from ~~the subject matter of~~ its pending litigation with SIGA Technologies, Inc., and which aggregate, undiscounted cash flows Leerink ~~assumed would~~ calculated to be approximately $74.2 million, an amount determined assuming the cash flows would be equal to the damages awarded by the Delaware Chancery Court in its judgment dated May 31, 2012 (which was subsequently remanded by the Delaware Supreme Court on May 24, 2013 for reconsideration) then discounted to present value using a discount rate of 15% and applying a 90% probability of success to such forecasts, with Leerink also (a) assuming that SIGA would not make any further sales of Arestvyr™ following completion of delivery of product under its current supply contract with the U.S. government and (b) applying the post-judgment positions taken by SIGA as to the allocation of costs to Arestvyr™ and timing of sales (positions PharmAthene disputes); and (iii) adding to the sum of the amounts derived from the analyses in (i) and (ii) above the net cash of PharmAthene. The following table presents the results of this analysis:

Illustrative Equity Value / Equity Value per share of PharmAthene Common Stock	*$89mm / $1.72*

* * *

The Company acknowledges 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 of 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 proceedings initiated by the Commission or any person under the federal securities laws of the United States.

If you have any questions, or if we may be of any assistance, please do not hesitate to contact the undersigned at (410) 269-2600 or our counsel, Jeffrey Baumel of Dentons US LLP, at (973) 912-7189.

Sincerely,

/s/ Eric Richman
Eric Richman
Chief Executive Officer

cc: Jeffrey Baumel