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

Form 10-Q

(Mark One)

x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2010

Or

o TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number: 001-32587

PHARMATHENE, INC.
(Exact name of registrant as specified in its charter)

Delaware	**20-2726770**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
One Park Place, Suite 450, Annapolis, MD	**21401**
(Address of principal executive offices)	(Zip Code)

(410) 269-2600
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data file required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes o No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer o	Accelerated Filer o
Non-Accelerated Filer o (Do not check if a smaller reporting company)	Smaller Reporting Company x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No x

Indicate the number of shares outstanding of each of the issuer’s classes of common stock, as of the latest practicable date: The number of shares of the registrant’s Common Stock, par value $0.0001 per share, outstanding as of May 4, 2010 was 30,086,019.

PHARMATHENE, INC.

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PART I — FINANCIAL INFORMATION

Item 1. Financial Statements

PHARMATHENE, INC.

UNAUDITED CONSOLIDATED BALANCE SHEETS

	March 31 2010	December 31 2009
ASSETS		
Current assets:		
Cash and cash equivalents	$ 735,119	$ 2,673,567
Restricted cash	100,000	-
Short-term investments	-	3,137,071
Accounts receivable	9,201,010	8,866,346
Other receivables (including unbilled receivables)	7,737,207	8,566,425
Prepaid expenses and other current assets	652,468	973,214
Total current assets	18,425,804	24,216,623
Property and equipment, net	6,481,457	6,262,388
Patents, net	918,368	928,577
Other long-term assets and deferred costs	308,348	308,973
Goodwill	2,348,453	2,348,453
Total assets	$ 28,482,430	$ 34,065,014
LIABILITIES AND STOCKHOLDERS' (DEFICIT) EQUITY		
Current liabilities:		
Accounts payable	$ 5,957,428	$ 1,934,119
Accrued expenses and other liabilities	8,422,656	11,532,101
Total current liabilities	14,380,084	13,466,220
Other long-term liabilities	458,846	452,618
Derivative instruments	567,803	835,299
Long-term debt	18,284,030	17,426,513
Total liabilities	33,690,763	32,180,650
Stockholders' (deficit) equity:		
Common stock, $0.0001 par value; 100,000,000 shares authorized; 28,188,288 and 28,130,284 shares issued and outstanding at March 31, 2010 and December 31, 2009, respectively	2,819	2,813
Additional paid-in-capital	157,673,857	157,004,037
Accumulated other comprehensive income	1,369,901	1,188,156
Accumulated deficit	(164,254,910)	(156,310,642)
Total stockholders' (deficit) equity	(5,208,333)	1,884,364
Total liabilities and stockholders' (deficit) equity	$ 28,482,430	$ 34,065,014

See the accompanying notes to the consolidated financial statements.

PHARMATHENE, INC.

UNAUDITED CONSOLIDATED STATEMENTS OF OPERATIONS

	Three months ended March 31,	
	2010	**2009**
Revenue	$ 3,116,553	$ 5,521,903
Operating expenses:		
Research and development	4,952,393	5,695,326
General and administrative	5,325,422	5,145,999
Depreciation and amortization	245,258	192,478
Total operating expenses	10,523,073	11,033,803
Loss from operations	(7,406,520)	(5,511,900)
Other income (expense):		
Interest income	3,483	104,245
Interest expense	(948,150)	(602,115)
Other income (expense)	139,422	(123,841)
Change in market value of derivative instruments	267,496	120,589
Total other income (expense)	(537,749)	(501,122)
Net loss	$ (7,944,269)	$ (6,013,022)
Basic and diluted net loss per share	$ (0.28)	$ (0.23)
Weighted average shares used in calculation of basic and diluted net loss per share	28,172,802	26,009,387

See the accompanying notes to the consolidated financial statements.

PHARMATHENE, INC.

UNAUDITED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Three months Ended March 31 2010	2009
Operating activities		
Net loss	$ (7,944,269)	$ (6,013,022)
Adjustments to reconcile net loss to net cash used in operating activities:		
Change in market value of derivative instruments	(267,496)	3,085
Depreciation and amortization	245,258	192,478
Measurement period changes in purchase accounting estimates	-	112,173
Compensatory option expense	695,029	951,560
Non cash interest expense on debt	895,155	468,047
Changes in operating assets and liabilities:		
Accounts receivable	(306,422)	(1,160,788)
Prepaid expenses and other current assets	1,093,149	(168,509)
Accounts payable	4,180,024	(414,221)
Accrued expenses and other liabilities	(2,972,554)	(742,539)
Net cash used in operating activities	(4,382,126)	(6,771,736)
Investing activities		
Purchases of property and equipment	(279,488)	(151,979)
Purchases of short term investments	-	(3,982,682)
Proceeds from sales or maturities of short term investments	3,130,588	400,000
Net cash provided by (used in) investing activities	2,851,100	(3,734,661)
Financing activities		
Payments of debt obligations	-	(1,000,000)
Change in restricted cash requirements	(100,000)	4,250,000
Net proceeds from issuance of common stock and warrants	(25,203)	4,978,778
Net cash provided by (used in) financing activities	(125,203)	8,228,778
Effects of exchange rates on cash	(282,219)	(229,364)
Decreases in cash and cash equivalents	(1,938,448)	(2,506,983)
Cash and cash equivalents, at beginning of period	2,673,567	19,752,404
Cash and cash equivalents, at end of period	$ 735,119	$ 17,245,421
Supplemental disclosure of cash flow information		
Cash paid for interest	$ 2,853	$ 124,908
Cash paid for income taxes	$ 0	$ 184,226

See the accompanying notes to the consolidated financial statements.

Note 1 - Organization and Business

PharmAthene, Inc. ("PharmAthene" or the "Company") was incorporated under the laws of the State of Delaware as Healthcare Acquisition Corp. ("HAQ") in 2005, a special purchase acquisition corporation formed solely to acquire a then unidentified business. In 2007 HAQ acquired a Delaware corporation which at the time was known as "PharmAthene, Inc." (the "Merger"); as a result of the Merger, HAQ changed its name to "PharmAthene, Inc."

In March 2008, PharmAthene Inc., through its wholly-owned subsidiary PharmAthene UK Limited, acquired substantially all the assets and liabilities related to the biodefense vaccines business (the "Avecia Acquisition") of Avecia Biologics Limited (along with its affiliates, "Avecia").

We are a biopharmaceutical company focused on developing biodefense countermeasure applications. We are subject to those risks associated with any biopharmaceutical company that has substantial expenditures for research and development. There can be no assurance that our research and development projects will be successful, that products developed will obtain necessary regulatory approval, or that any approved product will be commercially viable. In addition, we operate in an environment of rapid technological change and are largely dependent on the services and expertise of our employees, consultants and other third parties.

Historically, we have performed under government contracts and grants and raised funds from investors (including additional debt and equity issued in 2009, and equity issued subsequent to March 31, 2010) to sustain our operations. Based on the operating cash requirements and capital expenditures expected through the end of 2010, and expected receipts from our government contracts and grants, we currently do not anticipate requiring additional funding to continue our current level of operations through the end of 2010. We may elect to raise additional capital in 2010 through the issuance of debt and/or equity to expand our business and/or strengthen our financial position or, if our current expectations and estimates about future operating costs prove to be incorrect, we may need to raise additional capital in 2010. Further, we may need to raise additional capital to fund our operations beyond 2010.

Note 2 - Summary of Significant Accounting Policies

Basis of Presentation

Our consolidated financial statements include the accounts of PharmAthene, Inc. and its wholly-owned subsidiaries, PharmAthene U.S. Corporation (which was merged with and into PharmAthene, Inc. in the first quarter 2009), PharmAthene Canada, Inc., and PharmAthene UK Limited, collectively referred to herein as "PharmAthene", "we", "us", "our" or the "Company". All significant intercompany transactions and balances have been eliminated in consolidation. Our consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States. In the opinion of management, the accompanying unaudited condensed consolidated financial statements include all adjustments, consisting of normal recurring adjustments, which are necessary to present fairly our financial position, results of operations and cash flows. The condensed consolidated balance sheet at December 31, 2009 has been derived from audited consolidated financial statements at that date. The interim results of operations are not necessarily indicative of the results that may occur for the full fiscal year. These statements should be read in conjunction with the Consolidated Financial Statements and Notes included in our Annual Report on Form 10-K for the year ended December 31, 2009 filed with the Securities and Exchange Commission. We currently operate in one business segment.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Foreign Currency Translation

The functional currency of our wholly owned foreign subsidiaries located in Canada and the United Kingdom is their local currency. Assets and liabilities of our foreign subsidiaries are translated into United States dollars based on exchange rates at the end of the reporting period. Income and expense items are translated at the weighted average exchange rates prevailing during the reporting period. Translation adjustments are accumulated in a separate component of stockholders' equity. Transaction gains or losses are included in the determination of net loss.

Comprehensive Loss

Comprehensive loss includes the total of our net loss and all other changes in equity other than transactions with owners, including (i) changes in equity for cumulative translation adjustments resulting from the consolidation of foreign subsidiaries whose financial statements are prepared for using the local currency as the functional currency, and (ii) unrealized gains and losses on short term available-for-sale investments. Comprehensive loss for the three month periods ended March 31, 2010 and 2009 was approximately $7.8 million and $6.7 million, respectively. Comprehensive loss was not significantly different from net loss.

Cash and Cash Equivalents

Cash and cash equivalents, are stated at cost which approximates market value. We consider all highly liquid investments with original maturities of three months or less to be cash equivalents. Interest income earned on cash and cash equivalents and short-term investments was $0.0 million and $0.1 million for the three months ended March 31, 2010 and 2009, respectively.

Short-Term Investments

Short-term investments consist of investment grade government agency and corporate debt securities due within one year. All investments are classified as available-for-sale and are recorded at market value. Unrealized gains and losses are reflected in other comprehensive income (loss). The estimated fair value of the available-for-sale securities is determined based on quoted market prices or rates for similar instruments. Management reviews the Company's investment portfolio on a regular basis and seeks guidance from its professional portfolio manager related to U.S. and global market conditions. We assess the risk of impairment related to securities held in our investment portfolio on a regular basis. At March 31, 2010 there were no short-term investments.

Significant Customers and Accounts Receivable

Our primary customers are the U.S. Department of Defense (the “DoD”), the National Institute of Allergy and Infectious Diseases (“NIAID”), the Biomedical Advanced Research and Development Authority (“BARDA”), and the National Institutes of Health (“NIH”).

As of March 31, 2010 and December 31, 2009, the Company’s trade receivable balances were comprised solely of receivables from these customers. Unbilled accounts receivable totaling $7.1 million and $7.7 million as of March 31, 2010 and December 31, 2009, respectively, relate to the contracts with these same customers.

Concentration of Credit Risk

Financial instruments that potentially subject us to concentrations of credit risk are primarily cash and cash equivalents, investments and billed and unbilled accounts receivable. We maintain our cash and cash equivalents and investment balances in the form of money market accounts, corporate and government debt securities and overnight deposits with financial institutions that we believe are creditworthy.

Fair Value of Financial Instruments

Our financial instruments primarily include cash and cash equivalents, accounts receivable, short-term investments and other current assets, accounts payable, accrued and other liabilities, convertible notes and long-term debt. Due to the short-term nature of the cash and cash equivalents, accounts receivable, short-term investments and other current assets, accounts payable and accrued and other liabilities (including derivative instruments), the carrying amounts of these assets and liabilities approximate their fair value. The carrying values of our convertible notes and other long term debt approximate their fair values, based on our current incremental borrowing rates.

Short-term investments consist of investment grade government agency and corporate debt securities due within one year. All investments are classified as available-for-sale and are recorded at market value. Unrealized gains and losses are reflected in other comprehensive income (loss). The estimated fair value of our available-for-sale securities is determined based on quoted market prices or rates for similar instruments. We review our investment portfolio on a regular basis and seek guidance from our professional portfolio manager related to U.S. and global market conditions. We assess the risk of impairment related to securities held in our investment portfolio on a regular basis and identified no permanent or “other-than-temporary” impairment as of March 31, 2010 or December 31, 2009.

Intangible Assets

Patents are carried at cost less accumulated amortization which is calculated on a straight line basis over the estimated useful lives of the patents, currently estimated to be 11 years. Goodwill represents the excess of purchase price over the fair value of net identifiable assets associated with the Avecia Acquisition. We review the carrying value of our intangible assets for impairment annually during the fourth quarter of every year, or more frequently if impairment indicators exist and concluded that goodwill was not impaired. Evaluating for impairment requires judgment, including the estimation of future cash flows, future growth rates and profitability and the expected life over which cash flows will occur. Changes in the Company’s business strategy or adverse changes in market conditions could impact impairment analyses and require the recognition of an impairment charge equal to the excess of the carrying value of the intangible asset over its estimated fair value. In accordance with ASC Section 360-10-35, "Impairment or Disposal of Long-Lived Assets" we review assets for impairment. If impairment is indicated, we measure the amount of such impairment by comparing the carrying value of the assets to the present value of the expected future cash flows associated with the use of the asset. During the three months ended March 31, 2010, no indicators of impairment came to our attention.

Accrued Expenses

Management is required to estimate accrued expenses as part of the process of preparing financial statements. The estimation of accrued expenses involves identifying services that have been performed on the Company's behalf, and estimating the level of services performed and the associated costs incurred for such services as of each balance sheet date in the financial statements. Accrued expenses include professional service fees, such as fees paid to lawyers and accountants, contract service fees, such as those under contracts with clinical research organizations and investigators in conjunction with clinical trials, and fees to contract manufacturers in conjunction with the production of clinical materials. Pursuant to management's assessment of the services that have been performed on clinical trials and other contracts, the Company recognizes these expenses as the services are provided. Management assessments include, but are not limited to: (1) an evaluation by the project manager of the work that has been completed during the period, (2) measurement of progress prepared internally and/or provided by the third-party service provider, (3) analyses of data that justify the progress, and (4) management's judgment.

Revenue Recognition

We generate our revenue from two different types of contractual arrangements: cost-plus-fee contracts and cost reimbursable grants. Costs consist primarily of actual internal labor charges and external sub-contractor costs incurred plus an allocation of applied fringe benefits, overhead and general and administrative expenses as defined in the contract.

Revenues on cost-plus-fee contracts are recognized in an amount equal to the costs incurred during the period plus an estimate of the applicable fee earned. The estimate of the applicable fee earned is determined by reference to the contract: if the contract defines the fee in terms of risk-based milestones and specifies the fees to be earned upon the completion of each milestone, then the fee is recognized when the related milestones are earned. Otherwise, we compute fee income earned in a given period by using a proportional performance method based on costs incurred during the period as compared to total estimated project costs and application of the resulting fraction to the total project fee specified in the contract.

We analyze each cost reimbursable grant to determine whether we should report such reimbursements as revenue or as an offset to our expenses incurred. For the three months ended March 31, 2010 and 2009, we recorded approximately $0.8 million and $0.3 million, respectively, of costs reimbursed by the government as an offset to research and development expenses.

Our revenue-generating contracts may include multiple elements, including one or more of up-front license fees, research payments, and milestone payments. In these situations, we allocate the total contract price to the multiple elements based on their relative fair values and recognize revenue for each element according to its characteristics. As revenue is recognized in accordance with the terms of the contracts, related amounts are recorded as unbilled receivables, the primary component of "Other receivables (including unbilled receivables)" in our consolidated balance sheets. As specific contract invoices are generated and sent to our customers, invoiced amounts are transferred out of unbilled receivables and into billed accounts receivable. Invoicing frequency and payment terms for cost-plus-fee contracts with our customers are defined within each contract, but are typically monthly invoicing with 30-60 day payment cycles.

At March 31, 2010, "Other receivables (including unbilled receivables)" were approximately $7.7 million. As we progress through 2010, we expect the amount of unbilled receivables to decline until all programs are being invoiced on a current basis.

Collaborative Arrangements

Even though most of our products are being developed in conjunction with support by the U.S. Government, we are an active participant in that development, with exposure to significant risks and rewards of commercialization relating to the development of these pipeline products. In collaborations where we are deemed to be the principal participant of the collaboration, we recognize costs and revenues generated from third parties using the gross basis of accounting; otherwise, we use the net basis of accounting.

Research and Development

Research and development costs are expensed as incurred; pre-payments are deferred and expensed as performance occurs. Research and development costs include salaries, facilities expense, overhead expenses, material and supplies, pre-clinical expense, clinical trials and related clinical manufacturing expenses, stock-based compensation expense, contract services and other outside services.

Share-Based Compensation

We expense the estimated fair value of share-based awards granted to employees under our stock compensation plans. The fair value of restricted stock grants is determined based on the quoted market price of our common stock. Share-based compensation cost for stock options is determined at the grant date using an option pricing model. We have estimated the fair value of each award using the Black-Scholes option pricing model. The Black-Scholes model considers, among other factors, the expected life of the award and the expected volatility of the Company's stock price. The value of the award that is ultimately expected to vest is recognized as expense on a straight line basis over the employee's requisite service period.

The fair value of restricted stock grants are determined based on the closing price of our common stock on the award date and is recognized ratably as expense over the requisite service period. Employee share-based compensation expense recognized in the three months ended March 31, 2010 and 2009 was calculated based on awards ultimately expected to vest and has been reduced for estimated forfeitures at a rate of approximately 17% for both stock options and restricted shares, based on historical forfeitures. Share-based compensation expense for the three months ended March 31, 2010 and 2009, was:

	Three months ended March 31,	
	2010	**2009**
Research and development	$ 183,427	$ 259,320
General and administrative	511,602	692,240
Total share-based compensation expense	$ 695,029	$ 951,560

During the three months ended March 31, 2010, we granted options to purchase an aggregate of 110,000 shares of common stock to employees and non-employee directors, and made no restricted stock grants. At March 31, 2010, we had total unrecognized stock based compensation expense related to unvested awards of approximately $5.0 million that we expect to recognize as expense over the next three years.

Income Taxes

We account for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are recorded for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect of a tax rate change on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date. We record valuation allowances to reduce net deferred tax assets to the amount considered more likely than not to be realized. Changes in estimates of future taxable income can materially change the amount of such valuation allowances. As of March 31, 2010, we had recognized a valuation allowance to the full extent of our net deferred tax assets since the likelihood of realization of the benefit does not meet the more likely than not threshold.

We file a U.S. federal income tax return as well as returns for various state and foreign jurisdictions. Our income taxes have not been examined by any tax jurisdiction since our inception. Uncertain tax positions taken on our tax returns are accounted for as liabilities for unrecognized tax benefits. We recognize interest and penalties, if any, related to unrecognized tax benefits in other income (expense) in the consolidated statements of operations.

Basic and Diluted Net Loss Per Share

Basic loss per share is computed by dividing consolidated net loss by the weighted average number of shares of common stock outstanding during the year, excluding unvested restricted stock.

For periods of net income when the effects are not anti-dilutive, diluted earnings per share is computed by dividing our net income allocable to common shareholders by the weighted average number of shares outstanding and the impact of all dilutive potential shares of common stock, consisting primarily of stock options and the shares of common stock underlying our convertible notes and stock purchase warrants. The dilutive impact of our dilutive potential shares of common stock resulting from stock options and stock purchase warrants is determined by applying the treasury stock method. The dilutive impact of our dilutive potential shares of common stock resulting from our convertible notes is determined by applying the "if converted" method.

For the periods of net loss, diluted loss per share is calculated similarly to basic loss per share because the impact of all dilutive potential shares of common stock is anti-dilutive due to the net losses. A total of 16.5 million and 20.1 million potential dilutive shares have been excluded in the calculation of diluted net loss per share in the three months ended March 31, 2010 and 2009, respectively, because their inclusion would be anti-dilutive.

Recent Accounting Pronouncements

There are several new accounting and disclosure requirements that we will be required to adopt in the future, primarily with respect to revenue recognition practices. In 2011 we will be required to adopt ASU 2009-13 which deals with new revenue recognition practices relating to revenue arrangements that include multiple elements. We will also be adopting ASU 2010-17 which deals with revenue recognition for arrangements with milestones. Our government contracts and grants, and any future modifications to those contracts and grants, may be affected by the new accounting and disclosure requirements. We are currently evaluating any potential impact these new requirements may have on our consolidated financial statements.

Note 3 – Contemplated Exit Activities

In the second quarter 2009, our existing research and development contract for SparVax™ was transferred from NIAID to BARDA. In the third quarter 2009 BARDA and PharmAthene modified the existing statement of work to include, among other things, the completion of on-going stability studies and development of potency assays along with certain manufacturing scale-up and technology transfer activities to a U.S.-based manufacturer for the bulk drug substance for SparVax™. We then entered into a corresponding subcontract with our U.S.-based manufacturer. As a result of the transfer of the contract and modification of the statement of work, we have been transitioning development and manufacturing activities as well as other general and administrative functions from the UK to the U.S. In connection with this transition, we anticipate relocating our UK operations, including terminating our UK workforce, by June 30, 2010. In the third quarter of 2009, we recorded a reserve for these exit activities, of which $1.0 million remained in accrued expense at March 31, 2010.

Note 4 - Fair Value Measurements

We define fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. We report assets and liabilities that are measured at fair value using a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy maximizes the use of observable inputs and minimizes the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows:

· Level 1 — Quoted prices in active markets for identical assets or liabilities.

· Level 2 — Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

· Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

An asset's or liability's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. At each reporting period, we perform a detailed analysis of our assets and liabilities that are measured at fair value. All assets and liabilities for which the fair value measurement is based on significant unobservable inputs or instruments which trade infrequently and therefore have little or no price transparency are classified as Level 3.

We have segregated our financial assets and liabilities that are measured at fair value into the most appropriate level within the fair value hierarchy based on the inputs used to determine the fair value at the measurement date in the table below. We have no non-financial assets and liabilities that are measured at fair value. As of March 31, 2010 and 2009 we had level 3 derivative liabilities of approximately $0.6 million and $1.5 million, respectively

The following table sets forth a summary of changes in the fair value of our Level 3 liabilities for the three months ended March 31, 2010:

Description	Balance as of December 31, 2009	Cumulative Effect of Adoption of New Accounting	New Liabilities	Unrealized Gains	Balance as of March 31, 2010
Stock purchase warrants	$ 835,299	—	—	$ 267,496	$ 567,803

The following table sets forth a summary of changes in the fair value of the Company's Level 3 liabilities for the three months ended March 31, 2009:

Description	Balance at December 31, 2008	Cumulative Effect of the Adoption of EITF 07-05 (See Note 4)	Realized Gains (Losses)	Balance as of March 31, 2009
Derivative liabilities related to Warrants	$ —	$ 1,412,110	$ 123,674	$ 1,535,784

The gains on the derivative instruments are classified in other expenses as the change in derivative instruments in our consolidated statements of operations. The fair value of our stock purchase warrants and conversion option is determined based on the Black-Scholes option pricing model. Use of the Black-Scholes option-pricing model requires the use of unobservable inputs such as the expected term, anticipated volatility and expected dividends.

Note 5 - Short-Term Investments – Available for Sale Securities

At March 31, 2010 we had no available-for-sale investments.

During the three months ended March 31, 2010, we realized net gains of approximately $4,640 on sales of available-for-sale securities. The gains and losses on available-for-sale securities are based on the specific identification method.

Note 6 - Debt

Convertible Notes

Our 8% senior unsecured convertible notes accrued interest at a rate of 8% per annum and were to mature on August 3, 2009 (the "Old Notes"). The principal amount of the Old Notes and any accrued interest were convertible into shares of PharmAthene common stock at the option of the holder at any time based upon a conversion rate of $10.00 per share. In July 2009, we cancelled a portion of the Old Notes, and issued new convertible notes and stock purchase warrants to certain holders of the Old Notes as well as to certain new note investors in a private placement (the "July 2009 Private Placement"). The balance at March 31, 2010 was $18.3 million. In connection with the July 2009 Private Placement, among other things we:

- exchanged a portion of the Old Notes in the aggregate principal amount plus accrued interest totaling $8.8 million for new two-year 10% unsecured senior convertible notes, convertible into shares of common stock at a conversion price of approximately $2.54 per share (the "New Convertible Notes") and cancelled the corresponding Old Notes; and

- issued additional New Convertible Notes in the aggregate principal amount of $10.5 million to new note investors.

The New Convertible Notes accrue interest at 10% per annum and mature on July 28, 2011. The note holders may convert their principal and related accrued interest into shares of the Company's common stock at a conversion price of $2.54 per share. The conversion price is subject to adjustment for specified dilutive events, as defined in the note. Starting on July 28, 2010, the Company has the right to redeem all or a portion of the New Convertible Notes. Upon a change in control or default, as defined in the note, the note holders may require the Company to redeem their notes. These two provisions of the note are considered embedded derivatives that require bifurcation from the debt host contract. At the date of issuance and as of March 31, 2010, we have determined the probability of change in control or default to be remote; accordingly the resulting value of these derivatives is not significant. We evaluate these estimates and assumptions each reporting period and make revisions should facts and circumstances warrant a change.

Note 7 - Commitments and Contingencies

SIGA Litigation

In December 2006, we filed a complaint against Siga Technologies, Inc. ("SIGA") in the Delaware Chancery Court. The complaint alleges, among other things, that we have the right to license exclusively development and marketing rights for SIGA's drug candidate, SIGA-246, pursuant to a merger agreement between the parties (the "Merger Agreement") that was terminated in October 2006. The complaint also alleges that SIGA failed to negotiate in good faith the terms of such a license pursuant to the terminated merger agreement.

We are seeking alternatively a judgment requiring SIGA to enter into an exclusive license agreement with the Company for SIGA-246 in accordance with the terms of the term sheet attached to the merger agreement or monetary damages. In January 2008, the Delaware Chancery Court issued a ruling denying a motion by SIGA to dismiss the complaint. SIGA has filed a counterclaim against the Company alleging that we breached our duty to engage in good-faith negotiations by, among other things, presenting SIGA with a bad-faith initial proposal for a license agreement that did not contain all necessary terms, demanding SIGA prepare a complete draft of a partnership agreement and then unreasonably rejecting that agreement, and unreasonably refusing to consider economic terms that differed from those set forth in the license agreement term sheet attached to the Merger Agreement. SIGA is seeking recovery of its reliance damages from this alleged breach.

Discovery in the case closed in February 2010. In March 2010 SIGA filed a motion for summary judgment, and subsequently we filed an answering brief and SIGA filed its reply brief. While the specific timing for any hearing on SIGA's motion is within the court's discretion, we anticipate that the court will schedule a hearing in June or July 2010. Thereafter, once the court rules on the motion for summary judgment, and assuming open issues remain in the case, the parties can ask the court to set a trial date for any time 45 days following the ruling on summary judgment. An actual trial date will be subject to the court's discretion and its schedule and docket at that time.

An accrual for a loss contingency has not been made because the contingency is not probable.

Government Contracting

Payments to the Company on cost-plus-fee contracts are provisional and are subject to adjustment upon audit by the Defense Contract Audit Agency. In our opinion, adjustments that may result from audits are not expected to have a material effect on the Company's financial position, results of operations, or cash flows.

Registration Rights Agreements

We entered into a Registration Rights Agreement with the investors who participated in the July 2009 Private Placement. We subsequently filed a registration statement on Form S-3 with the Securities and Exchange Commission to register a portion of the shares underlying the New Convertible Notes and related warrants, which registration statement was declared effective in the fourth quarter 2009. We are obligated to maintain the registration statement effective until the date when all shares underlying the New Convertible Notes and related warrants (and any other securities issued or issuable with respect to in exchange for such shares) have been sold.

We have separate registration rights agreements with investors that we executed in connection with the initial public offering, the Merger and a subsequent equity financing, under which we have obligations to keep the corresponding registration statements effective until the registrable securities (as defined in each such agreement) have been sold, and under which we may have separate obligations to file registration statements in the future on either a demand or "piggy-back" basis or both.

Under the terms of the New Convertible Notes, if the registration statement is not declared effective as specified in such notes ("Effectiveness Failure"), or after the effective date of the registration statement, after the 2nd consecutive business day (other than during an allowable blackout period) on which sales of all of the securities required to be included on the registration statement cannot be made pursuant to the registration statement (a "Maintenance Failure"), we will be required to pay to each selling stockholder a one-time payment of 1.0% of the aggregate principal amount of the New Convertible Notes relating to the affected shares on: (i) the day of an Effectiveness Failure and (ii) the initial day of a Maintenance Failure. Our total maximum obligation under this provision would be approximately $193,000.

Following an Effectiveness Failure or Maintenance Failure, we will also be required to make to each selling stockholder monthly payments of 1.0% of the aggregate principal amount of the New Convertible Notes relating to the affected shares on each of the following dates: (i) on every 30th day after the initial day of an Effectiveness Failure and (ii) on every 30th day after the initial day of a Maintenance Failure, in each case prorated for shorter periods and until the failure is cured. Our total maximum obligation under this provision would approximate $193,000 for each month until the failure is cured. The payments above assume that we otherwise comply with the terms of the New Convertible Notes.

Note 8 - Stockholders' Equity

Common Stock

In April 2010, we completed a public sale of 1,666,668 shares of common stock at $1.50 per share and warrants to purchase 500,000 shares of our common stock at an exercise price of $1.89 per share, generating gross proceeds of $2.5 million. The warrants become exercisable on October 13, 2010 and expire on October 13, 2015. Placement fees of $175,000 and legal fees of $92,772 were incurred in connection with this transaction.

Long-Term Incentive Plan

Prior to 2007, share-based awards were granted pursuant to our 2002 Long-Term Incentive Plan (the "2002 Plan"). In connection with the Merger, we assumed all outstanding awards that had been initially granted under the 2002 Plan. No further grants are being made under the 2002 Plan. On August 3, 2007, the Company's stockholders approved the 2007 Long Term Incentive Plan (the "2007 Plan") which provides for the granting of incentive and non-qualified stock options, stock appreciation rights, performance units, restricted common awards and performance bonuses (collectively "awards") to Company officers and employees. Additionally, the 2007 Plan authorizes the granting of non-qualified stock options and restricted stock awards to Company directors and to independent consultants.

At that time, we reserved 3,500,000 shares of common stock in connection with awards to be granted under the 2007 Plan, including those awards that had originally been made under the 2002 Plan. In 2008, the Company's shareholders approved amendments to the 2007 Plan, increasing from 3,500,000 shares to 4,600,000 shares the maximum number of shares authorized for issuance under the plan and adding an evergreen provision pursuant to which the number of shares authorized for issuance under the plan will increase automatically in each year, beginning in 2009 and continuing through 2015, according to certain limits set forth in the 2007 Plan. The Board of Directors in conjunction with management determines who receives awards, the vesting conditions, which are generally four years, and the exercise price. Options may have a maximum term of ten years.

Warrants

In connection with the March 27, 2009 public offering of approximately 2.1 million shares, we issued warrants to purchase an aggregate of 705,354 shares of our common stock at an exercise price of $3.00 per share. The warrants became exercisable on September 27, 2009 and will expire on September 27, 2014. These warrants are a derivative liability and as such reflect the liability at fair value in the consolidated balance sheets. The fair value of this derivative liability will be re-measured at the end of every reporting period and the change in fair value will be reported in the consolidated statement of operations as other income (expense).

In connection with the July 2009 Private Placement, we issued warrants to purchase an aggregate of 2,572,775 shares of the company's common stock at an exercise price of $2.50 per share. The warrants will expire on January 28, 2015 and are classified in equity.

Note 9 - Subsequent Events

In April 2010, we completed a public sale of 1,666,668 shares of common stock at $1.50 per share and warrants to purchase 500,000 shares of our common stock at an exercise price of $1.89 per share, generating gross proceeds of $2.5 million. The warrants become exercisable on October 13, 2010 and expire on October 13, 2015. Placement fees of $175,000 and legal fees of $92,772 were incurred in connection with this transaction.

In April 2010 David P. Wright resigned as CEO. In May 2010, Mr. Wright resigned as member of our Board of Directors, and Mr. Eric Richman was appointed interim CEO.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. This information may involve known and unknown risks, uncertainties and other factors that are difficult to predict and may cause our actual results, performance or achievements to be materially different from future results, performance or achievements expressed or implied by any forward-looking statements. These risks, uncertainties and other factors include, but are not limited to, risk associated with the reliability of the results of the studies relating to human safety and possible adverse effects resulting from the administration of the Company's product candidates, unexpected funding delays and/or reductions or elimination of U.S. government funding for one or more of the Company's development programs, the award of government contracts to our competitors, unforeseen safety issues, challenges related to the development, technology transfer, scale-up, and/or process validation of manufacturing processes for our product candidates, unexpected determinations that these product candidates prove not to be effective and/or capable of being marketed as products, as well as risks detailed from time to time in PharmAthene's Forms 10-K and 10-Q under the caption "Risk Factors" and in its other reports filed with the U.S. Securities and Exchange Commission (the "SEC"). Forward-looking statements describe management's current expectations regarding our future plans, strategies and objectives and are generally identifiable by use of the words "may," "will," "should," "expect," "anticipate," "estimate," "believe," "intend," "project," "potential" or "plan" or the negative of these words or other variations on these words or comparable terminology. Such statements include, but are not limited to, statements about potential future government contract or grant awards, potential payments under government contracts or grants, potential regulatory approvals, future product advancements, anticipated financial or operational results and expected benefits from our acquisition of Avecia's biodefense vaccines business. Forward-looking statements are based on assumptions that may be incorrect, and we cannot assure you that the projections included in the forward-looking statements will come to pass.

We have based the forward-looking statements included in this Quarterly Report on Form 10-Q on information available to us on the date of this Quarterly Report, and we assume no obligation to update any such forward-looking statements, other than as required by law. Although we undertake no obligation to revise or update any forward-looking statements, whether as a result of new information, future events or otherwise, you are advised to consult any additional disclosures that we may make directly to you or through reports that we, in the future, may file with the SEC, including Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K.

The following discussion should be read in conjunction with the our condensed consolidated financial statements which present our results of operations for the three months ended March 31, 2010 and 2009 as well as our financial positions at March 31, 2010 and December 31, 2009, contained elsewhere in this Quarterly Report on Form 10-Q. The following discussion should also be read in conjunction with the Annual Report on Form 10-K for the year ended December 31, 2009 filed on March 26, 2010 and as amended on April 30, 2010, including the consolidated financial statements contained therein.

Overview

We are a biodefense company engaged in the development and commercialization of medical countermeasures against biological and chemical weapons. Our current lead product candidates are:

- SparVax™, a second generation recombinant protective antigen ("rPA") anthrax vaccine,

- Valortim®, a fully human monoclonal antibody (an identical population of highly specific antibodies produced from a single clone) for the prevention and treatment of anthrax infection, and

· Protexia®, a recombinant enzyme (butyrylcholinesterase), which mimics a natural bioscavenger for the prevention or treatment of nerve agent poisoning by organophosphate compounds, including nerve gases and pesticides.

Recent Events

In January 2010, we submitted a proposal to the U.S. Department of Health and Human Services (HHS), operating through the Biomedical Advanced Research and Development Authority (BARDA), for work under our existing research and development contract with BARDA for the development of SparVax™ (HHSO100200900103C) to cover remaining transfer and validation of the bulk drug substance manufacturing process to final scale as well as work related to bulk drug substance chemistry manufacturing and controls (CMC), development of analytical methods, and generation of data to support target expiration dating and non-clinical data in two animal species, all within the original contract statement of work.

In February 2010, we entered into a contract modification to fund that work. During the base period of performance under the contract modification, i.e., through December 31, 2012, we could receive payments of up to approximately $61 million on a cost-reimbursement-plus-fixed-fee basis, assuming that all milestones are achieved. Under the contract modification, the government, at its sole discretion, may exercise three contract options during the base period of performance. Assuming that the government exercises all three options, we could receive up to an additional $17 million. In March 2010, a third party filed a bid protest with the U.S. Government Accountability Office (GAO), challenging the decision by HHS to enter into the contract modification. On March 19, 2010 HHS suspended performance under the modification pursuant to the automatic stay provisions of the Competition in Contracting Act, pending a decision by the GAO on the protest, which is expected no later than June 11, 2010.

On February 1, 2010, we submitted a white paper under BAA-BARDA-09-34 (which BAA was originally issued in March 2009 and amended in December 2009) requesting additional funding to further support our development efforts on SparVax™. Generally, if BARDA finds a white paper submission acceptable, it will then request an interested party to submit a formal funding proposal. BARDA has provided feedback to us regarding certain technical aspects of the program, in particular matters related to the proposed alternative formulation, and notified us that they would not be requesting a full proposal at this time based on the submitted white paper. However, in its written response and in debriefing meetings, BARDA strongly encouraged us to resubmit a revised white paper focusing on areas of interest to them that would support a BAA funding.

NIAID has raised concerns regarding performance under our existing three year, $13.2 million contract with them related to our third-generation anthrax vaccine program, with project delays and contract management noted as key areas of concern. Through March 31, 2010 we had recognized approximately $1.6 million in revenue under this contract. In April 2010, NIAID notified us that the agency is considering terminating the contract, possibly for default. We have responded to address the agency's specific concerns. At this point we believe it is likely that we will reach an agreement with NIAID regarding termination of this contract.

We have been exploring alternative third generation technologies for enhancing an rPA-based vaccine, which are directed at meeting the government's requirements for reducing the number of doses to achieve protective immunity, enhancing product stability, and possibly employing alternative delivery mechanism. We are a current rPA supplier to a company that has been awarded a third generation contract and a past supplier to other companies exploring this technology. We are developing a lyophilized rPA-based vaccine candidate that has shown promise, and we are continuing to evaluate its potential to fulfill these requirements.

In April 2010, we completed a public sale (the "April 2010 Public Offering") of 1,666,668 shares of common stock at $1.50 per share and warrants to purchase 500,000 shares of our common stock at an exercise price of $1.89 per share, generating gross proceeds of $2.5 million. The warrants become exercisable on October 13, 2010 and expire on October 13, 2015.

In April 2010 BARDA informed us of its belief that it is not practical at this point to resume negotiations under our current proposal under BARDA- BAA-09-34 for the advanced development of Valortim® and encouraged us to submit a new white paper under Broad Agency Announcement, BARDA-CBRN-BAA-10-100-SOL-00012, if and when FDA agrees to permit us to reinitiate the Valortim® IV administration clinical trial program. The program is continuing under our current contract with NIAID/BARDA.

In April 2010, David P. Wright resigned as Chief Executive Officer. In May 2010, Mr. Wright resigned as member of our Board of Directors, and Mr. Eric Richman was appointed interim Chief Executive Officer.

In April 2010, our Board of Directors appointed Mitchel Sayare, Ph.D. to serve as a director, and we hired Thomas R. Fuerst to serve as our Senior Vice President, Chief Scientific Officer.

Critical Accounting Policies

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the U.S. requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. We base our estimates and assumptions on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results could differ from our estimates and assumptions. We believe the following are our critical accounting policies, i.e., they affect our more significant estimates and assumptions and require the use of difficult, subjective and complex judgment in their application.

Revenue Recognition

We generate our revenue from two different types of contractual arrangements: cost-plus-fee contracts and cost reimbursable grants. Costs consist primarily of actual internal labor charges and external sub-contractor costs incurred plus an allocation of applied fringe benefits, overhead and general and administrative expenses as defined in the contract.

Revenues on cost-plus-fee contracts are recognized in an amount equal to the costs incurred during the period plus an estimate of the applicable fee earned. The estimate of the applicable fee earned is determined by reference to the contract: if the contract defines the fee in terms of risk-based milestones and specifies the fees to be earned upon the completion of each milestone, then the fee is recognized when the related milestones are earned. Otherwise, we compute fee income earned in a given period by using a proportional performance method based on costs incurred during the period as compared to total estimated project costs and application of the resulting fraction to the total project fee specified in the contract.

We analyze each cost reimbursable grant to determine whether we should report such reimbursements as revenue or as an offset to our expenses incurred. For the three months ended March 31, 2010 and 2009, we recorded approximately $0.8 million and $0.3 million, respectively, of costs reimbursed by the government as an offset to research and development expenses.

Our revenue-generating contracts may include multiple elements, including one or more of up-front license fees, research payments, and milestone payments. In these situations, we allocate the total contract price to the multiple elements based on their relative fair values and recognize revenue for each element according to its characteristics. As revenue is recognized in accordance with the terms of the contracts, related amounts are recorded as unbilled receivables, the primary component of "Other receivables (including unbilled receivables)" in our consolidated balance sheets. As specific contract invoices are generated and sent to our customers, invoiced amounts are transferred out of unbilled receivables and into billed accounts receivable. Invoicing frequency and payment terms for cost-plus-fee contracts with our customers are defined within each contract, but are typically monthly invoicing with 30-60 day payment cycles. At March 31, 2010, "Other receivables (including unbilled receivables)" were approximately $7.7 million. As we progress through 2010, we expect the amount of unbilled receivables to decline until all programs are being invoiced on a current basis.

Research and Development Expenses

Research and development costs are expensed as incurred; pre-payments are deferred and expensed as performance occurs. Research and development costs include salaries, facilities expense, overhead expenses, material and supplies, pre-clinical expense, clinical trials and related clinical manufacturing expenses, stock-based compensation expense, contract services and other outside services.

Share-Based Payments

We expense all share-based awards to employees, including grants of employee stock options, based on their estimated fair value at date of grant. Costs of all share-based payments are recognized over the requisite service period that an employee must provide to earn the award (i.e. usually the vesting period) and charged to the functional operating expense associated with that employee.

Intangible Assets

Because of the nature of pharmaceutical research, and particularly because of the difficulties associated with efficacy studies in humans related to the bioterrorist products with which we work and the government's related funding provisions, factors that affect the estimate of the life of an asset are often more uncertain than with respect to other non-bioterrorist pharmaceutical research. We review the carrying value of our intangible assets for impairment annually during the fourth quarter of every year, or more frequently if impairment indicators exist, in accordance with ASC Section 360-10-35, "Impairment or Disposal of Long-Lived Assets." Evaluating for impairment requires judgment, including the estimation of future cash flows, future growth rates and profitability and the expected life over which cash flows will occur. Changes in the Company's business strategy or adverse changes in market conditions could impact impairment analyses and require the recognition of an impairment charge equal to the excess of the carrying value of the intangible asset over its estimated fair value. If impairment is indicated, we measure the amount of such impairment by comparing the carrying value of the assets to the present value of the expected future cash flows associated with the use of the asset.

Results of Operations

Revenue

We recognized revenue of $3.1 million and $5.5 million during the three months ended March 31, 2010 and 2009, respectively.

Our revenue consisted primarily of contract funding from the U.S. government for the development of Protexia®, SparVax™ and Valortim. Our revenue in the three months ended March 31, 2010 changed from the comparable period of 2009 primarily due to the following:

· Under the September 2006 contract with the DoD for the advanced development of Protexia®, we recognized $0.0 million and $2.4 million of revenue for the three months ended March 31, 2010 and 2009, respectively. The significant decline in revenue in the 2010 period as compared to 2009 is primarily attributable to the fact that activities related to the first phase of this contract were completed in 2009 and the Company is awaiting the decision of the DoD regarding whether to fund the next phase of the program. It is unclear at this point when the DoD will make a decision regarding funding for the next phase (although the government has indicated that it may make a decision before the end of the third quarter 2010). In addition, the Company has requested interim funding from the DoD for certain activities under this program through the end of 2010. Until a funding decision is made either for the proposed interim activities or for the longer term, we do not expect to recognize significant additional revenues under this contract.

· Under our contract for the development of SparVax™, we recognized approximately $2.1 million and $2.0 million of revenue for the three months ended March 31, 2010 and 2009, respectively. The increase in revenue in 2010 as compared to 2009 was primarily attributable to the additional work performed under the contract modification entered into in February 2010, performance under which was subsequently suspended pending a decision on the protest (as described in "--Recent Events" above).

· Under the September 2007 contract for the advanced development of Valortim®, we recognized $0.8 million and $0.6 million of revenue for the three months ended March 31, 2010 and 2009, respectively. Revenue in both periods was largely attributable to reimbursement of costs related to non-clinical studies. In addition, work in the three months ended March 31, 2009 included other development work as we prepared for human clinical trials, while work in the three months ended March 31, 2010 included work in connection with the on-going investigation related to the partial clinical hold and certain manufacturing-related activities.

Research and Development Expenses

Our research and development expenses were $5.0 million and $5.7 million for the three months ended March 31, 2010 and 2009, respectively. These expenses resulted from research and development activities related to our Valortim® and Protexia® programs as well as from activities related to the SparVax™, RypVax™ and third generation anthrax vaccine programs. We incurred both direct expenses, which included salaries and other costs of personnel, raw materials and supplies, and an allocation of indirect expenses. We also incurred third-party costs, such as contract research, consulting and clinical development costs for individual projects. Research and development expenses for the three months ended March 31, 2010 and 2009 were net of cost reimbursements under certain of our government grants of $0.8 million and $0.3 million, respectively.

Research and development expenses for the three months ended March 31, 2010 and 2009 were attributable to research programs as follows:

	Three Months ended	
($ in millions)	March 31, 2010	March 31, 2009
Anthrax therapeutic and vaccines	$ 4.0	2.7
Chemical nerve agent protectants	1.0	2.5
Recombinant dual antigen plague vaccine	—	0.3
Internal research and development		0.2
Total research and development expenses	$ 5.0	5.7

For the three months ended March 31, 2010, research and development expenses decreased $0.7 million from the prior year period, primarily due to a reduction in pre-clinical development costs for our chemical nerve agent protectants program, having finished activities for the initial phase of this program by the end of 2009 , and a reduction in development costs for our plague vaccine program, partially offset by increased pre-clinical development associated with our anthrax-related therapeutics and vaccines programs.

The decrease in development expenses related to the clinical nerve agent protectants program resulted from reduced process development and manufacturing activities as the program completed the development stage by the end of 2009. As we note above, we and the U.S. government have agreed to a reduction to the scope of work related to the development of our plague vaccine, and costs (and related revenue) under that contract have declined during the wind down period. Until such time as the DoD decides, if ever, to continue to fund work, whether on an interim basis during 2010 and/or over the longer term, costs incurred under our chemical nerve agent protectants program in future periods will not be covered, either in whole or in part, by corresponding revenues under our contract with the DoD. If the DoD does consent to further work under this program, we anticipate that costs under our chemical nerve agent protectants program will increase in future periods as that program progresses through human clinical trials.

General and Administrative Expenses

General and administrative functions include executive management, finance and administration, government affairs and regulations, corporate development, human resources, legal, and compliance. For each function, we may incur expenses such as salaries, supplies and third-party consulting and other external costs and non-cash expenditures such as expense related to stock option and restricted share awards. An allocation of indirect costs such as facilities, utilities and other administrative overhead is also included in general and administrative expenses.

Expenses associated with general and administrative functions were $5.3 million and $5.1 million for the three months ended March 31, 2010 and 2009, respectively.

General and administrative expenses increased $0.2 million for the three months ended March 31, 2010, as compared to the prior year period, primarily due to the recording of an allowance for doubtful accounts in the amount of approximately $588,000, established in conjunction with correspondence with NIAID regarding the potential wind down of the third-generation anthrax vaccine program, partially offset by reduced professional and consulting fees and travel and entertainment expenses.

Depreciation and Intangible Amortization

Depreciation and amortization expenses were $0.2 million and $0.2 million for the three months ended March 31, 2010 and 2009, respectively. These expenses relate primarily to the depreciation and amortization of farm building improvements, leasehold improvements and laboratory equipment, and patents acquired as part of a 2005 business combination.

Other Income and Expenses

Other income and expenses primarily consists of income on our investments, interest expense on our debt and other financial obligations, changes in market value of our derivative financial instruments, loss on early extinguishment of debt, and foreign currency transaction gains or losses.

For the three months ended March 31, 2010 and 2009, we recognized interest income on our investments of $0.0 million and $0.1 million, respectively. The decrease in interest income during the periods is primarily attributable to the reduced average balances of our investments and cash balances as we continue to use cash to support our operations, along with lower prevailing interest rates.

We incurred interest expense of $0.9 million and $0.6 million for the three months ended March 31, 2010 and 2009, respectively. Interest expense for both periods relates primarily to interest on our outstanding convertible notes. For the three months ended March 31, 2010, interest expense includes the amortization of the debt discount arising from the allocation of fair value to the stock purchase warrants issued in connection with the July 2009 convertible debt, whereas interest expense for the first quarter 2009 also includes amounts related to our outstanding secured credit facility, which was repaid in full during the third quarter 2009.

The change in the fair value of our derivative instruments was $0.3 million for the three months ended March 31, 2010 compared to $0.1 million for the three months ended March 31, 2009. The fair value of these derivative instruments is estimated using the Black-Scholes option pricing model.

Liquidity and Capital Resources

Overview

Our primary cash requirements through the end of 2010 are to fund our operations (including our research and development programs) and support our general and administrative activities. Our future capital requirements will depend on many factors, including, but not limited to, the progress of our research and development programs; the progress of pre-clinical and clinical testing; the time and cost involved in obtaining regulatory approval; the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights; changes in our existing research relationships, competing technological and marketing developments; our ability to establish collaborative arrangements and to enter into licensing agreements and contractual arrangements with others; and any future change in our business strategy. These cash requirements could change materially as a result of shifts in our business and strategy.

Since our inception, we have not generated positive cash flows from operations. To bridge the gap between payments made to us under our government contracts and grants and our operating and capital needs, we have had to rely on a variety of financing sources, including the issuance of equity securities and convertible notes, proceeds from loans and other borrowings, and the trust funds obtained in the Merger. For the foreseeable future, we will continue to need these types of financing vehicles and potentially others to help fund our future operating and capital requirements. Based on the operating cash requirements and capital expenditures expected through the end of 2010, and expected receipts from our government contracts and grants, we currently do not anticipate requiring additional funding to continue our current level of operations through the end of 2010. We may elect to raise additional capital in 2010 through the issuance of debt and/or equity to expand our business and/or strengthen our financial position or, if our current expectations and estimates about future operating costs prove to be incorrect, we may need to raise additional capital in 2010. Further, we may need to raise additional capital to fund our operations beyond 2010.

The turmoil affecting the banking system and financial markets and the possibility that financial institutions may consolidate or cease operations has resulted in a tightening in the credit markets, a low level of liquidity in many financial markets, and extreme volatility in fixed income, credit, currency and equity markets. As a result, there can be no assurance that future funding will be available to us on reasonably acceptable terms, or at all. In addition, due to the U.S. government's substantial efforts to stabilize the economy, the U.S. government may be forced or choose to reduce or delay spending in the biodefense field, which could decrease the likelihood of future government contract awards, the likelihood that the government will exercise its right to extend any of its existing contracts with us and/or the likelihood that the government would procure products from us. Finally, the note and warrant purchase agreement entered into in connection with the July 2009 Private Placement prevents us from incurring senior indebtedness (other than trade payables) in excess of $10 million without the prior written approval of no less than a majority of the aggregate principal amount of the debt then outstanding.

We have incurred cumulative net losses and expect to incur additional losses in conducting further research and development activities. We do not have commercial products and, given the substantial costs relating to the development of pharmaceutical products, have relatively limited existing capital resources. Our plans with regard to these matters include continued development of our products as well as seeking additional funds to support our research and development efforts. Although we continue to pursue these plans, there is no assurance that we will be successful in obtaining sufficient future financing on commercially reasonable terms or at all or that we will be able to secure additional funding through government contracts and grants. Our consolidated financial statements have been prepared on a basis which assumes that we will continue as a going concern and which contemplates the realization of assets and the satisfaction of liabilities and commitments in the normal course of business and do not include any adjustments that might result if the carrying amount of recorded assets and liabilities are not realized.

Sources and Uses of Cash

Cash, cash equivalents, restricted cash and short-term available-for-sale investments were $0.8 million and $5.8 million at March 31, 2010 and December 31, 2009, respectively. The $5.0 million decrease at March 31, 2010 was primarily attributable to the net impact of cash used to fund operations and the timing of collections on our U.S. Government accounts receivable. As of March 31, 2010 and December 31, 2009, total accounts receivables and other receivables (including unbilled receivables) were $16.9 million and $17.4 million, respectively. As we progress through 2010, we expect the amount of unbilled receivables to decline until all programs are being invoiced on a current basis.

As a result of the April 2010 Public Offering, we sold 1,666,668 shares of common stock at $1.50 per share and warrants to purchase 500,000 shares of our common stock at an exercise price of $1.89 per share, generating gross proceeds of $2.5 million. The warrants become exercisable on October 13, 2010 and expire on October 13, 2015.

Operating Activities

Net cash used in operating activities was $4.4 million and $6.8 million for the three months ended March 31, 2010 and 2009, respectively. Net cash used in operations during the three months ended March 31, 2010 primarily reflects the $7.9 million net loss for the period and a decrease in accrued expenses and other liabilities of $3.0 million due to reduced development activities, partially offset by a $4.2 million increase in accounts payable due to enhanced cash management activities and a $1.1 million increase in prepaid expenses and other current assets.

Cash used in operations during the three months ended March 31, 2009 reflects a net loss, after the effect of non-cash adjustments, of $4.3 million, an increase in accounts receivable of $1.2 million, and a decrease in accrued expenses and accounts payable totaling $1.2 million. Non-cash adjustments for the three months ended March 31, 2009 included non-cash stock compensation expense of $1.0 million and non-cash interest expense of $0.5 million related to the Old Notes. Accounts receivable increased due to contract award receivables due from NIAID related to the further development of SparVax™ and RypVax™ under contracts acquired in the second quarter of 2008 as part of the Avecia Acquisition, and from NIAID related to increased activities for the development of Valortim® and our third generation rPA anthrax vaccine.

Investing Activities

Net cash provided by investing activities was $2.9 million for the three months ended March 31, 2010, compared to $3.7 million used in investing activities for the three months ended March 31, 2009. Investing activities for the 2010 period related primarily to liquidating investments to meet working capital requirements.

Net cash used in investing activities for the first three months of 2009 related primarily to the purchase, net of sales of available for sale securities, of $3.6 million and approximately $0.2 million of capital expenditures.

Financing Activities

Net cash used in financing activities was $0.1 million for the three months ended March 31, 2010 as compared to $8.2 million provided by financing activities for the three months ended March 31, 2009. Net cash used in financing activities for the three months ended March 31, 2010 consisted of the issuance of a $100,000 letter of credit in favor of American Express.

In March 2009, the Company raised net proceeds of approximately $5.0 million as a result of the public sale of shares of its common stock and warrants. Additionally, in the first quarter 2009, the Company reduced its restricted cash obligations under its outstanding secured credit facility by $4.3 million. The Company made principal repayments of $1.0 million under this credit facility for the three months ended March 31, 2009, which it repaid in full during the third quarter 2009.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Contractual Obligations

The following are contractual commitments at March 31, 2010 associated with leases, research and development arrangements, collaborative development obligations and long term debt:

Contractual Obligations(1)	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 years
Operating facility leases	$ 5,782,427	853,794	1,496,764	2,401,392	1,030,477
Research and development agreements	18,782,737	16,797,737	1,985,000	-	-
Notes payable, including interest	23,208,562	-	23,208,562	-	-
Total contractual obligations	$ 47,773,726	17,651,531	26,690,326	2,401,392	1,030,477

(1) This table does not include any royalty payments of future sales of products subject to license agreements the Company has entered into in relation to its in-licensed technology, as the timing and likelihood of such payments are not known.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

Not applicable.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as of the end of the period covered by this report. Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosures.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting, identified in connection with the evaluation required by Rule 13a-15(d) under the Securities Exchange Act of 1934, as amended, that occurred during the quarter ended March 31, 2010 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.
In April 2010, David P. Wright resigned as our Chief Executive Officer, and in May 2010 Eric I. Richman was appointed as our interim Chief Executive Officer.

Inherent Limitations on Disclosure Controls and Procedures

In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

In December 2006, we filed a complaint against Siga Technologies, Inc. (“SIGA”) in the Delaware Chancery Court. The complaint alleges, among other things, that we have the right to license exclusively development and marketing rights for SIGA’s drug candidate, SIGA-246, pursuant to a merger agreement between the parties (the “Merger Agreement”) that was terminated in October 2006. The complaint also alleges that SIGA failed to negotiate in good faith the terms of such a license pursuant to the terminated merger agreement.

We are seeking alternatively a judgment requiring SIGA to enter into an exclusive license agreement with the Company for SIGA-246 in accordance with the terms of the term sheet attached to the merger agreement or monetary damages. In January 2008, the Delaware Chancery Court issued a ruling denying a motion by SIGA to dismiss the complaint. SIGA has filed a counterclaim against the Company alleging that we breached our duty to engage in good-faith negotiations by, among other things, presenting SIGA with a bad-faith initial proposal for a license agreement that did not contain all necessary terms, demanding SIGA prepare a complete draft of a partnership agreement and then unreasonably rejecting that agreement, and unreasonably refusing to consider economic terms that differed from those set forth in the license agreement term sheet attached to the Merger Agreement. SIGA is seeking recovery of its reliance damages from this alleged breach.

Discovery in the case closed in February 2010. In March 2010 SIGA filed a motion for summary judgment, and subsequently we filed an answering brief and SIGA filed its reply brief. While the specific timing for any hearing on SIGA’s motion is within the court’s discretion, we anticipate that the court will schedule a hearing in June or July 2010. Thereafter, once the court rules on the motion for summary judgment, and assuming open issues remain in the case, the parties can ask the court to set a trial date for any time 45 days following the ruling on summary judgment. An actual trial date will be subject to the court’s discretion and its schedule and docket at that time.

Item 1A. Risk Factors

Investing in our securities involves risks. In addition to the other information in this quarterly report on Form 10-Q, stockholders and potential investors should carefully consider the risks and uncertainties discussed in the section "Item 1.A. Risk Factors" in our annual report on Form 10-K for the year ended December 31, 2009, as supplemented by the risks and uncertainties discussed below. If any of the risks and uncertainties set forth below or in our annual report on Form 10-K actually materialize, our business, financial condition and/or results of operations could be materially adversely affected, the trading price of our common stock could decline and a stockholder could lose all or part of his or her investment. The risks and uncertainties described below and in our annual report on Form 10-K are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also impair our business operations.

Risks Related to Our Financial Condition

We have a history of losses and negative cash flow, anticipate future losses and negative cash flow, and cannot provide assurances that we will achieve profitability.

We have incurred significant losses since we commenced operations. For the years ended December 31, 2009, 2008 and 2007 we incurred net losses of approximately $32.3 million, $36.4 million and $17.7 million respectively and had an accumulated deficit of approximately $164.3 million at March 31, 2010. Our losses to date have resulted principally from research and development costs related to the development of our product candidates, general and administrative costs related to operations, and costs related to the Avecia Acquisition.

Our likelihood for achieving profitability will depend on numerous factors, including success in:

- developing our existing products and developing and testing new product candidates;
- continuing to receive government funding and identifying new government funding opportunities;
- receiving regulatory approvals;
- carrying out our intellectual property strategy;
- establishing our competitive position;
- pursuing third-party collaborations;
- acquiring or in-licensing products; and
- manufacturing and marketing products.

Many of these factors will depend on circumstances beyond our control. We cannot guarantee that we will achieve sufficient revenues for profitability. Even if we do achieve profitability, we cannot guarantee that we can sustain or increase profitability on a quarterly or annual basis in the future. If revenues grow more slowly than we anticipate, or if operating expenses exceed our expectations or cannot be adjusted accordingly, then our business, results of operations, financial condition and cash flows will be materially and adversely affected. Because our strategy includes potential acquisitions of other businesses, acquisition expenses and any cash used to make these acquisitions will reduce our available cash. While we believe that, based on the operating cash requirements and capital expenditures expected through the end of 2010, and expected receipts from our government contracts and grants, we currently do not anticipate requiring additional funding to continue our current level of operations through the end of 2010, there can be no assurance that unexpected financial obligations or other activities that increase our use of cash will not result in our depleting our cash resources quicker than presently anticipated. For example, to the extent that we are unable to collect our receivables on a timely basis, we may be required to seek short term financing solutions, including either short term indebtedness or through the sale of equity.

Furthermore, under the terms of the sale and purchase agreement, as amended (the "Avecia Purchase Agreement") we entered into in connection with the Avecia Acquisition, we are required to pay Avecia $5 million within 90 days of entering into a multi-year funded development contract that was to be issued by BARDA under solicitation number RFP-BARDA-08-15 (or any substitution or replacement thereof) for the further development of SparVax™. RFP-BARDA-08-15 was cancelled by BARDA in December 2009. Accordingly, our obligation to pay Avecia the $5 million payment would mature only upon our receipt of a substitution or replacement thereof. We have received funds from BARDA and other U.S. government agencies under various development agreements between us and BARDA. Any development contract deemed to be a substitute or replacement of RFP-BARDA-08-15 could trigger our obligation to make the $5 million payment under the Avecia Purchase Agreement.

The continuing turmoil affecting the banking system and financial markets and the possibility that financial institutions may consolidate or cease operations has resulted in a tightening in the credit markets, a low level of liquidity in many financial markets and extreme volatility in fixed income, credit, currency and equity markets. As a result, there can be no assurances that we will be successful in obtaining sufficient financing on commercially reasonable terms or at all. Our requirements for additional capital may be substantial and will be dependent on many factors, including the success of our research and development efforts, our ability to commercialize and market products, our ability to successfully pursue our licensing and collaboration strategy, the receipt of continued government funding, competing technological and marketing developments, costs associated with the protection of our intellectual property and any future change in our business strategy.

To the extent that we raise additional capital through the sale of securities, the issuance of those securities or shares underlying such securities would result in dilution that could be substantial to our stockholders. In addition, if we incur additional debt financing, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, thus limiting funds available for our business activities.

If adequate funds are not available, we may be required to curtail significantly our development and commercialization activities. This would have a material adverse effect on our business, financial condition and/or results of operations.

Risks Related to Product Development and Commercialization

Even if we succeed in commercializing our product candidates, they may not become profitable and manufacturing problems or side effects discovered at later stages can further increase costs of commercialization.

We cannot assure you that any drugs resulting from our research and development efforts will become commercially available. Even if we succeed in developing and commercializing our product candidates, we may never generate sufficient or sustainable revenues to enable us to be profitable. Even if effective, a product that reaches market may be subject to additional clinical trials, changes to or re-approvals of our manufacturing facilities or a change in labeling if we or others identify side effects or manufacturing problems after a product is on the market. This could harm sales of the affected products and could increase the cost and expenses of commercializing and marketing them. It could also lead to the suspension or revocation of regulatory approval for the products.

We and our contract manufacturing organizations ("CMOs") will also be required to comply with the applicable FDA current Good Manufacturing Practice ("cGMP") regulations. These regulations include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation. Manufacturing facilities are subject to inspection by the FDA. These facilities must be approved to supply licensed products to the commercial marketplace. We and our contract manufacturers may not be able to comply with the applicable cGMP requirements and other FDA regulatory requirements. Should we or our contract manufacturers fail to comply, we could be subject to fines or other sanctions or could be precluded from marketing our products. In particular, we have engaged a new contract manufacturer, Diosynth (now a subsidiary of Merck & Co., Inc.), to replace Avecia (now a subsidiary of Merck & Co., Inc.) to manufacture bulk drug substance for SparVax™ and are engaged in a technology transfer process to this new contract manufacturer. Diosynth has not manufactured this bulk drug substance before. There can be no assurance that we will be successful in our technology transfer efforts or that this new contract manufacturer will be able to manufacture sufficient amounts of cGMP quality bulk drug substance necessary for us to meet our obligations to the U.S. government.

We may also fail to fully realize the potential of Valortim® and of our co-development arrangement with Medarex (which was acquired by Bristol Myers Squibb in 2009), our partner in the development of Valortim ® , which would have an adverse effect upon our business. We have completed only one Phase I clinical trial for Valortim ® with our development partner, Medarex, at this point. As discussed in "*— Risks Related to Our Dependence on U.S. Government Contracts—Most of our immediately foreseeable future revenues are contingent upon grants and contracts from the U.S. government and we may not achieve sufficient revenues from these agreements to attain profitability "*, in the fourth quarter of 2009, the FDA placed our Phase I clinical trial of Valortim ® and ciprofloxacin on partial clinical hold, pending the results of our investigation of the potential causes for adverse reactions observed in two subjects dosed in the trial. As a consequence, BARDA advised us that until satisfactory resolution of this issue and the partial clinical hold is lifted it would not act on our request for additional advanced development funding for Valortim ® under BAA-BARDA-09-34. In April 2010 BARDA informed us of its belief that it is not practical at this point to resume negotiations under the current proposal and encouraged us to submit a new white paper for Valortim® under Board Agency Announcement, BARDA-CBRN-BAA-10-100-SOL-00012, if and when FDA agrees to permit us to reinitiate a Valortim® iv administration clinical trial program. It is unclear at this time how long it will take us to complete our investigation, if and when we will be in a position to submit a new white paper and if in response BARDA will request a formal proposal and provide additional funding for this program, and what the effects of any delay in potential future funding of the program will be on the overall Valortim® development timeline.

Before we may begin selling any doses of Valortim®, we will need to conduct more comprehensive safety trials in a significantly larger group of human subjects. We will be required to expend a significant amount to finalize manufacturing capability through a contract manufacturer to provide material to conduct the pivotal safety and efficacy trials. If our contract manufacturer is unable to produce sufficient quantities at a reasonable cost, or has any other obstacles to production, then we will be unable to commence these required clinical trials and studies. Even after we expend sufficient funds to complete the development of Valortim ® and if and when we enter into an agreement to supply Valortim ® to the U.S. government, we will be required to share any and all profits from the sale of products with our partner in accordance with a pre-determined formula.

Risks Related to Our Dependence on U.S. Government Contracts

All of our immediately foreseeable future revenues are contingent upon grants and contracts from the U.S. government and we may not achieve sufficient revenues from these agreements to attain profitability.

For the foreseeable future, we believe our main customer will be national governments, primarily the U.S. government. Substantially all of our revenues to date have been derived from grants and U.S. government contracts. There can be no assurances that existing government contracts will be renewed or that we can enter into new contracts or receive new grants to supply the U.S. or other governments with our products. The process of obtaining government contracts is lengthy and uncertain. In addition, the U.S. government is in the process of reviewing the public health emergency countermeasure enterprise. It is anticipated that the review will include recommendations for how the U.S government structures and oversees the research, development, procurement, stockpiling and dispensing of countermeasures as well as how the enterprise is funded. The implications of the review are not known at this time, however, it could impact existing and anticipated contract opportunities.

If the U.S. government makes significant contract awards to our competitors for the supply to the U.S. emergency stockpile, our business will be harmed and it is unlikely that we will ultimately be able to supply that particular treatment or product to foreign governments or other third parties. Further, changes in government budgets and agendas, cost overruns in our programs, or advances by our competitors, may result in a decreased and de-prioritized emphasis on, or termination of, government contracts that support the development and/or procurement of the biodefense products we are developing. More generally, due to the current economic downturn, the accompanying fall in tax revenues and the U.S. government’s efforts to stabilize the economy, the U.S. government may be forced or choose to reduce or delay spending in the biodefense field or eliminate funding of certain programs altogether, which could decrease the likelihood of future government contract awards or that the government would procure products from us.

For example, while RFP-BARDA-08-15 for an rPA vaccine for the SNS initially indicated that the government would make an award by September 26, 2008, the award was delayed multiple times and ultimately canceled in December 2009. Furthermore, the U.S. government has selected a plague vaccine product candidate from a competitor for advanced development funding, and we do not anticipate that the U.S. government will provide additional funding in the future for or procure RypVax™. Given the limited future prospects for RypVax™ at this time, we and the U.S. government agreed to a reduction to the scope of work that has resulted in early wind down of all activities under our existing RypVax™ contract. In addition, we believe the remaining development costs required to obtain FDA licensure for Protexia® in advance of government procurement exceed those used in our original proposal and provided for in the contract with the DoD, and it is unclear whether, under the terms of our 2006 contract with the DoD, the DoD will elect to continue to fund development of Protexia ® (as well as the timing of any decision by the DoD in that regard, although the government has recently indicated that it may make a decision before the end of the third quarter 2010). Further, even if the DoD does so elect to continue funding and we meet all development milestones, the DoD may nevertheless choose not to procure any doses of Protexia®.

In the fourth quarter of 2009, the FDA placed our phase I clinical trial of Valortim® and ciprofloxacin on partial clinical hold, pending the results of our investigation of the potential causes for adverse reactions observed in two subjects dosed in the trial. As a consequence, BARDA advised us that until satisfactory resolution of this issue and the partial clinical hold is lifted it would not act on our request for additional advanced development funding for Valortim® under BAA-BARDA-09-34. In April 2010 BARDA informed us of its belief that it is not practical at this point to resume negotiations under the current proposal and encouraged us to submit a new white paper for Valortim® under Board Agency Announcement, BARDA-CBRN-BAA-10-100-SOL-00012, if and when FDA agrees to permit us to reinitiate a Valortim® iv administration clinical trial program. It is unclear at this time how long it will take us to complete our investigation, if and when we will be in a position to submit a new white paper and if in response BARDA will request a formal proposal and provide additional funding for this program, and what the effects of any delay in potential future funding of the program will be on the overall Valortim® development timeline.

U.S. government agencies have special contracting requirements that give them the ability to unilaterally control our contracts.

U.S. government contracts typically contain unfavorable termination provisions and are subject to audit and modification by the government at its sole discretion, which will subject us to additional risks. These risks include the ability of the U.S. government unilaterally to:

- suspend or prevent us for a set period of time from receiving new contracts or extending existing contracts based on violations or suspected violations of laws or regulations;
- terminate our contracts, including if funds become unavailable or are not provided to the applicable governmental agency;
- reduce the scope and value of our contracts;
- audit and object to our contract-related costs and fees, including allocated indirect costs;
- control and potentially prohibit the export of our products;
- change certain terms and conditions in our contracts; and
- cancel outstanding RFP solicitations (as was the case with RFP-BARDA-08-15) or BAAs.

The U.S. government will be able to terminate any of its contracts with us either for its convenience or if we default by failing to perform in accordance with the contract schedule and terms. Termination-for-convenience provisions generally enable us to recover only our costs incurred or committed, settlement expenses, and profit on the work completed prior to termination. Termination-for-default provisions do not permit these recoveries and would make us liable for excess costs incurred by the U.S. government in procuring undelivered items from another source.

NIAID has raised concerns regarding performance under our existing three year, $13.2 million contract with them related to our third-generation anthrax vaccine program, with project delays and contract management noted as key areas of concern. Through March 31, 2010 we had recognized approximately $1.6 million in revenue under this contract. In April 2010, NIAID notified us that the agency is considering terminating the contract, possibly for default. We have responded to address the agency's specific concerns. At this point we believe it is likely that we will reach an agreement with NIAID regarding termination of this contract.

Due to the current economic downturn, the accompanying fall in tax revenues, and the U.S. government's efforts to stabilize the economy, the U.S. government may be forced or choose to reduce or delay spending in the biodefense field or eliminate funding of certain programs altogether, which could decrease the likelihood of future government contract awards, the likelihood that the government will exercise its right to extend any of its existing contracts with us and/or the likelihood that the government would procure products from us.

Risks Related to Dependence on or Competition From Third Parties

We depend on third parties to manufacture, package and distribute compounds for our product candidates and key components for our product candidates. The failure of these third parties to perform successfully could harm our business.

We do not have any of our own manufacturing facilities. We have therefore utilized, and intend to continue utilizing, third parties to manufacture, store, package and distribute our product candidates and key components of our product candidates. Any material disruption in manufacturing could cause a delay in our development programs and potential future sales. Furthermore, certain compounds, media, or other raw materials, including master and working cell banks, used to manufacture our drug candidates are available from any one or a limited number of sources. Any delays or difficulties in obtaining key components for our product candidates or in manufacturing, storage, packaging or distributing our product candidates could delay clinical trials and further development of these potential products. Additionally, the third parties we rely on for manufacturing, storage, and packaging are subject to regulatory review, and any regulatory compliance problems with these third parties could significantly delay or disrupt our commercialization activities.

We were notified by the contract manufacturer who supplies the pegylation reagent for our Protexia® product candidate that it intends to cease its contract manufacturing operations to focus exclusively on developing its own proprietary product candidates. We are now in the process of searching for an alternative supplier. As part of this process, we will need to negotiate and execute a license to certain intellectual property from our current supplier related to the pegylation process and to engage in a technology transfer process to a new supplier. If we are not successful in these endeavors, our Protexia® development program will be adversely affected.

Finally, third-party manufacturers, storage companies, suppliers and distributors, like most companies, have been adversely affected by the credit crisis and weakening of the global economy and as such may be more susceptible to being acquired as part of the current wave of consolidations in the pharmaceutical industry. It has, for example, become challenging for companies to secure debt capital to fund their operations as financial institutions have significantly curtailed their lending activities. If our third-party suppliers continue to experience financial difficulties as a result of weak demand for their products or for other reasons and are unable to obtain the capital necessary to continue their present level of operations or are acquired by others, they may have to reduce their activities and/or their priorities or our working relationship with them might change. A material deterioration in their ability or willingness to meet their obligations to us could cause a delay in our development programs and potential future sales and jeopardize our ability to meet our obligations under our contracts with the government or other third parties.

Risks Related to Intellectual Property

Our commercial success will be affected significantly by our ability (i) to obtain and maintain protection for our proprietary technology and that of our licensors and collaborators and (ii) not to infringe on patents and proprietary rights of third parties.

The patent position of biotechnology firms generally is highly uncertain and involves complex legal and factual questions, and, therefore, validity and enforceability cannot be predicted with certainty. To date, no consistent policy has emerged regarding the breadth of claims allowed in biotechnology patents. We currently hold two U.S. patents, have five pending U.S. patent applications, and have a limited number of foreign patents and pending international and foreign patents applications. In addition, we have rights under numerous other patents and patent applications pursuant to exclusive and non-exclusive license arrangements with licensors and collaborators. However, there can be no assurance that patent applications owned or licensed by us will result in patents being issued or that the patents, whether existing or issued in the future, will afford protection against competitors with similar technology. Any conflicts resulting from third-party patent applications and patents could significantly reduce the coverage of the patents owned, optioned by or licensed to us or our collaborators and limit our ability or that of our collaborators to obtain meaningful patent protection.

Further, our commercial success will depend significantly on our ability to operate without infringing the patents and proprietary rights of third parties. We are aware of one U.S. patent covering recombinant production of an antibody and a license may be required under such patent with respect to Valortim ® , which is a monoclonal antibody and uses recombinant reproduction of antibodies. Although the patent owner has granted licenses under such patent, we cannot provide any assurances that we will be able to obtain such a license or that the terms thereof will be reasonable. If we do not obtain such a license and if a legal action based on such patent was to be brought against us or our distributors, licensees or collaborators, we cannot provide any assurances that we or our distributors, licensees or collaborators would prevail or that we have sufficient funds or resources to defend such claims.

We are aware of one granted U.S. patent directed to pegylated butyrylcholinesterase. Protexia® includes a pegylated butyrylcholinesterase. If a license is required under such patent, we believe that the patent owner is willing to grant such a license; however, we cannot provide any assurances that, if needed, such a license will be granted or that the terms thereof will be reasonable. We are also aware of pending applications directed to pegylated butyrylcholinesterase and if a patent is issued from such an application, we may be required to obtain a license thereunder or obtain alternative technology. We cannot provide any assurances that licenses will be available or that the terms thereof will be reasonable or that we will be able to develop alternative technologies. If we do not obtain a license under any patent directed to pegylated butyrylcholinesterase and if a legal action based on such patent was to be brought against us or our distributors, licensees or collaborators, we cannot provide any assurances that we or our distributors, licensees or collaborators would prevail or that we have sufficient funds or resources to defend such claims.

The costs associated with establishing the validity of patents, of defending against patent infringement claims of others and of asserting infringement claims against others is expensive and time consuming, even if the ultimate outcome is favorable. An outcome of any patent prosecution or litigation that is unfavorable to us or one of our licensors or collaborators may have a material adverse effect on us. The expense of a protracted infringement suit, even if ultimately favorable, would also have a material adverse effect on us.

We furthermore rely upon trade secrets protection for our confidential and proprietary information. We have taken measures to protect our proprietary information; however, these measures may not provide adequate protection to us. We have sought to protect our proprietary information by entering into confidentiality agreements with employees, collaborators and consultants. Nevertheless, employees, collaborators or consultants may still disclose our proprietary information, and we may not be able to meaningfully protect our trade secrets. In addition, others may independently develop substantially equivalent proprietary information or techniques or otherwise gain access to our trade secrets.

Risks Related to our Common Stock and Warrants

Shares that we may issue in the future in connection with certain capital-raising transactions and shares available for future issuance upon conversion and exercise of convertible notes, warrants and options could dilute our shareholders and depress the market price of our common stock.

We will likely seek to raise additional capital and may do so at any time through various financing alternatives, including potentially selling shares of common or preferred stock, notes and/or warrants convertible into, or exercisable for, shares of common or preferred stock. Even with the completion of the April 2010 Public Offering, we could again rely upon the shelf registration statement on Form S-3, which was declared effective on February 12, 2009 in connection with a sale from time to time of common stock, preferred stock or warrants or any combination of those securities, either individually or in units, in one or more offerings for up to $50,000,000 (inclusive of the gross proceeds from the April 2010 Public Offering and the offering we completed in March 2009). Raising capital in this manner or any other manner may depress the market price of our stock, and any such financing(s) will dilute our existing shareholders.

In addition, as of March 31, 2010, we had outstanding options to purchase approximately 5.0 million shares of common stock. Additional shares are reserved for issuance under our 2007 Long-Term Incentive Compensation Plan. Our stock options are generally exercisable for ten years, with a significant portion exercisable either immediately or beginning one year after the date of the grant. Furthermore, the senior unsecured convertible notes in the aggregate principal amount of $19.3 million issued in July 2009 are convertible at approximately $2.54 per share into approximately 7.6 million shares of our common stock, and the accompanying warrants became exercisable on January 28, 2010 for up to approximately 2.6 million shares of common stock at $2.50 per share. Finally, as of March 31, 2010, the Company had issued and outstanding additional warrants to purchase up to an additional approximately 0.8 million shares of common stock. We issued additional warrants (which become exercisable October 13, 2010) to purchase up to 500,000 shares at $1.89 per share as part of the April 2010 Public Offering. The issuance or even the expected issuance of a large number of shares of our common stock upon conversion or exercise of the securities described above could depress the market price of our stock and the issuance of such shares will dilute the stock ownership of our existing shareholders.

Item 6. Exhibits.

No.	Description
10.32	Modification 18 to Contract Number HHSO100200900203C*
31.1	Certification of Principal Executive Officer Pursuant to SEC Rule 13a-14(a)/15d-14(a)
31.2	Certification of Principal Financial Officer Pursuant to SEC Rule 13a-14(a)/15d-14(a)
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350
32.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350

* Certain confidential portions of this exhibit have been omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused the report to be signed on its behalf by the undersigned, thereunto duly authorized.

PHARMATHENE, INC.

Dated: May 13, 2010

By: /s/ Eric I. Richman
Eric I Richman
President and interim Chief Executive Officer

Dated: May 13, 2010

By: /s/ Charles A. Reinhart III
Charles A. Reinhart III
Chief Financial Officer

Exhibit 10.32
PharmAthene, Inc.
Confidential Materials Omitted and Filed Separately with the Securities and Exchange Commission Confidential Portions denoted by [***]

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE N/A	Page 1 of 11

2. AMENDMENT/MODIFICATION NO. Modification 0018	3. EFFECTIVE DATE See Item 16C	4. REQUISITION/PURCHASE REQ. NO OS29771	5. PROJECT NO. *(If applicable)* N/A
6. ISSUED BY CODE N/A U.S. DEPT OF HEALTH & HUMAN SERVICES ASPR/BARDA 330 INDEPENDENCE AVE SW, ROOM G640 WASHINGTON, D.C. 20201		7. ADMINISTERED BY (IF OTHER THAN ITEM 6) CODE N/A See Item 6	

8. NAME AND ADDRESS OF CONTRACTOR (*No., Street, County, State, and Zip Code*)	☐	9A. AMENDMENT OF SOLICITATION NO.
PharmAthene Inc One Park Place, Suite 450 Annapolis, MD 21401 DUNS: 082804936		9B. DATED (*SEE ITEM 11*)
	☒	10A. MODIFICATION OF CONTRACT/ORDER NO. HHSO100200900103C
CODE: N/A FACILITY CODE: N/A		10B. DATED (*SEE ITEM 11*) 09/30/2003

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers ☐ is extended ☐ is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods:

(a) By completing Items 8 and 15, and returning ___ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted, or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (*If Required*)
CAN: 1990987 Appropriation Year: 2010 O.C.: 25103 Obligation: $61,041,425

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO., AS DESCRIBED IN ITEM 14:

☐ A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify Authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

☐ B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (*such as changes in paying office, appropriation date, etc.*) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

☒ C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
FAR 1.602-1, FAR ; FAR 52.243-2 Changes – Cost Reimbursement – Alt V (Apr 1984)

☐ D. OTHER (*Specify type of modification and authority*)

E. IMPORTANT: Contractor ☐ is NOT ☒ is required to sign this document and return 1 Copy to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible)
The purpose of this modification is to revise the previously reduced Scope of Work and too extend the period of performance. The estimated cost is increased by $ [***] from [***] to $ [***] The fee is increased by $ [***] from $ [***] to $ [***] The Total contract price is increased by $ [***] from $ [***] to $178,777,625. The period of performance is changed from 6/30/2011 to 12/31/2012.
(See continuation Sheet)

	Cost	Fee	Total
Prior to this Mod	$ [***]	$ [***]	$ [***]
Mod Obligated	$ [***]	$ [***]	$ [***]
Revised Total	$ [***]	$ [***]	$ 178,777,625

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER DAVID P. WRIGHT President - CEO	16A. NAME AND TITLE OF CONTRACTING OFFICER Darnick A. Early, Contracting Officer	
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED 22 Feb 2010	16B. UNITED STATES OF AMERICA *(Signature of Contracting Officer)*

16C. DATE SIGNED

NSN 7540-01-152-8070
Previous Edition Unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA FAR (48 CFR) 53.243

Document Control # A00967-02

SECTION B – SUPPLIES OR SERVICES AND PRICE/COSTS

1. ARTICLE B.2. ESTIMATED COST AND FIXED FEE is modified to read as follows.

a. The total revised estimated cost and fee under MOD 0014 is hereby updated to reflect the correct revised total estimated cost and fee. The total revised cost should be $[***] ; not $ [***] . Total revised fee should be $[***] , not $.

b. The estimated cost for this Contract is $ [***]

c. The Fixed fee for this Contract is $[***] . The fixed fee shall be paid in installments based on the negotiated milestones set forth in ARTICLE B.4.h. and subject to the withholdings provisions of the ALLOWABLE COST AND PAYMENT and FIXED FEE referenced in the General Clause Listing in Part II, Article 1.1 of this contract. Payment of fixed fee shall not be made in less than monthly increments.

d. The Government's obligation, represented by the sum of the estimated cost plus fixed fee is $178,777,625

e. Total funds currently available for payment and allotted to this Contract modification is $[***] ; of which $[***] represents the estimated costs, and of which $[***] is fixed fee. These funds cover the revised scope of work for Milestones 1, 2, 3, 4, 5, 6, 7. For further provision on funding, see the LIMITATIONS OF COSTS clause referenced in PART II, ARTICLE I.2. Authorized Substitutions of Clauses. If the government exercises any or all of the Option(s) listed in the schedule, the estimated cost, fee, and sum total of the estimated cost plus fee shall be adjusted accordingly.

f. It is estimated that the amount currently allotted to this Contract will cover performance of contract through December 31, 2012. This Contract is fully funded and shall be executed in accordance with FAR 52.232-20

(End of Paragraph 1) (Rest of this Page intentionally left blank)

Document
Control # A09U7-02

2. Schedule B – Milestone Payment

CLIN 0001

	Brief Description	Estimated Cost	Fixed Fee	Total CPFF
Milestone 1 -Stability Studies: Continuing and New				
	MOD 0016 Subtotal	$	$	$
	MOD 0018 Subtotal	$	$	$
	New Total	$	$	$
Milestone 2 -Potency Assays: Development and Validation				
	MOD 0016 Subtotal	$	$	$
	MOD 0018 Subtotal	$	$	$
	New Total	$	$	$
Milestone 3 -FDP Development and Manufacture				
	MOD 0016 Subtotal	$	$	$
	MOD 0018 Subtotal	$	$	$
	New Total	$	$	$
Milestone 4 -Assay Development and Validation				
	MOD 0018 Subtotal	$	$	$
	New total	$	$	$
Milestone 5 -Regulatory Plan, Submissions and Engagement				
	MOD 0016 Subtotal	$	$	$
	MOD 0018 Subtotal	$	$	$
	New Total	$	$	$
		[***]	[***]	[***]
Milestone 6- BDS: Process Development and Scale up	MOD 0016 Subtotal	$	$	$
	MOD 0018 Subtotal	$	$	$
	New Total	$	$	$
Milestone 7 - Non-Clinical Studies: Safety and Efficacy	MOD 0018 Subtotal	$	$	$
	New total	$	$	$
	Other Cost Areas			
General Program Management	MOD 0016 Subtotal	$	$	$
	MOD 0018 Subtotal	$	$	$
	New Total	$	$	$
Earned Value Management	MOD 0016 Subtotal	$	$	$
	MOD 0018 Subtotal	$	$	$
	New Total	$	$	$
Contracts, Subcontracts, and Program Control	MOD 0018 Subtotal	$	$	$
	New Total	$	$	$
Risk Mitigation Management	MOD 0018 Subtotal	$	$	$
	MOD 0016 SubTotal	$ [***]	$ [***]	$ [***]
	Unbilled Expense Carried over to MOD 0016	$		
	MOD 0016 Program Estimated Total Cost	$	$	$
	MOD 0018 Program Estimated Total Cost	$ [***]	$ [***]	$ [***]
	Estimated Contract Price (4/1/209 thru 12/31/12)	$	$	$

Options				
GLP Immunogenicity Study	MOD 0018	$	$	$
Non-Clinical PEP Studies	MOD 0018	$	$	$
BDS Validation	MOD 0018	$ [***]	$ [***]	$ [***]
	SubTotal	$	$	$

(End of paragraph 2)

3. ARTICLE B.4. ADVANCE UNDERSTANDINGS, paragraph a,b,d,e,f,g,h,i, j,k,l,m,n,o,p,q,r.s,t,u, and v of Subcontractor provisions are modified to reflect the following changes:

Contractor	Period Of Performance	Subcontracted not to Exceed Amt		
		MOD 16	MOD 18	Total
[***]	4/01/2009- 12/31/2012	[***]	[***]	[***]
	4/01/2009- 12/31/2012			
	4/01/2009- 12/31/2012			
	3/01/2010- 12/31/2012			
	4/01/2009- 12/31/2012			
	4/01/2009- 12/31/2009			
	4/01/2009- 12/31/2012			
	4/01/2009- 12/31/2010			
	4/01/2009- 03/31/2010			
	3/01/2009- 12/31/2012			
	4/01/2009- 12/31/2012			
	3/01/2010- 12/31/2012			
	4/01/2009- 12/31/2012			
	4/01/2009- 12/31/2012			
	4/1/2009-9/30/2009			
	4/01/2009- 12/31/2012			
	4/01/2009- 12/31/2012			
	4/01/2009- 12/31/2012			
	4/01/2009- 12/31/2012			
	4/01/2009- 12/31/2012			
	3/01/2009- 12/31/2012			
	4/01/2009- 12/31/2012			
	3/1/2010- 12/31/2012			
	4/01/2009- 12/31/2012			
	3/01/2009- 12/31/2012			
	3/01/2010- 12/31/2012			
	4/01/2009- 12/31/2012			
	4/01/2009- 12/31/2012			
	3/01/2010- 12/31/2012			
	4/01/10- 12/31/2012			
	3/01/10- 12/21/2012			

(End of Paragraph 3)

4. ARTICLE B.4. ADVANCE UNDERSTANDINGS , paragraph H Milestones are modified as follows:

The Contractor's Technical Proposal dated January 14th, 2010 and Supplemental Proposal dated January 30th, 2010 submitted in response to this change is hereby incorporated into this Contract by reference. The activities provided under this modification reflect the revised Scope of Work . The Contractor shall perform the work in accordance with the statement of work and the contract milestones set forth below. In the event of a conflict between Section C, and the Contractor's Technical Proposal, Section C shall take precedence. The work under Modification 16 remains unchanged.

Milestone 1	**Stability Studies: Continuing and New**	**Deliverable Date**	**Deliverable**
WBS	Brief Description		
1.1.1.1	Ongoing BDS Stability	7/31/2010	BDS B2272-008 [***] Certificate of Analysis
1.1.2.1	Ongoing FDP Stability	11/30/2010	FDP 907616, Up to [***] months Certificate of Analysis
1.1.2.2	Clinical Batch 1 (2009) [***]	12/31/2010	FDP, up to [***] Certificate of Analysis
1.1.2.3	Clinical Batch 2 (2009) [***]	12/31/2010	FDP, up to [***] Certificate of Analysis
1.1.2.6	Ongoing Diluent Stability	11/15/2009	Diluent lot 803634, Final Study Report
1.1.2.7	Clinical diluent stability	11/30/2010	Diluent, up to [***] Certificate of Analysis
1.6.8.4	BDS [***] First cGMP batch stability [***]	12/14/2010	Certificate of Analysis
1.13.1.1.7	FDP 7L Clinical Lot 4 stability ex- [***] dose [***]	5/04/2011	Certificate of Analysis
1.11.1.2.1.2	FDP Clinical Lot 1 [***] Stability [***]	9/8/2011	Certificate of Analysis
1.11.1.2.2.4	FDP Clinical Lot [***] Stability [***]	9/12/2011	Certificate of Analysis
1.11.1.1.1.13	BDS [***] First cGMP batch stability [***]	12/12/2011	Certificate of Analysis
1.11.1.2.3.13	FDP 7L Clinical Lot 4 stability ex- [***]	2/12/2012	Certificate of Analysis
1.11.1.2.1.4	FDP Clinical Lot 1 [***] [***]	9/3/2010	Certificate of Analysis
1.11.1.2.2.6	FDP Clinical Lot 1 [***] Stability [***]	9/6/2012	Certificate of Analysis
1.11.1.1.1.17	BDS [***] First cGMP batch stability [***]	12/04/2012	Certificate of Analysis
Milestone 2	**Potency Assays: Development and Validation**	**Deliverable Date**	**Deliverable**
1.2.1.1.2	MCLA development and qualification	3/31/2010	Final report
1.2.1.1.3	MCLA assay validation	5/14/2010	MCLA assay Validation Report
1.2.2.2.2	Immunopotency development	12/31/2010	Immunopotency Assay Development Report (work to date)
1.10.1.1.1	Immunopotency qualification complete	1/27/2012	Final report
1.10.1.1.2	Immunopotency validation protocol	2/17/2012	Final protocol
1.10.1.1.6	Immunopotency validation complete	12/31/2012	Final report

Milestone 3	FDP: Development and Manufacture	Deliverable Date	Deliverable
1.3.1.9.3.4	Clinical Batch 1 [***]	11/30/2009	Certificate of Analysis and Disposition Cert for each Batch
1.3.2.2.3.4	Clinical Batch 2 [***]	12/15/2009	Certificate of Analysis and Disposition Cert for each Batch
1.3.4.5.2	[***] High Phosphate Diluent Manufacture	11/15/2009	Certificate of Analysis and Disposition Certificate
1.13.1.1.7	FDP Clinical Batch [***] Manufacture	5/4/2012	Certificate of Analysis and Disposition Certificate
Milestone 4	**Assay Development and Validation**	**Deliverable Date**	**Deliverable**
1.4.1.3	BDS release and stability assay validation for [***] [***]	4/30/2010	Approved validation reports for each assay
1.4.2.1	FDP Phosphate release and stability method development and validation	2/15/2010	Approved validation report
1.4.2.2	FDP characterization method development	10/31/2010	Approved method development report(s)
Milestone 5	**Regulatory Plan: Submissions and Engagement**	**Deliverable Date**	**Deliverable**
1.5.1.2	Submission 2 - CMC update	12/31/2009	Submission package to FDA
1.5.2.1	2009 Annual Report	8/30/2009	Annual Report Submitted to FDA
1.14.1.1.4.1	Validation design for MCLA	7/19/2010	FDA approval to proceed
1.14.2	Target product profile preparation	6/4/2010	Delivery to BARDA
1.14.1.1.1	Non-Clinical Approach meeting	12/20/2010	FDA approval to proceed
1.14.1.1.3	Comparability protocol	6/7/2011	FDA approval to proceed
1.14.1.1.4.3	Immunopotency Approach Meeting	5/19/2011	Formal Meeting held with FDA
1.14.1.1.2.2	BDS Process Validation Protocol	12/12/2011	FDA approval to proceed
1.14.1.1.4.4	Validation design for immunopotency	5/11/2012	FDA approval to proceed
1.8.2.1	GUP Demonstration (Rabbit) Complete	3/7/2012	Submission of Final Study Report to FDA
1.8.2.3	GUP Demonstration (NHP) Complete	6/13/2012	Submission of Final Study Report to FDA

Milestone 6	BDS: Process Development and Scale up	Deliverable Date	Deliverable
1.6.3.1	Process Transfer Initiated	11/1/2009	Contract signed
1.6.3.1	Process Transfer mid-point	12/31/2009	2 months from contract signed
1.6.3.2.2.5	Fermentation Process Transfer Complete	2/28/2010	4 months from contract signed
1.6.3.2.3.5	Purification Process Transfer and Development Complete	3/31/2010	Demonstration run vial crack and final report
1.6.4.1	Analytical method transfer initiated	11/30/2009	Contract signed
1.6.4.5.2 1.6.4.4.3 1.6.4.3.3	Analytical method transfer and qualification complete	5/30/2010	Vial crack for 1st demonstration run and final report
1.6.4.1	Transfer of validated assays initiated	11/30/2009	Contract signed
1.6.4	Transfer of validated assays complete	5/31/2010	Vial crack for 3rd demonstration run and final report
1.6.5.2	Demonstration run #1 complete	4/30/2010	bulk fill complete and CoA
1.6.5.3	Demonstration run #2 complete	5/31/2010	bulk fill complete and CoA
1.6.5.4	Demonstration run #3 complete	5/31/2010	bulk fill complete and CoA
1.6.7.1	cGMP pre-production started	4/30/2010	3 months before planned start of engineering run
1.6.7.2	Pre-production and facility set-up complete	7/31/2010	Engineering run vial crack
1.6.7.5.1	Start of 1st engineering run	7/31/2010	Vial crack
1.6.7.5.1.5	Completion of 1st engineering run	30 days after start	Bulk fill complete and final report
1.6.7.5.2	Start of 2nd engineering run	8/30/2010	Vial crack
1.6.7.5.2.6	Completion of 2nd engineering run	30 days after start	Bulk fill complete and final report
1.6.8	Start of cGMP run	10/31/2010	Vial crack
1.6.8.6	Completion of cGMP run	30 days after start	Bulk fill complete and final report
1.6.8.8	cGMP run tested	12/31/2010	CoA
1.6.6.1	Validation master plan work initiated	10/31/2010	Bulk fill complete cGMP run
1.6.6.4	Validation master plan complete	2/28/2011	Validation master plan approved
1.6.4.3.5 1.6.4.4.5	Start Analytical method validation	8/30/2010	Initiated
1.6.4.3.5.5 1.6.4.4.5.6	Complete Analytical method validation	2/28/2011	Reports approved
1.6.15	Small Scale Process Characterization	3/31/2011	Reports Approved
1.12.1.1	BDS process development study plan	4/9/2011	BARDA review and approval
1.12.1.1.4.5	Go/No go decision to evaluate BDS process development runs	5/28/2011	BARDA review and approval

1.12.1.2.7.2	Process Profiling and Cleaning Validation protocols	8/24/2011	BARDA review and approval
1.12.1.2.8	Go/No go decision to evaluate BDS process profiling lots	8/24/2011	BARDA review and approval
Milestone 7	Non-Clinical Studies: Safety and Efficacy	Delivery Date	Deliverable
1.8.2.5.1	Interim Gap Analysis	4/6/2010	Progress discussion with BARDA
1.8.2.5.6	Final Gap Analysis	8/2/2010	BARDA review and approval
1.8.1.1	Rat Toxicity Study Start	1/13/2011	Initiation of in-life activities
1.8.1.1.3	Rat Toxicity Study Complete	12/28/2011	Final Study Report
1.8.2.1	GUP Demonstration (Rabbit) Start	1/20/2011	Initiation of in-life activities
1.8.2.1.3	GUP Demonstration (Rabbit) Complete	3/7/2012	Final Study Report
1.8.2.3	GUP Demonstration (NHP) Start	3/3/2011	Initiation of in-life activities
1.8.2.3.3	GUP Demonstration (NHP) Complete	6/13/2012	Final Study Report

(End of Paragraph 4) (The rest of this page is intentionally left blank)

5. Section J – Attachment 1 – Statement of work, paragraph a through g, is revised as follows:

Manufacturing

h. The Contractor shall develop process development activities to increase the efficiency, optimize and reduce the variability and risk factors. Identify and verify Critical Quality Attributes (CQA) and Critical Process Parameters.

i. The Contractor shall develop and successfully execute process scale-up to commercial-scale the Bulk Drug Substance (BDS) manufacturing process under cGMP at a Contract Manufacturing Organization (CMO).

j. The Contractor shall develop and execute the fill/finish of cGMP BDS from CMO into Final Drug Product (FDP) that is acceptable for use in non-clinical and clinical studies.

Assay Validation

k. The Contractor shall update the current or develop a Validation Master Plan for analytical methods key to defining product manufacturing control, performance specification or product stability indication.

l. The Contractor shall ensure advanced development and successful validation of critical assays required for BDS and FDP release and stability testing, including Toxin Neutralization Antibodies (TNA) immunopotency assays. Identify a stable source and availability of reagents and reference standards or an updated plan for these acquiring these assays reagents and validation.

m. The Contractor shall design stability testing plan and successfully conduct stability studies on the BDS and FDP lots from the current CMO in conformance with International Conference on Harmonization (ICH) guidelines and Federal Drug Administration (FDA) requirements throughout the contract lifetime.

Non-Clinical

n. The Contractor shall develop and execute (if necessary, and when appropriate) a complete non-clinical safety assessment via Pharmacological Toxicity studies following Good Laboratory Practice guidelines (as defined in the U.S. Code of Federal Regulations -21CFR Part §58), with material from to current CMO to include tests to determine the direct toxicity of the candidate vaccine and other components of the formulation.

o. The Contractor shall develop, execute (if necessary, and when appropriate), successfully complete non-clinical study plans evaluating the safety, immunogenicity, efficacy to demonstrate appropriate vaccine dose range in at least one animal model.

Regulatory

p. The Contractor shall ensure regulatory submission plans and potential engagement opportunities for meetings/discussions with FDA on critical issues and Investigation New Drug amendment submissions related to Chemistry, Manufacturing, and Controls (CMC) activities and non-clinical development including potency assay development.

Project Management, Earned Value Management System & Risk Mitigation

q. The Contractor shall develop a plan to incorporate work proposed to meet technical objectives (above) into the existing integrated product development plan (project plan) in both tabular and Gantt format that clearly

indicates the critical path to support each development component: manufacturing, non clinical and assay development, regulatory activities which demonstrates interactions and advice input from FDA. Attention shall be placed on allowing sufficient time in the schedule for the USG (BARDA, FDA or other agencies as appropriate) to review documentation, including technical plans, protocols, data, draft and final study reports and regulatory submissions. The plan shall identify critical strategic Go/ No Go decision points during development. The integrated product development plan shall demonstrate interdependencies, source of material in a given activity and plans to be used in monitoring performance of the contract and subcontracts.

r. The Contractor shall incorporate the work proposed to meet the technical objectives above into the existing program Earned Value Management system.

s. The Contractor shall incorporate the work proposed to meet the technical objectives (above) into the existing program risk mitigation plan highlighting potential problems and/or issues that may arise during the life of the contract, their impact on cost, performance and timelines, and appropriate remediation plans.

6. Article C.2(2) – Earned Value Management is here by updated to include the following:

Monthly Reporting

(1) The Contractor shall provide a (1) Contract Performance Report (CPR) format 1 at a WBS level 3 and (2) shall provide a CPR Format 5- Variance Analysis Reports (VARs) at a WBS level 2. The variance narrative reports shall describe be what the variance and indices may be indicating regarding the over all performance, the reasons for the variances, the adequacy of corrective action plans, and forecasts of future performance.

Work Authorization Documents (WAD)

(1) The Contractor shall provide the WAD at WBS level 3.

Control Account Plans (CAP)

(1) The contractor shall submit a supplemental CAP report on a monthly basis and submit with the final CPR each month (on the 20th day after end of Pharmathene accounting reporting period). The CAP shall contain, at the work package level, time phased budget (BCWS), earned value (BCWP) and actual costs (ACWP). The contractor shall provide a rational in the package of its use of % complete as EVMS methodology or identify if any other EVMS methodology is being used.

Integrated Master Schedule (IMS)

(1) The Contractor shall ensure that the Integrated Master Schedule (IMS) is presented at the work package level, with predecessors/successors noted as well as critical path (the schedule submitted with the monthly progress reports. The report shall be submitted in either soft copy or electronic copy.

(End of paragraph 6)

7. Article G.2. KEY PERSONNEL are hereby amended as follows:

Position	From	To
Vice President of Manufacturing and Supply Chain	[***]	[***]
Chief Scientific Officer		

(End of paragraph 7)

8. Article G.4. Indirect Rates are hereby amended as follows:

Type	CFY 2009	CFY 2010	CFY2011	CFY 2012
[***]	[***]	[***]	[***]	[***]

(End of Paragraph 8)

9. Section I. Article I.4 Additional FAR Contract Clauses Included in Full Text, is revised to incorporate the following clause in full text.

FAR 52-217-7- **Option for Increase Quantity – Separately Price Line Item. (Mar 1989)**. As determined to be in the best interest of the government, the government may require the delivery of any or all of the items identified in the Schedule as an Option. The items listed in the Options may be required together or singularly at a time during the contract period of performance, in the quantity and at the price stated in the Schedule. The Contracting Officer, may exercise the Option by written notice to the Contractor within 60 days prior notice. If added, the Option(s) will be added to the Milestone table and a mutually agreed upon delivery schedule will be established. The estimated cost plus fix fee of the contract shall be increased as set forth in Article B.2 of this contract.

(End of paragraph 9)

This Modification, together with the Contract, contains the entire, exclusive and final understanding of the Parties with respect to the matter hereof and supersedes all negotiations, representations, promises or agreements, either written or oral, regarding this subject matter.

All other terms and conditions survive this Modification unmodified and unaffected and shall remain in full force and effect, except for the Contract modification expressly effectuated hereby and set forth herein. The Parties agree and acknowledge that this Modification's terms, conditions, and forms of expressions were negotiated and bargained by and between the Parties. This modification may be executed and delivered by any means and in any number of counterparts, each of which shall be an original against either Part whose signature appears thereon, but all of which taken shall constitute but one and the same instrument.

(End of Modification No. 0018)

Exhibit 31.1

Certification of Principal Executive Officer
Pursuant to SEC Rule 13a-14(a)/15d-14(a)

I, Eric I. Richman, certify that:

1. I have reviewed this Form 10-Q of PharmAthene, Inc. for the quarter ended March 31, 2010;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statement for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: May 13, 2010

/s/ Eric I. Richman

Name: Eric I. Richman
Title: President and interim Chief Executive Officer

Exhibit 31.2

Certification of Principal Financial Officer
Pursuant to SEC Rule 13a-14(a)/15d-14(a)

I, Charles A. Reinhart III, certify that:

1. I have reviewed this Form 10-Q of PharmAthene, Inc. for the quarter ended March 31, 2010;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statement for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: May 13, 2010

/s/ Charles A. Reinhart III

Name: **Charles A. Reinhart III**
Title: **Chief Financial Officer**

Exhibit 32.1

Certification Pursuant to Section 1350 of Chapter 63
of Title 18 of the United States Code

In connection with the Quarterly Report of PharmAthene, Inc. (the "Company") on Form 10-Q for the quarter ended March 31, 2010, as filed with the Securities and Exchange Commission (the "Report"), I, Eric I. Richman, interim Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Eric I. Richman

Name: Eric I. Richman
Title: President and interim Chief Executive Officer
May 13, 2010

Exhibit 32.2

Certification Pursuant to Section 1350 of Chapter 63
of Title 18 of the United States Code

In connection with the Quarterly Report of PharmAthene, Inc. (the "Company") on Form 10-Q for the quarter ended March 31, 2010, as filed with the Securities and Exchange Commission (the "Report"), I, Charles A. Reinhart III, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Charles A. Reinhart III

Charles A. Reinhart III
Chief Financial Officer
May 13 , 2010