

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**Form 10-Q**

(Mark One)

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

For the quarterly period ended September 30, 2013

Or

**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**

(State or other jurisdiction of incorporation or organization)

**20-2726770**

(I.R.S. Employer Identification No.)

**One Park Place, Suite 450, Annapolis, MD**

(Address of principal executive offices)

**21401**

(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  No

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  No

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

Accelerated Filer

Non-Accelerated Filer

Smaller Reporting Company

(Do not check if a smaller reporting company)

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

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 November 1, 2013 was 52,310,913.

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**PHARMATHENE, INC.**

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## Item 1. Financial Statements

## PHARMATHENE, INC.

## CONDENSED CONSOLIDATED BALANCE SHEETS

	September 30, 2013 (Unaudited)	December 31, 2012
<b><u>ASSETS</u></b>		
Current assets:		
Cash and cash equivalents	\$ 15,943,399	\$ 12,701,517
Billed accounts receivable	-	2,432,641
Unbilled accounts receivable	1,613,325	4,114,442
Prepaid expenses and other current assets	209,514	547,245
Total current assets	<u>17,766,238</u>	<u>19,795,845</u>
Property and equipment, net	429,506	483,976
Other long-term assets and deferred costs	74,594	113,130
Goodwill	2,348,453	2,348,453
Total assets	<u>\$ 20,618,791</u>	<u>\$ 22,741,404</u>
<b><u>LIABILITIES AND STOCKHOLDERS' EQUITY</u></b>		
Current liabilities:		
Accounts payable	1,159,179	1,697,280
Accrued expenses and other liabilities	2,590,605	2,328,877
Deferred revenue	471,816	1,381,755
Current portion of long-term debt	999,996	749,997
Current portion of derivative instruments	191,643	-
Short-term debt	-	1,330,507
Total current liabilities	<u>5,413,239</u>	<u>7,488,416</u>
Other long-term liabilities	592,028	579,427
Long-term debt, less current portion	974,413	1,704,108
Derivative instruments, less current portion	2,285,545	1,295,613
Total liabilities	<u>9,265,225</u>	<u>11,067,564</u>
Stockholders' equity:		
Common stock, \$0.0001 par value; 100,000,000 shares authorized; 52,297,580 and 48,352,651 shares issued and outstanding at September 30, 2013 and December 31, 2012, respectively	5,230	4,835
Additional paid-in-capital	217,471,662	210,495,905
Accumulated other comprehensive loss	(220,110)	(217,328)
Accumulated deficit	(205,903,216)	(198,609,572)
Total stockholders' equity	<u>11,353,566</u>	<u>11,673,840</u>
Total liabilities and stockholders' equity	<u>\$ 20,618,791</u>	<u>\$ 22,741,404</u>

The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.

**PHARMATHENE, INC.**

**UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**

	<u>Three months ended September 30,</u>		<u>Nine months ended September 30,</u>	
	<u>2013</u>	<u>2012</u>	<u>2013</u>	<u>2012</u>
Contract Revenue	3,488,142	6,696,126	14,258,680	19,162,176
Operating expenses:				
Research and development	2,556,383	5,138,622	11,192,403	14,762,634
General and administrative	4,086,348	3,275,428	8,698,873	9,004,008
Depreciation	44,593	72,453	139,049	234,811
Total operating expenses	<u>6,687,324</u>	<u>8,486,503</u>	<u>20,030,325</u>	<u>24,001,453</u>
Loss from operations	(3,199,182)	(1,790,377)	(5,771,645)	(4,839,277)
Other income (expense):				
Interest income	31	5,727	2,470	13,534
Interest expense	(89,817)	(112,529)	(289,635)	(226,910)
Realization of cumulative translation adjustment	-	1,227,656	-	1,227,656
Change in fair value of derivative instruments	(628,622)	508,971	(1,181,575)	341,118
Other income (expense)	507	(31,312)	(3,506)	22,122
Total other income (expense)	<u>(717,901)</u>	<u>1,598,513</u>	<u>(1,472,246)</u>	<u>1,377,520</u>
Net loss before provision for income taxes	(3,917,083)	(191,864)	(7,243,891)	(3,461,757)
Provision for income taxes	(28,804)	(22,072)	(49,753)	(188,610)
Net Loss	<u>\$ (3,945,887)</u>	<u>\$ (213,936)</u>	<u>\$ (7,293,644)</u>	<u>\$ (3,650,367)</u>
Basic and diluted net loss per share	\$ (0.08)	\$ (0.00)	\$ (0.15)	\$ (0.08)
Weighted average shares used in calculation of basic and diluted net loss per share	52,166,733	48,345,984	50,105,641	48,314,058

The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.

**PHARMATHENE, INC.**

**UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS**

	<b>Three months ended September 30,</b>		<b>Nine months ended September 30,</b>	
	<b>2013</b>	<b>2012</b>	<b>2013</b>	<b>2012</b>
<b>Net loss</b>	\$ (3,945,887)	\$ (213,936)	\$ (7,293,644)	\$ (3,650,367)
Other comprehensive (loss) income:				
Realization of cumulative translation adjustment included in net loss	-	(1,227,656)	-	(1,227,656)
Foreign currency translation adjustments	164	7,690	(2,782)	1,157
<b>Comprehensive loss</b>	<b>\$ (3,945,723)</b>	<b>\$ (1,433,902)</b>	<b>\$ (7,296,426)</b>	<b>\$ (4,876,866)</b>

The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.

PHARMATHENE, INC.

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	<b>Nine months ended September 30,</b>	
	<b>2013</b>	<b>2012</b>
<b>Operating activities</b>		
Net loss	\$ (7,293,644)	\$ (3,650,367)
Adjustments to reconcile net loss to net cash used in operating activities:		
Realization of cumulative translation adjustment	-	(1,227,656)
Share-based compensation expense	957,261	1,499,910
Change in fair value of derivative instruments	1,181,575	(341,118)
Depreciation expense	139,049	234,811
Provision for deferred income taxes	49,753	188,610
Non-cash interest expense	104,726	81,252
Gain on the disposal of property and equipment	(3,500)	(66,626)
Changes in operating assets and liabilities:		
Billed accounts receivable	2,432,641	2,818,201
Unbilled accounts receivable	2,501,117	(661,103)
Prepaid expenses and other current assets	313,384	557,683
Accounts payable	(588,086)	400,764
Accrued expenses and other liabilities	203,951	455,184
Deferred revenue	(909,939)	(467,409)
Net cash used by operating activities	(911,712)	(177,864)
<b>Investing activities</b>		
Purchases of property and equipment	(84,579)	-
Proceeds from the sale of property and equipment	3,500	67,400
Net cash (used) provided by investing activities	(81,079)	67,400
<b>Financing activities</b>		
Proceeds from issuance (repayment) of debt and warrants	(499,998)	2,500,000
Net proceeds from (repayment of) revolving credit agreement	(1,330,507)	1,208,370
Deferred financing costs	-	(216,460)
Change in restricted cash requirements	-	100,000
Proceeds from issuance of common stock, net of offering costs	6,068,891	38,984
Other	-	(32,960)
Net cash provided by financing activities	4,238,386	3,597,934
Effects of exchange rates on cash	(3,713)	2,087
Increases in cash and cash equivalents	3,241,882	3,489,557
Cash and cash equivalents, at beginning of period	12,701,517	11,236,771
Cash and cash equivalents, at end of period	\$ 15,943,399	\$ 14,726,328
<b>Supplemental disclosure of cash flow information</b>		
Cash paid for interest	\$ 184,909	\$ 145,658
<b>Noncash Financing activity</b>		
Value of warrants issued to lender in connection with loan	\$ -	\$ 69,876

The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.

**PHARMATHENE, INC.**

**Notes to Unaudited Condensed Consolidated Financial Statements  
September 30, 2013**

**Note 1 - Organization and Business**

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 the products we may develop 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 to sustain our operations.

**Note 2 - Summary of Significant Accounting Policies**

*Basis of Presentation*

Our unaudited condensed consolidated financial statements include the accounts of PharmAthene, Inc. and its wholly-owned subsidiaries. All significant intercompany transactions and balances have been eliminated in consolidation. Our unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("U.S. GAAP"). 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 unaudited condensed consolidated balance sheet at December 31, 2012 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. Certain information and footnote disclosure normally included in the financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to instructions, rules and regulations prescribed by the U.S. Securities and Exchange Commission. We believe that the disclosures provided herein are adequate to make the information presented not misleading when these unaudited condensed consolidated financial statements are 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, 2012, 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 U.S. GAAP 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. Our unaudited condensed consolidated financial statements include significant estimates for the value and the expected economic life of our intangible assets, the amount of our net operating losses available for income tax purposes, our share-based compensation, the value of our derivative financial instruments, among other things. Because of the use of estimates inherent in the financial reporting process, actual results could differ significantly from those estimates.

*Foreign Currency Translation*

The functional currency of our wholly owned foreign subsidiaries 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 for subsidiaries that have not been sold, substantially liquidated or otherwise disposed of are accumulated in other comprehensive income (loss), a component of stockholders' equity. Transaction gains or losses are included in the determination of net loss.

### *Comprehensive Loss and Accumulated Other Comprehensive Income*

Comprehensive loss includes the total of our net loss and all other changes in equity other than transactions with owners, which currently only includes changes in equity for cumulative translation adjustments resulting from the consolidation of foreign subsidiaries as the financial statements of the subsidiaries located outside of the United States are accounted for using the local currency as the functional currency.

### *Cash and Cash Equivalents*

Cash and cash equivalents are stated at market value. We consider all highly liquid investments with original maturities of three months or less to be cash equivalents.

### *Revolving Line of Credit and Term Loan*

As discussed further in Note 7, we entered into a loan agreement with General Electric Capital Corporation (“GE Capital”) in March 2012. As part of that agreement, we issued stock purchase warrants to GE Capital that expire in March 2022 (see Note 7). The fair value of the warrants was charged to additional paid-in-capital, resulting in a debt discount to the term loan at the date of issuance. The debt discount and the financing costs incurred in connection with the agreement are being amortized over the term of the loan using the effective interest method. The amortization of both the debt discount and deferred financing costs are included in interest expense in the unaudited condensed consolidated statements of operations.

### *Significant Customers and Accounts Receivable*

Our primary customers are the U.S. Department of Defense (the “DoD”) - Chemical Biological Medical Systems (“CBMS”), and the Biomedical Advanced Research and Development Authority (“BARDA”). As of September 30, 2013 and December 31, 2012, the Company’s billed and unbilled receivable balances were comprised solely of receivables from CBMS and BARDA.

### *Goodwill*

Goodwill represents the excess of purchase price over the fair value of net identifiable assets associated with acquisitions. We review the recoverability of goodwill when there are indicators of impairment and at least annually as of December 31<sup>st</sup> by comparing our market value (as measured by our stock price multiplied by the number of outstanding shares as of the end of the year) to the net book value of our equity. If our market value exceeds our net book value, no further analysis is required. Changes in our business strategy or adverse changes in market conditions could impact the impairment analyses and require the recognition of an impairment charge equal to the excess of the carrying value of goodwill over its estimated fair value. We completed our last annual impairment assessment of goodwill as of December 31, 2012 and determined that there was no impairment as of that date.

### *Financial Instruments*

Our financial instruments, and/or embedded features contained in those instruments, often are classified as derivative liabilities and are recorded at their fair values. The determination of fair value of these instrument and features requires estimates and judgments. Some of our stock purchase warrants are considered to be derivative liabilities due to the presence of net settlement features; the fair value of our warrants 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.

### *Revenue Recognition*

We generate our revenue from different types of contractual arrangements: cost-plus-fee contracts, cost reimbursable grants and fixed price contracts.

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, as further described below; otherwise, we estimate the fee 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.

Under the milestone method of revenue recognition, substantive milestone payments (including milestone payments for fees) contained in research and development arrangements are recognized as revenue when: (i) the milestones are achieved; (ii) no further performance obligations with respect to the milestone exist; (iii) collection is reasonably assured; and (iv) substantive effort was necessary to achieve the milestone.

Milestones are considered substantive if all of the following conditions are met:

- it is commensurate with either our performance to meet the milestone or the enhancement of the value of the delivered item or items as a result of a specific outcome resulting from our performance to achieve the milestone;
- it relates solely to past performance; and
- the value of the milestone is reasonable relative to all the deliverables and payment terms (including other potential milestone consideration) within the arrangement.

If a milestone is deemed not to be substantive, the Company recognizes the portion of the milestone payment as revenue that correlates to work already performed using the proportional performance method; the remaining portion of the milestone payment is deferred and recognized as revenue as the Company completes its performance obligations.

Revenue on fixed price contracts (without substantive milestones as described above) is recognized on the percentage-of-completion method. The percentage-of-completion method recognizes income as the contract progresses (generally related to the costs incurred in providing the services required under the contract). The use of the percentage-of-completion method depends on the ability to make reasonable dependable estimates and the fact that circumstances may necessitate frequent revision of estimates does not indicate that the estimates are unreliable for the purpose for which they are used.

As a result of our revenue recognition policies and the billing provisions contained in our contracts, the timing of customer billings may differ from the timing of recognizing revenue. Amounts invoiced to customers in excess of revenue recognized are reflected on the balance sheet as deferred revenue. Amounts recognized as revenue in excess of amounts billed to customers are reflected on the balance sheet as unbilled accounts receivable.

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 September 30, 2012, we recorded approximately \$0.1 million of costs reimbursed by the government as an offset to research and development expenses, while no such reimbursements were recorded for the three months ended September 30, 2013. For the nine months ended September 30, 2013 and 2012, we recorded approximately \$0.02 million and \$1.1 million, respectively, of costs reimbursed by the government as an offset to research and development expenses.

#### *Research and Development Expenses*

Research and development costs are expensed as incurred; advance 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, share-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 stock options is determined at the grant date using an option pricing model. We have estimated the fair value of each stock option 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 our 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 is determined based on the closing price of our common stock on the award date and is recognized as expense ratably over the requisite service period.

Employee share-based compensation expense recognized in the three months and nine months ended September 30, 2013 and 2012 was calculated based on awards ultimately expected to vest and has been reduced for estimated forfeitures based on historical forfeitures.

Share-based compensation expense for the three months ended September 30, 2013 and 2012 was:

	Three months ended September 30,	
	2013	2012
Research and development	\$ 105,796	\$ 107,199
General and administrative	198,876	332,006
Total share-based compensation expense	<u>\$ 304,672</u>	<u>\$ 439,205</u>

During the three months ended September 30, 2013 and September 30, 2012, no options were granted to employees and nonemployee directors and we made no restricted stock grants.

Share-based compensation expense for the nine months ended September 30, 2013 and 2012 was:

	Nine months ended September 30,	
	2013	2012
Research and development	\$ 268,289	\$ 351,342
General and administrative	688,972	1,148,568
Total share-based compensation expense	<u>\$ 957,261</u>	<u>\$ 1,499,910</u>

During the nine months ended September 30, 2013, we granted 205,000 options to employees, nonemployee directors and consultants and made no restricted stock grants. During the nine months ended September 30, 2012, we granted 200,948 options to employees and nonemployee directors and made no restricted stock grants.

At September 30, 2013, we had total unrecognized share-based compensation expense related to unvested awards of approximately \$1.6 million, net of estimated forfeitures, which we expect to recognize as expense over a weighted-average period of 1.9 years.

### Income Taxes

We account for income taxes using the asset and liability approach, which requires the recognition of future tax benefits or liabilities on the temporary differences between the financial reporting and tax bases of our assets and liabilities. A valuation allowance is established when necessary to reduce deferred tax assets to the amounts expected to be realized. We also recognize a tax benefit from uncertain tax positions only if it is "more likely than not" that the position is sustainable based on its technical merits. Our policy is to recognize interest and penalties on uncertain tax positions as a component of income tax expense.

Our provision for income taxes was \$0.03 million and \$0.02 million during the three months ended September 30, 2013 and 2012, respectively. The provision for income taxes was \$0.05 million and \$0.2 million during the nine months ended September 30, 2013 and 2012, respectively. The provision for income taxes is a result of the difference between the treatment of goodwill for income tax purposes and for U.S. GAAP, resulting in a deferred tax liability which cannot be used to offset deferred tax assets. This deferred tax liability is included in our condensed consolidated balance sheet in other long-term liabilities.

#### *Basic and Diluted Net Loss Per Share*

Basic loss per share is computed by dividing consolidated net loss by the weighted average number of common shares outstanding during the period, 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 by the weighted average number of shares outstanding and the impact of all potential dilutive common shares, consisting primarily of stock options, unvested restricted stock and stock purchase warrants. The dilutive impact of our dilutive potential common shares resulting from stock options and stock purchase warrants is determined by applying the treasury stock method.

For periods of net loss, diluted loss per share is calculated similarly to basic loss per share because the impact of all dilutive potential common shares is anti-dilutive due to the net losses. A total of approximately 11.6 million potentially dilutive securities have been excluded in the calculation of diluted net loss per share in the three and nine months ended September 30, 2013 and 11.5 million potentially dilutive securities have been excluded in the calculation of diluted net loss per share in the three and nine months ended September 30, 2012 because their inclusion would be anti-dilutive.

#### *Recent Accounting Pronouncements*

In July 2013, the FASB issued Accounting Standards Update No. 2013-11, Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists, (“ASU 2013-11”). The objective of this update is to eliminate the diversity in practice in the presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss or a tax credit carryforward exists. The amendments in this update require an entity to present an unrecognized tax benefit in the financial statements as a reduction to a deferred tax asset for those instances described above, except in certain situations discussed in the update. ASU 2013-11 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2013. The Company is currently evaluating the impact of adopting this guidance.

In March 2013, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2013-05, Foreign Currency Matters (Topic 830)-Parent’s Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity, (“ASU 2013-05”). This amendment clarifies the applicable guidance for the release of cumulative translation adjustment into net earnings. When an entity ceases to have a controlling financial interest in a subsidiary or group of assets within a foreign entity, the entity is required to apply the guidance in FASB Accounting Standards Codification Topic 830-30 to release any related cumulative translation adjustment into net earnings. ASU 2013-05 is effective prospectively for fiscal years, and interim reporting periods within those years, beginning after December 15, 2013. Adoption of this guidance did not have a significant impact on the determination or reporting of the Company’s financial results.

#### **Note 3 – Proposed Merger**

On July 31, 2013, PharmAthene entered into an agreement and plan of merger (the “Merger Agreement”), pursuant to which its wholly-owned subsidiary, Taurus Merger Sub, Inc. (“Merger Sub”), will be merged with and into Theraclone Sciences, Inc., a Delaware corporation (“Theraclone”), with Theraclone as the surviving subsidiary (the “Merger”).

Pursuant to the terms of the Merger Agreement, at the effective time of the Merger (the “Effective Time”), each outstanding share of common stock of Theraclone will be converted into the right to receive a number of shares of PharmAthene common stock equal to the quotient obtained by dividing the Fully Diluted Equity (as defined below) of PharmAthene by the Fully Diluted Equity of Theraclone (the “Exchange Ratio”), less a pro rata share of PharmAthene common stock representing 5% of the merger consideration issuable to the stockholders of Theraclone (the “Escrow Shares”). The Merger Agreement defines “Fully Diluted Equity” to mean, with respect to PharmAthene, the total number of shares outstanding of PharmAthene common stock assuming full conversion or exercise of all then outstanding options and warrants, which, in each case, have an exercise price less than or equal to \$2.50 per share, and convertible securities. With respect to Theraclone, “Fully Diluted Equity” means the total number of shares outstanding of Theraclone common stock, assuming full conversion or exercise of all then-outstanding options and warrants and all convertible securities. Holders of Theraclone common stock will receive cash in lieu of fractional shares. In addition, all outstanding Theraclone options, as well as Theraclone’s 2004 Option Plan, will be assumed by PharmAthene. Each option or warrant to purchase one share of Theraclone common stock will be converted into an option or warrant, as the case may be, to purchase a number of shares of PharmAthene common stock representing the number of Theraclone shares for which the exchanged option or warrant was exercisable multiplied by the Exchange Ratio. The exercise price would be proportionately adjusted.

Following the consummation of the transactions contemplated by the Merger Agreement, the security holders of PharmAthene immediately prior to the Effective Time and the security holders of Theraclone immediately prior to the Effective Time will each own approximately 50% of the fully-diluted equity (without regard to PharmAthene options and warrants having an exercise price greater than \$2.50 per share) after the Merger. The Escrow Shares described above, which will serve to secure the Theraclone stockholders’ indemnification obligations under the Merger Agreement, will be deposited with Citibank, N.A., as escrow agent under a separate escrow agreement to be entered into prior to the completion of the Merger. The escrow period will expire nine months from the date of completion of the Merger.

Completion of the Merger is subject to a number of conditions, including, but not limited to (i) approval of the issuance of shares of PharmAthene common stock in connection with the Merger, and approval of an increase in the authorized number of shares of common stock, by PharmAthene’s stockholders and the adoption and approval of the Merger Agreement and the transactions contemplated thereby by Theraclone’s stockholders; (ii) the effectiveness of a registration statement on Form S-4 filed by PharmAthene with the Securities and Exchange Commission (the “SEC”) to register the issuance of the shares of PharmAthene common stock in connection with the Merger, which will contain a joint proxy statement/prospectus (see Note 8 – Subsequent Events); (iii) approval for listing on the NYSE MKT LLC of such shares of PharmAthene common stock; (iv) execution of the Board Composition Agreement; (v) exercise of appraisal rights by no more than 5% of Theraclone’s stockholders; (vi) the amendment of PharmAthene’s bylaws to limit the ability to remove Clifford Stocks as Chief Executive Officer; (vii) all \$8.0 million of capital committed to Theraclone pursuant to its Series B-1 Preferred Stock and Warrant Purchase and Exchange Agreement shall have been delivered to Theraclone (which Theraclone has confirmed did occur) and (viii) other customary closing conditions.

The Merger Agreement contains termination rights in favor of each of PharmAthene and Theraclone in certain circumstances. If PharmAthene terminates the Merger Agreement pursuant to its superior proposal termination right, it is obligated to pay to Theraclone a break-up fee of \$3.5 million. If the PharmAthene board of directors changes its voting recommendations to PharmAthene stockholders as a result of a Transaction Event and Theraclone terminates as a result of such change in recommendation, or if PharmAthene terminated the Merger Agreement as a result of a Transaction Event (as defined below), PharmAthene is obligated to pay Theraclone a break-up fee of \$4.5 million. A “Transaction Event” is defined to occur if the Court of Chancery of the State of Delaware (“Delaware Court of Chancery”) renders a substantive decision on the merits in PharmAthene’s civil case against SIGA and within 20 business days thereafter the PharmAthene board of directors determines, in its reasonable discretion, that, as a result of such decision, it can no longer consider the Merger a merger of equals. In addition, either party may terminate the Merger Agreement if (i) the Merger has not been completed by January 31, 2014 (the “Outside Termination Date”), provided that if the registration statement on Form S-4 is not declared effective by October 4, 2013, then either party is generally entitled to extend the Outside Termination Date by 60 days, or (ii) the PharmAthene stockholders fail to approve the issuance of shares in the Merger, the increase in authorized shares of common stock or the election of the PharmAthene or Theraclone board designees. If (a) the Merger Agreement is terminated because the Merger has not been completed prior to the Outside Termination Date, (b) a takeover approval was announced prior to the PharmAthene stockholder meeting with respect to the Merger and (c) within nine months after the date of the termination of the Merger Agreement, PharmAthene enters into an agreement or understanding with respect to any takeover proposal that is subsequently completed, then PharmAthene is obligated to pay to Theraclone a break-up fee of \$3.5 million. In certain other circumstances, PharmAthene will be obligated to reimburse Theraclone for expenses incurred in connection with the Merger, not to exceed \$1.0 million. The Merger Agreement contains certain indemnification provisions, which, among other things, provide that Theraclone stockholders are not obligated, absent fraud or willful misconduct, to indemnify PharmAthene and its affiliates unless and until the aggregate amount of indemnification claims brought against them by PharmAthene and its affiliates is at least \$1.0 million. In addition, no Theraclone stockholder has an obligation, absent fraud or willful misconduct of Theraclone, to indemnify PharmAthene or its affiliates for an amount in excess of such Theraclone stockholder’s pro rata share of the Escrow Shares. The Merger Agreement furthermore appointed Steven Gillis, Ph.D. as the agent for and on behalf of the Theraclone stockholders with respect to the Merger Agreement and Escrow Agreement, as well as related matters.

The merger, if completed, will be accounted for in accordance with the acquisition method of accounting. Under the acquisition method, the purchase consideration is allocated to the assets acquired and the liabilities assumed based on their estimated fair values, with any excess of the purchase consideration over the estimated fair values of the identifiable net assets acquired being recorded as goodwill.

#### **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 on a recurring basis 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 on a recurring basis. As of September 30, 2013 and December 31, 2012 we had Level 3 derivative instruments related to stock purchase warrants of approximately \$2.5 million and \$1.3 million, respectively.

The following table represents the Company's fair value hierarchy for its financial assets and liabilities measured at fair value on a recurring basis:

	As of September 30, 2013			Balance
	Level 1	Level 2	Level 3	
<b>Liabilities</b>				
Current portion of derivative instruments related to stock purchase warrants	\$ -	\$ -	\$ 191,643	\$ 191,643
Non-current portion of derivative instruments related to stock purchase warrants	-	-	2,285,545	2,285,545
Total derivative instruments related to stock purchase warrants	\$ -	\$ -	\$ 2,477,188	\$ 2,477,188

  

	As of December 31, 2012			Balance
	Level 1	Level 2	Level 3	
<b>Liabilities</b>				
Non-current portion of derivative instruments related to stock purchase warrants	\$ -	\$ -	\$ 1,295,613	\$ 1,295,613
Total derivative instruments related to stock purchase warrants	\$ -	\$ -	\$ 1,295,613	\$ 1,295,613

The following table sets forth a summary of changes in the fair value of the Company's Level 3 liabilities for the nine months ended September 30, 2013:

Description	Balance as of	Unrealized Losses	Balance as of
	December 31, 2012		September 30, 2013
Derivative liabilities related to stock purchase warrants	\$ 1,295,613	\$ 1,181,575	\$ 2,477,188

The following table sets forth a summary of changes in the fair value of the Company's Level 3 liabilities for the nine months ended September 30, 2012:

Description	Balance as of	Unrealized (Gains)	Balance as of
	December 31, 2011		September 30, 2012
Derivative liabilities related to stock purchase warrants	\$ 1,886,652	\$ (341,118)	\$ 1,545,534

At September 30, 2013 and December 31, 2012, derivative liabilities are comprised of warrants to purchase 2,899,991 shares of common stock. The warrants are considered to be derivative liabilities due to the presence of net settlement features and, as a result, are recorded at fair value at each balance sheet date, with changes in fair value recorded in the unaudited condensed consolidated statements of operations. Stock purchase warrants to acquire 705,354 shares of common shares, expire on September 27, 2014 and the value of these warrants have been reported as current liabilities. The fair value of our warrants 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.

#### Quantitative Information about Level 3 Fair Value Measurements

Fair Value at 9/30/2013	Valuation Technique	Unobservable Inputs
\$ 2,477,188	Black-Scholes option pricing model	Expected term
		Expected dividends
		Anticipated volatility

Changes in any of the assumptions related to the unobservable inputs identified above may change the stock purchase warrants' fair value; increases in expected term, anticipated volatility and expected dividends generally result in increases in fair value, while decreases in these unobservable inputs generally result in decreases in fair value. Beginning in the third quarter of 2013, we stopped using a peer group index to determine our estimated stock price volatility and began using our own historical stock volatility since we now have sufficient historical stock price data. We accounted for this change in accounting prospectively as a change in accounting estimate. Gains and losses on the fair value adjustments for these derivative instruments are classified in other expenses as the change in fair value of derivative instruments in our unaudited condensed consolidated statements of operations

#### *Assets Measured at Fair Value on a Nonrecurring Basis*

The Company measures its long-lived assets, including, property and equipment and goodwill, at fair value on a nonrecurring basis. These assets are recognized at fair value when they are deemed to be other-than-temporarily impaired (see Note 2).

#### **Note 5 - Commitments and Contingencies**

##### *SIGA Litigation*

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

In September 2011, the Delaware Court of Chancery issued an opinion in the case finding that SIGA had breached certain contractual obligations to us and upholding our claims of promissory estoppel. The Delaware Court of Chancery awarded us the right to receive 50% of all net profits (as defined in the court's final judgment) related to the sale of Arestvyr™ and related products for 10 years following initial commercial sale of the drug once SIGA earns \$40 million in net profits from the sale of Arestvyr™ and related products. The Delaware Court of Chancery also awarded us one-third of our reasonable attorney's fees and expert witness fees, which amounts to approximately \$2.4 million plus interest. In May 2012, the Delaware Court of Chancery issued its final judgment. SIGA appealed aspects of the decision to the Delaware Supreme Court. In response, we cross-appealed other aspects of the decision.

In May 2013, the Delaware Supreme Court issued its ruling on the appeal, affirming the Chancery Court's finding of breach of contract, reversing its finding of promissory estoppel, and remanding the case back to the Delaware Court of Chancery to reconsider the remedy and award of attorney's fees and expert witness costs in light of the Delaware Supreme Court's decision. Currently, because the Delaware Supreme Court remanded the issue of a remedy back to the Delaware Court of Chancery, we no longer have a financial interest in Arestvyr™ and may never receive any proceeds from the product.

While we believe there may be significant revenue potential under a potential damages award, we can provide no assurances that on remand the Chancery Court will re-instate its prior remedy or order another remedy for us, that SIGA will not appeal any subsequent decision by the Delaware Court of Chancery, or that SIGA will not be successful in any subsequent appeal. We have not yet recorded any amount due from SIGA in relation to this case.

##### *Government Contracting*

Payments to the Company on cost-plus-fee contracts are provisional. The accuracy and appropriateness of costs charged to U.S. Government contracts are subject to regulation, audit and possible disallowance by the Defense Contract Audit Agency ("DCAA") and other government agencies such as BARDA. Accordingly, costs billed or billable to U.S. Government customers are subject to potential adjustment upon audit by such agencies. In our opinion, adjustments that may result from audits are not expected to have a material effect on our financial position, results of operations, or cash flows.

Changes in government policies, priorities or funding levels through agency or program budget reductions by the U.S. Congress or executive agencies could materially adversely affect the Company's financial condition or results of operations. Furthermore, contracts with the U.S. Government may be terminated or suspended by the U.S. Government at any time, with or without cause. Such contract suspensions or terminations could result in unreimbursable expenses or charges or otherwise adversely affect the Company's financial condition and/or results of operations.

#### *Registration Rights Agreements*

We entered into a Registration Rights Agreement with the investors who participated in the July 2009 private placement of convertible notes and related warrants. We subsequently filed two registration statements on Form S-3 with the Securities and Exchange Commission to register the resale of the shares issuable upon conversion of the convertible notes and exercise of the related warrants, which registration statements have been declared effective. We are obligated to maintain the registration statements effective until the date when such shares (and any other securities issued or issuable with respect to or in exchange for such shares) have been sold. The convertible notes were converted or extinguished in 2010, although the related warrants remain outstanding. The warrants will expire on January 28, 2015.

We have separate registration rights agreements with investors, under which we have obligations to keep the corresponding registration statements effective until the registrable securities (as defined in each 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 convertible notes, which were converted or extinguished in 2010, if 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 convertible notes relating to the affected shares on the initial day of a Maintenance Failure. Our total maximum obligation under this provision at September 30, 2013, which is not probable of payment, would be approximately \$0.2 million.

Following a 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 convertible notes relating to the affected shares 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, which is not probable of payment, would be approximately \$0.2 million for each month until the failure, if it occurs, is cured.

#### **Note 6 - Stockholders' Equity**

##### *Long-Term Incentive Plan*

In 2007, the Company's stockholders approved the 2007 Long-Term Incentive Compensation 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.

In 2008, the Company's shareholders approved amendments to the 2007 Plan, increasing from 3.5 million shares to 4.6 million 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. At September 30, 2013, there are approximately 9.3 million shares approved for issuance under the 2007 Plan, of which approximately 2.6 million shares are available to be issued. The Board of Directors in conjunction with management determines who receives awards, the vesting conditions and the exercise price. Options may have a maximum term of ten years.

## Stock Purchase Warrants

At September 30, 2013 and 2012 there were warrants outstanding to purchase 5,620,128 shares of our common stock, respectively. The warrants outstanding as of September 30, 2013 and December 31, 2012 were as follows:

Number of Common Shares Underlying Warrants	Issue Date/Exercisable Date	Exercise Price	Expiration Date
100,778(1)	Mar-07 / Mar-07	\$ 3.97	Mar-17
705,354(2)	Mar-09 / Sep-09	\$ 3.00	Sep-14
2,572,775(1)	Jul-09 / Jan-10	\$ 2.50	Jan-15
500,000(2)	Apr-10 / Oct-10	\$ 1.89	Oct-15
1,323,214(2)	Jul-10 / Jan-11	\$ 1.63	Jan-17
371,423(2)	Jun-11 / Jun-11	\$ 3.50	Jun-16
46,584(1)	Mar-12 / Mar-12	\$ 1.61	Mar-22
<u>5,620,128</u>			

- (1) These warrants to purchase common stock are classified as equity.
- (2) Because of the presence of net settlement provisions, these warrants to purchase common stock are classified as derivative liabilities. The fair value of these liabilities (see Note 4) is remeasured at the end of every reporting period and the change in fair value is reported in the unaudited condensed consolidated statements of operations as other income (expense).

## Note 7 – Financing Transactions

### Controlled Equity Offering

On March 25, 2013, we entered into a controlled equity offering arrangement with a sales agent pursuant to which we may offer and sell, from time to time, through the agent shares of our common stock having an aggregate offering price of up to \$15.0 million. Under the arrangement, the agent may sell shares by any method permitted by law and deemed to be an “at-the-market” offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, including sales made directly on NYSE MKT, or any other existing trading market for our Common Stock or to or through a market maker. Subject to the terms and conditions of that agreement, the agent will use commercially reasonable efforts, consistent with its normal trading and sales practices and applicable state and federal law, rules and regulations and the rules of NYSE MKT, to sell shares from time to time based upon our instructions. We are not obligated to sell any shares under the arrangement. We are obligated to pay the agent a commission of 3.0% of the aggregate gross proceeds from each sale of shares under the arrangement.

Through September 30, 2013, we sold 3,883,173 shares of our common stock under this arrangement resulting in net proceeds (net of commission and offering costs) to the Company of approximately \$5.9 million. As of September 30, 2013, aggregate gross sales for additional common stock of approximately \$8.6 million remained available under the arrangement. Under the terms of the Merger Agreement with Theraclone Sciences (see Note 3), we are currently prohibited from using the controlled equity offering arrangement.

### Loan Agreement with GE Capital

On March 30, 2012, we entered into a Loan Agreement with GE Capital. The Loan Agreement provides for a senior secured debt facility, including a \$2.5 million term loan and a revolving line of credit of up to \$5 million based on our outstanding qualified accounts receivable. On March 30, 2012, the term loan was funded for the full \$2.5 million.

Under the terms of the revolving line of credit, the Company may draw down from the revolving line of credit up to 85% of qualified billed accounts receivable and 80% of qualified unbilled accounts receivable. As of September 30, 2013, the total amount available to draw was approximately \$0.7 million, none of which was drawn and outstanding under the line of credit.

The fixed interest rate on the term loan is 10.14% per annum. The revolving line of credit has an adjustable interest rate based upon the 3-month London Interbank Offered Rate (LIBOR), with a floor of 1.5%, plus 5%. As of September 30, 2013, the interest rate was 6.5%. Both the term loan and the revolving line of credit mature in September 2015. Payments on the term loan were originally interest-only for the first 10 months (which has since been extended to 12 months pursuant to terms of the agreement); subsequently, the term loan will fully amortize over its remaining term. Remaining principal payments on the term loan are scheduled as follows:

Year	Principal Payments
2013	\$ 249,999
2014	999,996
2015	750,007
	\$ 2,000,002

The term loan, net of a debt discount of \$25,593, is recorded on our unaudited condensed consolidated balance sheet as follows:

Current portion of long-term debt	\$ 999,996
Long-term debt, less current portion	\$ 974,413

If we prepay the term loan and terminate the revolving line of credit prior to the scheduled maturity date, we are obligated to pay a prepayment premium equal to 3% of the then outstanding principal amount of the term loan if prepaid during the first two years of the loan and 2% if prepaid during the third year or thereafter. In addition, we are obligated to pay a final payment fee of 3% of the term loan balance. The final payment fee is being accrued and expensed over the term of the agreement, using the effective interest method and is included in other long-term liabilities on our unaudited condensed consolidated balance sheet.

Our obligations under the Loan Agreement are collateralized by a security interest in substantially all of our assets. While the security interest does not, except in limited circumstances, cover our intellectual property, it does cover any proceeds received by us from the use or sale of our intellectual property.

In connection with the Loan Agreement, we issued GE Capital warrants to purchase 46,584 shares of our common stock at an exercise price of \$1.61 per share. The warrants were exercisable immediately and subject to customary and standard anti-dilution adjustments. The warrants are classified in equity and, as a result, the fair value of the warrants was charged to additional paid-in-capital resulting in a debt discount at the date of issuance. The debt discount is being amortized over the term of the loan agreement using the effective interest method. Financing costs incurred in connection with this agreement are also being amortized over the term of the agreement using the effective interest method.

The estimated fair value of the Company's outstanding borrowings under its revolving credit facility at December 31, 2012 was equal to its carrying value as of that date due to the short-term nature of the Revolver's repayment terms. The Company determined the estimated fair value of the Term Loan also approximated its carrying value as of September 30, 2013.

## **Note 8 – Subsequent Events**

### **S-4 Effective And Shareholders Meeting**

The SEC declared our registration statement on Form S-4 effective on October 29, 2013, and we have set December 3, 2013 as the date for the shareholders meeting to consider and vote upon the proposed merger with Theraclone.

## **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. Statements that are not historical facts, including statements preceded by, followed by, or that include words such as “will”; “potential”; “believe”; “anticipate”; “intend”; “plan”; “expect”; “estimate”; “predict”; “could”; “may”; “would”; “should”; “might”; “possible”; or similar statements are forward-looking statements. Our results could be materially different from our expectations because of various risks, including the risks discussed in “Part II-Item 1A – Risk Factors” of this Quarterly Report on Form 10-Q. In addition, 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. Such statements include, but are not limited to, those referring to the potential for the generation of value, ability to leverage funding sources, potential for revenue, potential for growth, the expected completion and outcome of the Company’s proposed merger with Theraclone Sciences, Inc. and the transactions contemplated by the Merger Agreement with Theraclone and related agreements, statements about potential future government contract or grant awards, potential payments under government contracts or grants, potential regulatory approvals, future product advancements and anticipated financial or operational results.*

*Risks and uncertainties that 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 statement include, among others, failure to obtain necessary shareholder approval for the proposed merger with Theraclone and the matters related thereto; failure of either party to meet the conditions to closing of the transaction; delays in completing the transaction and the risk that the transaction may not be completed at all; failure to realize the anticipated benefits from the transaction or delay in realization thereof; the businesses of PharmAthene and Theraclone may not be combined successfully, or such combination may take longer, be more difficult, time-consuming or costly to accomplish than expected; operating costs and business disruption during the pendency of and following the transaction, including adverse effects on employee retention and on business relationships with third parties; the combined company’s need for and ability to obtain additional financing; 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 combined company’s product candidates; unexpected funding delays and/or reductions or elimination of U.S. government funding for one or more of the combined company’s development programs; the award of government contracts to competitors; unforeseen safety issues; 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 our Form 10-K under the caption “Risk Factors” and in its other reports filed with the U.S. Securities and Exchange Commission (the “SEC”).*

*In particular, there is significant uncertainty regarding the level and timing of sales of Arestvyr™ and when and whether it will be approved by the U.S. FDA and corresponding health agencies around the world. We cannot predict with certainty if or when SIGA will begin recognizing profit on the sale thereof and there can be no assurance that any profits received by SIGA and paid to us will be significant. In its May 2013 decision, the Delaware Supreme Court reversed the remedy ordered by the Court of Chancery and remanded the issue of a remedy back to the trial court for reconsideration in light of the Supreme Court’s opinion. As a result, there can be no assurance that the Delaware Court of Chancery will issue a remedy that provides us with a financial interest in Arestvyr™ and related products or any meaningful remedy. In addition, significant additional research work, non-clinical animal studies, human clinical trials, and manufacturing development work remain to be done with respect to SparVax®, rBChE bioscavanger, and Valortim®. At this point there can be no assurance that any of our product candidates will be shown to be safe and effective and approved by regulatory authorities for use in humans.*

*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. 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 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 our unaudited condensed consolidated financial statements which present our results of operations for the three and nine months ended September 30, 2013 and 2012, as well as our financial positions at September 30, 2013 and December 31, 2012, 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, 2012, filed on March 13, 2013, including the audited consolidated financial statements contained therein.

## **Overview**

We are a biodefense company engaged in the development and commercialization of next generation medical countermeasures against biological and chemical threats. Our current biodefense portfolio includes the following product candidates:

- SparVax<sup>®</sup>, a next generation recombinant protective antigen (“rPA”) anthrax vaccine;
- rBChE (recombinant butyrylcholinesterase) bioscavenger, a medical countermeasure for nerve agent poisoning by organophosphorous compounds, including nerve gases and pesticides; and
- Valortim<sup>®</sup>, a fully human monoclonal antibody for the prevention and treatment of anthrax infection.

In addition, in May 2013 the Delaware Supreme Court affirmed a September 2011 ruling of the Delaware Court of Chancery that SIGA had breached certain contractual obligations to us. The matter is on remand to the Delaware Court of Chancery to determine a remedy in light of the Delaware Supreme Court’s decision. Previously the Delaware Court of Chancery had awarded us the right to receive 50% of all net profits (as defined in the court’s final judgment) related to the sale of SIGA’s Arestvyr<sup>™</sup> (formerly known as ST-246<sup>®</sup>) and related products for 10 years following initial commercial sale of the drug once SIGA earns \$40.0 million in net profits from the sales of Arestvyr<sup>™</sup> and related products and a portion of our attorney’s fees and expert witness and other costs. There can be no assurance that the Delaware Court of Chancery will re-instate its prior remedy or order another remedy for us, that SIGA will not appeal any subsequent decision by the Delaware Court of Chancery, or that SIGA will not be successful in any subsequent appeal.

On July 31, 2013, we entered into an agreement and plan of merger (the “Merger Agreement”) pursuant to which our wholly-owned subsidiary, Taurus Merger Sub, Inc., will be merged with and into Theraclone Sciences, Inc. (“Theraclone”). The description of the Merger Agreement is incorporated herein by reference to *Note 3 – Proposed Merger* and *Note 8 – Subsequent Events* in the accompanying notes to unaudited condensed consolidated financial statements, to Amendment No. 1 to Form S-4 (Registration No. 333-191055) filed with the SEC on October 25, 2013, including the Annexes thereto, and to our current report on Form 8-K filed with the SEC on August 1, 2013, including the exhibits thereto.

## **Recent Developments**

### ***Shareholders Meeting***

The SEC declared our registration statement on Form S-4 (Registration No. 333-191055) effective on October 29, 2013, and we have set December 3, 2013 as the date for the shareholders meeting to consider and vote upon the proposed merger with Theraclone.

### ***Debt Restructuring***

Along with Theraclone, we are in negotiations with both parties’ existing potential lenders for a term loan and revolving line of credit for the combined company, to be funded promptly after the closing of the merger. The combined company would use the proceeds from the borrowings to refinance our existing senior fully-secured debt facility with GE Capital and Theraclone’s credit facility with MidCap Financial and Silicon Valley Bank.

Specifically, upon completion of the proposed merger, we expect that the combined company will establish a \$15 million senior secured credit facility with these lenders, as reflected in a non-binding letter of intent. Such credit facility is expected to consist of a \$5 million revolving loan facility and a \$10 million term loan, each with a 42-month term. The revolving loan facility is anticipated to bear interest at an annual rate of one month LIBOR (subject to a 1.5% floor) plus a 5.0% margin and the term loan is anticipated to bear interest at an annual rate of 9.0%. The combined company is expected to pay an origination fee of 1.0% of the revolving loan facility and 0.25% of the term loan, in addition to any unused line fees, prepayment fees, final payment fees and other administrative fees. The revolving loan facility and the term loan will be secured by the combined company's existing and after-acquired assets and will be cross-collateralized and cross-defaulted. The credit facility is also expected to contain representations, warranties, covenants, conditions and defaults customary for transactions of this type. The foregoing terms remain subject to final negotiation with the lenders, and the final terms of any senior secured credit facility may be different in whole or in part from the terms described above.

### **Critical Accounting Policies**

A "critical accounting policy" is one that is both important to the portrayal of our financial condition and results of operations and that requires management's most difficult, subjective or complex judgments. Such judgments are often the result of a need to make estimates about the effect of matters that are inherently uncertain. The preparation of our financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and 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 materially from those estimates. We believe that the disclosures provided herein are adequate to make the information presented not misleading when these unaudited condensed consolidated financial statements are read in conjunction with the audited consolidated financial statements and notes included in our Annual Report on Form 10-K for the year ended December 31, 2012, filed with the Securities and Exchange Commission.

During the nine months ended September 30, 2013, there were no significant changes in critical accounting policies from those at December 31, 2012.

### **Results of Operations**

#### **Revenue**

We recognized revenue of \$3.5 million and \$6.7 million during the three months ended September 30, 2013 and 2012, respectively. We recognized revenue of \$14.3 million and \$19.2 million during the nine months ended September 30, 2013 and 2012, respectively.

Revenue (\$ in millions)	Three months ended September 30,		
	2013	2012	% Change
SparVax <sup>®</sup>	\$ 3.4	\$ 5.6	(39.3)%
rBChE bioscavanger	0.1	0.7	(85.7)%
Valortim <sup>®</sup>	0.0	0.4	(100.0)%
Total Revenue	\$ 3.5	\$ 6.7	(47.8)%

Revenue (\$ in millions)	Nine months ended September 30,		
	2013	2012	% Change
SparVax <sup>®</sup>	\$ 12.0	\$ 16.9	(29.0)%
rBChE bioscavanger	2.3	1.8	27.8%
Valortim <sup>®</sup>	0.0	0.5	(100.0)%
Total Revenue	\$ 14.3	\$ 19.2	(25.5)%

Our revenue was derived primarily from contracts with the U.S. government for the development of SparVax<sup>®</sup> and our rBChE bioscavanger. Our revenue in the three and nine months ended September 30, 2013 changed from the comparable periods of 2012 primarily due to the following:

- Under our contract for the development of SparVax<sup>®</sup>, we recognized approximately \$3.4 million and \$5.6 million of revenue for the three months ended September 30, 2013 and 2012, respectively, and approximately \$12.0 million and \$16.9 million of revenue for the nine months ended September 30, 2013 and 2012, respectively. During the three and nine months ended September 30, 2013 revenue was primarily attributable to chemistry, manufacturing, and controls (“CMC”) work and non-clinical animal studies. Milestone revenue for the three months and nine months ended September 30, 2013 was \$0.3 million and \$0.4 million, respectively. During the three and nine months ended September 30, 2012 revenue for the SparVax<sup>®</sup> program was primarily attributable to CMC work, certain non-clinical activities and limited clinical trial pre-study activities. Milestone revenue received for the achievement of key technical milestones for the three and nine months ended September 30, 2012 was \$0.02 million and \$1.3 million, respectively. The decrease in revenue for the three and nine months ended September 30, 2013 compared to the same periods in 2012 reflects lower overall development activity in the later periods partially as a result of the FDA’s clinical hold imposed in August 2012. With the lifting of the FDA’s clinical hold in May 2013 on SparVax<sup>®</sup>, and as a result of the consent and extension of the period of performance of our development contract from BARDA, we anticipate recognizing revenue during the fourth quarter of 2013 and through 2014 with respect to a planned Phase 2 clinical trial for that product candidate. As a result of the partial federal government shutdown from October 1 - 16, 2013, work was temporarily suspended under our development contract for SparVax<sup>®</sup>. Consequently, revenues and corresponding research and development costs under this contract for the fourth quarter 2013 may be lower than they otherwise would have been. We expect to make up these revenues in future periods. However, we expect that unless we are able to secure new contracts and orders from the U.S. government to fund additional development activities for our SparVax<sup>®</sup> program and for eventual procurement of that product, we anticipate that revenues for this program in future periods to be less than in past years.
- Under our contract for our second generation rBChE bioscavanger, we recognized approximately \$0.1 million and \$0.7 million of revenue for the three months ended September 30, 2013 and 2012, respectively, and approximately \$2.3 million and \$1.8 million of revenue for the nine months ended September 30, 2013 and 2012, respectively. In the first three and nine months of 2012 our activities related to the establishment of final clones, genetic stability and fed batch evaluation to establish the bioreactor conditions for manufacturing, while in the comparable 2013 periods we completed process development work and material generation activities and continued to execute activities to support non-clinical studies. Unless we are able to secure additional funding for our rBChE bioscavanger development program, we anticipate revenues for this program in future periods to be less than in past years.

## Research and Development Expenses

Our research and development expenses were \$2.6 million and \$5.1 million for the three months ended September 30, 2013 and 2012, respectively. Our research and development expenses were \$11.2 million and \$14.8 million for the nine months ended September 30, 2013 and 2012, respectively. These expenses resulted from research and development activities in all periods related primarily to our SparVax<sup>®</sup> and rBChE bioscavanger programs. Direct expenses 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 nine months ended September 30, 2013, were net of the receipt of approximately \$0.5 million, the result of the settlement of a lawsuit filed against a vendor. Research and development expenses for the three months ended September 30, 2012 were net of cost reimbursements under certain of our government grants of \$0.1 million. For the three months ended September 30, 2013, no cost reimbursements by the government were recorded as an offset to research and development expenses. Research and development expenses for the nine months ended September 30, 2013 and 2012 were net of cost reimbursements under certain of our government grants of \$0.02 million and \$1.1million, respectively.

Research and development expenses for the three and nine months ended September 30, 2013 and 2012 were attributable to research programs as follows:

Research and Development Expenses (\$ in millions)	Three months ended September 30,		
	2013	2012	% Change
SparVax <sup>®</sup> and Valortim <sup>®</sup>	\$ 2.5	\$ 4.7	(46.8)%
rBChE bioscavenger	0.1	0.4	(75.0)%
Internal research and development	-	-	0.0%
Total research and development expenses	\$ 2.6	\$ 5.1	(49.0)%

  

Research and Development Expenses (\$ in millions)	Nine months ended September 30,		
	2013	2012	% Change
SparVax <sup>®</sup> and Valortim <sup>®</sup>	\$ 10.2	\$ 13.6	(25.0)%
rBChE bioscavenger	1.5	1.1	36.4%
Internal research and development	(0.5)	0.1	(600.0)%
Total research and development expenses	\$ 11.2	\$ 14.8	(24.3)%

For the three and nine months ended September 30, 2013, research and development expenses decreased \$2.5 million and \$3.6 million, respectively from the same periods in the prior year, primarily due to (i) the receipt in the 2013 period of approximately \$0.5 million, the result of the settlement of a lawsuit filed against a vendor and (ii) decreased costs related to SparVax<sup>®</sup> resulting from reduced overall development activity in the 2013 periods, partially as a result of the FDA's clinical hold imposed in August 2012. These reductions in cost were partially offset by increased costs in our rBChE bioscavenger program. With the lifting of the FDA's clinical hold in May 2013 on SparVax<sup>®</sup>, and as a result of the consent and extension of the period of performance of our development contract from BARDA, we anticipate costs will increase for the remainder of this year and into 2014 with respect to a planned Phase 2 clinical trial. As a result of the partial federal government shutdown from October 1 - 16, 2013, work was temporarily suspended under our development contract for SparVax<sup>®</sup>. Consequently, research and development costs and corresponding revenues under this contract for the fourth quarter 2013 may be lower than they otherwise would have been. While we expect to incur these costs in future periods, unless we are able to secure new contracts or orders from the U.S. government to fund development activities for our SparVax<sup>®</sup> program and for eventual procurement of that product, as a result of the general cost-reimbursement approach of government funding for biodefense product development (including for our SparVax<sup>®</sup> development program), we anticipate that research and development costs for this program in future periods to be less than in past years.

### **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.

General and administrative expenses increased by \$0.8 million, or 25%, to \$4.1 million for the three months ended September 30, 2013, from \$3.3 million for the three months ended September 30, 2012. The change in expense was principally due to a \$1.3 million increase in merger related transactions costs, which were partially offset by lower legal and share-based compensation expenses during the quarter.

General and administrative expenses decreased by \$0.3 million, or 3.4%, to \$8.7 million for the nine months ended September 30, 2013, from \$9.0 million for the nine months ended September 30, 2012. The decrease in expenses during the period were primarily due to reduced labor and associated share-based compensation costs and decreased legal and professional fees which were partially offset with a \$1.2 million increase in merger related transactions costs.

### **Depreciation**

Depreciation expense was \$0.04 million for the three months ended September 30, 2013 and \$0.07 million for the three months ended September 30, 2012. Depreciation expense was \$0.1 million for the nine months ended September 30, 2013 and \$0.2 million for the nine months ended September 30, 2012.

### **Other Income (Expense)**

Other income (expense) primarily consists of income on our cash and investments, interest expense on our debt and other financial obligations, changes in the fair value of our derivative financial instruments, foreign currency transaction gains or losses, and the gain on the disposal of property and equipment.

Other expense was \$0.7 million for the three months ended September 30, 2013, compared to other income of \$1.6 million in the comparable period in 2012, resulting in a change in other income (expense) of approximately \$2.3 million, or 145%. The change was primarily the result of (i) the \$1.1 change in fair value of our derivative instruments, from a \$0.5 million unrealized gain to a \$0.6 million unrealized loss, for the three months ended September 30, 2012 and 2013, respectively and (ii) as a result of substantially completing the liquidation of our Canadian subsidiary in July 2012, which had been acquired in 2005. Prior to substantially liquidating the Canadian subsidiary, currency fluctuations were recorded as foreign currency translation adjustments, a component of other comprehensive income. As a result of the substantially completing the liquidation, we realized approximately \$1.2 million of income in our condensed consolidated statement of operations, which represents the amount of previously recorded foreign currency translation adjustments related to our Canadian subsidiary, in the three month period ended September 30, 2012.

Other expense was \$1.5 million in the nine months ended September 30, 2013, compared to other income of \$1.4 million in the comparable period in 2012, resulting in a change in other income (expense) of approximately \$2.8 million, or 207%. The change was primarily the result of (i) the \$1.5 million change in the fair value of derivative instruments, from an unrealized gain of \$0.3 million to an unrealized losses of \$1.2 million, for the nine months ended September 30, 2012 and 2013, respectively and (ii) as a result of substantially completing the liquidation of our Canadian subsidiary in July 2012, which resulted in the realization of approximately \$1.2 million of income in our condensed consolidated statement of operations, which represents the amount of previously recorded foreign currency translation adjustments related to our Canadian subsidiary.

## **Income Taxes**

The provision for income taxes was \$0.03 million and \$0.02 million during the three months ended September 30, 2013 and 2012, respectively, an increase of approximately \$0.01 million. The provision for income taxes was \$0.05 million and \$0.2 million during the nine months ended September 30, 2013 and 2012, respectively, a decrease of approximately \$0.15 million. Our provision for income taxes results from the difference between the treatment of goodwill for income tax purposes and for U.S. GAAP.

## **Liquidity and Capital Resources**

### **Overview**

In addition to amounts paid under our development contract for SparVax<sup>®</sup>, our primary source of cash during the third quarter and first nine months of 2013 was provided from proceeds raised as a result of sales of shares of our common stock under the controlled equity offering arrangement, which we commenced at the end of March 2013. Our primary source of funding in the same periods in 2012 were amounts paid under our development contract for SparVax<sup>®</sup> and for the nine month period proceeds from our term loan and revolving line of credit with GE Capital. Under the terms of the Merger Agreement, we are currently prohibited from using our controlled equity offering arrangement.

Our future capital requirements will depend on many factors, including, the progress of our research and development programs; the progress of preclinical 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, including the proposed merger with Theraclone. If the proposed merger is not completed, we may reevaluate its strategic alternatives. Our cash requirements could change materially as a result of shifts in our business and strategy. The need to raise additional capital will depend on many factors, including but not limited to, the completion of the proposed merger, our future cash requirements, future contract funding, the ongoing proceedings in our litigation with SIGA, the timing, amount, and profitability of sales of Arestvyr<sup>™</sup>, if any (including potentially the timing of SIGA's recognition of revenue related thereto) in the event the trial court awards us a remedy tied to sales or profits of that product, and our ability to collect amounts due from SIGA in the event the trial court awards us a remedy tied to sales or profits of Arestvyr<sup>™</sup>.

Historically, we have not generated positive cash flows from operations. To bridge the gap between payments made to us under our U.S. 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 and equity-linked securities and proceeds from loans and other borrowings. On March 25, 2013, we entered into a controlled equity offering arrangement pursuant to which we may offer and sell, from time to time, through a sales agent, shares of our common stock having an aggregate offering price of up to \$15.0 million. As of September 30, 2013, aggregate gross sales for additional common stock of approximately \$8.6 million remained available under the arrangement. Please see "— Financing Activities" below. 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; however, under the terms of the Merger Agreement, we are currently prohibited from using the existing controlled equity offering arrangement. Due to the current economic environment, 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. As a result of the partial federal government shutdown from October 1 - 16, 2013, work was temporarily suspended under our development contract for SparVax<sup>®</sup>. Consequently, revenues and corresponding research and development costs under this contract for the fourth quarter 2013 may be lower than they otherwise would have been. We expect to recognize revenues and incur costs related to this delayed work in future periods.

Our unaudited condensed 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.

### **Cash Flows**

The following table provides information regarding our cash flows for the nine months ended September 30, 2013 and 2012.

	<b>Nine months ended September 30,</b>	
	<b>2013</b>	<b>2012</b>
Net cash provided by (used in):		
Operating activities	\$ (911,712)	\$ (177,864)
Investing activities	(81,079)	67,400
Financing activities	4,238,386	3,597,934
Effects of exchange rates on cash	(3,713)	2,087
Total increase (decrease) in net cash	<u>\$ 3,241,882</u>	<u>\$ 3,489,557</u>

### **Sources and Uses of Cash**

Cash and cash equivalents were \$15.9 million and \$12.7 million at September 30, 2013 and December 31, 2012, respectively.

#### **Operating Activities**

Net cash used by operating activities was \$0.9 million and \$0.2 million for the nine months ended September 30, 2013 and 2012, respectively.

Net cash used by operating activities during the nine months ended September 30, 2013 reflects our net loss of \$7.3 million, adjusted for \$1.0 million for non-cash share-based compensation expense, \$1.2 million for the increase in the fair value of derivative instruments and \$0.3 million for other non-cash expenses. A decrease in receivables (billed and unbilled) of \$4.9 million and prepaid expense and other current assets of \$0.3 million and an increase in accrued expenses and other liabilities of \$0.2 million was partially offset by a decrease in accounts payable of \$0.6 million and deferred revenue of \$0.9 million. The increase in the fair value of the derivative instruments primarily relates to the change in our stock price from \$1.12 per share at December 31, 2012 to \$2.10 per share at September 30, 2013.

Net cash used in operations during the nine months ended September 30, 2012 reflects our net loss of \$3.6 million, adjusted for non-cash share-based compensation expense of \$1.5 million, the \$1.2 million gain on substantially complete liquidation of PharmAthene Canada, Inc., the decrease in the fair value of derivative instruments of \$0.3 million and other noncash expenses of \$0.4 million. The decrease in billed accounts receivable of approximately \$2.8 million was partially offset by an increase in unbilled accounts receivable of approximately \$0.7 million. The increase in the fair value of the derivative instruments primarily relates to the change in our stock price from \$1.27 per share at December 30, 2011 to \$1.18 per share at September 30, 2012.

Unless we are able to secure new contracts and orders from the U.S. government to fund additional development activities for our programs and for eventual procurement of our products, we anticipate net cash generated by operating activities will be lower in future periods than in past years.

### ***Investing Activities***

There were no significant investing activities during the nine months ended September 30, 2013 and September 30, 2012.

### ***Financing Activities***

Net cash provided by financing activities was \$4.2 million for the nine months ended September 30, 2013, as compared to, \$3.6 million provided by financing activities for the nine months ended September 30, 2012.

Net cash provided by financing activities for the nine months ended September 30, 2013 was principally the result of net proceeds received from sales of our stock under the controlled equity offering arrangement partially offset by the repayment the current portion of long-term debt and net repayment of the revolving credit agreement. The majority of cash provided by financing for the nine months ended September 30, 2012, was a result of our entering into a senior fully-secured debt facility.

On March 25, 2013, we entered into a controlled equity offering arrangement pursuant to which we may offer and sell, from time to time, through a sales agent, shares of our common stock having an aggregate offering price of up to \$15.0 million. Under the arrangement, the agent may sell shares by any method permitted by law and deemed to be an “at-the-market” offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, including sales made directly on the NYSE MKT, on any other existing trading market for the Common Stock or to or through a market maker. We are not obligated to sell any shares under this arrangement. We are obligated to pay the agent a commission of 3.0% of the aggregate gross proceeds from each sale of shares. As of September 30, 2013, aggregate gross sales for additional common stock of approximately \$8.6 million remained available under the arrangement. Under the terms of the Merger Agreement, we are currently prohibited from using the controlled equity arrangement.

The majority of cash provided by financing for the nine months ended September 30, 2012, was a result of our entering into a senior fully-secured debt facility with GE Capital as described in Note 7 to the unaudited condensed consolidated financial statements. Along with Theraclone we are in negotiations with their existing potential lenders for a term loan and revolving line of credit for the combined company, to be funded promptly after the closing of the merger. The combined company would use the proceeds from the borrowings to refinance our existing senior fully-secured debt facility with GE Capital and Theraclone’s credit facility with MidCap Financial and Silicon Valley Bank. See “Recent Developments – Debt Restructuring” above for a description of the currently anticipated terms for the debt restructuring.

### **Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements.

## Contractual Obligations

The following are contractual commitments at September 30, 2013:

Contractual Obligations <sup>(1)</sup>	Total	Less than			More than 5 Years
		1 Year	1 - 3 Years	3 - 5 Years	
Operating facility leases	\$ 3,018,400	\$ 791,800	\$ 1,655,500	\$ 571,100	\$ -
Research and development agreements	7,225,000	5,900,000	1,325,000	-	-
Term loan, principal payments only	2,000,002	999,996	1,000,006	-	-
Total contractual obligations	<u>\$ 12,243,402</u>	<u>\$ 7,691,796</u>	<u>\$ 3,980,506</u>	<u>\$ 571,100</u>	<u>\$ -</u>

(1) This table does not include any royalty payments relating to future sales of products subject to license agreements we have entered into in relation to our in-licensed technology, as the timing and likelihood of such payments are not known. The table also excludes any obligations related to registration rights agreements, as a result of a Maintenance Failure, as the likelihood of such payment is not probable. In addition, the table does not include the final payment fee of \$0.08 million on the term loan, which is being accrued and expensed over the term of the agreement, using the effective interest method, or the debt discount, which is being amortized over the term of the agreement. The debt discount and final payment accrual at September 30, 2013 were \$0.03 million and \$0.05 million respectively.

### Item 3. Quantitative and Qualitative Disclosures about Market Risk.

Our exposure to market risk is currently confined to our cash and cash equivalents and our revolving line of credit. We currently do not hedge interest rate exposure or foreign currency exchange exposure. We have not used derivative financial instruments for speculation or trading purposes.

The Company's current operations in foreign countries are minimal. We have closed our active operations in Canada and maintain only nominal operations in the United Kingdom. A 10% change in exchange rates (against the U.S. dollar) would not have a material impact on earnings, fair values or cash flow.

Because of the short-term maturities of our cash and cash equivalents, we do not believe that an increase in market interest rates would have a significant impact on their realized value. Our term loan with GE Capital is at a fixed 10.14% rate. Because of the fixed rate, a change in market interest rates would not have a material impact on interest expense associated with the loan. The interest rate on the revolving line of credit is variable; therefore, a 1% increase in market interest rates above the interest rate floor of 1.5%, would increase interest expense associated with the line by \$50,000 if the maximum amount of the line (\$5.0 million) was drawn for a full year.

The change in fair value of our derivative instruments is calculated utilizing the Black-Scholes model; therefore, a 10% increase/decrease in the closing price of our common stock at September 30, 2013 would result in a change in fair value of derivative instruments and our earnings of approximately \$0.4 million.

### Item 4. Controls and Procedures.

#### Evaluation of Disclosure Controls and Procedures

Our management, including our principal executive and principal financial officers, has evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2013. Our disclosure controls and procedures are designed to provide reasonable assurance that the information required to be disclosed in reports we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive and principal financial officers, to allow timely decisions regarding required disclosure. Based on that evaluation, our principal executive and principal financial officers have concluded that our disclosure controls and procedures are effective at the reasonable assurance level.

## Changes in Internal Control Over Financial Reporting

Our management, including our principal executive and principal financial officers, has evaluated any changes in our internal control over financial reporting that occurred during the quarterly period ended September 30, 2013, and has concluded that there was no change that occurred during the quarterly period ended September 30, 2013 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## PART II — OTHER INFORMATION

### Item 1. Legal Proceedings

Except as noted below, we are not a party to any material legal proceedings.

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

In September 2011, the Court issued an opinion in the case finding that SIGA had breached certain contractual obligations to us and upholding our claims of promissory estoppel. The Court awarded us the right to receive 50% of all net profits (as defined in the court’s final judgment) related to the sale of Arestvyr™ and related products for 10 years following initial commercial sale of the drug once SIGA earns \$40 million in net profits from the sale of Arestvyr™ and related products. The Court also awarded us one-third of our reasonable attorney’s fees and expert witness fees, which amounts to approximately \$2.4 million plus interest. In May 2012, the Court issued its final judgment. SIGA appealed aspects of the decision to the Delaware Supreme Court. In response, we cross-appealed other aspects of the decision.

In May 2013, the Delaware Supreme Court issued its ruling on the appeal, affirming the lower Court’s finding of breach of contract, reversing its finding of promissory estoppel, and remanding the case back to the Court of Chancery to reconsider the remedy and award of attorney’s fees and expert witness costs in light of the Supreme Court’s opinion. Currently, because the Delaware Supreme Court remanded the issue of a remedy back to the Delaware Court of Chancery, we no longer have a financial interest in Arestvyr™ and may never receive any proceeds from the product.

While we believe there may be significant revenue potential under a potential damages award, we can provide no assurances that on remand the Chancery Court will re-instate its prior remedy or order another meaningful remedy for us, that SIGA will not appeal any subsequent decision by the Delaware Court of Chancery, or that SIGA will not be successful in any subsequent appeal. We have not yet recorded any amount due from SIGA in relation to this case.

### Item 1A. Risk Factors

*In addition to the risks described below and in our subsequent SEC reports, there are additional risks and uncertainties not currently known to us or that we currently deem to be immaterial that may also materially, adversely affect our business, financial condition or operating results.*

*Investing in our securities involves risks. If any of the risks and uncertainties set forth below 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 set forth below 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. As of December 31, 2012, we had accumulated losses of \$198.6 million since our inception, and had net losses of approximately \$4.9 million, \$3.8 million, and \$34.8 million during the last three years, respectively. Our losses to date have resulted principally from research and development costs related to the development of our product candidates and general and administrative costs related to operations. Currently our development efforts are primarily focused on one product candidate, SparVax®. At September, 2013, we had cash on hand of approximately \$15.9 million.

We expect to incur substantial losses for the foreseeable future as a result of increases in our research and development costs, including costs associated with conducting preclinical testing, clinical trials and regulatory compliance activities. If we continue to incur losses and are not able to raise adequate funds to cover those losses, 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.

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

- completing the merger;
- refinancing of the existing credit facilities;
- obtaining a ruling from the Delaware Court of Chancery that provides for a remedy in our on-going litigation with SIGA;
- the timing, amount and profitability of sales of Arestvyr™ (including the timing of SIGA's recognition of revenue related thereto) if any final ruling from the Delaware Court of Chancery provides as a remedy for a cash flow to us related to sales or profits of Arestvyr™;
- 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.

Under the terms of our agreements with Avecia, we are required to pay Avecia (now a subsidiary of FUJIFilm) \$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. 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.

Global economic uncertainty continues to make capital markets more volatile and is threatening to once again tighten the credit markets. As a result, there can be no assurances that we would 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 it incurs 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.

***As a result of the ruling of the Delaware Supreme Court, we no longer have a financial interest in Arestvyr™ and there can be no assurance that the Delaware Chancery Court will issue a remedy that provides us with a financial interest in that product or another remedy.***

In its May 2013 decision, the Delaware Supreme Court reversed the remedy ordered by the Delaware Court of Chancery and remanded the issue of a remedy back to the trial court for reconsideration in light of the Delaware Supreme Court's opinion. There can be no assurance that the Delaware Court of Chancery will issue a remedy that provides us with a financial interest in Arestvyr™ and related products, that SIGA will not appeal any subsequent decision by the Delaware Court of Chancery, or that SIGA will not be successful in any subsequent appeal. Even if the Delaware Court of Chancery does provide us with a remedy that provides us with a financial interest in Arestvyr™, we may never receive any proceeds from SIGA's future sales of that product.

In addition to the risks that ordinarily accompany the development and commercialization of biodefense products, including with respect to government contracting activities (including protests filed by third parties), competition (which with respect to Arestvyr™ includes potential competing products being developed by Chimerix, Inc.), FDA and other regulatory approval and commercialization efforts, which are described elsewhere in our risk factors, any interest we may have in future sales of SIGA's product Arestvyr™ and related products is subject to additional risks.

In particular, SIGA's ability to deliver product to the U.S. strategic national stockpile ("SNS") (and potential foreign government purchasers), and the timing and profitability thereof (including the timing of SIGA's recognition of revenue related thereto), are subject to a number of significant risks and uncertainties (certain of which are outlined in SIGA's filings with the SEC) as to which we have limited knowledge and no ability to control, mitigate or fully evaluate. We have no first-hand knowledge of, and SIGA has not publicly disclosed, any information related to the potential margins or profitability of Arestvyr™ and related products.

***Even if the Delaware Chancery Court re-instates its prior remedy or another remedy granting us a financial interest in Arestvyr™, the potential value of any damages that may be awarded to us is subject to several variables, many of which are controlled by SIGA, and uncertainties, including the timing of any final decision by the courts, which preclude the current calculation of a predictable value of the SIGA litigation.***

In its May 31, 2012 judgment, the Delaware Chancery Court awarded us the right to receive 50% of certain profits related to the sale of Arestvyr™ and related products for a specified period of time once SIGA retained the first \$40 million in profits. However, as noted in the prior risk factor, although the Delaware Supreme Court affirmed in May 2013 that SIGA breached contractual obligations to us, its remand of the issue of the remedy back to the Delaware Chancery Court for reconsideration has effectively deprived us of any current financial interest on Arestvyr™ and related products. We cannot predict whether the Delaware Chancery Court will re-instate its prior remedy or order another remedy.

We have taken the position in documents submitted to the courts, that our damages may be as high as \$1 billion. SIGA has taken the position, in documents that it has submitted to the courts, that it owes us no or nominal damages. In addition, SIGA has taken post-judgment positions with respect to Arestvyr™ as to timing and costs (positions we disputes), which we expect SIGA may continue to take in the future, thus reducing SIGA's revenues from Arestvyr™ and related products and, correspondingly, potentially reducing any damages that would be owed to us. We intend to continue to vigorously pursue in court our position that, as a result of our successful breach of contract case against SIGA, we deserve significant damages in our award from the Delaware Chancery Court. We can provide no assurance that we will succeed in our litigation strategy or, as stated above, that the Delaware Chancery Court will re-instate its prior remedy or provide any remedy at all.

Even if we are awarded a remedy by the court, we are unable to control or predict the timing of sales of or whether or when SIGA will recognize any profits with respect to Arestvyr™ or related products. It is possible that SIGA could discontinue development, production or sales of Arestvyr™ and any related products at any time such that we would not collect any damages.

### **Risks Related to Product Development and Commercialization**

***We have not commercialized any products or recognized any revenues from sales. All of our product candidates are still under development, and there can be no assurance of successful commercialization of any of our products.***

We have not commercialized any product candidates or recognized any revenues from product sales. In general, our research and development programs are in development stages. There can be no assurances that one or more of our future product candidates will not fail to meet safety and efficacy standards in human testing, even if those product candidates are found to be effective in animal studies. To develop and commercialize biodefense treatment and prophylactic product candidates, we must provide the FDA and foreign regulatory authorities with human clinical and non-clinical animal data that demonstrate adequate safety and effectiveness. To generate these data, we will have to subject our product candidates to significant additional research and development efforts, including extensive non-clinical studies and clinical testing. We cannot be sure that our approach to drug discovery will be effective or will result in the development of any drug. Currently our development efforts are primarily focused on one product candidate, SparVax®. Even if our product candidates are successful when tested in animals, such success would not be a guarantee of the safety or effectiveness of such product candidates in humans.

Research and development efforts are time-consuming and subject to delays. Even if we initially receive positive early-stage preclinical or clinical results, such results may not be indicative of results that could be anticipated in the later stages of drug development. Delays in obtaining results in our non-clinical studies and clinical testing can occur for a variety of reasons, such as slower than anticipated enrollment by volunteers in the trials, adverse events related to the products, failure to comply with Good Clinical Practices, unforeseen safety issues, unsatisfactory results in trials, perceived defects in the design of clinical trials, changes in regulatory policy as well as for reasons detailed in the section entitled “— Necessary reliance on the Animal Rule in conducting trials is time-consuming and expensive.”

Any delay or adverse clinical event arising during any of our clinical trials could force us to conduct additional clinical trials in order to obtain approval from the FDA and other regulatory bodies. Our development costs will increase substantially if we experience material delays in any clinical trials or if we need to conduct more or larger trials than planned.

If delays are significant, or if any of our product candidates do not prove to be safe, pure, and potent (including efficacy) or do not receive required regulatory approvals, we may have to abandon the product candidate altogether and will be unable to recognize revenues from the sale of that product. In addition, our collaborative partners may not be able to conduct clinical testing or obtain necessary approvals from the FDA or other regulatory authorities for any product candidates jointly developed by us and our partners. If we fail to obtain required governmental approvals, we and our collaborative partners will experience delays in, or be precluded from, marketing products developed through them or, as applicable, their research.

***If we cannot maintain successful licensing arrangements and collaborations, enter into new licensing arrangements and collaborations, or effectively accomplish strategic acquisitions, our ability to develop and commercialize a diverse product portfolio could be limited and our ability to compete may be harmed.***

A key component of our business strategy is the in-licensing of compounds and products developed by other pharmaceutical and biotechnology companies or academic research laboratories. In addition, we have entered into licensing and research and development agreements with a number of other parties and collaborators. There can be no assurances that the research and development conducted pursuant to these agreements will result in revenue generating product candidates. If our suppliers, vendors, licensors, or other collaboration partners experience financial difficulties as a result of the weak economy, change in strategic direction (like the decision of our main CRO vendor on our rBChE program to cease its research and development operations, which caused us to locate a replacement vendor on an expedited basis), or if they are acquired as part of the current wave of consolidations in the pharmaceutical industry (such as, for example, with the acquisitions of Medarex by Bristol-Myers Squibb and Diosynth Biotechnologies, Inc.’s parent company by Merck & Co., Inc. in 2009 and of Avecia’s CMO subsidiary (Avecia Biologics) by Merck in 2010 and the subsequent acquisition of these two entities by FUJIFilm in 2011), their priorities or our working relationship with them might change. As a result, they might shift resources away from the research, development and/or manufacturing efforts intended to benefit our products, which could lead to significant delays in our development programs and potential future sales. Our current licensing, research and development, and supply agreements may expire and may not be renewable or could be terminated if we do not meet our obligations.

If we are not able to identify new licensing opportunities or enter into other licensing arrangements on acceptable terms, we may be unable to develop a diverse portfolio of products. For our future collaboration efforts to be successful, we must first identify partners whose capabilities complement and integrate well with ours. We face, and will continue to face, significant competition in seeking appropriate collaborators. Collaboration arrangements are complex and time consuming to negotiate, document and implement. We may not be successful in our efforts to establish and implement collaborations or other similar arrangements. The terms of any collaboration or other arrangements that we establish may not be favorable to it. Furthermore, technologies to which we gain access may prove ineffective, become obsolete, or unsafe or our partners may prove difficult to work with or less skilled than we originally expected. In addition, any past collaborative successes are no indication of potential future success.

***Necessary reliance on the Animal Rule in conducting trials is time-consuming and expensive.***

To obtain FDA approval for our biological warfare defense products under current FDA regulations, we are required to utilize animal model studies for efficacy and provide animal and human safety data under the Animal Rule. For many of the biological and chemical threats, animal models are not yet available, and as such we are developing, or will have to develop, appropriate animal models, which is a time-consuming and expensive research effort. Further, we may not be able to sufficiently demonstrate the animal correlation to the satisfaction of the FDA, as these corollaries are difficult to establish and are often unclear. The FDA may decide that our data are insufficient for approval and require additional non-clinical, clinical or other studies, refuse to approve our products, or place restrictions on our ability to commercialize those products. Further, other countries have not, at this time, established criteria for review and approval of these types of products outside their normal review process, i.e., there is no Animal Rule equivalent, and consequently there can be no assurance that we will be able to make a submission for marketing approval in foreign countries based on such animal data.

Additionally, few facilities in the United States and internationally have the capability to test animals with anthrax, nerve agents, or other lethal biotoxins or chemical agents or otherwise assist us in qualifying the requisite animal models. We have to compete with other biodefense companies for access to this limited pool of highly specialized resources. We therefore may not be able to secure contracts to conduct the testing in a predictable timeframe or at all.

***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 its research and development efforts will become commercially available. Even if we succeed in developing and commercializing our product candidates, they 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 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.

***We may become subject to product liability claims, which could reduce demand for its product candidates or result in damages that exceed its insurance coverage.***

We face an inherent risk of exposure to product liability suits in connection with our product candidates being tested in clinical trials or sold commercially. We may become subject to a product liability suit if any product we develop causes injury, or if treated individuals subsequently become infected or suffer adverse effects from our products. Regardless of merit or eventual outcome, product liability claims may result in decreased demand for a product, injury to our reputation, withdrawal of clinical trial volunteers, and loss of revenues.

In addition, if a product liability claim is brought against us, the cost of defending the claim could be significant and any adverse determination may result in liabilities in excess of our insurance coverage. Although our anthrax countermeasures are covered under the general immunity provisions of the U.S. Public Readiness and Emergency Preparedness Act (the "Public Readiness Act") there can be no assurance that the U.S. Secretary of Health and Human Services will make other declarations in the future that cover any of our other product candidates or that the U.S. Congress will not act in the future to reduce coverage under the Public Readiness Act or to repeal it altogether. For further discussion of that act, see "— Legislation limiting or restricting liability for medical products used to fight bioterrorism is new, and it cannot be certain that any such protection will apply to our products or if applied what the scope of any such coverage will be." Additionally, we are considering applying for indemnification under the U.S. Support Anti-terrorism by Fostering Effective Technologies (SAFETY) Act of 2002 which preempts and modifies tort laws so as to limit the claims and damages potentially faced by companies who provide certain "qualified" anti-terrorism products. However, we cannot be certain that we will be able to obtain or maintain coverage under the SAFETY Act or adequate insurance coverage on acceptable terms, if at all.

***If we cannot effectively accomplish strategic acquisitions, generally, our ability to develop and commercialize a diverse product portfolio could be limited and our ability to compete may be harmed.***

We may pursue other strategic acquisitions to further its development and commercialization efforts, which could result in our incurring significant out of pocket costs as well as expending management time and those of other employees. To achieve the anticipated benefits of an acquisition, we must integrate the acquired company's business, technology and employees in an efficient and effective manner. The successful combination of companies in a rapidly changing biodefense industry is generally more difficult to accomplish than in other industries. As with the proposed merger, the combination of two companies requires, among other things, integration of the companies' respective technologies and research and development efforts. We cannot assure you that any integration will be accomplished smoothly or successfully. The difficulties of integration are increased by the need to coordinate geographically separated organizations and address possible differences in corporate cultures and management philosophies. The integration of operations and systems will require the dedication of management resources that may temporarily distract attention from the day-to-day operations of the combined companies. The business of the combined companies may also be disrupted by employee retention uncertainty and lack of focus during integration. The inability of management to integrate successfully the operations of the two companies, in particular, to integrate and retain key scientific personnel, or the inability to successfully integrate technology platforms, could have a material adverse effect on our business, results of operations and financial condition.

#### **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 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 U.S. government contracts will be renewed or that we can enter into new contracts or receive new grants to supply the United States or other governments with our products. The process of obtaining government contracts is lengthy and uncertain.

If the U.S. government makes significant contract awards for the supply to the U.S. SNS, to our competitors, rather than to us, our business will be harmed and it is unlikely that it will ultimately be able to supply that particular treatment or product to foreign governments or other third parties. Further, changes in U.S. government budgets and agendas, funding strategies, cost overruns in our programs, or advances by our competitors, may result in changes in the timing of funding for, a decreased and de-prioritized emphasis on, or termination of, U.S. government contracts that support the development and/or procurement of the biodefense products we are developing. For example, while RFP-BARDA-08-15 for an rPA-based anthrax vaccine for the U.S. SNS initially indicated that the U.S. government would make an award by September 26, 2008, the award was delayed multiple times and ultimately canceled in December 2009.

Funding is subject to U.S. Congressional appropriations generally made on an annual basis even for multi-year contracts. More generally, due to the ongoing economic uncertainty, the U.S. government may 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. Future funding levels for two of our key government customers, BARDA and DoD, for the advanced development and procurement of medical countermeasures are uncertain, and may be subject to budget cuts as the U.S. Congress and the President look to reduce the nation's budget deficit.

For example, due to DoD budget constraints and concerns about potential duration of protection with the current route of Protexia® administration, the DoD did not extend our September 2006 contract for Protexia®, which contract expired on December 31, 2010. As a result of DoD's decision not to continue funding Protexia® development, we closed down our Protexia®-related operations. We incurred wind-down costs in the fourth quarter of 2010 and approximately \$0.5 million in 2011, for which we did not get reimbursed by the government. We also wrote down the net book value of our Protexia® - related assets recognizing approximately \$4.6 million of impairment charges for the year ended December 31, 2010.

The U.S. government deficit and budget crisis has created increasing pressure to reduce government spending. In August 2011, President Obama signed into law the Budget Control Act of 2011 (the "Budget Control Act") which increased the U.S. government's debt ceiling and enacted 10-year discretionary spending caps expected to generate substantial savings for the U.S. government. The Budget Control Act also established a joint bipartisan committee of Congress responsible for identifying at least \$1.2 trillion in additional savings by November 2011. The joint committee did not meet the deadline for proposing recommended legislation and Congress missed a related deadline in January 2013. Under the Budget Control Act, additional automatic spending cuts, referred to as sequestration totaling \$1.2 trillion (subsequently adjusted downward to approximately \$1.0 trillion) over nine years would be triggered. These discretionary spending cuts are expected to be evenly split between defense and non-defense areas.

On March 1, 2013, the sequestration became effective and the law required the President to issue a sequestration order cancelling \$85 billion in budgetary resources across the federal government for the government fiscal year, which ended on September 30, 2013. The Office of Management and Budget calculated that, over the course of the government fiscal year, the sequestration required a 7.8 percent reduction in non-exempt defense discretionary spending and a 5.0 percent reduction in non-exempt nondefense discretionary spending. The sequestration also required reductions of 2.0 percent to Medicare, 5.1 percent to other non-exempt nondefense mandatory programs, and 7.9 percent to non-exempt defense mandatory programs. Because these cuts had to be achieved over only 7 months instead of 12, the effective percentage reductions were approximately 13 percent for non-exempt defense programs and 9 percent for non-exempt nondefense programs.

As of December 31, 2012, of the total \$5.6 billion allotted under Project BioShield in 2004, over \$2.6 billion in procurement contracts had been awarded and approximately \$2.3 billion had been transferred out of the Project BioShield Special Reserve fund ("SRF") for non-procurement related activities. Remaining funds in the SRF were approximately \$500 million as of December 31, 2012. It is expected that BARDA, which administers the SRF, obligated these remaining funds as of the end of the fiscal year 2013 (i.e., September 30, 2013). Sequestration was applied to fiscal year 2013 funding only. As BARDA was funded through a transfer of the SRF advanced appropriation, and not fiscal year 2013 funds, its funding was not impacted.

The Pandemic and All Hazards Preparedness Act Reauthorization (“PAHPA”) signed into law in March 2013, authorized \$2.8 billion in funding for the SRF for fiscal years 2014-2018. These funds are for the procurement of medical countermeasures. PAHPA also authorized \$415 million in funding to BARDA for advanced development activities. However, actual funding for BARDA is dependent on annual congressional appropriations. Currently, Congress has not passed appropriation legislation for fiscal year 2014 and, until Congress reaches an agreement, it is premature to predict future funding to BARDA. Until Congress reaches an agreement on the budget for fiscal year 2014, the amount and nature of future federal budget spending will be uncertain. Potential reductions in funding could severely limit our ability to maintain, renew or enter into new contracts with respect to our business generally and therefore materially adversely impact our business.

Our current development contract for Valortim® with NIAID expired January 31, 2012. There can be no assurance it will be successful in obtaining additional financial support for this program.

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

U.S. government contracts typically contain unilateral termination provisions for the government 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 for poor performance or if funds become unavailable or are not provided to the applicable governmental agency;
- reduce the scope and value of our contracts and/or revise the timing for work to be performed;
- audit and object to our contract-related costs and fees, including allocated indirect costs;
- control and potentially prohibit the export of our products;
- claim rights to products, including intellectual property, developed under the contract;
- 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.

The U.S. government may 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.

***The U.S. government's determination to award any contracts may be challenged by an interested party, such as another bidder, at the GAO or in federal court. If such a challenge is successful, a contract award may be re-evaluated and terminated.***

The laws and regulations governing the procurement of goods and services by the U.S. government provide procedures by which other bidders and other interested parties may challenge the award of a government contract. If we are awarded a government contract, such challenges or protests could be filed even if there are not any valid legal grounds on which to base the protest. If any such protests are filed, the government agency may decide, and in certain circumstances will be statutorily required, to suspend our performance under the contract while such protests are being considered by the GAO or the applicable federal court, thus potentially delaying delivery of goods and services and payment. In addition, we could be forced to expend considerable funds to defend any potential award. If a protest is successful, the government may be ordered to terminate our contract and re-evaluate bids. The government could even be directed to award a potential contract to one of the other bidders.

For example, in March 2010, a third-party filed a bid protest with the GAO challenging the February 2010 decision of the DHHS to modify its existing research and development contract with us for the development of SparVax®. In March 2010 DHHS suspended performance under the modification pursuant to the automatic stay provisions of the FAR, pending a decision by the GAO on the protest. While the bid protest was ultimately denied, and the related DHHS "stop work" order canceled in June 2010, the protest contributed to a reduction in revenues and cash and cash equivalents over the period that work could not be performed under the modification. In addition, we incurred unexpected general and administrative expenses to intervene in the protest. In October 2010 a losing bidder filed a successful protest with the small business administration claiming that SIGA did not qualify as a small business entitled to a contract award under RFP-BARDA-09-35 for a smallpox antiviral. When the government subsequently issued a contract to SIGA in May 2011 without the small business requirement, this same losing bidder filed a second protest, this time with the GAO. While this protest was withdrawn, in exchange for dropping the protest, the government agreed to remove an option from the contract permitting the government to purchase up to 12 million additional courses of therapy of Arestvyr™ beyond the base purchase of 1.7 million courses of therapy.

In addition, as a result of the partial U.S. Federal government shutdown from October 1 through October 16, 2013, work was temporarily suspended under our development contract for SparVax®. Consequently, our revenues under this contract for the fourth quarter of 2013 may be lower than they otherwise could have been.

***Our business is subject to audit by the U.S. government, and a negative audit could adversely affect our business.***

U.S. government agencies such as the DCAA routinely audit and investigate government contractors. These agencies review a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards.

The DCAA also reviews the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's purchasing, property, estimating, compensation and management information systems. Any costs found to be improperly allocated to a specific contract will not be reimbursed, while such costs already reimbursed must be refunded. If an audit uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including:

- termination of contracts;
- forfeiture of profits;
- suspension of payments;
- fines; and

- suspension or prohibition from conducting business with the U.S. government.

In addition, we could suffer serious reputational harm if allegations of impropriety were made against it.

***Laws and regulations affecting government contracts make it more costly and difficult for us to successfully conduct its business.***

We must comply with numerous laws and regulations relating to the formation, administration and performance of government contracts, which can make it more difficult for us to retain our rights under these contracts. These laws and regulations affect how we conduct business with government agencies. Among the most significant government contracting regulations that affect our business are:

- the Federal Acquisition Regulation (“FAR”) and agency-specific regulations supplemental to the Federal Acquisition Regulation, which comprehensively regulate the procurement, formation, administration and performance of government contracts;
- the business ethics and public integrity obligations, which govern conflicts of interest and the hiring of former government employees, restrict the granting of gratuities and funding of lobbying activities and incorporate other requirements such as the Anti-Kickback Act, the Procurement Integrity Act, the False Claims Act and Foreign Corrupt Practices Act;
- export and import control laws and regulations; and
- laws, regulations and executive orders restricting the use and dissemination of information classified for national security purposes and the exportation of certain products and technical data.

Foreign governments typically also have laws and regulations governing contracts with their respective agencies. These foreign laws and regulations affect how we and our customers conduct business and, in some instances, impose added costs on our business. Any changes in applicable laws and regulations could restrict our ability to maintain our existing contracts and obtain new contracts, which could limit our ability to conduct our business and materially adversely affect our revenues and results of operations.

**Risks Related to Dependence on or Competition From Third Parties**

***Because we depend on clinical research centers and other contractors for clinical and non-clinical testing, including testing under the Animal Rule, and for certain research and development activities, the results of its clinical trial, non-clinical animal efficacy studies, and research and development activities are largely beyond our control.***

The nature of clinical trials and our business strategy of outsourcing substantially all of our research and development and manufacturing work require that we rely on clinical research centers and other contractors to assist us with research and development, clinical and non-clinical testing (including animal efficacy studies under the Animal Rule), patient enrollment, manufacturing and other activities. As a result, our success depends largely on the success of these third parties in performing their responsibilities. Although we prequalify our contractors and believe that they are fully capable of performing their contractual obligations, we cannot directly control the adequacy and timeliness of the resources and expertise that they apply to these activities. Furthermore, we have to compete with other biodefense and biopharmaceutical companies for access to this limited pool of highly specialized resources. If our contractors do not perform their obligations in an adequate and timely manner or we are unable to enter into contracts with them because of prior commitments to our competitors, the pace of clinical or non-clinical development, regulatory approval and commercialization of our product candidates could be significantly delayed and our prospects could be adversely affected.

***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 provide their services or to perform them 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, package and distribute our product candidates and key components of our product candidates. Any material disruption in manufacturing (i.e. due to third party capacity or availability limitations) could cause a delay in our development programs and potential future sales. Furthermore, certain compounds, media, or other raw materials 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, 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 and packaging are subject to regulatory review, and any regulatory compliance problems with these third parties could significantly delay or disrupt our commercialization activities.

Finally, third-party manufacturers, 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.

***We face, and likely will continue to face, competition from companies with greater financial, personnel and research and development resources. Our commercial opportunities will be reduced or eliminated if our competitors are more successful in the development and marketing of their products.***

The biopharmaceutical industry is characterized by rapid and significant technological change. Our success will depend on our ability to develop and apply our technologies in the design and development of our product candidates and to establish and maintain a market for our product candidates. There are many organizations, both public and private, including major pharmaceutical and chemical companies, specialized biotechnology firms, universities and other research institutions engaged in developing pharmaceutical and biotechnology products. Many of these organizations have substantially greater financial, technical, intellectual property, research and development, and human resources than we have. Competitors may develop products or other technologies that are more effective than any that we are developing or may obtain FDA approval for products more rapidly. For example, the U.S. government selected a plague vaccine product candidate from a competitor for advanced development funding, causing us to wind down activities related to the development of our RypVax<sup>TM</sup> product candidate in 2010.

If we commence commercial sales of products, we still must compete in the manufacturing and marketing of such products, areas in which we have limited experience. Many of these organizations also have manufacturing facilities and established marketing capabilities that would enable such companies to market competing products through existing channels of distribution. Our commercial opportunities will be reduced or eliminated if our competitors develop and market products that:

- are more effective;

- have fewer or less severe adverse side effects;
- are more adaptable to various modes of dosing;
- obtain orphan drug exclusivity that blocks the approval of our application for seven years;
- are easier to administer; or
- are less expensive than the products or product candidates that we are, or in the future will be, developing.

While the regulatory climate for generic versions of biological products approved under a Biologics License Application (“BLA”) in the United States remains uncertain, and currently there is no formalized mechanism by which the FDA can approve a generic version of an approved biological product, Federal legislation has been introduced to establish a legal pathway for the approval of generic versions of approved biological products. If enacted, the legislation may impact the revenue projections for our products.

Even if we are successful in developing effective products, and obtains FDA and other regulatory approvals necessary for commercializing them, our products may not compete effectively with other successful products. Our competitors may succeed in developing and marketing products either that are more effective than those that we may develop, alone or with our collaborators, making our products obsolete, or that are marketed before any products that we develop are marketed.

#### **Risks Related to Political and Social Factors**

*Political or social factors may delay or impair our ability to market our products and our business may be materially adversely affected.*

Products developed to treat diseases caused by, or to combat the threat of, bioterrorism will be subject to changing political and social environments. The political and social responses to bioterrorism have been unpredictable. Political or social pressures may delay or cause resistance to bringing our products to market or limit pricing of our products, which would harm our business.

#### **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.*

Issues surrounding patents of biotechnology firms often involve 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 has 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<sup>®</sup>, which is a monoclonal antibody and uses recombinant production technologies. 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.

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 Regulatory Approvals and Legislation**

***Our use of hazardous materials and chemicals requires us to comply with regulatory requirements which may result in significant costs and expose us to potential liabilities.***

Our research and development involves the controlled use of hazardous materials and chemicals. We are subject to federal, state, local and foreign laws governing the use, manufacture, storage, handling and disposal of such materials. We will not be able to eliminate the risk of accidental contamination or injury from these materials. In the event of such an accident, we could be forced to pay significant damages or fines, and these damages could exceed our resources and any applicable insurance coverage. In addition, we may be required to incur significant costs to comply with regulatory requirements in the future.

***Legislation limiting or restricting liability for medical products used to fight bioterrorism is new, and it cannot be certain that any such protection will apply to our products or if applied what the scope of any such coverage will be.***

The U.S. Public Readiness Act was signed into law in December 2005 and creates general immunity for manufacturers of countermeasures, including security countermeasures (as defined in Section 319F-2(c)(1)(B) of that act), when the U.S. Secretary of Health and Human Services issues a declaration for their manufacture, administration or use. The declaration is meant to provide general immunity from all claims under state or federal law for loss arising out of the administration or use of a covered countermeasure. Manufacturers are excluded from this protection in cases of willful misconduct. Although our anthrax countermeasures have been covered under the general immunity provisions of the Public Readiness Act since October 1, 2008, there can be no assurance that the Secretary of Health and Human Services will make other declarations in the future that would cover any of our other product candidates or that the U.S. Congress will not act in the future to reduce coverage under the Public Readiness Act or to repeal it altogether.

Upon a declaration by the Secretary of Health and Human Services, a compensation fund would be created to provide “timely, uniform, and adequate compensation to eligible individuals for covered injuries directly caused by the administration or use of a covered countermeasure.” The “covered injuries” to which the program applies are defined as serious physical injuries or death. Individuals are permitted to bring a willful misconduct action against a manufacturer only after they have exhausted their remedies under the compensation program. A willful misconduct action could be brought against us if an individual(s) has exhausted their remedies under the compensation program which thereby could expose us to liability. Furthermore, there is no assurance that the Secretary of Health and Human Services will issue under this act a declaration to establish a compensation fund. We may also become subject to standard product liability suits and other third party claims if products we develop which fall outside of the Public Readiness Act cause injury or if treated individuals subsequently become infected or otherwise suffer adverse effects from such products.

***We are required to comply with certain export control laws, which may limit our ability to sell our products to non-U.S. persons and may subject us to regulatory requirements that may delay or limit our ability to develop and commercialize our products.***

Our product candidates are subject to the Export Administration Regulations (“EAR”) administered by the U.S. Department of Commerce and are, in certain instances (such as aspects of our nerve agent countermeasure product candidates) subject to the International Traffic in Arms Regulations (“ITAR”) administered by the U.S. Department of State. EAR restricts the export of dual-use products and technical data to certain countries, while ITAR restricts the export of defense products, technical data and defense services. The U.S. government agencies responsible for administering EAR and ITAR have significant discretion in the interpretation and enforcement of these regulations. Failure to comply with these regulations can result in criminal and civil penalties and may harm our ability to enter into contracts with the U.S. government. It is also possible that these regulations could adversely affect our ability to sell our products to non-U.S. customers.

### **Risks Related to Personnel**

***We depend on our key technical and management personnel, and the loss of these personnel could impair the development of our products.***

We rely, and will continue to rely, on our key management and scientific staff, all of whom are employed at-will. The loss of key personnel or the failure to recruit necessary additional qualified personnel could have a material adverse effect on our business and results of operations. There is intense competition from other companies, research and academic institutions and other organizations for qualified personnel. Furthermore uncertainties regarding the proposed merger can lead employees who are otherwise satisfied working for us to leave the organization for other opportunities. We may not be able to continue to attract and retain the qualified personnel necessary for the development of our business. If we do not succeed in retaining and recruiting necessary personnel or developing this expertise, our business could suffer significantly.

***Biotechnology companies often become subject to claims that they or their employees wrongfully used or disclosed alleged trade secrets of the employees’ former employers. Such litigation could result in substantial costs and be a distraction to our management.***

As is commonplace in the biotechnology industry, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including at competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that we or our employees have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and distract management.

## **Risks Related to our Common Stock and Under our Loan Agreement**

***If we do not meet the continued listing standards of the NYSE MKT our common stock could be delisted from trading, which could limit investors' ability to make transactions in our common stock and subject us to additional trading restrictions.***

Our common stock is listed on the NYSE MKT, a national securities exchange, which imposes continued listing requirements with respect to listed shares.

### ***Our stock price is volatile.***

The market price of our common stock has been, and is expected to continue to be, subject to significant volatility. The value of our common stock may decline regardless of our operating performance or prospects. Factors that may affect our market price include:

- Our perceived prospects, including but not limited to any developments in the timing and outcome of the SIGA litigation and changes in U.S. government funding of projects in which we participate;
- variations in our operating results and whether we have achieved key business targets;
- changes in, or our failure to meet, revenue estimates;
- changes in securities analysts' buy/sell recommendations;
- differences between our reported results and those expected by investors and securities analysts;
- announcements of new contracts by us or our competitors;
- reaction to any acquisitions, joint ventures or strategic investments announced by us or our competitors; and
- general economic, political or stock market conditions.

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

The issuance of our securities in the future may depress the market price of our stock, and any such financing(s) will dilute our existing stockholders.

In addition, as of October 4, 2013, we had outstanding options to purchase approximately 6.0 million shares of common stock (not including restricted shares). 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.

We filed two registration statements on Form S-3 (File Nos. 333-161587 and 333-176607) covering the resale of shares issued upon conversion of our 10% convertible notes and issuable upon exercise of related warrants by certain of our affiliates, among other security holders. Both registration statements have been declared effective. Our obligation under the terms of the related registration rights agreement is to keep these registration statements effective. The sale by these security holders of their shares pursuant to the registration statement or otherwise could depress the market price of our common stock.

Finally, as of October 4, 2013, we had issued and outstanding additional warrants to purchase up to approximately 5.6 million shares of common stock.

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 stockholders. Shares that we may issue in the future in connection with certain capital-raising transactions and shares available for future issuance upon exercise of warrants and options could dilute our stockholders and depress the market price of our common stock (see “Risks Related to the Proposed Merger – The issuance of shares of our common stock to Theraclone stockholders in the merger will dilute substantially the voting power of our current stockholders.” below).

***We can give no assurances that we will ever pay dividends.***

We did not pay any dividends on our common stock in 2013, 2012, 2011, or 2010 and we do not intend to declare any dividends in the foreseeable future. While subject to periodic review, our current policy is to retain all earnings, if any, primarily to finance our future growth. The current loan and security agreement with GE Capital (“the “GE Loan Agreement””) specifically restricts the declaration or payment of any dividends. We make no assurances that we will ever pay dividends, cash or otherwise. Whether we pay any dividends in the future will depend on our financial condition, results of operations, and other factors that we will consider.

***Our fully-secured loan agreement with GE Capital is subject to acceleration in specified circumstances, including the proposed Merger with Theraclone Sciences, Inc., which may result in GE Capital taking possession and disposing of any collateral.***

In the first quarter 2012, we closed on a senior fully-secured debt facility with GE Capital providing for a \$2.5 million term loan and a revolving line of credit of up to \$5 million based on a percentage of our outstanding qualified accounts receivable. Our obligations under the GE Loan Agreement are secured by a security interest in substantially all of our assets. While the security interest does not, except in limited circumstances, cover our intellectual property, it does cover any proceeds to us from the use of intellectual property. The GE Loan Agreement contains customary representations, warranties and covenants, including limitations on acquisitions, dispositions, incurrence of indebtedness and the granting of security interests. Upon the occurrence and during the continuance of any event of default, GE Capital may, and at the written request of the requisite lenders shall, terminate the commitments under the facilities and declare any or all of the obligations to be immediately due and payable, without demand or notice to us. The completion of the proposed merger with Theraclone and related transactions would, in the absence of a waiver, constitute an event of default under the loan agreement and permit GE Capital to terminate the commitments under the facilities and declare any or all of the obligations to be immediately due and payable, without demand or notice to us. However, any event of default relating to timely payment of debts, insolvency, liquidation, bankruptcy or similar events will result in automatic acceleration. Among the remedies available to GE Capital in case of an event of default are the taking possession and disposition of any collateral under the GE Loan Agreement.

#### **Risks Related to the Proposed Merger**

***The issuance of shares of our common stock to Theraclone stockholders in the merger will dilute substantially the voting power of our current stockholders.***

Pursuant to the terms of the Merger Agreement, at the Effective Time (as defined in the Merger Agreement), all outstanding shares of Theraclone common stock will be converted into shares of our common stock based on the exchange ratio. Upon completion of the merger, our security holders will own 50% of the outstanding equity of the combined company, and Theraclone security holders will own 50% of the outstanding equity of the combined company, in each case, on an as converted and fully diluted basis but excluding our warrants and options with an exercise price of more than \$2.50 per share. Based on the number of outstanding securities of each company as of October 4, 2013, (i) if none of our or Theraclone options or warrants are exercised prior to the completion of the merger, our and Theraclone security holders would own, respectively, approximately 54.1% and 45.9% of the outstanding shares of common stock of the combined company and (ii) if our warrants and options with an exercise price of more than \$2.50 per share are exercised, to the extent such exercises occur, our and Theraclone security holders would own, respectively, between approximately 51.5% and 50.0% and 48.5% and 50.0% of the outstanding equity of the combined company, on a fully diluted basis.

Accordingly, the issuance of shares of our common stock to Theraclone stockholders in the merger will reduce significantly the relative voting power of each share of our common stock held by our current stockholders. Consequently, our stockholders as a group will have significantly less influence over the management and policies of the combined company after the merger than prior to the merger.

***There is no assurance when or even if the merger will be completed. Failure to obtain required approvals necessary to satisfy closing conditions may delay or prevent completion of the merger.***

Completion of the merger is subject to the satisfaction or waiver of a number of conditions, including the requisite approvals by our stockholders and the stockholders of Theraclone. There can be no assurance that we or Theraclone will be able to satisfy the closing conditions or that closing conditions beyond their control will be satisfied or waived. If the merger is not completed, we will need to consider other strategic alternatives to grow and diversify our business to enhance stockholder value.

***Our valuation is highly dependent on the outcome of the SIGA litigation and, because the timing and outcome of the SIGA litigation is inherently uncertain, its impact on us cannot be determined with certainty.***

Prior to May 2013 one of our primary assets was our financial interest in Arestvyr<sup>TM</sup> and related products as a result of the September 2011 ruling of the Delaware Chancery Court. In May 2013, the Delaware Supreme Court affirmed the trial court's ruling that SIGA had breached certain contractual obligations to us, but remanded the matter back to the Delaware Chancery Court to determine a remedy consistent with the Delaware Supreme Court's opinion. Previously, the Delaware Chancery Court, in its May 31, 2012 judgment, had awarded us the right to receive 50% of all net profits in connection with the sale of SIGA's Arestvyr<sup>TM</sup> and related products once SIGA retained the first \$40 million in profits (see below) and a portion of our attorney fees and expert witness and other costs. As a result of our successful breach of contract case against SIGA, we believe that we have significant revenue potential under a potential damages award from the Delaware Chancery Court.

Previously, the Delaware Chancery Court, in its May 31, 2012 judgment, had awarded us the right to (1) receive 50% of all net profits in connection with the sale of SIGA's Arestvyr<sup>TM</sup> and related products (once SIGA retained the first \$40 million in profits) and (2) a portion of our attorney fees and expert witness and other costs.

However, notwithstanding the Delaware Supreme Court's May 2013 affirmation that SIGA breached contractual obligations to us, its remand of the issue of the remedy back to the Delaware Chancery Court for reconsideration has effectively deprived us of any current financial interest in Arestvyr<sup>TM</sup> and related products.

We have taken the position in documents submitted to the courts, that our damages may be as high as \$1 billion. SIGA has taken the position, in documents that it has submitted to the courts, that it owes us no or nominal damages. We expect to continue to pursue in court our position that, as a result of our successful breach of contract case against SIGA, we deserve significant damages in our award from the Delaware Court of Chancery.

We cannot predict the outcome of the SIGA litigation, and there can be no assurance that the Delaware Chancery Court will re-instate its prior remedy or order another remedy for us or that SIGA will not appeal any subsequent decision by the Delaware Chancery Court. It is possible the litigation could continue for the foreseeable future. Due to the uncertainty of the timing and the ultimate outcome of the SIGA litigation, as well as our lack of access to information about SIGA's sales of Arestvyr<sup>TM</sup> and related products, inability to influence SIGA's sales of Arestvyr<sup>TM</sup> and related products and lack of access to information about SIGA's recording of revenues or profits based on any such sales, we cannot predict the ultimate value of the SIGA litigation.

Our valuation is highly dependent on the outcome of the SIGA litigation. There can be no assurance that the estimated value attributed to the SIGA litigation by us and Theraclone in negotiating the Merger Agreement and the merger consideration will prove to be commensurate with the actual outcome of the SIGA litigation. If our valuation of the SIGA litigation for purposes of the merger proves to be materially different than the actual value based on a final and binding court decision, our stockholders may have experienced either more or less dilution than they would have had the outcome of the SIGA litigation been known or predictable at the time the Merger Agreement was executed.

***Each of PharmAthene and Theraclone must either refinance or repay their credit facilities simultaneously with the closing of the merger.***

PharmAthene is a party to a senior fully-secured debt facility with GE Capital under which approximately \$2.0 million is currently outstanding and Theraclone is a party to a credit facility with MidCap Financial and Silicon Valley Bank under which approximately \$6.0 million is currently outstanding. Each of these credit facilities requires the applicable lenders to consent to the merger prior to the closing of the merger. As of the date of this Form 10-Q, none of the lenders has provided the required consent. Failure to obtain such consent prior to the closing of the merger would constitute an event of default under each credit facility. PharmAthene and Theraclone have received a non-binding letter of intent from the lenders that provides terms for a \$15 million senior secured credit facility with the same three lenders, which is intended to replace the credit facilities currently in place. There can be no assurance that the companies will be able to negotiate binding agreements with the lenders that are satisfactory to the companies, that the companies will be able to satisfy the conditions set forth in the non-binding term sheet necessary for the lenders to enter into and fund a replacement facility or that the lenders will not otherwise determine not to proceed with the transaction. The failure of PharmAthene and Theraclone to enter into a new credit facility to replace the existing facilities could delay the closing of the merger, prevent the closing of the merger or, if the companies determine to proceed without a new facility in place, result in the need to repay the existing facilities, severely depleting the reserve of currently available cash for the combined company.

***The pendency of the merger could have an adverse effect on the trading price of our common stock and our business, financial condition, results of operations or business prospects.***

While there have been no significant adverse effects to date, the pendency of the merger could disrupt our businesses in the following ways, including:

- third parties may seek to terminate or renegotiate their relationships with us as a result of the merger, whether pursuant to the terms of their existing agreements with us or otherwise; and
- the attention of our management may be directed toward completion of the merger and related matters and may be diverted from the day-to-day business operations, including from other opportunities that otherwise might be beneficial to us.

Should they occur, any of these matters could adversely affect the trading price of our common stock or harm our financial condition, results of operations or business prospects.

***During the pendency of the merger, we may be unable to enter into a business combination with another party because of restrictions in the Merger Agreement.***

The Merger Agreement restricts the ability of PharmAthene and Theraclone to make acquisitions or complete other transactions during the pendency of the merger. While the Merger Agreement is in effect, subject to limited exceptions, each party is prohibited from soliciting, initiating, encouraging or taking actions designed to facilitate any inquiries or the making of any proposal or offer that could lead to such party entering into certain extraordinary transactions with any third party, such as a sale of assets, an acquisition of equity interest, a tender offer for capital stock or a merger or other business combination outside the ordinary course of business. Any such transactions could be favorable to our stockholders.

In addition, certain of our stockholders, who in the aggregate beneficially owned approximately 7.5% of the shares of PharmAthene common stock outstanding on and issuable within 60 days of July 31, 2013 (approximately 7.6% as of October 4, 2013), entered into the PharmAthene Voting Agreement, pursuant to which each stockholder agreed to, among other things, vote its shares of PharmAthene common stock in furtherance of the transactions contemplated by the Merger Agreement. Certain of Theraclone's stockholders, who in the aggregate held approximately 75% of the outstanding shares of Theraclone capital stock as of July 31, 2013 (approximately 75% as of October 4, 2013), entered into the Theraclone Voting Agreement, pursuant to which each stockholder agreed to, among other things, vote its shares of Theraclone capital stock in favor of the approval and the adoption of the Merger Agreement and any actions required in furtherance thereof.

These provisions might discourage an otherwise interested third party from considering or proposing an acquisition of PharmAthene or Theraclone, even one that may be deemed of greater value than the merger to PharmAthene stockholders or Theraclone stockholders, as applicable.

***The merger may be completed even though material adverse changes may result from the announcement of the merger, industry-wide changes or other causes.***

In general, either party can refuse to complete the merger if there is a material adverse change affecting the other party between July 31, 2013, the date of the Merger Agreement, and the closing of the merger. However, some types of changes do not permit either party to refuse to complete the merger, even if such changes would have a material adverse effect on PharmAthene or Theraclone. If adverse changes occur but PharmAthene and Theraclone must still complete the merger, the combined company's stock price may suffer.

***We have incurred and will continue to incur significant transaction costs in connection with the merger.***

We have incurred and will continue to incur significant transaction costs in connection with the merger. We estimate that we will incur aggregate direct transaction costs of approximately \$2.5 million associated with the merger and additional costs associated with the commencement of the combined company's operation as a public company, which cannot be estimated accurately at this time.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**

None.

**Item 3. Default upon Senior Securities**

Not applicable

**Item 4. Mine Safety Disclosures**

Not applicable

**Item 5. Other Information**

None.

**Item 6. Exhibits.**

No.	Description
10.1	Form of Amendment to Employment Agreement of Eric I. Richman
10.2	Form of Amendment to Employment Agreement of Linda Chang
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
(101)	The following condensed consolidated financial statements from the PharmAthene, Inc. Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2013, formatted in Extensive Business Reporting Language ("XBRL"): (i) Condensed Consolidated Balance Sheets as of September 30, 2013 and December 31, 2012, (ii) Unaudited Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2013 and 2012, (iii) Unaudited Condensed Consolidated Statements of Comprehensive Loss for the three and nine months ended September 30, 2013 and 2012, (iv) Unaudited Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2013 and 2012, and (v) Notes to consolidated financial statements.
101.INS	Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

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: November 7, 2013

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

Dated: November 7, 2013

By: /s/ Linda L. Chang  
Linda L. Chang  
Chief Financial Officer

**Form of Amendment to Employment Agreement**

This Amendment to Employment Agreement (this "**Amendment**") dated as of July 31, 2013 ("Effective Date"), by and between PharmAthene, Inc., a Delaware corporation ("**Company**") and Eric Richman ("**Executive**"). Executive and Company are sometimes each referred to in this Amendment as a "**Party**" and collectively as the "**Parties**."

**Background**

WHEREAS, the Parties are parties to that certain Employment Agreement dated as of December 23, 2010 (the "**Employment Agreement**");

WHEREAS, on May 9, 2012 the Board of Directors of the Company ("**Board**") adopted a severance plan to provide certain benefits to our Chief Executive Officer and certain other executive officers of the Company that applies in the event of a change of control of the Company (the "**Severance Plan**");

WHEREAS, the Company has entered into an Agreement and Plan of Merger (as such agreement may be amended from time to time, the "**Merger Agreement**") among the Company and Theraclone Sciences, Inc. as of the date hereof pursuant to which Theraclone Sciences, Inc. will become a wholly-owned subsidiary of the Company (the "**Merger**");

WHEREAS, the Board, pursuant to the authority reserved in the Severance Plan, is terminating the Severance Plan effective upon the consummation of the Merger; and

WHEREAS, the Parties desire to clarify and memorialize the severance benefits, if any, to which the Executive would be entitled upon termination of his employment following the consummation of the Merger or another transaction that constitutes a change of control hereunder.

**NOW, THEREFORE**, in consideration of the mutual promises, covenants and conditions set forth herein, the Parties, intending to be legally bound, hereby agree as follows:

1. The Parties agree that Section 9b of the Employment Agreement is hereby amended effective upon consummation of the Merger substantially in accordance with the terms of the Merger Agreement to add the following paragraph to the end thereof:

If the Company terminates the Executive's Employment without Cause, Executive timely executes and does not revoke the General Release described in this Section 9b and the Merger is consummated substantially in accordance with the terms of the Merger Agreement after the Executive's termination of employment, Executive shall be entitled to the following additional severance benefits: (v) a lump sum payment equal to the amount of the Executive's base salary as in effect immediately prior to such termination (but without giving effect to any reduction in base salary that triggered a Good Reason termination) for a period of 12 months, payable on the later of 60 days after his termination of employment or 5 days of the date the Merger is consummated; (w) a lump sum payment equal to the excess of (I) two times the Executive's Target Bonus Amount as in effect immediately prior to such termination, over (II) any amount already paid pursuant to clause (iii) above, payable on the later of 60 days after his termination of employment or 5 days of the date the Merger is consummated; (x) each stock option that remains outstanding as of the date on which the Merger is consummated shall remain exercisable for three years following the date of Executive ceases to perform services for the Company in any capacity (i.e., as an employee, a non-employee director or consultant), but not later than the earlier of ten years after such option was granted or its original expiration date; and (y) reimbursement of the portion of the Executive's health insurance premiums as described in clause (v) above for an additional 12 months beyond the initial 12-month period described in clause (v).

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2. The Parties agree that Section 9c of the Employment Agreement is hereby amended effective upon consummation of the Merger substantially in accordance with the terms of the Merger Agreement to read as follows:

c. **Termination Without Cause or Termination for Good Reason Following a Change in Control.** Following a Change in Control (as defined below), if requested by the Company's successor or acquirer, as applicable, the Executive shall negotiate a new employment agreement in form and substance acceptable to the Executive in all respects in his sole discretion. In the event the Company and the Executive fail to enter into such new employment agreement within ninety (90) days of the Change in Control and during the Employment Period a Termination Without Cause or a termination of the Executive's employment for Good Reason occurs on or within twelve months of the consummation of the Change in Control, the Executive shall not have any further rights or claims against the Company under this Agreement except the right to receive (i) the payments and other rights provided for in Section 9a hereof and a lump sum cash payment for Executive's unused vacation at the rate of his base salary in effect immediately prior to such termination (but without giving effect to any reduction in base salary that triggered a Good Reason termination), (ii) a lump sum payment equal to the amount of the Executive's base salary as in effect immediately prior to such termination (but without giving effect to any reduction in base salary that triggered a Good Reason termination) for a period of 24 (twenty-four) months, payable within 60 days of the date of termination (subject to Section 24), (iii) a lump sum payment equal to two times the Executive's Target Bonus Amount as in effect immediately prior to such termination and a payment for the prior fiscal year to the extent that bonuses have not previously been paid on or before the date of termination (and in the case of the bonus in respect of the prior fiscal year to the extent such bonus has been earned), payable within 60 days of the date of termination (subject to Section 24), (iv) all equity-based awards held by Executive will be deemed fully vested as of the date of termination and each outstanding stock option shall remain exercisable for three years following the date of Executive ceases to perform services for the Company in any capacity (i.e., as an employee, a non-employee director or consultant), but not later than the earlier of ten years after such option was granted or its original expiration date, (v) reimbursement of the portion of the Executive's health insurance premiums (whether such premiums are paid for COBRA continuation coverage under the Company's group health plan in accordance with Section 4980B of the Code or for any comparable replacement group or individual health insurance coverage obtained by the Executive) that exceeds the amount that the Company charges its active employees for the same level of group health coverage during the twenty-four (24) month period following the Executive's termination, and (vi) the Excise Tax Gross-Up described in Section 9g below. Notwithstanding the foregoing, the severance benefits described in clause (ii), (iii), (iv) and (vi) above and the health care premium reimbursement described in clause (v) above shall be provided in consideration for, and expressly conditioned upon, the Executive's execution of a binding General Release (which shall be provided on or about the date of termination) containing terms reasonably satisfactory to the Company within 45 days of the Executive's termination of employment. Subject to Section 24, if the Executive timely executes such General Release and the applicable revocation period with respect to such General Release lapses, the Executive will receive the severance benefits described in clauses (ii) and (iii) above and the reimbursement for health insurance premiums paid by the Executive during the first 60 days after his termination of employment 60 days after the Executive's termination of employment. The Excise Tax Gross-Up described in Section 9g below will be paid in accordance with Section 9g. If the Executive does not timely execute the General Release or if the Executive revokes the General Release within the applicable revocation period prescribed by law, the Executive shall not be entitled to receive any severance payments.

For purposes of this Section 9c, Change of Control shall have the same meaning as that term is defined in Section 3g, except that any such transaction will not constitute a Change of Control for this Section 9c unless it also constitutes a change in ownership of the Company within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(v), a change in effective control of the Company within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(vi)(A) (1), or a change in ownership of a substantial portion of the Company's assets within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(vii).

3. The Parties agree that Section 9f of the Employment Agreement is hereby amended effective upon consummation of the Merger substantially in accordance with the terms of the Merger Agreement to read as follows:

f. **Rabbi Trust.** If the Executive's employment is terminated prior to a Change of Control (as defined in Section 9c above) and the Executive becomes entitled to receive severance payments under clause (b) above, and the Executive's General Release described in clause (b) above becomes binding and enforceable, the Company shall establish an irrevocable grantor trust (a "rabbi trust"), appoint a federally or state chartered bank or trust company as the trustee for such rabbi trust and shall contribute 12 (twelve) months of salary continuation payments to such rabbi trust. Immediately upon consummation of a Change of Control (as defined in Section 9c above) during the Employment Period, the Company shall establish a rabbi trust, appoint a federally or state chartered bank or trust company as the trustee for such rabbi trust and shall contribute the sum of (i) 24 (twenty-four) months of base salary as in effect immediately prior to such Change of Control, and (ii) two times the Executive's Target Bonus Amount as in effect immediately prior to such Change of Control.

The assets of such rabbi trust shall be used solely to make the severance payments to the Executive as required under this Agreement (or to reimburse the Company for severance payments it makes to the Executive); or to satisfy the claims of the Company's unsecured general creditors in the event of the Company's insolvency or bankruptcy. The rabbi trust may be terminated and any remaining assets therein shall revert to the Company after the Executive has received all of the severance payments to which he is entitled hereunder. Notwithstanding the foregoing, the provisions of this Section 9f shall not apply if the funding of the rabbi trust would subject the Executive to acceleration of taxation and tax penalties under Section 409A(b) of the Code.

4. The Parties agree that Section 9g of the Employment Agreement (Directorship) is hereby removed and replaced with a new Section 9g effective upon consummation of the Merger substantially in accordance with the terms of the Merger Agreement to read as follows:

g. **Excise Tax Gross-Up.** Anything in this Agreement to the contrary notwithstanding, in the event it shall be determined that any payment, award, benefit or distribution (including any acceleration) by the Company or any entity which effectuates a transaction described in Section 280G(b)(2)(A)(i) of the Code to or for the benefit of the Executive (whether pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 9g) (a "**Payment**") would be subject to the excise tax imposed by Section 4999 of the Code or any interest or penalties are incurred with respect to such excise tax by the Executive (such excise tax, together with any such interest and penalties, are hereinafter collectively referred to as the "**Excise Tax**"), then the Executive shall be entitled to receive an additional payment (a "**Gross-Up Payment**") in an amount such that after payment by the Executive of all taxes, including, without limitation, any income taxes (and any interest and penalties imposed with respect thereto) and Excise Taxes imposed upon the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed upon the Payments. For purposes of this Section 9g, the Executive shall be deemed to pay federal, state and local income taxes at the highest marginal rate of taxation for the calendar year in which the Gross-Up Payment is to be made, taking into account the maximum reduction in federal income taxes which could be obtained from the deduction of state and local income taxes.

All determinations required to be made under this Section 9g, including whether and when a Gross-Up Payment is required and the amount of such Gross-Up Payment and the assumptions to be utilized in arriving at such determination, shall be made by a certified public accounting firm of national standing reasonably acceptable to the Executive as may be designated by the Company (the "**Accounting Firm**") which shall provide detailed supporting calculations both to the Company and the Executive within 15 business days of the receipt of notice from the Executive that there has been a Payment, or such earlier time as is requested by the Company. All fees and expenses of the Accounting Firm shall be borne solely by the Company. Any Gross-Up Payment, as determined pursuant to this Section 9g, shall be paid by the Company to the Executive within five business days prior to the later of (i) the due date for the payment of any Excise Tax, and (ii) the receipt of the Accounting Firm's determination. If the Accounting Firm determines that no Excise Tax is payable by the Executive, it shall furnish the Executive with a written opinion to such effect, and to the effect that failure to report the Excise Tax, if any, on the Executive's applicable federal income tax return will not result in the imposition of a negligence or similar penalty. Any determination by the Accounting Firm shall be binding upon the Company and the Executive.

As a result of the uncertainty in the application of Section 4999 of the Code at the time of the initial determination by the Accounting Firm hereunder, it is possible that Gross-Up Payments which will not have been made by the Company should have been made ("**Underpayment**") or Gross-up Payments are made by the Company which should not have been made ("**Overpayments**"), consistent with the calculations required to be made hereunder. In the event the Executive is required to make a payment of any Excise Tax, the Accounting Firm shall determine the amount of the Underpayment that has occurred and any such Underpayment shall be promptly paid by the Company to or for the benefit of the Executive. In the event the amount of Gross-up Payment exceeds the amount necessary to reimburse the Executive for his Excise Tax, the Accounting Firm shall determine the amount of the Overpayment that has been made and any such Overpayment shall be promptly paid by the Executive (to the extent he has received a refund if the applicable Excise Tax has been paid to the Internal Revenue Service) to or for the benefit of the Company. The Executive shall cooperate with any reasonable requests by the Company in connection with any contests or disputes with the Internal Revenue Service in connection with the Excise Tax; provided that the Company reimburse any reasonable expenses incurred by the Executive in connection with such cooperation.

5. The Parties agree that the heading of Section 24 of the Employment Agreement is hereby amended to read "**409A Compliance**" and Section 24(b) is hereby deleted effective upon consummation of the Merger substantially in accordance with the terms of the Merger Agreement.

6. The Parties agree that the grant agreement or other instruments evidencing each of Executive's outstanding equity awards shall be deemed amended by this Amendment effective upon consummation of the Merger substantially in accordance with the terms of the Merger Agreement to the extent necessary to reflect the terms hereof.

*[Remainder of page intentionally left blank. Signature page follows.]*

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be duly executed as of the date first written above; provided, however, that this Amendment shall become effective only if the Merger described in the **Background** above is consummated substantially in accordance with the terms of the Merger Agreement either while the Executive is employed by the Company or after the Executive's employment has been terminated by the Company without Cause.

**PHARMATHENE, INC.**

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Name: Brian Markison  
Title: Chairman, Compensation Committee

**EXECUTIVE**

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Name: Eric Richman

**Form of Amendment to Employment Agreement**

This Amendment to Employment Agreement (this "**Amendment**") dated as of July 31, 2013 ("**Effective Date**"), by and between PharmAthene, Inc., a Delaware corporation ("**Company**") and Linda Chang ("**Executive**"). Executive and Company are sometimes each referred to in this Amendment as a "**Party**" and collectively as the "**Parties**."

**Background**

WHEREAS, the Parties are parties to that certain Employment Agreement dated as of February 12, 2012 (the "**Employment Agreement**");

WHEREAS, on May 9, 2012 the Board of Directors of the Company ("**Board**") adopted a severance plan to provide certain benefits to our Chief Executive Officer and certain other executive officers of the Company that applies in the event of a change of control of the Company (the "**Severance Plan**");

WHEREAS, the Company has entered into an Agreement and Plan of Merger (as such agreement may be amended from time to time, the "**Merger Agreement**") among the Company and Theraclone Sciences, Inc. as of the date hereof pursuant to which Theraclone Sciences, Inc. will become a wholly-owned subsidiary of the Company (the "**Merger**");

WHEREAS, the Board, pursuant to the authority reserved in the Severance Plan, is terminating the Severance Plan effective upon the consummation of the Merger; and

WHEREAS, the Parties desire to clarify and memorialize the severance benefits, if any, to which the Executive would be entitled upon termination of her employment following the consummation of the Merger.

**NOW, THEREFORE**, in consideration of the mutual promises, covenants and conditions set forth herein, the Parties, intending to be legally bound, hereby agree as follows:

1. The Parties agree that Section 9 of the Employment Agreement is hereby amended effective immediately prior to the consummation of the Merger substantially in accordance with the terms of the Merger Agreement while Executive is employed by the Company to add the following new subsections e, f and g to the end thereof to read as follows:

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e. **Termination Without Cause or Termination for Good Reason Following a Change in Control.**

Following a Change in Control (as defined below), if requested by the Company's successor or acquirer, as applicable, the Executive shall negotiate a new employment agreement in form and substance acceptable to the Executive in all respects in her sole discretion. In the event the Company and the Executive fail to enter into such new employment agreement within ninety (90) days of the Change in Control and during the Employment Period a Termination Without Cause or a termination of the Executive's employment for Good Reason occurs on or within twelve months of the consummation of the Change in Control, the Executive shall not have any further rights or claims against the Company under this Agreement except the right to receive (i) the payments and other rights provided for in Section 9a hereof and a lump sum cash payment for Executive's unused vacation at the rate of her base salary in effect immediately prior to such termination (but without giving effect to any reduction in base salary that triggered a Good Reason termination), (ii) a lump sum payment equal to the amount of the Executive's base salary as in effect immediately prior to such termination (but without giving effect to any reduction in base salary that triggered a Good Reason termination) for a period of eighteen (18) months, payable within 60 days of the effective date of such termination (subject to Section 24), (iii) a lump sum payment equal to one and one half (1.5) times the Executive's Target Bonus Amount as in effect immediately prior to such termination and a payment for the prior fiscal year to the extent that bonuses have not previously been paid on or before the date of termination (and in the case of the bonus in respect of the prior fiscal year to the extent such bonus has been earned), payable within 60 days of the date of termination (subject to Section 24), (iv) all equity-based awards held by Executive will be deemed fully vested as of the date of termination and each outstanding stock option shall remain exercisable for three years following the date of Executive ceases to perform services for the Company in any capacity (i.e., as an employee, a non-employee director or consultant), but not later than the earlier of ten years after such option was granted or its original expiration date, (v) to the extent that the Executive has elected and is continuing to receive COBRA continuation coverage under the Company's group health plan in accordance with Section 4980B of the Code, the Company shall reduce the COBRA premiums that the Executive is required to pay following her termination of employment to that amount that the Company charges its active employees for the same level of group health coverage during the 18 month period following the Executive's termination, and (vi) a lump sum payment equal to the costs associated with 18 months use of an automobile, payable within 60 days of the date of termination (subject to Section 24). Notwithstanding the foregoing, the severance benefits described in clause (ii), (iii), (iv), and (vi) above and the COBRA premium subsidy described in clause (iv) above shall be provided in consideration for, and expressly conditioned upon, the Executive's execution of a binding General Release (which shall be provided on or about the date of termination) containing terms reasonably satisfactory to the Company within 45 days of the Executive's termination of employment. Subject to Section 24, if the Executive timely executes such General Release and the applicable revocation period with respect to such General Release lapses, the Executive will receive the severance benefits described in clauses (ii), (iii) and (vi) above shall be paid 60 days after the Executive's termination of employment. In addition, to the extent that the Executive paid the full premium for her COBRA coverage during the first 60 days after her termination of employment, the Company will reimburse the Executive for the COBRA premiums subsidy paid by the Executive during the first 60 days after her termination of employment at the same time that the Executive receives the payments required under clauses (ii), (iii) and (vi) above. If the Executive does not timely execute the General Release or if the Executive revokes the General Release within the applicable revocation period prescribed by law, the Executive shall not be entitled to receive any severance payments and the Executive will be required to pay 102% of the applicable premium (as defined in Code Section 4980B) for any COBRA continuation coverage elected by the Executive.

For purposes of this Section 9e, Change of Control shall mean as used herein, "Change in Control" means: (i) an acquisition subsequent to the date hereof by any person, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**")), of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 30% or more of either (A) the then outstanding shares of common stock of the Company ("**Common Stock**") or (B) the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors; excluding, however, the following: (1) any acquisition directly from the Company, other than an acquisition by virtue of the exercise of a conversion privilege unless the security being so converted was itself acquired directly from the Company, (2) any acquisition by the Company and (3) any acquisition by an employee benefit plan (or related trust) sponsored or maintained by the Company; (ii) a merger, consolidation, reorganization or similar corporate transaction, whether or not the Company is the surviving corporation in such transaction, in which outstanding shares of Common Stock are converted into (A) shares of stock of another company, other than a conversion into shares of voting common stock of the successor corporation (or a holding company thereof) representing 80% of the voting power of all capital stock thereof outstanding immediately after the merger or consolidation or (B) other securities (of either the Company or another company) or cash or other property; (iii) the sale or other disposition of all or substantially all of the assets of the Company; provided, however, that any such transaction will not constitute a Change of Control for this Section 9e unless it also constitutes a change in ownership of the Company within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(v), a change in effective control of the Company within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(vi)(A)(1), or a change in ownership of a substantial portion of the Company's assets within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(vii).

f. **Rabbi Trust.** Immediately upon consummation of a Change of Control (as defined in Section 9e above) during the Employment Period, the Company shall establish an irrevocable grantor trust (a "rabbi trust"), appoint a federally or state chartered bank or trust company as the trustee for such rabbi trust and shall contribute the sum of (i) 18 (eighteen) months of base salary as in effect immediately prior to such Change of Control and (ii) one and one half (1.5) times the Executive's Target Bonus Amount as in effect immediately prior to such Change of Control to such rabbi trust. The assets of such rabbi trust shall be used solely to make the severance payments to the Executive as required under this Agreement (or to reimburse the Company for severance payments it makes to the Executive); or to satisfy the claims of the Company's unsecured general creditors in the event of the Company's insolvency or bankruptcy. The rabbi trust may be terminated and any remaining assets therein shall revert to the Company after the Executive has received all of the severance payments to which she is entitled hereunder. Notwithstanding the foregoing, the provisions of this Section 9f shall not apply if the funding of the rabbi trust would subject the Executive to acceleration of taxation and tax penalties under Section 409A(b) of the Code.

g. **Excess Parachute Payments.** Anything in this Agreement to the contrary notwithstanding, in the event it shall be determined that any payment, award, benefit or distribution (including any acceleration) by the Company or any entity which effectuates a transaction described in Section 280G(b)(2)(A)(i) of the Code to or for the benefit of the Executive (whether pursuant to the terms of this Agreement or otherwise, but determined before application of any reductions required pursuant to this Section 9g) (a “**Payment**”) would be subject to the excise tax imposed by Section 4999 of the Code or any interest or penalties are incurred with respect to such excise tax by the Executive (such excise tax, together with any such interest and penalties, are hereinafter collectively referred to as the “**Excise Tax**”), the Company will automatically reduce such Payments to the extent, but only to the extent, necessary so that no portion of the remaining Payments will be subject to the Excise Tax, unless the amount of such Payments that the Executive would retain after payment of the Excise Tax and all applicable Federal, state and local income taxes without such reduction would exceed the amount of such Payments that the Executive would retain after payment of all applicable Federal, state and local taxes after applying such reduction. Unless otherwise elected by the Executive, to the extent permitted under Code Section 409A, such reduction shall first be applied to any severance payments payable to the Executive under this Agreement, then to the accelerated vesting on any equity awards, starting with stock options reversing accelerated vesting of those options with the smallest spread between fair market value and exercise price first and after reversing the accelerated vesting of all stock options, thereafter reversing accelerated vesting of restricted stock on a pro rata basis.

All determinations required to be made under this Section 9g, including the assumptions to be utilized in arriving at such determination, shall be made by the Company’s independent auditors or such other certified public accounting firm of national standing reasonably acceptable to the Executive as may be designated by the Company (the “**Accounting Firm**”) which shall provide detailed supporting calculations both to the Company and the Executive within 15 business days of the receipt of notice from the Executive that there has been a Payment, or such earlier time as is requested by either the Company or the Executive. All fees and expenses of the Accounting Firm shall be borne solely by the Company. If the Accounting Firm determines that no Excise Tax is payable by the Executive, it shall furnish the Executive with a written opinion to such effect. Any determination by the Accounting Firm shall be binding upon the Company and the Executive.

2. The Parties agree that Section 24 of the Employment Agreement is hereby amended to read as follows:

24. **409A Compliance.** If the Executive is a “specified employee” (as determined in accordance with Treasury Regulation Section 1.409A-1(i) or any written Company policy implementing such regulation) at the time of her termination of employment, then her severance payments that are otherwise payable during the first six month period following the Executive’s termination of employment (to the extent that such severance payments constitute nonqualified deferred compensation within the meaning of Section 409A of the Code and the regulations promulgated thereunder) shall be deferred until the date that is six months after the Executive’s termination of employment (or, if earlier, upon her death). Each salary continuation payment that is due under this Agreement shall be treated as a separate payment for purposes of Section 409A Code. This Agreement shall be interpreted to comply, or otherwise be exempt from, with the requirements of Code Section 409A. Accordingly, references to termination of employment hereunder shall be interpreted to mean “separation from service” as defined in regulations under Section 409A of the Code. All expenses under this Agreement that are reimbursable in accordance with Company policy shall be made as soon as practicable after Executive’s submission of such expenses in accordance with the Company’s policy, but in no event later than the last day of the taxable year following the taxable year in which the expense was incurred.

3. The Parties agree that the grant agreement or other instruments evidencing each of Executive's outstanding equity awards shall be deemed amended by this Amendment to the extent necessary to reflect the terms hereof effective immediately prior to the consummation of the Merger substantially in accordance with the terms of the Merger Agreement while Executive is employed by the Company.

*[Remainder of page intentionally left blank. Signature page follows.]*

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be duly executed as of the date first written above; provided, however, that Paragraphs 1 and 3 of this Amendment shall become effective only if the Merger described in the **Background** above is consummated substantially in accordance with the terms of the Merger Agreement while the Executive is employed by the Company.

**PHARMATHENE, INC.**

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Name: Brian Markison  
Title: Chairman, Compensation Committee

**EXECUTIVE**

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Name: Linda Chang

**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 period ended September 30, 2013;
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: November 7, 2013

/s/ Eric I. Richman

Name: **Eric I. Richman**

Title: **Chief Executive Officer**

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

I, Linda L. Chang, certify that:

1. I have reviewed this Form 10-Q of PharmAthene, Inc. for the period ended September 30, 2013;
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: November 7, 2013

/s/ Linda L. Chang

Name: **Linda L. Chang**

Title: **Chief Financial Officer**

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

In connection with the Quarterly Report on Form 10-Q of PharmAthene, Inc. (the "Company") for the period ended September 30, 2013, as filed with the Securities and Exchange Commission (the "Report"), I, Eric I. Richman, 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 Act of 1934.
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

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**Eric I. Richman**  
**Chief Executive Officer**  
November 7, 2013

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification is being furnished pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section. This certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.

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

In connection with the Quarterly Report on Form 10-Q of PharmAthene, Inc. (the "Company") for the period ended September 30, 2013, as filed with the Securities and Exchange Commission (the "Report"), I, Linda L. Chang, 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 of 1934.
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Linda L. Chang

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**Linda L. Chang**  
**Chief Financial Officer**  
November 7, 2013

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification is being furnished pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section. This certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.

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