#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

# FORM 8-K

#### CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): June 10, 2011

# PHARMATHENE, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-32587 (Commission File Number) 20-2726770 (IRS Employer Identification No.)

One Park Place, Suite 450, Annapolis, Maryland (Address of principal executive offices) 21401 (Zip Code)

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

#### (Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

#### Item 1.01 Entry Into a Material Definitive Agreement.

On June 10, 2011, PharmAthene, Inc. (the "Company") entered into a placement agency agreement (the "Placement Agency Agreement") with Leerink Swann LLC and Noble Financial Capital Markets (the "Placement Agents"), relating to the Company's registered offer and sale of shares of its common stock and warrants to purchase its common stock. A copy of the Placement Agency Agreement is attached as Exhibit 1.1 to this Current Report on Form 8-K, and is incorporated herein by reference.

Also on June 10, 2011, the Company entered into Subscription Agreements (the "Subscription Agreements") with certain accredited investors. The Subscription Agreements relate to the issuance and sale to these investors in a registered offering by the Company of an aggregate of 1,857,143 units ("Units") for a purchase price of \$3.50 per Unit, with each Unit consisting of one share of the Company's common stock (each a "Share," and, collectively, the "Shares") and one warrant to purchase 0.2 of a share of common stock (each a "Warrant," and, collectively, the "Warrants"). The Shares and Warrants are immediately separable and will be issued separately. The Company expects to receive net proceeds of approximately \$5,765,000 after placement agent fees and other offering expenses. The Subscription Agreements contains representations, warranties, and covenants of the Company and the investors that are customary for transactions of this type. The form of Subscription Agreement is attached as Exhibit 10.1 to this Current Report on Form 8-K, and is incorporated herein by reference.

The Warrants are exercisable immediately at an exercise price of \$3.50 per share until the fifth anniversary of the date of issuance. The exercise price and number of shares issuable upon exercise are subject to adjustment in the event of stock dividends and stock splits, distributions of debt, securities, rights, warrants or other assets, and fundamental transactions. A copy of the form of Warrant is attached as Exhibit 10.2 to this Current Report on Form 8-K, and is incorporated herein by reference.

Pursuant to the Placement Agency Agreement, the Placement Agents will receive an aggregate fee of 7.0% of the gross proceeds from the offering. In addition, the Company will reimburse the Placement Agents for expenses incurred in connection with the transaction (including reasonable attorney's fees and expenses) up to \$85,000, and has agreed to grant Leerink Swann LLC a right of first refusal to provide certain services to the Company in the future, as further described in the Prospectus Supplement (as defined below).

The description of the offering provided herein is qualified in its entirety by reference to the Placement Agency Agreement, the form of Subscription Agreement and the form of Warrant. The Company has filed with the Securities and Exchange Commission (the "Commission") the Placement Agency Agreement, the form of Subscription Agreement and the form of Warrant in order to provide investors and the Company's stockholders with information regarding their respective terms and in accordance with applicable rules and regulations of the Commission. Each of the agreements contains representations and warranties that the parties made to, and solely for the benefit of, the other in the context of all of the terms and conditions of that agreement and in the context of the specific relationship between the parties. The provisions of the Placement Agency Agreement and the form of Subscription Agreement, including the representations and warranties contained therein, are not for the benefit of any party other than the parties to such agreements and are not intended as documents for investors and the public to obtain factual information about the current state of affairs of the parties to those documents and agreements. Rather, investors and the public should look to other disclosures contained in the Company's filings with the Commission.

The units are being issued pursuant to a prospectus supplement dated June 10, 2011, filed with the Commission pursuant to Rule 424(b) under the Securities Act (the "Prospectus Supplement"), as part of a shelf takedown from the Company's registration statement on Form S-3 (File No. 333-156997), including a related prospectus, which was declared effective by the Securities and Exchange Commission on February 12, 2009.

#### Item 8.01 Other Events.

On June 10, 2011, the Company issued a press release announcing the execution of the Placement Agency Agreement and the Subscription Agreements and the general terms of the units being offered. The text of the press release is included as Exhibit 99.1 to this Form 8-K and is incorporated herein by reference.

# Item 9.01 Financial Statements and Exhibits

(d) The following exhibits are filed herewith:

No.	Description
1.1	Placement Agency Agreement dated as of June 10, 2011 by and among the Company, Leerink Swann LLC and Noble Financial Capital Markets
5.1	Opinion of SNR Denton US LLP
10.1	Form of Subscription Agreement dated as of June 10, 2011
10.2	Form of Warrant
99.1	Press Release dated June 10, 2011

#### SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

# **PHARMATHENE, INC.** (Registrant)

Date: June 10, 2011

By: /s/ Jordan P. Karp

Jordan P. Karp Senior Vice President and General Counsel

#### PHARMATHENE, INC.

#### PLACEMENT AGENCY AGREEMENT

Leerink Swann LLC Noble Financial Capital Markets c/o Leerink Swann LLC

**One Federal Street** 

Boston, MA 02110

Ladies and Gentlemen:

1. **Introductory**. PharmAthene, Inc., a Delaware corporation (the "<u>Company</u>"), proposes, pursuant to the terms of this Placement Agency Agreement (this "<u>Agreement</u>") and the subscription agreements in the form of <u>Exhibit A</u> attached hereto (the "<u>Subscription Agreements</u>") entered into with the purchasers identified therein (each a "<u>Purchaser</u>" and collectively, the "<u>Purchasers</u>"), to sell to the Purchasers an aggregate of 1,857,143 units (the "<u>Units</u>"), with each Unit consisting of (a) one share (a "<u>Share</u>," and collectively the "<u>Shares</u>") of common stock, par value \$0.0001 per share (the "<u>Common Stock</u>") of the Company and (b) one warrant to purchase 0.20 of a share of Common Stock (a "<u>Warrant</u>," and collectively the "<u>Warrants</u>"). Units will not be issued or certificated. The Shares and Warrants are immediately separable and will be issued separately. The terms and conditions of the Warrants are set forth in the form of <u>Exhibit B</u> attached hereto. The Company hereby confirms its agreement with Leerink Swann LLC ("<u>Leerink</u>"), to act as lead placement agent and with Noble Financial Capital Markets ("<u>Noble</u>") to act as co-placement agent (Leerink and Noble, the "<u>Placement Agents</u>") in accordance with the terms and conditions hereof as set forth below.

2. *Agreement to Act as Placement Agents; Placement of Units*. On the basis of the representations, warranties and agreements of the Company herein contained, and subject to all the terms and conditions of this Agreement:

(a) The Company engages the Placement Agents to act as its exclusive agents, on a best efforts basis, in connection with the issuance and sale by the Company of the Units (the "<u>Offering</u>"). Until the Closing Date (defined below), the Company shall not, without the prior consent of Leerink, solicit or accept offers to purchase Units otherwise than through the Placement Agents.

(b) Under no circumstances will the Placement Agents be obligated to purchase any Units for their own account and, in soliciting purchases of Units, the Placement Agents shall act solely as the Company's agents and not as principals. Notwithstanding the foregoing and except as otherwise provided in Section 2(c), it is understood and agreed that the Placement Agents (or their affiliates) may, solely in their discretion and without any obligation to do so, purchase Units as principals to the extent any such purchase of Units is properly disclosed in the General Disclosure Package in the manner required by the Securities Laws.

(c) Subject to the provisions of this Section 2, offers for the purchase of Units may be solicited by the Placement Agents as agents for the Company at such times and in such amounts as the Placement Agents deem advisable. The Placement Agents shall communicate to the Company, orally or in writing, each reasonable offer to purchase Units received by it as agents of the Company. The Company shall have the sole right to accept offers to purchase the Units and may reject any such offer, in whole or in part. The Placement Agents shall have the right, in their discretion reasonably exercised, without notice to the Company, to reject any offer to purchase Units received by it, in whole or in part, and any such rejection shall not be deemed a breach of their agreement contained herein.

June 10, 2011

(d) The Units are being sold to the Purchasers at a price of \$3.50 per Unit. The purchases of the Units by the Purchasers shall be evidenced by the execution of Subscription Agreements by each of the parties thereto.

(e) As compensation for services rendered, on the Closing Date, the Company shall pay to the Placement Agents by wire transfer of immediately available funds to an account or accounts designated by the Placement Agents, an aggregate amount equal to 7.0% of the gross proceeds received by the Company from the sale of the Units on such Closing Date (such aggregate amount to be divided among the Placement Agents as they agree and as agreed to in advance by the Company). At the Closing, the Company shall direct the Escrow Agent (defined below) to wire to an account or accounts designated by the Placement Agents such amounts out of the Escrow Funds (defined below).

(f) No Units that the Company has agreed to sell pursuant to this Agreement shall be deemed to have been purchased and paid for, or sold by the Company, until such Units shall have been delivered to the Purchaser thereof against payment by such Purchaser. If the Company shall default in its obligations to deliver Units to a Purchaser whose offer it has accepted, the Company shall indemnify and hold the Placement Agents harmless against any loss, claim or damage arising from or as a result of such default by the Company.

#### 3. **Delivery and Payment.**

(a) Concurrently with the execution and delivery of this Agreement, the Company, Leerink and U.S. Bank National Association, as escrow agent (the "Escrow Agent"), shall enter into an escrow agreement (the "Escrow Agreement"), pursuant to which an escrow account (the "Escrow Account") will be established for the benefit of the Company and the Purchasers. Prior to the completion of the purchase and sale of the Units pursuant to this Agreement and the Subscription Agreements (the "Closing"), each such Purchaser shall deposit into the Escrow Account an amount equal to the product of (x) the number of Units such Purchaser has agreed to purchase and (y) the purchase price per Unit as set forth in the Subscription Agreements (the "Purchase Amount"). The aggregate of such Purchase Amounts is herein referred to as the "Escrow Funds." On the Closing Date, upon satisfaction or waiver of all of the conditions to Closing, the Escrow Agent will disburse the Escrow Funds to the Company and the Placement Agents as provided in the Escrow Agreement and Section 2(e) above, and the Company shall cause the Units to be delivered to the Purchasers.

(b) Subject to the terms and conditions hereof, delivery of the Units shall be made by the Company to the Purchasers, and payment of the purchase price shall be made by the Purchasers, at the office of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., 666 Third Avenue, New York, New York 10017 (or at such other place as agreed upon by Leerink and the Company), at 10:00 a.m., New York City time, on or before June 15, 2011 or at such time on such other date as may be agreed upon in writing by the Company and Leerink but in no event prior to the date on which the Escrow Agent shall have received all of the Escrow Funds (such date of delivery and payment is hereinafter referred to as the "<u>Closing Date</u>"). The Units shall be delivered (in the case of the Shares, through the facilities of The Depository Trust Company) to such persons, and shall be registered in such name or names and shall be in such denominations, as Leerink may request by written notice to the Company at least one business day before the Closing Date. The cost of original issue tax stamps and other transfer taxes, if any, in connection with the issuance and delivery of the Units by the Company to the respective Purchasers shall be borne by the Company.

#### 4. *Representations and Warranties of the Company.* The Company represents and warrants to, and agrees with, the Placement Agents that:

(a) *Filing and Effectiveness of Registration Statement; Certain Defined Terms*. The Company has filed with the Commission a registration statement on Form S-3 (No. 333-156997), including a related prospectus or prospectuses, covering the registration of the Shares and Warrants under the Act, which registration statement has become effective. "<u>Registration Statement</u>" at any particular time means such registration statement in the form then filed with the Commission, including any amendment thereto, any document incorporated by reference therein and all 430B Information or all 430C Information with respect to such registration statement, that in any case has not been superseded or modified. "Registration Statement" without reference to a time means the Registration Statement as of the Effective Date. For purposes of this definition, 430B Information shall be considered to be included in the Registration Statement as of the time specified in Rule 430B.

For purposes of this Agreement:

"<u>430B Information</u>" means information included in a prospectus then deemed to be a part of the Registration Statement pursuant to Rule 430B(e) or retroactively deemed to be a part of the Registration Statement pursuant to Rule 430B(f).

"430C Information" means information included in a prospectus then deemed to be a part of the Registration Statement pursuant to Rule 430C.

"<u>Act</u>" means the Securities Act of 1933, as amended.

"Applicable Time" means 8:00 a.m. (Eastern time) on the date of this Agreement.

"Closing Date" has the meaning defined in Section 3 hereof.

"Commission" means the Securities and Exchange Commission.

"Effective Date" of the Registration Statement relating to the Units means the earlier of (a) first use of the Final Prospectus and (b) the time of the first contract of sale for the Units.

"Exchange Act of 1934, as amended.

"<u>Final Prospectus</u>" means the Statutory Prospectus that discloses the public offering price, other 430B Information and other final terms of the Units and otherwise satisfies Section 10(a) of the Act.

"<u>General Use Issuer Free Writing Prospectus</u>" means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors, as evidenced by its being so specified in <u>Schedule A</u> to this Agreement.

"Issuer Free Writing Prospectus" means any "issuer free writing prospectus," as defined in Rule 433, relating to the Units in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g).

"Limited Use Issuer Free Writing Prospectus" means any Issuer Free Writing Prospectus that is not a General Use Issuer Free Writing Prospectus.

"Rules and Regulations" means the rules and regulations of the Commission.

"<u>Securities Laws</u>" means, collectively, the Sarbanes-Oxley Act of 2002 ("<u>Sarbanes-Oxley</u>"), the Act, the Exchange Act, the Rules and Regulations, the auditing principles, rules, standards and practices applicable to auditors of "issuers" (as defined in Sarbanes-Oxley) promulgated or approved by the Public Company Accounting Oversight Board and, as applicable, the rules of the New York Stock Exchange and the NYSE Amex ("<u>Exchange Rules</u>").

"<u>Statutory Prospectus</u>" with reference to any particular time means the prospectus relating to the Units that is included in the Registration Statement immediately prior to that time, including any document incorporated by reference therein and all 430B Information and all 430C Information with respect to the Registration Statement. For purposes of the foregoing definition, 430B Information shall be considered to be included in the Statutory Prospectus only as of the actual time that form of prospectus (including a prospectus supplement) is filed with the Commission pursuant to Rule 424(b) and not retroactively.

Unless otherwise specified, a reference to a "rule" is to the indicated rule under the Act.

(b) **Compliance with Securities Act Requirements.** (i) Each document, if any, filed or to be filed pursuant to the Exchange Act and incorporated by reference in the Statutory Prospectus or the Final Prospectus complied or will comply when so filed in all material respects with the Exchange Act and the applicable rules and regulations of the Commission thereunder, (ii) (A) at the time the Registration Statement initially became effective, (B) at the time of each amendment thereto for the purposes of complying with Section 10(a)(3) of the Act (whether by post-effective amendment, incorporated report or form of prospectus), (C) on the Effective Date relating to the Units and (D) on the Closing Date, the Registration Statement conformed and will conform in all material respects to the requirements of the Act and the Rules and Regulations and did not and will not include any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading and (iii) (A) on its date, (B) at the time of filing the Final Prospectus pursuant to Rule 424(b) and (C) on the Closing Date, the Final Prospectus will conform in all material respects to the requirements of the Act and the Rules and Regulations, and will not include any untrue statement of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The preceding sentence does not apply to statements in or omissions from any such document based upon written information furnished to the Company by the Placement Agents, if any, specifically for use therein, it being understood and agreed that the only such information is that described as such in Section 8(b) hereof.

(c) *Effectiveness.* No stop order of the Commission preventing or suspending the use of any Statutory Prospectus, the Final Prospectus Supplement, or any Free Writing Prospectus, or the effectiveness of the Registration Statement, has been issued, and no proceedings for such purpose have been instituted or, to the Company's knowledge, are contemplated by the Commission.

(d) *Shelf Registration Statement.* The date of this Agreement is not more than three years subsequent to the initial effective date of the Registration Statement.

(e) *General Disclosure Package*. As of the Applicable Time, neither (i) the General Use Issuer Free Writing Prospectus(es) issued at or prior to the Applicable Time, together with the accompanying prospectus (which is the most recent Statutory Prospectus distributed to investors generally) and any other documents listed or disclosures stated in <u>Schedule A</u> to this Agreement to be included in the General Disclosure Package, all considered together (collectively, the "<u>General Disclosure Package</u>"), nor (ii) any individual Limited Use Issuer Free Writing Prospectus, when considered together with the General Disclosure Package, included any untrue statement of a material fact or omitted to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The preceding sentence does not apply to statements in or omissions from any Statutory Prospectus or any Issuer Free Writing Prospectus in reliance upon and in conformity with written information furnished to the Company by the Placement Agents specifically for use therein, it being understood and agreed that the only such information furnished by the Placement Agents consists of the information described as such in Section 8(b) hereof.

(f) **Ineligible Issuer Status.** (i) At the earliest time after the filing of the Registration Statement that the Company or another offering participant made a bona fide offer (within the meaning of Rule 164(h)(2)) of the Units and (ii) at the date of this Agreement, the Company was not and is not an "ineligible issuer," as defined in Rule 405. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Act has been, or will be, filed with the Commission in accordance with the requirements of the Act and the applicable rules and regulations of the Commission thereunder. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Act and the applicable rules and regulations of the Act and the applicable rules and regulations of the Act and the applicable rules and regulations of the Commission thereunder. Except for the free writing prospectuses, if any, identified in <u>Schedule A</u> hereto and forming part of the General Disclosure Package, the Company has not prepared, used or referred to, and will not, without Leerink's prior written consent, prepare, use or refer to, any free writing prospectus.

(g) Issuer Free Writing Prospectuses. Each Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Units or until any earlier date that the Company notified or notifies the Placement Agents as described in the next sentence, did not, does not and will not include any information that conflicted, conflicts or will conflict with the information then contained in the Registration Statement. If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus, if republished immediately following such event or development, would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, (i) the Company has promptly notified or will promptly notify the Placement Agents and (ii) the Company has promptly amended or will promptly amend or supplement such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission. The foregoing two sentences do not apply to statements in or omissions from any Issuer Free Writing Prospectus in reliance upon and in conformity with written information furnished to the Company by the Placement Agents specifically for use therein, it being understood and agreed that the only such information furnished by the Placement Agents consists of the information described as such in Section 8(b) hereof.

(h) **Good Standing of the Company and Subsidiaries.** Each of the Company and its subsidiaries (the "Subsidiaries") has been duly incorporated and is existing and in good standing under the laws of the jurisdiction of incorporation, with power and authority (corporate and other) to own its properties and conduct its business as described in the General Disclosure Package and the Final Prospectus; and each of the Company and the Subsidiaries is duly qualified to do business as a foreign corporation in good standing in all other jurisdictions in which its ownership or lease of property or the conduct of its business requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not materially and adversely affect the Company or its businesses, properties, business prospects, conditions (financial or other) or results of operations, taken as a whole (such effect is referred to herein as a "<u>Material Adverse Effect</u>").

(i) **Exchange Act Reports.** The Company has filed in a timely manner all reports required to be filed pursuant to Sections 13(a), 13(e), 14 and 15(d) of the Exchange Act during the preceding 12 months (except to the extent that Section 15(d) requires reports to be filed pursuant to Sections 13(d) and 13(g) of the Exchange Act, which shall be governed by the next clause of this sentence); and the Company has filed in a timely manner all reports required to be filed pursuant to Sections 13(d) and 13(g) of the Exchange Act, which shall be governed by the next clause of this sentence); and the Company has filed in a timely manner all reports required to be filed pursuant to Sections 13(d) and 13(g) of the Exchange Act since January 1, 2008, except where the failure to timely file could not reasonably be expected individually or in the aggregate to have a Material Adverse Effect.

(j) **Capital Stock.** The Shares to be issued and sold by the Company to the Purchasers hereunder and under the Subscription Agreements, the shares of Common Stock issuable upon exercise of the Warrants (the "<u>Warrant Shares</u>") and all other outstanding shares of capital stock of the Company have been duly authorized; all outstanding shares of capital stock of the Company are, and, when the Shares have been delivered and paid for in accordance with this Agreement and the Subscription Agreements on the Closing Date, such Shares will have been, and, when the Warrant Shares have been delivered and paid for as provided in the Warrants, such Warrant Shares will have been validly issued, fully paid and nonassessable, will conform to the description thereof contained in the General Disclosure Package and the Final Prospectus; the stockholders of the Company have no statutory or contractual preemptive rights with respect to its Common Stock; none of the outstanding shares of capital stock of the Company are or will have been issued in violation of any statutory or contractual preemptive rights of any security holder; and the authorized equity capitalization of the Company is as set forth in the General Disclosure Package.

(k) *No Finder's Fee.* There are no contracts, agreements or understandings between the Company and any person that would give rise to a valid claim against the Company or the Placement Agents for a brokerage commission, finder's fee or other like payment.

(1) *Financial Statements.* The financial statements and schedules included or incorporated by reference in the Registration Statement and the General Disclosure Package and the Final Prospectus present fairly in all material respects the financial condition of the Company and its consolidated subsidiaries as of the respective dates thereof and the results of operations and cash flows of the Company and its consolidated subsidiaries for the respective periods covered thereby, all in conformity with Unites States generally accepted accounting principles ("GAAP") applied on a consistent basis throughout the entire period involved, except as may be otherwise specified in such financial statements or the notes thereto and except to the extent that unaudited financial statement may not contain all footnotes required by GAAP. No other financial statement or the General Disclosure Package or the Final Prospectus. Ernst & Young LLP ("<u>Accountants</u>"), who have reported on such financial statements and schedules, is an independent registered accounting firm with respect to the Company as required by the Act and the Rules and Regulations and Rule 3600T of the Public Company Accounting Oversight Board ("<u>PCAOB</u>"). The summary and selected consolidated financial and statistical data included in or incorporated by reference into the Registration Statement present fairly the information shown therein and have been compiled on a basis consistent with the audited financial statements presented in the Registration Statement.

(m) **Absence of Changes.** Subsequent to the respective dates as of which information is given in the Registration Statement and the General Disclosure Package and prior to or on the Closing Date, except as set forth in or contemplated by the Registration Statement and the General Disclosure Package, (i) there has not been and will not have been any change in the capitalization of the Company (other than in connection with the grant or exercise of options to purchase the Common Stock granted pursuant to the Company's stock option plans from the shares reserved therefor) or any Material Adverse Effect arising for any reason whatsoever, (ii) the Company has not incurred and will not incur, except in the ordinary course of business as described in the General Disclosure Package, any material liabilities or obligations, direct or contingent, the Company has not entered into and will not enter into, except in the ordinary course of business as described in the General Disclosure Package, any material liabilities or obligations, direct or contingent, the Company has not entered into and will not enter into, except in the ordinary course of business as described in the General Disclosure Package, any material liabilities or obligations, direct or contingent, the Company has not entered into and will not enter into, except in the ordinary course of business as described in the General Disclosure Package, any material transactions other than pursuant to this Agreement and the transactions referred to herein and (iii) the Company has not and will not have paid or declared any dividends or other distributions of any kind on any class of its capital stock.

(n) *Not An Investment Company*. The Company is not, will not become as a result of the transactions contemplated hereby, an "investment company" or an "affiliated person" of, or "promoter" or "principal underwriter" for, an "investment company," as such terms are defined in the Investment Company Act of 1940, as amended.

(o) *Litigation*. Other than as disclosed in the Registration Statement, the General Disclosure Package or the Final Prospectus, there are no actions, suits or proceedings pending or, to the knowledge of the Company, threatened against or affecting the Company or against any of its officers in their capacity as such, before or by any federal or state court, commission, regulatory body, administrative agency or other governmental body, domestic or foreign, wherein an unfavorable ruling, decision or finding would reasonably be expected to have a Material Adverse Effect.

(p) **Absence of Existing Defaults and Conflicts.** The Company is not (i) in violation of any provision of its certificate of incorporation or bylaws, (ii) in default in any respect, and no event has occurred which, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any indenture, contract, lease, mortgage, deed of trust, note agreement, loan agreement or other agreement, obligation, condition, covenant or instrument to which it is a party or by which it is bound or to which any of its property or assets is subject, or (iii) in violation in any respect of any statute, law, rule, regulation, ordinance, judgment, order or decree of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or any of its properties, as applicable, except, with respect to clauses (ii) and (iii), any violations or defaults which, individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect.

(q) **Absence of Further Requirements.** No consent, approval, authorization or order of, or any filing or declaration with, any court or governmental agency or body is required for the consummation by the Company of the transactions on its part contemplated herein, the Subscription Agreements, or Escrow Agreement, including the offering and sale of the Units, except such as have been obtained under the Act or the Rules and Regulations and such as may be required under state securities or Blue Sky laws.

Authorization; Absence of Defaults and Conflicts Resulting from Transaction. The Company has full corporate power and  $(\mathbf{r})$ authority to enter into this Agreement, each of the Subscription Agreements and the Escrow Agreement. Each of this Agreement, the Subscription Agreements, and the Escrow Agreement has been duly authorized, executed and delivered by the Company. The Subscription Agreements and the Escrow Agreement are valid and binding agreements of the Company, enforceable against the Company in accordance with their respective terms except (i) as may be limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as may be limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law. The performance of each of this Agreement, each Subscription Agreement and the Escrow Agreement and the consummation of the transactions contemplated hereby and thereby, will not (i) result in the creation or imposition of any lien, charge or encumbrance upon any of the assets of the Company pursuant to the terms or provisions of, or result in a breach or violation of any of the terms or provisions of, or conflict with or constitute a default under, or give any party a right to terminate any of its obligations under, or result in the acceleration of any obligation under, (A) the certificate of incorporation or bylaws of the Company, or (B) any indenture, mortgage, deed of trust, voting trust agreement, loan agreement, bond, debenture, note agreement or other evidence of indebtedness, lease, contract or other agreement or instrument to which the Company is a party or by which the Company or any of its properties is bound or affected, except, in the case of clause (i)(B), any lien, breach violation, conflict, default, right of termination or acceleration that, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect or (ii) violate or conflict with any judgment, ruling, decree, order, statute, rule or regulation of any court or other governmental agency or body applicable to the business or properties of the Company.

(s) *Title to Property.* The Company has good and marketable title to all properties and assets described in the General Disclosure Package and the Final Prospectus as owned by it, free and clear of all liens, charges, encumbrances or restrictions, except such as are described in the General Disclosure Package or are not material to the business of the Company. The Company has valid, subsisting and enforceable leases for the properties described in the General Disclosure Package and the Final Prospectus as leased by it. The Company owns or leases all such properties as are necessary to its operations as now conducted or as proposed to be conducted, except where the failure to so own or lease would not reasonably be expected to have a Material Adverse Effect.

(t) **Off Balance Sheet Interests and Contracts.** There is no document, contract, permit or instrument, affiliate transaction or offbalance sheet transaction (including, without limitation, any "variable interests" in "variable interest entities," as such terms are defined in Financial Accounting Standards Board Interpretation No. 46) of a character required to be described in the Registration Statement or the General Disclosure Package or to be filed as an Exhibit to the Registration Statement that is not described or filed as required. All such contracts described in the immediately preceding sentence to which the Company is a party have been duly authorized, executed and delivered by the Company, constitute valid and binding agreements of the Company and are enforceable against and by the Company in accordance with the terms thereof except (i) as may be limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally and (ii) as may be limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

(u) *Accuracy of Statements*. No statement, representation, warranty or covenant made by the Company in this Agreement or any Subscription Agreement or made in any certificate or document required by Section 7 of this Agreement to be delivered to the Placement Agents was or will be, when made, inaccurate, untrue or incorrect in any material respect.

(v) **Offering Material; Stabilization**. The Company has not distributed, and will not distribute prior to the Closing Date, any offering material in connection with the offering and sale of the Units other than any preliminary prospectuses, any Permitted Free Writing Prospectus (as defined in Section 6 below), the Final Prospectus, the Registration Statement and other materials, if any, permitted by the Act. The Company has not, and to its knowledge, none of its directors, officers or controlling persons has taken, directly or indirectly, any action designed, or that might reasonably be expected, to cause or result, under the Act or otherwise, in, or that has constituted, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Units.

(w) *Registration Rights.* No holder of securities of the Company has rights to the registration of any securities of the Company because of the filing of the Registration Statement, which rights have not been waived by the holder thereof as of the date hereof.

(x) *Listing*. The Common Stock is registered under Section 12(g) of the Exchange Act. The issuance and sale of the Shares, Warrants and Warrant Shares hereunder does not contravene the rules and regulations of the NYSE Amex.

(y) **Possession of Intellectual Property**. Except as disclosed in or specifically contemplated by the General Disclosure Package, (i) the Company owns or has adequate rights to use all trademarks, trade names, domain names, patents, patent rights, copyrights, technology, knowhow (including trade secrets and other unpatented or unpatentable proprietary or confidential information, systems or procedures), service marks, trade dress rights, and other intellectual property (collectively, "<u>Intellectual Property</u>") and has such other licenses, approvals and governmental authorizations, in each case sufficient to conduct its business as now conducted and as now proposed to be conducted, and to the Company's knowledge, none of the foregoing Intellectual Property rights owned or licensed by the Company is invalid or unenforceable, (ii) the Company has no knowledge of any infringement by it of Intellectual Property rights of others, (iii) the Company is not aware of any infringement, misappropriation or violation by others of, or conflict by others with rights of the Company with respect to, any Intellectual Property, (iv) there is no claim being made against the Company or, to the best knowledge of the Company, any employee of the Company, regarding Intellectual Property or other infringement, and (v) the Company has not received any notice of infringement with respect to any patent or any notice challenging the validity, scope or enforceability of any Intellectual Property owned by or licensed to the Company.

(z) **Taxes.** Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company has filed all federal, state, local and foreign income tax returns that have been required to be filed and has paid all taxes and assessments received by it to the extent that such taxes or assessments have become due. The Company has no tax deficiency that has been or, to the best knowledge of the Company, might be asserted or threatened against it that could reasonably be expected to have a Material Adverse Effect.

(a) **Permits and Licenses.** The Company owns or possesses all authorizations, approvals, orders, licenses, registrations, other certificates and permits of and from all governmental regulatory officials and bodies, including without limitation the United States Food and Drug Administration and foreign equivalents, necessary to conduct its businesses as contemplated in the General Disclosure Package, except where the failure to own or possess all such authorizations, approvals, orders, licenses, registrations, other certificates and permits would not reasonably be expected to have a Material Adverse Effect. There is no proceeding pending or, to the Company's knowledge, threatened (or any basis therefor known to the Company) that may cause any such authorization, approval, order, license, registration, certificate or permit to be revoked, withdrawn, cancelled, suspended or not renewed; and the Company is conducting its business in compliance with all laws, rules and regulations applicable thereto, except where such noncompliance would not reasonably be expected to have a Material Adverse Effect.

(bb) **FCPA Compliance**. The Company has not and, to the best of the Company's knowledge, none of its employees or agents at any time during the last five years have (i) made any unlawful contribution to any candidate for foreign office, or failed to disclose fully any contribution in violation of law, (ii) made any payment to any federal or state governmental officer or official, or other person charged with similar public or quasi-public duties, other than payments required or permitted by the laws of the United States or any jurisdiction thereof or (iii) violated in any material respect any provision of the Foreign Corrupt Practices Act of 1977, as amended.

(cc) **Internal Controls and Compliance With Sarbanes-Oxley Act.** The books, records and accounts of the Company accurately and fairly reflect in all material respects, in reasonable detail, the transactions in, and dispositions of, the assets of, and the results of operations of, the Company. The Company is in material compliance with all provisions of Sarbanes-Oxley that are applicable to it as of the date hereof and the Closing Date.

(dd) **ERISA Compliance.** The Company has fulfilled in all material respects its obligations, if any, under the minimum funding standards of Section 302 of the United States Employee Retirement Income Security Act of 1974 ("<u>ERISA</u>") and the regulations and published interpretations thereunder with respect to each "plan" (as defined in Section 3(3) of ERISA and such regulations and published interpretations) in which employees of the Company are eligible to participate and each such plan is in compliance in all material respects with the presently applicable provisions of ERISA and such regulations and published interpretations. No "prohibited transaction" (as defined in Section 406 of ERISA, or Section 4975 of the Internal Revenue Code of 1986, as amended from time to time (the "Code")) has occurred with respect to any employee benefit plan which could reasonably be expected to result in a Material Adverse Effect.

(ee) *Labor Issues.* No labor problem or dispute with the employees of the Company exists or, to the Company's knowledge, is threatened or imminent, which could reasonably be expected to result in a Material Adverse Effect. The Company is not aware that any key employee or significant group of employees of the Company plans to terminate employment with the Company.

(ff) **Statistical and Market-Related Data.** Any third-party statistical and market-related data included or incorporated by reference in the Registration Statement, a Statutory Prospectus or the General Disclosure Package are based on or derived from sources that the Company believes to be reliable and accurate.

(gg) *Forward-Looking Statements*. No forward-looking statement (within the meaning of Section 27A of the Act and Section 21E of the Exchange Act) contained in the Registration Statement and the General Disclosure Package or the Final Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(hh) **Environmental Laws.** The Company (i) is in compliance with any and all applicable federal, state, local and foreign laws, rules, regulations, decisions and orders relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (collectively, "<u>Environmental Laws</u>"); (ii) has received and is in compliance with all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct its business; and (iii) has not received notice of any actual or potential liability for the investigation or remediation of any disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, except in the case of subsections (i), (ii) and (iii) of this subsection (hh) as could not, individually or in the aggregate, have a Material Adverse Effect.

(ii) **Conduct of Clinical Trials.** The studies, tests and preclinical and clinical trials conducted by or on behalf of the Company that are described in the General Disclosure Package or the Final Prospectus were and, if still pending, are being conducted in compliance with all applicable current Good Laboratory Practices and Good Clinical Practices in all material respects. The descriptions of the studies, tests and preclinical and clinical trials, including the related results and regulatory status, contained in the General Disclosure Package or the Final Prospectus are accurate in all material respects. Other than as disclosed in the Registration Statement, the General Disclosure Package or the Final Prospectus, the Company has not received any notices, correspondence or other communication from the FDA or other governmental agency requiring the termination or suspension of any clinical trials conducted by, or on behalf of, the Company or in which the Company has participated.

(kk) **Regulatory Status.** The Company has (i) orally, to the Placement Agents or to counsel to the Placement Agents, fairly summarized in all material respects the substance of all of its material communications with representatives of the FDA; and (ii) no knowledge of any pending communication from the FDA that would cause the Company to revise its strategy for seeking marketing approval from the FDA for any of the Company's products under development as described in the Registration Statement, the General Disclosure Package and the Final Prospectus.

(ll) **FINRA Affiliations.** There are no affiliations with any member firm of The Financial Industry Regulatory Authority, Inc. ("<u>FINRA</u>") among the Company's officers, directors or, to the Company's knowledge, any five percent (5%) or greater stockholder of the Company.

(mm) **FINRA Filing Exception.** The Company satisfies the pre-1992 eligibility requirements for the use of a registration statement on Form S-3 in connection with the Offering contemplated thereby (the pre-1992 eligibility requirements for the use of the registration statement on Form S-3 include (i) having a non-affiliate, public common equity float of at least \$150 million or a non-affiliate, public common equity float of at least \$100 million and annual trading volume of at least three million shares and (ii) having been subject to the Exchange Act reporting requirements for a period of 36 months).

(nn) **SIGA Litigation.** The Company has (i) orally, to the Placement Agents or to counsel to the Placement Agents, fairly summarized in all material respects the status of its litigation with SIGA and communications from SIGA or the court before which the case is being tried (to the extent that the Company is not prohibited from disclosing such communications to a third party); and (ii) no knowledge of any pending communication from SIGA or the court before which the case is being tried that would cause the Company to materially revise its outlook upon the litigation with SIGA or its description of the SIGA litigation as described in the Registration Statement, the General Disclosure Package and the Final Prospectus.

5. *Certain Agreements of the Company.* The Company agrees with the Placement Agents that it will furnish to counsel for the Placement Agents one copy of the registration statement relating to the Units, including all exhibits, in the form it became effective and of all amendments thereto and that, in connection with the offering of Units:

(a) *Filing of Prospectuses.* The Company has filed or will file each Statutory Prospectus (including the Final Prospectus) pursuant to and in accordance with Rule 424(b)(2) (or, if applicable and consented to by Leerink, subparagraph (5)) not later than the second business day following the earlier of the date it is first used or the date of this Agreement. The Company has complied and will comply with Rule 433.

(b) *Filing of Amendments; Response to Commission Requests.* The Company will promptly advise the Placement Agents of any proposal to amend or supplement the Registration Statement or any Statutory Prospectus until the completion of the purchase and sale of the Units contemplated herein and will afford the Placement Agents a reasonable opportunity to comment on any such proposed amendment or supplement; and the Company will also advise the Placement Agents promptly of (i) the filing of any such amendment or supplement, (ii) any request by the Commission or its staff for any amendment to the Registration Statement, for any supplement to any Statutory Prospectus or for any additional information, (iii) the institution by the Commission of any stop order proceedings in respect of the Registration Statement or the threatening of any proceeding for that purpose, and (iv) the receipt by the Company of any notification with respect to the suspension of the qualification of the Units (including the Shares) in any jurisdiction or the institution or threatening of any proceedings for such purpose. The Company will use its best efforts to prevent the issuance of any such stop order or the suspension of any such qualification and, if issued, to obtain as soon as possible the withdrawal thereof.

(c) **Continued Compliance with Securities Laws.** If, at any time when a prospectus relating to the Units is (or but for the exemption in Rule 172 under the Act would be) required to be delivered under the Act in connection with sales by the Company to any Purchasers, any event occurs as a result of which the Final Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, or if it is necessary at any time to amend the Registration Statement or supplement the Final Prospectus to comply with the Act, the Company will promptly notify the Placement Agents of such event and will promptly prepare and file with the Commission and furnish, at its own expense, to the Placement Agents and, to the extent applicable, the dealers and any other dealers upon request of the Placement Agents, an amendment or supplement which will correct such statement or omission or an amendment which will effect such compliance. Neither the Placement Agents' consent to, nor the Placement Agents' delivery of, any such amendment or supplement shall constitute a waiver of any of the conditions set forth in Section 7 hereof.

(d) **Rule 158.** As soon as practicable, but not later than 16 months, after the date of this Agreement, the Company will make generally available to its securityholders an earnings statement covering a period of at least 12 months beginning after the date of this Agreement and satisfying the provisions of Section 11(a) of the Act and Rule 158.

(e) *Furnishing of Prospectuses.* The Company will furnish to the Placement Agents copies of the Registration Statement, including all exhibits, any Statutory Prospectus relating to the Units, the Final Prospectus and all amendments and supplements to such documents, in each case as soon as available and in such quantities as the Placement Agents reasonably request. The Company will pay the expenses of printing and distributing to the Placement Agents all such documents.

(f) **Blue Sky Qualifications.** The Company will arrange for the qualification of the Units for sale under the laws of such jurisdictions as Leerink designates and will continue such qualifications in effect so long as required for the distribution; provided that the Company will not be required to qualify as a foreign corporation or to file a general consent to service of process in any such jurisdiction or take any action that would subject it to taxation in any such jurisdiction where it is not then so subject.

(g) **Reporting Requirements.** During the period of five years after the date of the this Agreement, the Company will furnish to the Placement Agents as soon as practicable after the end of each fiscal year, a copy of its annual report to stockholders for such year; and the Company will furnish to the Placement Agents (i) as soon as available, a copy of each report and any definitive proxy statement of the Company filed with the Commission under the Exchange Act or mailed to stockholders, and (ii) from time to time, such other information concerning the Company as the Placement Agents may reasonably request in writing. However, so long as the Company is subject to the reporting requirements of either Section 13 or Section 15(d) of the Exchange Act and is timely filing reports with the Commission on its Electronic Data Gathering, Analysis and Retrieval system ("EDGAR"), it is not required to furnish such filed reports or statements to the Placement Agents required pursuant to subsection (i) above.

Payment of Expenses. The Company will pay all fees and expenses incident to the performance of the its obligations under this (h) Agreement, including but not limited to (i) any filing fees and other expenses incurred in connection with qualification of the Units for sale under the laws of such jurisdictions as Leerink may designate and the preparation and printing of memoranda relating thereto, (ii) any costs and expenses related to, the review by the Financial Industry Regulatory Authority, Inc. ("FINRA") of the Units (including filing fees and the reasonable fees and disbursements of counsel for the Placement Agents relating to such review), (iii) any travel expenses of the Company's officers and employees and any other expenses of the Company in connection with attending or hosting meetings with prospective purchasers of the Units, (iv) fees and expenses incident to listing the Shares and Warrant Shares on the NYSE Amex and other national and foreign exchanges, (v) fees and expenses in connection with the registration of the Shares and Warrant Shares under the Exchange Act, (vi) fees and expenses incurred in distributing any Statutory Prospectuses and the Final Prospectus (including any amendments and supplements thereto) to the Placement Agents and for expenses incurred for preparing, printing and distributing any Issuer Free Writing Prospectuses to investors or prospective investors, (vii) fees and expenses of the Escrow Agent and under the Escrow Agreement and (viii) all other costs and expenses incurred by the Company incident to the performance of the obligations of the Company hereunder for which provision is not otherwise made in this Section. In addition, whether or not the transaction contemplated by this Agreement are consummated, the Company shall reimburse the Placement Agents for reasonable fees and expenses (including the fees, disbursements and other charges of legal counsel to the Placement Agents ("Legal Charges") in amounts not to exceed \$75,000 for Legal Charges and \$10,000 for fees and expenses other than Legal Charges; provided, however, that the Company shall not have any reimbursement obligation if the Placement Agents have breached their obligations hereunder.

(i) *Use of Proceeds.* The Company will use the net proceeds received in connection with any offering of the Units in the manner described in the "Use of Proceeds" section of the General Disclosure Package.

(j) **Absence of Manipulation.** The Company will not take, directly or indirectly, any action designed to or that would constitute or that might reasonably be expected to cause or result in, stabilization or manipulation of the price of any securities of the Company to facilitate the sale or resale of the Units.

Restriction on Sale of Securities. For the period specified below (the "Lock-Up Period"), the Company will not, directly or (k)indirectly, take any of the following actions with respect to its Common Stock or any securities convertible into or exchangeable or exercisable for its Common Stock ("Lock-Up Securities"): (i) offer, sell, issue, contract to sell, pledge or otherwise dispose of, Lock-Up Securities, (ii) offer, sell, issue, contract to sell, contract to purchase or grant any option, right or warrant to purchase Lock-Up Securities, (iii) enter into any swap, hedge or any other agreement that transfers, in whole or in part, the economic consequences of ownership of Lock-Up Securities, (iv) establish or increase a put equivalent position or liquidate or decrease a call equivalent position in Lock-Up Securities within the meaning of Section 16 of the Exchange Act or (v) file with the Commission a registration statement under the Act relating to Lock-Up Securities (except that the Company may file a "universal shelf" registration statement on Form S-3), or publicly disclose the intention to take any such action, without the prior written consent of Leerink, except (A) issuances of Lock-Up Securities pursuant to the conversion of convertible securities or the exercise of warrants or options, in each case outstanding on the date of this Agreement, (B) issuances of Lock-Up Securities pursuant to the exercise of Warrants or options, (C) grants of employee stock options or shares of restricted stock pursuant to the terms of a plan or compensation agreement or arrangement in effect on the date of this Agreement, or issuances of Lock-Up Securities pursuant to the exercise of such options, (D) issuances of Lock-Up Securities as consideration for mergers, acquisitions, other business combinations, or strategic alliances, occurring after the date of this Agreement; provided that each recipient of shares pursuant to this clause or (D) agrees that all such shares remain subject to restrictions substantially similar to those contained in this subsection (k) or (E) issuances of Common Stock at any time at a price greater than \$5.00 per share. The initial Lock-Up Period will commence on the date hereof and continue for 30 days after the date of the commencement of the public offering of the Units or such earlier date that Leerink consents to in writing; provided, however, that if (1) during the last 17 days of the initial Lock-Up Period, the Company releases earnings results or material news or a material event relating to the Company occurs or (2) prior to the expiration of the initial Lock-Up Period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the initial Lock-Up Period, then in each case the Lock-Up Period will be extended until the expiration of the 18-day period beginning on the date of release of the earnings results or the occurrence of the materials news or material event, as applicable, unless Leerink waives, in writing, such extension. The Company will provide the Placement Agents with notice of any announcement described in clause (2) of the preceding sentence that gives rise to an extension of the Lock-Up Period.

Right of First Refusal. The Company shall offer Leerink the right to serve as lead book-runner, and shall allocate to Leerink at least (1)50% of any fees, commissions and other compensation paid to investment banks ("50% Economics") in any offering by the Company of the Company's securities for cash following the Closing Date, including without limitation a private placement, private investment in public equity (PIPE), registered direct offering, underwritten registered direct offering, confidentially marketed public offering, publicly marketed follow-on offering, Regulation 144A and/or Regulation S offering, or other form of private or public offering by the Company for cash, that is commenced within 12 months of the Closing Date (a "Future Offering"). As lead book-runner, Leerink shall control the marketing of and outreach to prospective investors in the offering. In the event that less than 50% of the securities sold the Future Offering are bought by investors contacted by Leerink during the marketing of the Future Offering, Leerink will receive the percentage of fees, commissions and other compensation paid to investment banks in the Future Offering equal to the percentage of the securities sold in the Future Offering that are bought by investors contacted by Leerink during the marketing of the Future Offering, but in no event shall Leerink receive less than 35% of such fees, commissions and other compensation paid to investment banks so long as Leerink pursues the engagement in good faith and with its customary level of attention. The Company shall not interfere with Leerink's ability to earn 50% Economics, and if the Company replaces prospective investors contacted by Leerink with other investors, or refuses prospective investors contacted by Leerink, then Leerink's economics shall be determined assuming such investors tendered by Leerink were accepted by the Company. The Company shall offer Leerink the right to serve as lead bookrunner for any Future Offering pursuant to the terms of this paragraph prior to discussing the Future Offering with any other investment bank, and Leerink shall inform the Company within five (5) business days of such offer whether it will serve as the lead book-runner for the Future Offering. In the event that Leerink declines to serve as the lead book-runner for a Future Offering (i) the Company shall be free to engage any investment bank or investment banks of its choosing in connection with that Future Offering, (ii) Leerink shall have no right to participate in that Future Offering in any capacity, but Leerink shall not be deemed to have waived its rights under this paragraph (1) with respect to any subsequent Future Offerings. In the event that Leerink serves as lead bookrunner and receives 50% Economics in a Future Offering in which the Company raises at least \$50,000,000 in gross proceeds (the "Gross Proceeds") and in which a customary spread is paid on the Gross Proceeds to the investment banks participating in the offering, the Company's obligations under this paragraph (l) shall terminate after such Future Offering closes and Leerink is paid 50% Economics in connection therewith.

6. *Free Writing Prospectuses.* The Company represents and agrees that, unless it obtains the prior consent of Leerink, and each Placement Agent, severally and not jointly, agree that, unless it obtains the prior consent of the Company, it has not made and will not make any offer relating to the Units that would constitute an Issuer Free Writing Prospectus, or that would otherwise constitute a "free writing prospectus," as defined in Rule 405, required to be filed with the Commission. Any such free writing prospectus consented to by the Company and Leerink, each of which is set forth on <u>Schedule A</u> hereto, is hereinafter referred to as a "Permitted Free Writing prospectus," as defined in Rule 433, and has complied and will comply with the requirements of Rules 164 and 433 applicable to any Permitted Free Writing Prospectus, including timely Commission filing where required, legending and record keeping.

7. **Conditions of the Obligations of the Placement Agents.** The obligations of the Placement Agents hereunder will be subject to the accuracy of the representations and warranties of the Company herein (as though made on such Closing Date), to the accuracy of the statements of Company officers made pursuant to the provisions hereof, to the performance by the Company of its obligations hereunder and to the following additional conditions precedent:

(a) Accountants' Comfort Letter. At the time of the execution of this Agreement, the Placement Agents shall have received a letter from Ernst & Young LLP addressed to the Placement Agents and dated such date, in form and substance satisfactory to Leerink and Ernst & Young LLP confirming that they are a registered public accounting firm and independent public accountants within the meaning of the Securities Laws and stating the conclusions and findings of such firm with respect to the financial statements and certain financial information contained or incorporated by reference in the Registration Statement, the Disclosure Package and the Final Prospectus.

(b) **Bring-Down Comfort Letter**. On the Closing Date, the Placement Agents shall have received a letter (the "<u>bring-down letter</u>") from Ernst & Young LLP addressed to the Placement Agents, and dated the Closing Date confirming, as of the date of the bring-down letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the Registration Statement, the General Disclosure Package and the Final Prospectus as of a date not more than three business days prior to the date of the bring-down letter), the conclusions and findings of such firm with respect to the financial information and other matters covered by its letter delivered to the Placement Agents concurrently with the execution of this Agreement pursuant to Section 7(a).

(c) *Filing of Prospectus.* The Final Prospectus shall have been filed with the Commission in accordance with the Rules and Regulations and Section 5(a) hereof. No stop order suspending the effectiveness of the Registration Statement or of any part thereof shall have been issued and no proceedings for that purpose shall have been instituted or, to the knowledge of the Company or the Placement Agents, shall be contemplated by the Commission.

No Material Adverse Change. Subsequent to the execution and delivery of this Agreement, there shall not have occurred (i) any (d) change, or any development or event involving a prospective change, in the condition (financial or otherwise), results of operations, business, properties or prospects of the Company and its subsidiaries taken as a whole which, in the reasonable judgment of Leerink, is material and adverse and makes it impractical or inadvisable to market the Units; (ii) any downgrading in the rating of any debt securities of the Company by any "nationally recognized statistical rating organization" (as defined for purposes of Rule 436(g)), or any public announcement that any such organization has under surveillance or review its rating of any debt securities of the Company (other than an announcement with positive implications of a possible upgrading, and no implication of a possible downgrading, of such rating) or any announcement that the Company has been placed on negative outlook; (iii) any change in U.S. or international financial, political or economic conditions or currency exchange rates or exchange controls, the effect of which is such as to make it, in the reasonable judgment of Leerink, impractical to market or to enforce contracts for the sale of the Units, whether in the primary market or in respect of dealings in the secondary market; (iv) any suspension or material limitation of trading in securities generally on the New York Stock Exchange, or any setting of minimum or maximum prices for trading on such exchange; (v) or any suspension of trading of any securities of the Company on any exchange or in the over-the-counter market; (vi) any banking moratorium declared by any U.S. federal or New York authorities; (vii) any major disruption of settlements of securities, payment, or clearance services in the United States or any other country where such securities are listed; or (viii) any attack on, outbreak or escalation of hostilities or act of terrorism involving the United States, any declaration of war by Congress or any other national or international calamity or emergency if, in the reasonable judgment of Leerink, the effect of any such attack, outbreak, escalation, act, declaration, calamity or emergency is such as to make it impractical or inadvisable to market the Units or to enforce contracts for the sale of the Units.

(e) **Opinion of Counsel for the Company.** The Placement Agents shall have received an opinion and a negative assurances statement, dated such Closing Date, of SNR Denton US LLP counsel for the Company, in form and substance reasonably satisfactory to the Placement Agents.

(f) **Opinion of Counsel for the Placement Agents.** The Placement Agents shall have received from Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel for the Placement Agents, such opinion or opinions, including negative assurance statements, dated such Closing Date, with respect to such matters as the Placement Agents may require, and the Company shall have furnished to such counsel such documents as they request for the purpose of enabling them to pass upon such matters.

(g) **Officer's Certificate.** The Placement Agents shall have received a certificate, dated the Closing Date, of an executive officer of the Company and a principal financial or accounting officer of the Company in which such officers shall state that: the representations and warranties of the Company in this Agreement are true and correct; the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date in all material respects; no stop order suspending the effectiveness of the Registration Statement or of any part thereof has been issued and no proceedings for that purpose have been instituted or, to the best of their knowledge and after reasonable investigation, are contemplated by the Commission; and subsequent to the date of the most recent financial statements in the General Disclosure Package, there has been no material adverse change, nor any development or event involving a prospective material adverse change, in the condition (financial or otherwise), results of operations, business, properties or prospects of the Company and its subsidiaries taken as a whole except as set forth in the General Disclosure Package or as described in such certificate.

(h) **Subscription** Agreements; Escrow Agreement. The Company shall have entered into (i) the Subscription Agreements with each of the Purchasers and (ii) the Escrow Agreement with Leerink and the Escrow Agreements shall be in full force and effect.

(i) *Listing.* The Shares and Warrant Shares shall have been approved for listing on the NYSE Amex, subject to notice of issuance.

(j) *FINRA Matters*. FINRA shall have confirmed that it has not raised any objection with respect to the fairness and reasonableness of the placement agency terms and arrangements.

(k) Additional Certificates. The Company shall have furnished to the Placement Agents such certificates, in addition to those specifically mentioned herein, as the Placement Agents may have reasonably requested as to the accuracy and completeness at the Closing Date of any statement in the Registration Statement or the Final Prospectus, as to the accuracy at the Closing Date of the representations and warranties of the Company herein, as to the performance by the Company of its obligations hereunder, or as to the fulfillment of the conditions concurrent and precedent to the obligations hereunder of the Placement Agents.

(1) **Copies.** The Company will furnish the Placement Agents with such conformed copies of such opinions, certificates, letters and documents as Leerink may reasonably request. Leerink may in its sole discretion waive compliance with any conditions to the obligations of the Placement Agents under this Agreement.

#### 8. Indemnification and Contribution.

Indemnification of Placement Agents. The Company will indemnify and hold harmless each Placement Agent, its partners, (a) members, directors, officers, employees, agents, affiliates and each person, if any, who controls any Placement Agent within the meaning of Section 15 of the Act or Section 20 of the Exchange Act (each, an "Indemnified Party"), against any and all losses, claims, damages or liabilities, joint or several, to which such Indemnified Party may become subject, under the Act, the Exchange Act, other Federal or state statutory law or regulation or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in any part of the Registration Statement at any time, any Statutory Prospectus as of any time, the Final Prospectus or any Issuer Free Writing Prospectus, or arise out of or are based upon the omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse each Indemnified Party for any legal or other expenses reasonably incurred by such Indemnified Party in connection with investigating or defending against any such loss, claim, damage, liability, action, litigation, investigation or proceeding whatsoever (whether or not such Indemnified Party is a party thereto), whether threatened or commenced, and in connection with the enforcement of this provision with respect to any of the above as such expenses are incurred; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement in or omission or alleged omission from any of such documents in reliance upon and in conformity with written information furnished to the Company by the Placement Agents specifically for use therein, it being understood and agreed that the only such information furnished by the Placement Agents consists of the information described as such in subsection (b) below.

Indemnification of Company. Each Placement Agent will, severally and not jointly, indemnify and hold harmless the Company, (b) each of its directors and each of its officers who signs the Registration Statement and each person, if any, who controls the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act (each, a "Placement Agent Indemnified Party"), against any losses, claims, damages or liabilities to which such Placement Agent Indemnified Party may become subject, under the Act, the Exchange Act, other Federal or state statutory law or regulation or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in any part of the Registration Statement at any time, any Statutory Prospectus as of any time, the Final Prospectus or any Issuer Free Writing Prospectus, or arise out of or are based upon the omission or the alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information furnished to the Company by such Placement Agent specifically for use therein, and will reimburse any legal or other expenses reasonably incurred by such Placement Agent Indemnified Party in connection with investigating or defending against any such loss, claim, damage, liability, action, litigation, investigation or proceeding whatsoever (whether or not such Placement Agent Indemnified Party is a party thereto), whether threatened or commenced, based upon any such untrue statement or omission, or any such alleged untrue statement or omission as such expenses are incurred, it being understood and agreed that the only information furnished by any Placement Agent is set forth in the third to last paragraph of the prospectus supplement dated the date hereof under the caption "Plan of Distribution" concerning stabilization. Notwithstanding the provisions of this Section 8(b), in no event shall any indemnity by any Placement Agent under this Section 8(b) exceed the total compensation received by such Placement Agent in accordance with Section 2(e).

Actions against Parties; Notification. Promptly after receipt by an indemnified party under this Section of notice of the (c) commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against the indemnifying party under subsection (a) or (b) above, notify the indemnifying party of the commencement thereof; but the failure to notify the indemnifying party shall not relieve it from any liability that it may have under subsection (a) or (b) above except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and provided further that the failure to notify the indemnifying party shall not relieve it from any liability that it may have to an indemnified party otherwise than under subsection (a) or (b) above. In case any such action is brought against any indemnified party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate therein and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party (who shall not, except with the consent of the indemnified party, be counsel to the indemnifying party), and after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party will not be liable to such indemnified party under this Section for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (i) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (ii) the indemnified party has concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (iii) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party), or (iv) the indemnifying party has not in fact employed counsel reasonably satisfactory to the indemnified party to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, in each of which cases the reasonable fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened action in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party unless such settlement (i) includes an unconditional release of such indemnified party from all liability on any claims that are the subject matter of such action and (ii) does not include a statement as to, or an admission of, fault, culpability or a failure to act by or on behalf of an indemnified party.

Contribution. If the indemnification provided for in this Section is unavailable or insufficient to hold harmless an indemnified (d) party under subsection (a) or (b) above, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages or liabilities referred to in subsection (a) or (b) above (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Placement Agents on the other from the offering of the Units or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and the Placement Agents on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Placement Agents on the other shall be deemed to be in the same proportion as the total net proceeds from the Offering (before deducting expenses) received by the Company bear to the total placement agent fees received by the Placement Agents in connection with the Offering. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or the Placement Agents and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The amount paid by an indemnified party as a result of the losses, claims, damages or liabilities referred to in the first sentence of this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any action or claim that is the subject of this subsection (d). Notwithstanding the provisions of this subsection (d), the Placement Agents shall not be required to contribute any amount in excess of the amount by which total compensation received by the Placement Agents in accordance with Section 2(e) exceeds the amount of any damages which the Placement Agents have otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Company and the Placement Agents agree that it would not be just and equitable if contribution pursuant to this Section 8(d) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in this Section 8(d).

(e) **Control Persons.** The obligations of the Company under this Section shall be in addition to any liability which the Company may otherwise have and shall extend, upon the same terms and conditions, to each person, if any, who controls any Placement Agents within the meaning of the Act; and the obligations of the Placement Agent under this Section shall be in addition to any liability which the Placement Agents may otherwise have and shall extend, upon the same terms and conditions, to each director of the Company, to each officer of the Company who has signed the Registration Statement and to each person, if any, who controls the Company within the meaning of the Act.

9. **Survival of Certain Representations and Obligations.** The respective indemnities, agreements, representations, warranties and other statements of the Company or its officers and of the Placement Agents set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation, or statement as to the results thereof, made by or on behalf of the Placement Agents, the Company or any of their respective representatives, officers or directors or any controlling person, and will survive delivery of and payment for the Units. If the sale and issuance of the Units by the Company hereunder are not consummated for any reason (other than a material breach by the Placement Agents of their obligations hereunder), the Company will reimburse the Placement Agents for all out of pocket expenses (including fess and disbursements of counsel) reasonably incurred in connection with the offering of the Units, subject to the caps specifically set forth in Section 5(h) hereof, and the respective obligations of the Company and the Placement Agents pursuant to Section 8 hereof shall remain in effect. In addition, if any Units have been purchased under this Agreement and the Subscription Agreements, the representations and warranties in Section 4 hereof and all obligations under Section 5 hereof shall also remain in effect.

10. **Notices.** All communications hereunder will be in writing and, if sent to the Placement Agents, will be mailed, delivered or telegraphed and confirmed to Leerink Swann LLC, One Federal Street Boston, Massachusetts 02110, Attention: Donald D. Notman, with a copy to Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., 666 Third Avenue, New York, New York 10017, Attention: William C. Hicks, or, if sent to the Company, will be mailed, delivered or telegraphed and confirmed to it at One Park Place, Suite 450, Annapolis, MD; Attention: Chief Financial Officer, with a copy to SNR Denton US LLP, 1221 Avenue of the Americas, New York, NY 10020, Attention: Jeffrey A. Baumel, Esq.

11. *Successors*. This Agreement will inure to the benefit of and be binding upon the parties hereto and their respective successors and the officers and directors and controlling persons referred to in Section 8, and no other person will have any right or obligation hereunder.

12. *Counterparts.* This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement.

13. Absence of Fiduciary Relationship. The Company acknowledges and agrees that:

(a) **No Other Relationship.** The Placement Agents have been retained solely to act as placement agents in connection with the sale of Units and that no fiduciary, advisory or agency relationship between the Company and the Placement Agents has been created in respect of any of the transactions contemplated by this Agreement, any Subscription Agreement or the Final Prospectus, irrespective of whether the Placement Agents have advised or are advising the Company on other matters;

(b) **Arm's-Length Negotiations.** The price of the Units set forth in this Agreement was established by the Company following discussions and arm's-length negotiations with the Placement Agents and the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement;

(c) **Absence of Obligation to Disclose.** The Company has been advised that the Placement Agents and their affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that the Placement Agents have no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and

(d) *Waiver*. The Company waives, to the fullest extent permitted by law, any claims it may have against the Placement Agents for breach of fiduciary duty or alleged breach of fiduciary duty and agrees that the Placement Agents shall have no liability (whether direct or indirect) to the Company in respect of such a fiduciary duty claim or to any person asserting a fiduciary duty claim on behalf of or in right of the Company, including stockholders, employees or creditors of the Company.

14. **Applicable Law.** This Agreement shall be governed by, and construed in accordance with, the laws of the Commonwealth of Massachusetts. The Company hereby submits to the non-exclusive jurisdiction of any court of the Commonwealth of Massachusetts or the United States District Court located in the City of Boston, Massachusetts in any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated thereby. The Company irrevocably and unconditionally waives any objection to the laying of venue of any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated thereby in any court of the Commonwealth of Massachusetts or the United States District Court located in the City of Boston, Massachusetts and irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such suit or proceeding in any such court has been brought in an inconvenient forum.

[The remainder of this page is intentionally left blank]

If the foregoing is in accordance with the Placement Agents' understanding of our agreement, kindly sign and return to the Company one of the counterparts hereof, whereupon it will become a binding agreement between the Company and the Placement Agents in accordance with its terms.

Very truly yours

PHARMATHENE, INC.

By: /s/ Charles A. Reinhart III

Name: Charles A. Reinhart III Title: Sr. VP & CFO

Signature Page to Placement Agency Agreement

The foregoing Placement Agency Agreement is hereby confirmed and accepted as of the date first above written.

LEERINK SWANN LLC

By: /s/ Donald Notman, Jr.

Name: Donald Notman, Jr. Title: Managing Director

Noble Financial Capital Markets

By: /s/ Shawn M. Titcomb

Name: Shawn M. Titcomb Title: Managing Director

Signature Page to Placement Agency Agreement

#### SCHEDULE A

## 1. Statutory Prospectus Included in the General Disclosure Package

Base prospectus included in the Registration Statement declared effective on February 12, 2009.

# 2. General Use Issuer Free Writing Prospectuses (included in the General Disclosure Package)

None.

## 3. Other Information Included in the General Disclosure Package

None.

# 4. **Permitted Free Writing Prospectus**

None.

SNR Denton US LLP 1221 Avenue of the Americas New York, NY 10020-1089 USA T +1 212 768 6700 F +1 212 768 6800 snrdenton.com

June 10, 2011

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

Re: Sale of Common Stock and Warrants registered pursuant to Registration Statement on Form S-3 (File No. 333-156997)

Ladies and Gentlemen:

In our capacity as counsel to PharmAthene, Inc., a Delaware corporation (the "**Company**"), we have been asked to render this opinion in connection with a registration statement on Form S-3 (the "**Registration Statement**"), heretofore filed by the Company with the Securities and Exchange Commission (the "**Commission**") under the Securities Act of 1933, as amended (the "**Act**"), and the prospectus supplement filed pursuant to Rule 424(b) under the Act, dated as of June 10, 2011 (the "**Prospectus Supplement**"), in connection with the registration by the Company of the following securities: (i) 1,857,143 shares (the "**Shares**") of common stock, par value \$0.0001 per share, of the Company (the "**Common Stock**"), (ii) 371,430 warrants to purchase Common Stock at an exercise price of \$3.50 per share (the "**Warrants**") and (iii) 371,430 shares (the "**Warrant Shares**") of Common Stock that are issuable upon exercise of the Warrants.

We are delivering this opinion to you at your request in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act.

In connection with rendering this opinion, we have examined and are familiar with (i) the Company's Amended and Restated Certificate of Incorporation, as amended, (ii) the Company's By-Laws, (iii) the Registration Statement, including the prospectus contained therein, (iv) the Prospectus Supplement (such prospectus and the Prospectus Supplement are collectively referred to herein as the "**Prospectus**"), (v) corporate proceedings of the Company relating to the Shares, the Warrants and the Warrant Shares, and (vi) such other instruments and documents as we have deemed relevant under the circumstances.

In making the aforesaid examinations, we have assumed the genuineness of all signatures and the conformity to original documents of all copies furnished to us as original or photostatic copies. We have also assumed that the corporate records furnished to us by the Company include all corporate proceedings taken by the Company to date.

Based upon the foregoing and subject to the assumptions and qualifications set forth herein, we are of the opinion that:

1. The Shares have been duly authorized by the Company and, when issued in accordance with the terms set forth in the Registration Statement and the Prospectus, will be validly issued, fully paid and non-assessable.

2. The Warrant Shares have been duly authorized by the Company and, when issued in accordance with the terms set forth in the Registration Statement and the Prospectus, and paid for in accordance with the terms of the Warrants, will be validly issued, fully paid and non-assessable.

PharmAthene, Inc. June 10, 2011 Page 2

3. The Warrants have been duly authorized by the Company and, when issued in accordance with the terms set forth in the Registration Statement and the Prospectus, will be validly issued.

The foregoing opinion is limited to the laws of the United States of America and Delaware corporate law (which includes the Delaware General Corporation Law and applicable provisions of the Delaware constitution, as well as reported judicial opinions interpreting same), and we do not purport to express any opinion on the laws of any other jurisdiction.

We hereby consent to the use of our opinion as an exhibit to the Registration Statement and to the reference to this firm and this opinion under the heading "Legal Matters" in the prospectus comprising a part of the Registration Statement and any amendment thereto. In giving such consent, we do not hereby admit that we come within the category of persons whose consent is required under Section 7 of the Act, or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ SNR DENTON US LLP

SNR DENTON US LLP

#### SUBSCRIPTION AGREEMENT

#### June 10, 2011

The undersigned investor (the "Investor") hereby confirms its agreement with PharmAthene, Inc. (the "Company") as follows:

1. This Subscription Agreement, including the Terms and Conditions For Purchase of Units attached hereto as Annex I (collectively, this "**Agreement**") is made as of the date set forth below between the Company and the Investor.

2. The Company has authorized the sale and issuance to certain investors of an aggregate of \_\_\_\_\_\_\_ units (the "**Units**") for a purchase price of \$3.50 per Unit (the "**Purchase Price**"), with each Unit consisting of (a) one share (a "**Share**," and collectively the "**Shares**") of common stock, par value \$0.0001 per share (the "**Common Stock**") of the Company and (b) one warrant (a "**Warrant**," and collectively the "**Warrants**") to purchase 0.2 of a share of Common Stock (and the fractional amount being the "**Warrant Ratio**"). Units will not be issued or certificated. The Shares and Warrants are immediately separable and will be issued separately. The terms and conditions of the Warrants are set forth in the form of Annex II attached hereto. The shares of Common Stock issuable upon exercise of the Warrants are referred to herein as the "**Warrant Shares**" and, together with the Units, the Shares and the Warrants, are referred to herein as the "**Securities**."

3. The offering and sale of the Units (the "**Offering**") are being made pursuant to (1) an effective Registration Statement on Form S-3 (Registration No. 333-156997) filed by the Company with the Securities and Exchange Commission (the "**Commission**") (the "**Registration Statement**"), which contains the base prospectus (the "**Base Prospectus**") and was declared effective by the Commission on February 12, 2009, (2) if applicable, certain "free writing prospectuses" (as that term is defined in Rule 405 under the Securities Act of 1933, as amended), that have or will be filed with the Commission and delivered to the Investor on or prior to the date hereof and (3) a final prospectus supplement (the "**Prospectus Supplement**" and together with the Base Prospectus, the "**Prospectus**") containing certain supplemental information regarding the Securities and terms of the Offering that will be filed with the Commission and delivered to the Investor (or made available to the Investor by the filing by the Company of an electronic version thereof with the Commission) along with the Company's counterpart to this Agreement.

4. The Company and the Investor agree that the Investor will purchase from the Company and the Company will issue and sell to the Investor the Units set forth below for the aggregate purchase price set forth below. The Units shall be purchased pursuant to the Terms and Conditions for Purchase of Units attached hereto as <u>Annex I</u> and incorporated herein by this reference as if fully set forth herein. The Investor acknowledges that the Offering is not being underwritten by the placement agent (the "**Placement Agent**") named in the Prospectus Supplement and that there is no minimum offering amount.

5. The manner of settlement of the Shares included in the Units purchased by the Investor shall be determined by such Investor as follows:

Delivery by electronic book-entry at The Depository Trust Company ("**DTC**"), registered in the Investor's name and address as set forth below, and released by Continental Stock Transfer & Trust Company, the Company's transfer agent (the "**Transfer Agent**"), to the Investor at the Closing (as defined in Section 3.1 of Annex A hereto).

NO LATER THAN ONE (1) BUSINESS DAY AFTER THE EXECUTION OF THIS AGREEMENT BY THE INVESTOR AND THE COMPANY, THE INVESTOR SHALL:

- (I) DIRECT THE CUSTODIAL AGENT OR BROKER-DEALER AT WHICH THE ACCOUNT OR ACCOUNTS TO BE CREDITED WITH THE SHARES ARE MAINTAINED TO SET UP A DEPOSIT/WITHDRAWAL AT CUSTODIAN ("DWAC") INSTRUCTING THE TRANSFER AGENT TO CREDIT SUCH ACCOUNT OR ACCOUNTS WITH THE SHARES, AND
- (II) REMIT BY WIRE TRANSFER THE AMOUNT OF FUNDS EQUAL TO THE AGGREGATE PURCHASE PRICE FOR THE UNITS BEING PURCHASED BY THE INVESTOR TO THE FOLLOWING ACCOUNT:

IT IS THE INVESTOR'S RESPONSIBILITY TO (A) MAKE THE NECESSARY WIRE TRANSFER OR CONFIRM THE PROPER ACCOUNT BALANCE IN A TIMELY MANNER AND (B) ARRANGE FOR SETTLEMENT BY WAY OF DWAC IN A TIMELY MANNER. IF THE INVESTOR DOES NOT DELIVER THE AGGREGATE PURCHASE PRICE FOR THE UNITS OR DOES NOT MAKE PROPER ARRANGEMENTS FOR SETTLEMENT IN A TIMELY MANNER, THE UNITS MAY NOT BE DELIVERED AT CLOSING TO THE INVESTOR OR THE INVESTOR MAY BE EXCLUDED FROM THE CLOSING ALTOGETHER.

6. The executed Warrant included in the Units purchased by the Investor shall be delivered in accordance with the terms thereof.

7. The Investor represents that, except as set forth below, (a) it has had no position, office or other material relationship within the past three years with the Company or persons known to it to be affiliates of the Company, (b) it is not a FINRA member or an Associated Person (as such term is defined under the FINRA Membership and Registration Rules Section 1011) as of the Closing, and (c) neither the Investor nor any group of Investors (as identified in a public filing made with the Commission) of which the Investor is a part in connection with the Offering of the Units, acquired, or obtained the right to acquire, 20% or more of the Common Stock (or securities convertible into or exercisable for Common Stock) or the voting power of the Company on a post-transaction basis.

Exceptions:

(If no exceptions, write "none." If left blank, response will be deemed to be "none.")

8. The Investor represents that it has received or can obtain on the Commission's EDGAR filing system the Base Prospectus, which is part of the Company's Registration Statement, the documents incorporated by reference therein, and any free writing prospectus (collectively, the "**Disclosure Package**"), prior to or in connection with the receipt of this Agreement along with the Company's counterpart to this Agreement.

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9. No offer by the Investor to buy Units will be accepted and no part of the Purchase Price will be delivered to the Company until the Company has accepted such offer by countersigning a copy of this Agreement, and any such offer may be withdrawn or revoked, without obligation or commitment of any kind, at any time prior to the Company (or a Placement Agent on behalf of the Company) sending (orally, in writing, or by electronic mail) notice of its acceptance of such offer. An indication of interest will involve no obligation or commitment of any kind until this Agreement is accepted and countersigned by or on behalf of the Company.

Number of Units:	
Purchase Price Per Unit: \$3.50	
Aggregate Purchase Price: \$	

Please confirm that the foregoing correctly sets forth the agreement between us by signing in the space provided below for that purpose.

Dated as of June 10, 2011

INVESTOR
By:\_\_\_\_\_\_
Name:\_\_\_\_\_\_
Title:\_\_\_\_\_\_
Address:\_\_\_\_\_\_

Agreed and accepted this 10th day of June 2011:

PHARMATHENE, INC.

By:\_\_\_\_\_

Name:\_\_\_\_\_

Title:\_\_\_\_\_

Page 3

#### TERMS AND CONDITIONS FOR PURCHASE OF UNITS

1. Authorization and Sale of the Units. Subject to the terms and conditions of this Agreement, the Company has authorized the sale of the Units.

2. Agreement to Sell and Purchase the Units; Placement Agent.

2.1 At the Closing (as defined in Section 3.1 of this Annex I), the Company will sell to the Investor, and the Investor will purchase from the Company, upon the terms and conditions set forth herein, the number of Units set forth on the last page of the Agreement to which these Terms and Conditions for Purchase of Units are attached as <u>Annex I</u> (the "**Signature Page**") for the aggregate purchase price therefor set forth on the Signature Page.

2.2 The Company proposes to enter into substantially this same form of Subscription Agreement with certain other investors (the "**Other Investors**") and expects to complete sales of Units to them. The Investor and the Other Investors are hereinafter sometimes collectively referred to as the "**Investors**," and this Agreement and the Subscription Agreements executed by the Other Investors are hereinafter sometimes collectively referred to as the "**Agreements**."

2.3 The Investor acknowledges that the Company intends to pay Leerink Swann LLC (the "**Placement Agent**") a placement agent fee (the "**Placement Fee**") in respect of the sale of Units to the Investor and Noble Financial Capital Markets a financial advisory fee in connection with the Offering.

2.4 The Company has entered into a Placement Agency Agreement, dated June 10, 2011 (the "**Placement Agreement**"), with the Placement Agent that contains certain representations, warranties, covenants, and agreements of the Company that may be relied upon by the Investor, which shall be a third party beneficiary thereof. A copy of the Placement Agreement is available upon request.

#### 3. Closings and Delivery of the Units and Funds.

3.1 *Closing.* The completion of the purchase and sale of the Units (the "**Closing**") shall occur at a place and time (the "**Closing Date**") to be specified by the Company and the Placement Agent, and of which the Investors will be notified in advance by the Placement Agent, in accordance with Rule 15c6-1 promulgated under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"). The Closing is expected to occur on June 15, 2011. At the Closing, (a) the Company shall cause the Transfer Agent to deliver to the Investor the number of Shares set forth on the Signature Page registered in the name of the Investor or, if so indicated on the Investor Questionnaire attached hereto as <u>Schedule A</u>, in the name of a nominee designated by the Investor, (b) the Company shall cause to be delivered to the Investor a Warrant to purchase a number of whole Warrant Shares determined by multiplying the number of Shares set forth on the signature page by the Warrant Ratio and rounding down to the nearest whole number and (c) the aggregate purchase price for the Units being purchased by the Investor will be delivered by or on behalf of the Investor to the Company.

3.2 (a) *Conditions to the Company's Obligations*. The Company's obligation to issue and sell the Units to the Investor shall be subject to: (i) the receipt by the Company of the purchase price for the Units being purchased hereunder as set forth on the Signature Page and (ii) the accuracy of the representations and warranties made by the Investor and the fulfillment of those undertakings of the Investor to be fulfilled prior to the Closing Date.

Annex I - Page 1

(b) *Conditions to the Investor's Obligations.* The Investor's obligation to purchase the Units will be subject to the accuracy of the representations and warranties made by the Company and the fulfillment of those undertakings of the Company to be fulfilled prior to the Closing Date that are contained in the Placement Agreement and the Subscription Agreement, and to the condition that the Placement Agent shall not have determined that the conditions to the closing in the Placement Agreement have not been satisfied. The Investor's obligations are expressly not conditioned on the purchase by any or all of the Other Investors of the Units that they have agreed to purchase from the Company or the issuance of any minimum amount of Units by the Company.

3.3 Delivery of Funds by Electronic Book-Entry at The Depository Trust Company. No later than one (1) business day after the execution of this Agreement by the Investor and the Company, the Investor shall remit by wire transfer the amount of funds equal to the aggregate purchase price for the Units being purchased by the Investor to the following account designated by the Company and the Placement Agent pursuant to the terms of that certain Escrow Agreement (the "Escrow Agreement") dated as of June 10, 2011, by and among the Company, the Placement Agent and U.S. Bank National Association (the "Escrow Agreem"):

> Bank: U.S. Bank National Association ABA: \_\_\_\_\_\_ A/C: \_\_\_\_\_\_ BNF: U.S. Bank Trust N.A. OBI: Trust Finance Management Attn: Leerink-PharmAthene Escrow Ref: \_\_\_\_\_\_

Such funds shall be held in escrow until the Closing and delivered by the Escrow Agent on behalf of the Investors to the Company upon the satisfaction, in the reasonable judgment of the Placement Agent, of the conditions set forth in Section 3.2(b) hereof. The Placement Agent shall have no rights in or to any of the escrowed funds unless the Placement Agent and the Escrow Agent are notified in writing by the Company in connection with the Closing that a portion of the escrowed funds shall be applied to the Placement Fee and reimbursable expenses of the Placement Agent as contemplated by Section 2(e) of the Placement Agreement. The Company and the Investor agree to indemnify and hold the Escrow Agent and the Placement Agent harmless up to its pro-rata share based on its investment amount from and against any and all losses, costs, damages, expenses and claims (including, without limitation, court costs and reasonable attorneys fees) ("**Losses**") arising under this Section 3.3 or otherwise with respect to the funds held in escrow pursuant hereto or arising under the Escrow Agreement, unless it is finally determined that such Losses resulted directly from the willful misconduct or gross negligence of the Escrow Agent or the Placement Agent. Anything in this Agreement to the contrary notwithstanding, in no event shall the Escrow Agent or the Placement Agent be liable for any special, indirect or consequential loss or damage of any kind whatsoever (including but not limited to lost profits), even if the Escrow Agent or the Placement Agent has been advised of the likelihood of such loss or damage and regardless of the form of action.

3.4 Delivery of Shares by Electronic Book-Entry at The Depository Trust Company. No later than one (1) business day after the execution of this <u>Agreement by the Investor and the Company</u>, the Investor shall direct the custodial agent or broker-dealer at which the account or accounts to be credited with the Shares being purchased by such Investor are maintained, which custodial agent or broker/dealer shall be a DTC participant, to set up a Deposit/Withdrawal at Custodian ("DWAC") instructing Continental Stock Transfer & Trust Company, the Company's transfer agent, to credit such account or accounts with the Shares by means of an electronic book-entry delivery. Such DWAC shall indicate the settlement date for the deposit of the Shares, which date shall be provided to the Investor by the Placement Agent. Simultaneously with the delivery to the Company by the Escrow Agent of the funds held in escrow pursuant to Section 3.3 above, the Company shall direct its transfer agent to credit the Investor's account or accounts with the Shares pursuant to the information contained in the DWAC.

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#### 4. Representations, Warranties and Covenants of the Investor.

4.1 The Investor represents and warrants to, and covenants with, the Company that (a) the Investor is knowledgeable, sophisticated and experienced in making, and is qualified to make decisions with respect to, investments in shares presenting an investment decision like that involved in the purchase of the Units, including investments in securities issued by the Company and investments in comparable companies, and has requested, received, reviewed and considered all information it deemed relevant in making an informed decision to purchase the Units, (b) the Investor has answered all questions on the Signature Page and the Investor Questionnaire for use in preparation of the Prospectus Supplement and the answers thereto are true and correct as of the date hereof and will be true and correct as of the Closing Date and (c) the Investor, in connection with its decision to purchase the number of Units set forth on the Signature Page, has reviewed the Disclosure Package and is relying only upon the Disclosure Package and the representations and warranties of the Company contained herein and the Placement Agreement.

4.2 The Investor acknowledges, represents and agrees that no action has been or will be taken in any jurisdiction outside the United States by the Company or the Placement Agent that would permit an offering of the Units, or possession or distribution of offering materials in connection with the issue of the Units in any jurisdiction outside the United States where action for that purpose is required. Each Investor outside the United States will comply with all applicable laws and regulations in each foreign jurisdiction in which it purchases, offers, sells or delivers Units or has in its possession or distributes any offering material, in all cases at its own expense. The Placement Agent is not authorized to make and have not made any representation or use of any information in connection with the issue, placement, purchase and sale of the Units, except as set forth or incorporated by reference in the Disclosure Package.

4.3 The Investor further represents and warrants to, and covenants with, the Company that (a) the Investor has full right, power, authority and capacity to enter into this Agreement and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Agreement, and (b) this Agreement constitutes a valid and binding obligation of the Investor enforceable against the Investor in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law) and except as the indemnification agreements of the Investors herein may be legally unenforceable.

4.4 The Investor understands that nothing in this Agreement, the Prospectus or any other materials presented to the Investor in connection with the purchase and sale of the Units constitutes legal, tax or investment advice. The Investor has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of Units.

4.5 Each Investor represents, warrants and agrees that, since the earlier to occur of (i) the date on which any Placement Agent first contacted such Investor about the Offering and (ii) the date of this Agreement, it has not engaged in any transactions in the securities of the Company in violation of securities laws (including, without limitation, any Short Sales involving the Company's securities). Each Investor covenants that it will not engage in any transactions in the securities of the Company (including Short Sales) prior to the time that the transactions contemplated by this Agreement are publicly disclosed. Each Investor agrees that it will not use any of the Securities acquired pursuant to this Agreement to cover any short position in the Common Stock if doing so would be in violation of applicable securities laws. For purposes hereof, "Short Sales" include, without limitation, all "short sales" as defined in Rule 200 promulgated under Regulation SHO under the Exchange Act, whether or not against the box, and all types of direct and indirect stock pledges, forward sales contracts, options, puts, calls, short sales, swaps, "put equivalent positions" (as defined in Rule 16a-1(h) under the Exchange Act) and similar arrangements (including on a total return basis), and sales and other transactions through non-US broker dealers or foreign regulated brokers.

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5. *Survival of Representations, Warranties and Agreements; Third Party Beneficiary.* Notwithstanding any investigation made by any party to this Agreement or by the Placement Agent, all covenants, agreements, representations and warranties made by the Company and the Investor herein will survive the execution of this Agreement, the delivery to the Investor of the Units being purchased and the payment therefor. The Placement Agent shall be a third party beneficiary with respect to representations, warranties and agreements of the Investor in Section 4 hereof.

6. *Notices*. All notices, requests, consents and other communications hereunder will be in writing, will be mailed (a) if within the domestic United States by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, or by facsimile or (b) if delivered from outside the United States, by International Federal Express or facsimile, and will be deemed given (i) if delivered by first-class registered or certified mail domestic, three business days after so mailed, (ii) if delivered by nationally recognized overnight carrier, one business day after so mailed, (iii) if delivered by International Federal Express, two business days after so mailed and (iv) if delivered by facsimile, upon electric confirmation of receipt and will be delivered and addressed as follows:

6.1 if to the Company, to:

PharmAthene, Inc. One Park Place Suite 450 Annapolis, MD 21401 Facsimile: 410-269-2601 Attention: Chief Financial Officer

with copies to: SNR Denton US LLP 1221 Avenue of the Americas New York, NY 10020 Facsimile: 212-768-6800 Attention: Jeffrey A. Baumel, Esq.

6.2 if to the Investor, at its address on the Signature Page hereto, or at such other address or addresses as may have been furnished to the Company in writing.

7. Changes. This Agreement may not be modified or amended except pursuant to an instrument in writing signed by the Company and the Investor.

8. *Headings*. The headings of the various sections of this Agreement have been inserted for convenience of reference only and will not be deemed to be part of this Agreement.

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9. *Severability.* In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein will not in any way be affected or impaired thereby.

10. *Governing Law*. This Agreement will be governed by, and construed in accordance with, the internal laws of the State of Delaware, without giving effect to the principles of conflicts of law that would require the application of the laws of any other jurisdiction.

11. *Counterparts*. This Agreement may be executed in two or more counterparts, each of which will constitute an original, but all of which, when taken together, will constitute but one instrument, and will become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. The Company and the Investor acknowledge and agree that the Company shall deliver its counterpart to the Investor along with the Base Prospectus and the Prospectus Supplement (or the filing by the Company of an electronic version thereof with the Commission).

12. *Confirmation of Sale*. The Investor acknowledges and agrees that such Investor's receipt of the Company's counterpart to this Agreement, together with the Base Prospectus and the Prospectus Supplement (or the filing by the Company of an electronic version thereof with the Commission), shall constitute written confirmation of the Company's sale of Units to such Investor.

13. *Press Release*. The Company and the Investor agree that the Company shall issue a press release announcing the material terms of the Offering prior to the opening of the financial markets in New York City on the business day immediately after the date hereof to the extent permitted by applicable law and the rules and regulations of the Commission.

14. *Termination*. In the event that the Placement Agent shall have determined that the conditions to the closing in the Placement Agreement have not been satisfied, this Agreement shall terminate without any further action on the part of the parties hereto.

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## SCHEDULE A TO ANNEX I

## PHARMATHENE, INC.

## **INVESTOR QUESTIONNAIRE**

Pursuant to Section 3 of <u>Annex I</u> to the Agreement, please provide us with the following information:

1. The exact name that your Shares and Warrants are to be registered in. You may use a nominee name if appropriate:

- 2. The relationship between the Investor and the registered holder listed in response to item 1 above:
- 3. The mailing address of the registered holder listed in response to item 1 above:

4. The Social Security Number or Tax Identification Number of the registered holder listed in the response to item 1 above:

5. Name of DTC Participant (custodial agent or broker-dealer at which the account or accounts to be credited with the Shares are maintained); please include the name and telephone number of the contract person at the custodial agent or broker-dealer:

6. DTC Participant Number:

- 7. Name of Account at DTC Participant being credited with the Shares:
- 8. Account Number at DTC Participant being credited with the Shares:

#### PHARMATHENE, INC. WARRANT TO PURCHASE COMMON STOCK To Purchase \_\_\_\_\_ Shares of Common Stock

#### Date of Issuance: June 15, 2011

## VOID AFTER June 15, 2016

THIS CERTIFIES THAT, for value received, \_\_\_\_\_\_, or permitted registered assigns (the "**Holder**"), is entitled to subscribe for and purchase at the Exercise Price (defined below) from PharmAthene, Inc., a Delaware corporation (the "**Company**"), up to \_\_\_\_\_\_ shares of the common stock of the Company, par value \$.0001 per share (the "**Common Stock**"). This warrant is one of a series of warrants issued by the Company as of the date hereof (individually a "**Warrant**"; collectively, "**Company Warrants**") pursuant to those certain subscription agreements between the Company and each of the Investors, each dated as of June 10, 2011 (each, a "**Subscription Agreement**").

1. <u>DEFINITIONS</u>. Capitalized terms used herein but not otherwise defined herein shall have their respective meanings as set forth in the Subscription Agreement. As used herein, the following terms shall have the following respective meanings:

(A) **"Eligible Market**" means any of the NYSE Amex, New York Stock Exchange, The NASDAQ Global Market, The NASDAQ Global Market, The NASDAQ Capital Market.

(B) **"Exercise Period**" shall mean the period commencing on the date hereof and ending five years from the date hereof, unless sooner terminated as provided below.

(C) **"Exercise Price**" shall mean \$3.50 per share, subject to adjustment pursuant to <u>Section 4</u> below.

(D) "Exercise Shares" shall mean the shares of Common Stock issuable upon exercise of this Warrant.

(E) **"Trading Day**" shall mean (a) any day on which the Common Stock is listed or quoted and traded on its primary Trading Market, (b) if the Common Stock is not then listed or quoted and traded on any Eligible Market, then a day on which trading occurs on the OTC Bulletin Board (or any successor thereto), or (c) if trading does not occur on the OTC Bulletin Board (or any successor thereto), any Business Day.

(F) **"Trading Market**" shall mean the OTC Bulletin Board or any other Eligible Market, or any national securities exchange, market or trading or quotation facility on which the Common Stock is then listed or quoted.

2. <u>EXERCISE OF WARRANT</u>. The rights represented by this Warrant may be exercised in whole or in part at any time during the Exercise Period, by delivery of the following to the Company at its address set forth on the signature page hereto (or at such other address as it may designate by notice in writing to the Holder):

(A) An executed Notice of Exercise in the form attached hereto;

(B) Payment of the Exercise Price either (i) in cash or by check or (ii) pursuant to Section 2.1 below; and

## (C) This Warrant.

Execution and delivery of the Notice of Exercise shall have the same effect as cancellation of the original Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Exercise Shares, if any.

Certificates for shares purchased hereunder shall be transmitted by the transfer agent of the Company to the Holder by crediting the account of the Holder's prime broker with the Depository Trust Company through its Deposit Withdrawal Agent Commission system if the Company is a participant in such system, and otherwise by physical delivery to the address specified by the Holder in the Notice of Exercise within three business days from the delivery to the Company of the Notice of Exercise, surrender of this Warrant and payment of the aggregate Exercise Price as set forth above. This Warrant shall be deemed to have been exercised on the date the Notice of Exercise and Exercise Price (whether paid in cash, check or pursuant to Section 2.1 below) are received by the Company. For the avoidance of doubt, in the case of a net exercise, the Warrant shall be deemed to have been exercised upon receipt by the Company of the Notice of Exercise with the section indicating exercise by net exercise filled out.

The person in whose name any certificate or certificates for Exercise Shares are to be issued upon exercise of this Warrant shall be deemed to have become the holder of record of such shares on the date on which the Notice of Exercise is received by the Company and payment of the Exercise Price was made (whether by cash, check or pursuant to Section 2.1 below), irrespective of the date of delivery of such certificate or certificates, except that, if the date of such surrender and payment is a date when the stock transfer books of the Company are closed, such person shall be deemed to have become the holder of such shares at the close of business on the next succeeding date on which the stock transfer books are open.

Subject to the final sentence of this paragraph and to the extent permitted by law, the Company's obligations to issue and deliver Exercise Shares in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any person or entity or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other person or entity of any obligation to the Company or any violation or alleged violation of law by the Holder or any other person or entity, and irrespective of any other circumstance which might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Exercise Shares. The Holder shall, subject to the following proviso, have the right to pursue any remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver Exercise Shares upon exercise of this Warrant as required pursuant to the terms hereof; *provided, however*, that notwithstanding anything to the contrary in this Warrant or in the Subscription Agreements, if the Company is for any reason unable to deliver Exercise Shares upon exercise of this Warrant as required pursuant to the terms hereof, the Company shall have no obligation to pay to the Holder any cash or other consideration or otherwise "net cash settle" this Warrant.

[Notwithstanding anything herein to the contrary, the Company shall not issue to the Holder, and the Holder may not acquire, a number of shares of Common upon exercise of this Warrant to the extent that, upon such exercise, the number of shares of Common Stock then beneficially owned by the Holder and its Affiliates and any other persons or entities whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") (including shares held by any "group" of which the Holder is a member, but excluding shares beneficially owned by virtue of the ownership of securities or rights to acquire securities that have limitations on the right to convert, exercise or purchase similar to the limitation set forth herein) would exceed 4.99% of the total number of shares of Common Stock then issued and outstanding (the "4.99% Cap"), provided that the4.99% Cap shall only apply to the extent that the Common Stock is deemed to constitute an "equity security" pursuant to Rule 13d-1(i) promulgated under the Exchange Act. For purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and applicable regulations of Section 13(d) of the Exchange Act. Upon the written request of the Holder, the Company shall, within two (2) Trading Days, confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding.]<sup>(1)</sup>

<sup>&</sup>lt;sup>(1)</sup> Bracketed section not included in all warrants of this series.

NET EXERCISE. If during the Exercise Period the fair market value of one share of the Common Stock is greater than the 21 Exercise Price (at the date of calculation as set forth below), in lieu of exercising this Warrant by payment of cash or by check, the Holder may effect a "net exercise" of this Warrant, in which event, if so effected, the Holder shall receive Exercise Shares equal to the value (as determined below) of this Warrant (or the portion thereof being canceled) by surrender of this Warrant at the principal office of the Company together with the properly endorsed Notice of Exercise in which event the Company shall issue to the Holder a number of shares of Common Stock computed using the following formula:

# $X = \frac{Y (A-B)}{A}$

- the number of Exercise Shares to be issued to the Holder Where = Х
  - Y = the number of Exercise Shares with respect to which this Warrant is being exercised
  - А = the Fair Market Value (as defined below) of one share of the Company's Common Stock (at the date of such calculation)
  - = В Exercise Price (as adjusted to the date of such calculation)

For purposes of this Warrant, the "Fair Market Value" of one share of Common Stock shall mean (i) the closing sales price for the shares of Common Stock on NYSE Amex or other Eligible Market where the Common Stock is listed or traded as reported by Bloomberg Financial Markets (or a comparable reporting service of national reputation selected by the Company and reasonably acceptable to the Holder if Bloomberg Financial Markets is not then reporting sales prices of such security) (collectively, "Bloomberg") on the last trading day prior to the Exercise Date, or (ii) if an Eligible Market is not the principal Trading Market for the shares of Common Stock, the closing sales price reported by Bloomberg on the principal Trading Market for the Common Stock on the last trading day prior to the Exercise Date, or (iii) if neither of the foregoing applies, the last sales price of such security in the overthe-counter market on the pink sheets or bulletin board for such security as reported by Bloomberg, or if no sales price is so reported for such security, the last bid price of such security as reported by Bloomberg or (iv) if fair market value cannot be calculated as of such date on any of the foregoing bases, the fair market value shall be as determined by the Board of Directors of the Company in the exercise of its good faith judgment.

ISSUANCE OF NEW WARRANTS. Upon any partial exercise of this Warrant, the Company, at its expense, will forthwith and, 2.2. in any event within five business days, issue and deliver to the Holder a new warrant or warrants of like tenor, registered in the name of the Holder, exercisable, in the aggregate, for the balance of the number of shares of Common Stock remaining available for purchase under this Warrant.

2.3. <u>PAYMENT OF TAXES AND EXPENSES</u>. The Company shall pay any recording, filing, stamp or similar tax which may be payable in respect of any transfer involved in the issuance of, and the preparation and delivery of certificates (if applicable) representing, (i) any Exercise Shares purchased upon exercise of this Warrant and/or (ii) new or replacement warrants in the Holder's name or the name of any transferee of all or any portion of this Warrant; provided, however, that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance, delivery or registration of any certificates for Exercise Shares or Warrants in a name other than that of the Holder. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Exercise Shares upon exercise hereof.

## 3. <u>COVENANTS OF THE COMPANY</u>.

3.1. <u>COVENANTS AS TO EXERCISE SHARES</u>. The Company covenants and agrees that all Exercise Shares that may be issued upon the exercise of the rights represented by this Warrant will, upon issuance, be validly issued and outstanding, fully paid and nonassessable, and free from all taxes, liens and charges with respect to the issuance thereof. The Company further covenants and agrees that the Company will at all times during the Exercise Period, have authorized and reserved, free from preemptive rights, a sufficient number of shares of Common Stock to provide for the exercise of the rights represented by this Warrant. If at any time during the Exercise Period the number of authorized but unissued shares of Common Stock shall not be sufficient to permit exercise of this Warrant, the Company will use its commercially reasonable efforts to take such corporate action in compliance with applicable law as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes.

3.2. <u>NOTICES OF RECORD DATE AND CERTAIN OTHER EVENTS</u>. In the event of any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, the Company shall mail to the Holder, at least fifteen (15) days prior to the date on which any such record is to be taken for the purpose of such dividend or distribution, a notice specifying such date. In the event of any voluntary dissolution, liquidation or winding up of the Company, the Company shall mail to the Holder, at least fifteen (15) days prior to the date of any such event, a notice specifying such date. In the event the Company authorizes or approves, enters into any agreement contemplating, or solicits stockholder approval for any Fundamental Transaction, as defined in <u>Section 6</u> herein, the Company shall mail to the Holder, at least fifteen (15) days prior to the date of the occurrence of such event, a notice specifying such date. Notwithstanding the foregoing, the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

4. <u>ADJUSTMENT OF EXERCISE PRICE AND SHARES</u>. The Exercise Price and number of Exercise Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this <u>Section 4</u>.

(A) If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, (ii) subdivides outstanding shares of Common Stock into a larger number of shares, or (iii) combines outstanding shares of Common Stock into a smaller number of shares, then in each such case (x) the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event and (y) the Exercise Shares shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock outstanding immediately after such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately before such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination.

(B) If the Company, at any time while this Warrant is outstanding, distributes to holders of Common Stock (i) evidences of its indebtedness, (ii) any security (other than a distribution of Common Stock covered by the preceding paragraph), (iii) rights or warrants to subscribe for or purchase any security, or (iv) any other asset (in each case, "**Distributed Property**"), then in each such case the Holder shall be entitled upon exercise of this Warrant for the purchase of any or all of the Exercise Shares, to receive the amount of Distributed Property which would have been payable to the Holder had such Holder been the holder of such Exercise Shares on the record date for the determination of stockholders entitled to such Distributed Property. The Company will at all times set aside in escrow and keep available for distribution to such holder upon exercise of this Warrant a portion of the Distributed Property to satisfy the distribution to which such Holder is entitled pursuant to the preceding sentence.

(C) Upon the occurrence of each adjustment pursuant to this Section 4, the Company at its expense will, at the written request of the Holder, promptly compute such adjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Exercise Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the Company's transfer agent.

5. <u>FRACTIONAL SHARES</u>. No fractional shares shall be issued upon the exercise of this Warrant as a consequence of any adjustment pursuant hereto. All Exercise Shares (including fractions) issuable upon exercise of this Warrant may be aggregated for purposes of determining whether the exercise would result in the issuance of any fractional share. If, after aggregation, the exercise would result in the issuance of a fractional share, the number of Exercise Shares to be issued will be rounded down to the nearest whole share.

FUNDAMENTAL TRANSACTIONS. If any capital reorganization, reclassification of the capital stock of the Company, consolidation or 6. merger of the Company with another entity in which the Company is not the survivor, or sale, transfer or other disposition of all or substantially all of the Company's assets to another entity shall be effected (any such transaction being hereinafter referred to as a "Fundamental Transaction"), then the Company shall use its commercially reasonable efforts to ensure that lawful and adequate provision shall be made whereby the Holder shall thereafter have the right to purchase and receive upon the basis and upon the terms and conditions herein specified and in lieu of the Exercise Shares immediately theretofore issuable upon exercise of this Warrant, such shares of stock, securities or assets as would have been issuable or payable with respect to or in exchange for a number of Exercise Shares equal to the number of Exercise Shares immediately theretofore issuable upon exercise of this Warrant, had such reorganization, reclassification, consolidation, merger, sale, transfer or other disposition not taken place, and in any such case appropriate provision shall be made with respect to the rights and interests of the Holder to the end that the provisions hereof (including, without limitation, provision for adjustment of the Exercise Price) shall thereafter be applicable, as nearly equivalent as may be practicable in relation to any share of stock, securities or assets thereafter deliverable upon the exercise thereof. The Company shall not effect any such consolidation, merger, sale, transfer or other disposition unless prior to or simultaneously with the consummation thereof the successor entity (if other than the Company) resulting from such consolidation or merger, or the entity purchasing or otherwise acquiring such assets or other appropriate corporation or entity shall assume the obligation to deliver to the Holder, at the last address of the Holder appearing on the books of the Company, such shares of stock, securities or assets as, in accordance with the foregoing provisions, the Holder may be entitled to purchase, and the other obligations under this Warrant. The provisions of this Section 6 shall similarly apply to successive reorganizations, reclassifications, consolidations, mergers, sales, transfers or other dispositions, each of which transactions shall also constitute a Fundamental Transaction.

7. <u>NO STOCKHOLDER RIGHTS</u>. Other than as provided in <u>Section 3.2</u> or otherwise herein, this Warrant in and of itself shall not entitle the Holder to any voting rights or other rights as a stockholder of the Company.

8. <u>TRANSFER OF WARRANT</u>. Subject to applicable laws and the restriction on transfer set forth in the Subscription Agreement, this Warrant and all rights hereunder are transferable, by the Holder in person or by duly authorized attorney, upon delivery of this Warrant and the form of assignment attached hereto to any transferee designated by Holder. The transferee shall sign an investment letter in form and substance reasonably satisfactory to the Company and its counsel. Any purported transfer of all or any portion of this Warrant in violation of the provisions of this Warrant shall be null and void.

9. LOST, STOLEN, MUTILATED OR DESTROYED WARRANT. If this Warrant is lost, stolen, mutilated or destroyed, the Company may, on such terms as to indemnity or otherwise as it may reasonably impose (which shall, in the case of a mutilated Warrant, include the surrender thereof), issue a new Warrant of like denomination and tenor as this Warrant so lost, stolen, mutilated or destroyed. Any such new Warrant shall constitute an original contractual obligation of the Company, whether or not the allegedly lost, stolen, mutilated or destroyed Warrant shall be at any time enforceable by anyone.

10. <u>NOTICES, ETC</u>. All notices required or permitted hereunder shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed facsimile to the facsimile number specified in writing by the recipient if sent during normal business hours of the recipient on a Trading Day, if not, then on the next Trading Day or (c) the next Trading Day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at the address listed on the signature page hereto and to Holder at the applicable address set forth on the applicable signature page to the Subscription Agreement or at such other address as the Company or Holder may designate by ten (10) days advance written notice to the other parties hereto.

11. <u>ACCEPTANCE</u>. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

12. <u>GOVERNING LAW</u>. This Warrant and all rights, obligations and liabilities hereunder shall be governed by, and construed in accordance with, the internal laws of the State of New York, without giving effect to the principles of conflicts of law that would require the application of the laws of any other jurisdiction.

13. <u>AMENDMENT OR WAIVER</u>. Any term of this Warrant may be amended or waived (either generally or in a particular instance and either retroactively or prospectively) with the written consent of the Company and the holders of Company Warrants representing at least two-thirds of the number of shares of Common Stock then subject to outstanding Company Warrants. Notwithstanding the foregoing, (a) this Warrant may be amended and the observance of any term hereunder may be waived without the written consent of the Holder only in a manner which applies to all Company Warrants in the same fashion and (b) the number of Exercise Shares subject to this Warrant and the Exercise Price of this Warrant may not be amended, and the right to exercise this Warrant may not be waived, without the written consent of the Holder. The Company shall give prompt written notice to the Holder of any amendment hereof or waiver hereunder that was effected without the Holder's written consent. No waivers of any term, condition or provision of this Warrant, in any one or more instances, shall be deemed to be, or construed as, a further or continuing waiver of any such term, condition or provision.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its duly authorized officer as of June 15, 2011.

## PHARMATHENE, INC.

\_\_\_\_\_

By:\_\_\_\_

Name:\_\_\_\_\_

Title:

One Park Place, Suite 450 Annapolis, MD 21401

#### NOTICE OF EXERCISE

## TO: PHARMATHENE, INC.

- (1) [\_] The undersigned hereby elects to purchase [\_] shares of the common stock, par value \$.0001 (the "Common Stock"), of PHARMATHENE, INC. (the "Company") pursuant to the terms of the attached Warrant, and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.
  - [\_] The undersigned hereby elects to purchase [\_\_\_\_] shares of Common Stock of the Company pursuant to the terms of the net exercise provisions set forth in Section 2.1 of the attached Warrant, and shall tender payment of all applicable transfer taxes, if any.
- (2) Please issue the certificate for shares of Common Stock in the name of:

(Print or Type Name)

(Social Security or other Identifying Number)

(Street Address)

(City, State, Zip Code)

(3) If such number of shares shall not be all the shares purchasable upon the exercise of the Warrants evidenced by this Warrant, a new warrant certificate for the balance of such Warrants remaining unexercised shall be registered in the name of and delivered to:

Please insert social security or other identifying number:

(Please Print Name and Address)

Dated:

(Signature)

(Print name)

## ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name:

(Please print)

Address:

(Please print)

Dated: \_\_\_\_\_\_, 20[\_\_]

Holder's Signature: \_\_\_\_\_

Holder's Address:

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant

## FOR IMMEDIATE RELEASE



Contact: Stacey Jurchison PharmAthene, Inc. Phone: (410) 269-2610 Stacey.Jurchison@PharmAthene.com

## PHARMATHENE ANNOUNCES \$6.5 MILLION REGISTERED DIRECT OFFERING

ANNAPOLIS, MD – June 10, 2011 – PharmAthene, Inc. (NYSE Amex: PIP), a biodefense company developing medical countermeasures against biological and chemical threats, announced today that it has entered into subscription agreements with certain institutional investors to sell approximately \$6.5 million of its common stock and warrants in a registered direct offering.

Under the terms of the subscription agreements, at closing, PharmAthene will sell an aggregate of 1,857,143 units for a purchase price of \$3.50 per unit, with each unit consisting of one share of common stock and one warrant to purchase 0.2 of a share of common stock. The warrants will have a five year term and will be immediately exercisable at an exercise price of \$3.50 per share.

The offering is expected to close on or about June 15, 2011 subject to the satisfaction of customary closing conditions. The net proceeds are expected to be approximately \$5.8 million after placement agent fees and other offering expenses. PharmAthene intends to use the net proceeds from the offering for general corporate purposes.

Leerink Swann is serving as lead placement agent with Noble Financial Capital Markets serving as co-placement agent in the offering. The securities described above are being offered by PharmAthene pursuant to a registration statement previously filed and declared effective by the Securities and Exchange Commission. Additional information and details with respect to the offering are included in a prospectus supplement that PharmAthene has filed with the Securities and Exchange Commission. The registration statement and prospectus supplement may be obtained from the Securities and Exchange Commission's website at www.sec.gov. This press release does not constitute an offer to sell, nor is it a solicitation of an offer to buy any securities, nor shall there be any sale of the securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful. The securities may be offered only by means of the prospectus supplement and the related prospectus.



## About PharmAthene, Inc.

PharmAthene is a biodefense company engaged in the development and commercialization of medical countermeasures against biological and chemical

weapons. Its current lead product candidates are:

- · SparVax<sup>™</sup>, a second generation recombinant protective antigen ("rPA") anthrax vaccine,
- $\cdot$  Valortim®, a fully human monoclonal antibody for the prevention and treatment of anthrax infection, and
- BChE (recombinant butyrylcholinesterase), countermeasures for nerve agent poisoning by organophosphorous compounds, including nerve gases and pesticides.

#### **Statement on Cautionary Factors**

Except for the historical information presented herein, matters discussed may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to certain risks and uncertainties that could cause actual results to differ materially from any future results, performance or achievements expressed or implied by such statements. Statements that are not historical facts, including statements preceded by, followed by, or that include the words "potential"; "believe"; "anticipate"; "intend"; "plan"; "expect"; "estimate"; "could"; "may"; "should"; "will"; "project"; "potential"; or similar statements are forward-looking statements. PharmAthene disclaims any intent or obligation to update these forward-looking statements other than as required by law. Risks and uncertainties include risk associated with the reliability of the results of the studies relating to human safety and possible adverse effects resulting from the administration of the Company's product candidates, unexpected funding delays and/or reductions or elimination of U.S. government funding for one or more of the Company's development programs, the award of government contracts to our competitors, unforeseen safety issues, challenges related to the development, scale-up, technology transfer, and/or process validation of manufacturing processes for our product candidates, unexpected determinations that these product candidates prove not to be effective and/or capable of being marketed as products, challenges related to the implementation of our NYSE Amex compliance plan as well as risks detailed from time to time in PharmAthene's Forms 10-K and 10-Q under the caption "Risk Factors" and in its other reports filed with the U.S. Securities and Exchange Commission (the "SEC"). In particular, there can be no assurance that the Company will prevail in its lawsuit against Siga, or that even if the court rules in the Company's favor, the court will award monetary damages or other remedies adequate to fully compensate the Company for its losses. Further, significant additional non-clinical animal studies, human clinical trials, and manufacturing development work remain to be completed for Valortim®. Copies of PharmAthene's public disclosure filings are available from its investor relations department and our website under the investor relations tab at www.PharmAthene.com.

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