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): October 29, 2010

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

<u>Delaware</u> (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)

follo	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 wing 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)
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
	Pre-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 October 29, 2010, PharmAthene, Inc. (the "Company") entered into an underwriting agreement (the "Underwriting Agreement") with Roth Capital Partners, LLC (the "Underwriter"), relating to the issuance and sale of an aggregate of 4,300,000 shares of the Company's common stock, at a public offering price of \$3.50 per share (the "Offering"). The Company expects to receive net proceeds of approximately \$14.1 million from the Offering before the payment of offering expenses payable by the Company. In the Underwriting Agreement, the Company also granted the Underwriter an option to acquire an additional 645,000 shares of common stock solely to cover overallotments made in connection with the Offering. In addition, the Company agreed to reimburse the Underwriter for certain expenses incurred by it in connection with the Offering (including reasonable attorney's fees and expenses) up to \$55,000. A copy of the Underwriting Agreement is attached as Exhibit 1.1 to this Current Report on Form 8-K, and is incorporated herein by reference.

The Company also engaged Noble Financial Group, Inc. ("Noble") to serve as its non-exclusive financial advisor in connection with the Offering. Noble will receive a financial advisory fee of \$75,000, which will reduce the underwriting discount payable to the Underwriter in connection with the Offering.

The net proceeds of the Offering will be used to repay certain indebtedness of the Company and for general corporate purposes.

The description of the Offering provided herein is qualified in its entirety by reference to the Underwriting Agreement, a copy of which is filed as an exhibit to this report. The Company has filed the Underwriting Agreement as required by the rules and regulations of the Securities and Exchange Commission (the "Commission"). The Underwriting Agreement 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 thereof and in the context of the specific relationship between the parties. The provisions of the Underwriting Agreement, including the representations and warranties contained therein, are not for the benefit of any party other than the parties thereto and are not intended to be relied upon by investors and the public. Rather, investors and the public should look to the Company's filings with the Commission for information regarding the Company.

The Shares are being issued pursuant to a prospectus supplement dated October 29, 2010, filed with the Commission pursuant to Rule 424(b) under the Securities Act, 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.

On October 29, 2010, eight of the Company's note holders (including five affiliated funds) elected to convert their 10% senior convertible notes pursuant to an early conversion agreement (the "Early Conversion Agreement"). In exchange for the note holders' election to convert the notes prior to their July 2011 maturity, in addition to receiving shares of the Company's common stock as a result of the conversion, they received cash payments corresponding to the interest foregone, i.e. the interest such holders would have received between the conversion date and the maturity date had they held the note through maturity. Such holders are affiliates, officers or directors of PharmAthene. A copy of the Early Conversion Agreement is attached as Exhibit 1.2 to this Current Report on Form 8-K, and is incorporated herein by reference.

On October 28, 2010, the Company issued a press release announcing that it intended to conduct the Offering. The text of the press release is included as Exhibit 99.1 to this Form 8-K and is incorporated herein by reference.

On October 29, 2010, the Company issued a press release announcing the specific terms and conditions of the Offering. The text of the press release is included as Exhibit 99.2 to this Form 8-K and is incorporated herein by reference.

Item 8.01 Other Events

As used in this section, the term "we", "us" and "our" refers to the Company.

On October 29, 2010, eight of the Company's note holders (including five affiliated funds) elected to convert their 10% senior convertible notes pursuant to an early conversion agreement (the "Early Conversion Agreement"). In exchange for the note holders' election to convert the notes prior to their July 2011 maturity, in addition to receiving shares of the Company's common stock as a result of the conversion, they received cash payments corresponding to the interest foregone, i.e. the interest such holders would have received between the conversion date and the maturity date had they held the note through maturity.

Conditional Listing on NYSE Amex

On July 26, 2010, we received a letter from the NYSE Amex, stating that we are not in compliance with the exchange's continued listing standards, specifically, Sections 1003(a)(i), (ii) and (iii) of the NYSE Amex Company Guide, because we have stockholders' equity of less than \$2.0 million, \$4.0 million and \$6.0 million and losses from continuing operations and net losses in two of our three most recent fiscal years, three of our four most recent fiscal years and our five most recent fiscal years, respectively.

On August 25, 2010, we submitted a plan to the NYSE Amex addressing how we intend to regain compliance with the continued listing standards by January 26, 2012, the end of the eighteen-month compliance period under NYSE Amex rules. Based on the information in our compliance plan and related discussions with exchange staff, the NYSE Amex determined that we had made a reasonable demonstration of our ability to regain compliance with Sections 1003(a)(i), (ii) and (iii) of the NYSE Amex Company Guide by January 26, 2012 and that it would continue the listing of our common stock subject to conditions. The conditions include (a) the requirement to provide exchange staff with updates on the initiatives included in our compliance plan, at least once each quarter concurrent with our corresponding periodic SEC filing, (b) the periodic review of our compliance with the plan by exchange staff, and (c) the approval of a NYSE Amex management committee prior to any issuances of additional shares of common stock. We currently believe that we are in compliance with these conditions. If we do not show progress consistent with our compliance plan, or we do not meet the continued listing standards by January 26, 2012, the NYSE Amex could initiate delisting proceedings. We may appeal any delisting determination before a listing qualifications panel of the exchange and in turn request a review of the decision of such panel by the exchange's Committee on Securities.

Status of SIGA Litigation

In March 2010, Siga Technologies, Inc., or SIGA, filed a motion for summary judgment relating to our lawsuit filed against them in 2006. Oral argument was held in July 2010 and the court indicated that it would render a decision by the end of October 2010. If the court rules in favor of SIGA, significant claims in our case could be dismissed, drastically limiting our chances for a meaningful remedy. We cannot assure you that SIGA will not prevail on its motion for summary judgment or that if the case eventually proceeds to trial, we will prevail or even recover any costs or damages.

Conversion of Outstanding Convertible Senior Notes

As of the date of this prospectus supplement, convertible notes in the aggregate principal amount of approximately \$19.3 million, bearing interest of 10% per annum, are outstanding. These notes are convertible into up to approximately 8.5 million shares of our common stock (based on principal amount plus interest through the date of this prospectus supplement). Under the terms of the notes, each holder converting notes is entitled to receive a number of shares corresponding to principal and accrued interest through the date of conversion (plus any accrued and unpaid late charges). We have offered to pay any holder exercising his conversion right prior to maturity an amount in cash corresponding to the interest foregone, i.e., the interest the holder would have received between the conversion date and the maturity date had he held the note through maturity as disclosed above.

Any net proceeds of this offering not paid to holders of our convertible notes will be used for general corporate purposes.

Related Party Transactions

MPM Bioventures is purchasing 430,000 shares of our common stock in this offering under the same terms as they are offered to the public hereunder.

Certain of our affiliates, officers and directors (and their family members) own convertible senior notes due July 2011 and, assuming they convert their notes in accordance with the procedures outlined above, will receive cash payments from the proceeds of this offering corresponding to the interest foregone, i.e., the interest the holders would have received between the conversion date and the maturity date had they held the note through maturity.

In the alternative, to the extent we repay their Notes either upon a redemption or at maturity thereof, we would use the proceeds hereof for the benefit of such affiliates, officers and directors (and their family members). See "Use of Proceeds"

Update on Nerve Agent Countermeasure Program

In 2006 we entered into a contract with the U.S. Department of Defense ("DoD") to develop a medical countermeasure for nerve agent exposure to protect the warfighter. This program utilizes the recombinant enzyme butyrylcholinesterase, or "rBChE", a naturally occurring bioscavenger, as its active ingredient. Our first generation program for producing rBChE, which we refer to as Protexia®, utilizes transgenic goats to produce the enzyme in their milk. We have also been working on a second generation approach, which we refer to as our Advanced Expression System, or "AES", that utilizes a mammalian-cell-based expression system for rBChE.

While the AES technology is still at an early research stage, if our efforts are successful, we believe this cell-based approach could have significant advantages over the transgenic goat-based approach originally developed to produce Protexia®. Specifically, we believe these advantages could include:

- An established manufacturing platform, consistent with those used for other biotechnology products and with the U.S. government's recent advanced manufacturing system initiative.
- Final product with a pharmacokinetic (PK) profile that more closely resembles naturally occurring butyrylcholinesterase, or BChE, from human blood plasma.
- Higher production yields than a transgenic goat based approach.
- Substantially lower costs of production to yield significant savings to our DoD customer.
- A more traditional regulatory path to FDA licensure.
- Greater ability to scale up production if demand increases.

The DoD has recently informed us that it is deferring a decision on whether to fund advanced development of Protexia® for the time being, potentially for several years, due to budget constraints and concerns about potential duration of protection with the current route of Protexia® administration as compared to the human blood plasma derived BChE product. DoD has said they need more data regarding the duration of protection of Protexia® before making a decision regarding future advanced development funding, and it is unclear at this time how long and what the cost would be to address their concerns. As such, our existing September 2006 contract related to milk collection for Protexia® will not be extended past its current term, which ends on December 31, 2010.

The second generation AES approach is more consistent with the DoD requirements. We believe the AES could provide a potentially safe and effective nerve agent countermeasure for the warfighter in a shorter timeframe and at a more affordable cost than the transgenic goat-based product. Consequently, we plan to defer the decision on whether to generate the additional data DoD has requested, pending the results of our work on the AES.

In connection with the expiration of our current contract for milk collection for Protexia®, we will eliminate our transgenic goat operations and are in discussions with a third party to establish the capability to initiate production of the transgenic goat-based product at an FDA-licensed facility if the government decides to pursue development of this product again in the future. In the fourth quarter of 2010 and the first half of 2011, we expect to incur a modest amount of severance and other wind-down costs related to the termination of our Protexia®-related operations, but have not yet determined whether we will need to write down the net book value of our Protexia® related assets, and if required, how much that will be. We expect to complete this analysis in the fourth quarter 2010.

We are in advanced discussions with the DoD regarding a new contract to fund on-going research we have been conducting related to the production of rBChE using our AES. Based on those discussions, we currently anticipate that DoD will award a contract to us before the end of 2010 for up to \$5.9 million to support this initial work. We cannot assure you, however, that the contract will be awarded in this time frame, or at all, or of the specific terms of any such contract. Also, in September 2010 we submitted a white paper to the DoD for additional funding of up to approximately \$30 million over three years to support further development of the AES, including process development and manufacture of cGMP material for non-clinical and clinical testing, IND-enabling safety and toxicity studies, IND submission, and a Phase I human clinical study. If DoD approves the white paper, we can submit a formal proposal for funding this work. If DoD were to accept our proposal and award us such funding, it would likely not occur before the fourth quarter 2011.

Update on BARDA performance evaluation

In response to the performance evaluation for the period April 1, 2009 through April 30, 2010 we received from BARDA under our current contract for the advanced development of SparVaxTM, we have implemented key organizational changes and information sharing enhancements. We have received positive feedback from BARDA personnel in recent months. BARDA has also solicited our input regarding achievements since the last assessment by BARDA and agreed to provide an interim assessment prior to the end of the year, which we anticipate will recognize our improved execution.

Update on Valortim® partial clinical hold

As part of our investigational plan regarding the partial clinical hold on Valortim®, we conducted a subcutaneous skin testing study with five subjects, including the two subjects who had adverse reactions as part of our Valortim®/Ciprofloxacin study. There were no positive skin test reactions to Valortim® or it excipients, suggesting that the adverse reactions previously observed were not likely to be allergic reactions.

We recently presented this information to the FDA and the Safety Monitoring Committee (SMC) for Valortim®, which agreed with our plan to propose to FDA an intravenous (IV) dose-escalation study of Valortim® with a slower infusion rate than that used in the Valortim®/Ciprofloxacin study. We plan to send our final investigation plan report, IV dose escalation protocol, and SMC recommendations to FDA in early November, and believe that we are well-positioned for FDA to permit us to proceed with the dose escalation study, with dosing of the first subject scheduled for January 2011.

We updated BARDA during the course of our investigation, and the agency has continued to express interest in Valortim®. We plan to submit a white paper to BARDA for advanced development funding for Valortim® of in excess of \$100 million before the end of 2010, and subject to BARDA's agreement, submit a formal funding proposal as soon as possible thereafter.

Item 9.01 Financial Statements and Exhibits

(d) The following exhibits are filed herewith:

No.	Description		
1.1	Underwriting Agreement dated as of October 28, 2010 by and among the Company and Roth Capital Partners, LLC.		
1.2	Form of Early Conversion Agreement		
5.1	Opinion of SNR Denton US LLP.		
99.1	Press Release dated October 28, 2010.		
99.2	Press Release dated October 29, 2010.		

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: October 29, 2010 By: /s/ Charles A. Reinhart III

Charles A. Reinhart III

Senior Vice President and Chief Financial Officer

PHARMATHENE, INC.

4,300,000 Shares of Common Stock

UNDERWRITING AGREEMENT

October 29, 2010

Roth Capital Partners, LLC 24 Corporate Plaza Newport Beach, CA 92660

Ladies and Gentlemen:

PharmAthene, Inc., a Delaware corporation (the "<u>Company</u>"), proposes to issue and sell to Roth Capital Partners, LLC (the "<u>Underwriter</u>") pursuant to this Underwriting Agreement (this "<u>Agreement</u>") 4,300,000 shares (the "<u>Firm Securities</u>") of common stock, \$0.0001 par value (the "<u>Common Stock</u>"), of the Company. In addition, solely for the purpose of covering over-allotments, the Company proposes to grant to the Underwriter the option to purchase from the Company up to an additional 645,000 shares of Common Stock (the "<u>Additional Securities</u>"). The Firm Securities and the Additional Securities are hereinafter collectively referred to as the "<u>Securities</u>." The Securities are described in the Prospectus which is referred to below.

The Company has prepared and filed, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the "Act"), with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-3 (File No. 333-156997) under the Act (the "registration statement"), including a prospectus, which registration statement incorporates by reference documents which the Company has filed, or will file, in accordance with the provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the "Exchange Act"). Such registration statement has become effective under the Act.

Except where the context otherwise requires, "<u>Registration Statement</u>," as used herein, means the registration statement, as amended at the time of such registration statement's effectiveness (the "<u>Effective Time</u>"), including (i) all documents filed as a part thereof or incorporated or deemed to be incorporated by reference therein and (ii) any information contained or incorporated by reference in a prospectus filed with the Commission pursuant to Rule 424(b) under the Act, to the extent such information is deemed, pursuant to Rule 430B or Rule 430C under the Act, to be part of the registration statement at the Effective Time.

Except where the context otherwise requires, "Basic Prospectus," as used herein, means the base prospectus included as part of the Registration Statement, in the form in which it has most recently been filed with the Commission prior to the date of this Agreement. Except where the context otherwise requires, "Prospectus Supplement," as used herein, means the preliminary prospectus supplement (the "Preliminary Prospectus Supplement") and the final prospectus supplement relating to the Securities, each filed by the Company with the Commission pursuant to Rule 424(b) under the Act on or before the second business day after the date hereof (or such earlier time as may be required under the Act), in the form furnished by the Company to the Underwriter for use by the Underwriter and by dealers in connection with the offering of the Securities. Except where the context otherwise requires, "Prospectus," as used herein, means the Basic Prospectus as supplemented by the Prospectus Supplement.

"<u>Permitted Free Writing Prospectuses</u>," as used herein, means the documents listed on <u>Schedule I</u> attached hereto. The Underwriter has not offered or sold and will not offer or sell, without the Company's consent, any Securities by means of any "free writing prospectus" (as defined in Rule 405 under the Act) that is required to be filed by the Underwriter with the Commission pursuant to Rule 433 under the Act, other than a Permitted Free Writing Prospectus.

"<u>Disclosure Package</u>," as used herein, means the Basic Prospectus, together with the Preliminary Prospectus Supplement and the Permitted Free Writing Prospectuses, if any, and the information set forth on <u>Schedule II</u> attached hereto, taken as a whole.

"Time of Sale," as used herein, means 8:30 a.m. (Eastern time) on the date of this Agreement.

Any reference herein to the Registration Statement, the Basic Prospectus, the Prospectus Supplement, the Prospectus or any Permitted Free Writing Prospectus shall be deemed to refer to and include the documents, if any, incorporated by reference, or deemed to be incorporated by reference, therein (each an "Incorporated Document" and collectively, the "Incorporated Documents"), including, unless the context otherwise requires, the documents, if any, filed as exhibits to such Incorporated Documents. Any reference herein to the terms "amend," "amendment" or "supplement" with respect to the Registration Statement, the Basic Prospectus, the Prospectus Supplement, the Prospectus or any Permitted Free Writing Prospectus shall be deemed to refer to and include the filing of any document under the Exchange Act on or after the initial effective date of the Registration Statement, or the date of the Basic Prospectus, the Prospectus Supplement, the Prospectus or such Permitted Free Writing Prospectus, as the case may be, and deemed to be incorporated therein by reference.

As used in this Agreement, "business day" shall mean a day on which the NYSE Amex is open for trading. The terms "herein," "hereof," "hereto," "hereinafter" and similar terms, as used in this Agreement, shall in each case refer to this Agreement as a whole and not to any particular section, paragraph, sentence or other subdivision of this Agreement. The term "or," as used herein, is not exclusive.

The Company and the Underwriter agree as follows:

<u>SECTION 1.</u> <u>SALE AND PURCHASE</u>. On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company agrees to issue and sell the Firm Securities to the Underwriter, and the Underwriter agrees to purchase from the Company the Firm Securities. The pricing terms of the purchase of the Firm Securities by the Underwriter and the pricing terms of the offering of the Firm Securities to the public are as set forth in <u>Schedule II</u> hereto.

In addition, the Company hereby grants to the Underwriter the option to purchase, and upon the basis of the warranties and representations and subject to the terms and conditions herein set forth, the Underwriter shall have the right to purchase from the Company, all or a portion of the Additional Securities as may be necessary solely to cover over-allotments, if any, made in connection with the offering of the Firm Securities, at the same purchase price per share to be paid by the Underwriter to the Company for the Firm Securities. This option may be exercised by the Underwriter at any time and from time to time on or before the thirtieth (30th) day following the date hereof, by written notice to the Company. Such notice shall set forth the aggregate number of Additional Securities as to which the option is being exercised, and the date and time when the Additional Securities are to be delivered (such date and time being herein referred to as the "Additional Time of Purchase"); provided, however, that the Additional Time of Purchase shall not be earlier than the Time of Purchase (as defined below) nor earlier than the second business day after the date on which the option shall have been exercised nor later than the tenth business day after the date on which the option shall have been exercised.

SECTION 2. PAYMENT AND DELIVERY. Payment of the purchase price for the Firm Securities shall be made to the Company by Federal Funds wire transfer against delivery of the certificates for the Firm Securities to the Underwriter through the facilities of The Depository Trust Company ("DTC") for the account of the Underwriter. Such payment and delivery shall be made at 10:00 A.M., New York time, on November 3, 2010 (unless another time shall be agreed to by the Underwriter and the Company). The time at which such payment and delivery are to be made is hereinafter sometimes called the "Time of Purchase." Electronic transfer of the Firm Securities shall be made to the Underwriter at the Time of Purchase in such names and in such denominations as the Underwriter shall specify.

Payment of the purchase price for the Additional Securities shall be made at the Additional Time of Purchase in the same manner and at the same office as the payment for the Firm Securities. Electronic transfer of the Additional Securities shall be made to the Underwriter at the Additional Time of Purchase in such names and in such denominations as the Underwriter shall specify. The Time of Purchase and the Additional Time of Purchase are each sometimes referred to herein as a "Closing Date" and collectively as the "Closing Dates".

Deliveries of the documents described in <u>Section 6</u> hereof with respect to the purchase of the Securities shall be made at the offices of Lowenstein Sandler P.C., counsel for the Underwriter, located at 65 Livingston Avenue, Roseland, New Jersey, at 10:00 A.M., New York time, on the Closing Dates.

SECTION 3. REPRESENTATIONS AND WARRANTIES.

Except as set forth under the corresponding section of the Disclosure Schedules, which shall be deemed a part hereof, the Company hereby makes the representations and warranties set forth below to the Underwriter.

(A) <u>Registration Statement</u>. (i) The Registration Statement has heretofore become effective under the Act; no stop order of the Commission preventing or suspending the use of the Basic Prospectus, the Prospectus Supplement, the Prospectus or any Permitted 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;

(ii) The Registration Statement complied when it was filed, complied as of the Effective Time and, as amended or supplemented, at the Time of Purchase and at the Additional Time of Purchase, as the case may be, and at all times during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Securities, will comply, in all material respects, with the requirements of the Act; the conditions to the use of Form S-3 in connection with the offering and sale of the Securities as contemplated hereby have been satisfied; the Registration Statement meets, and the offering and sale of the Securities as contemplated hereby complies with, the requirements of Rule 415 under the Act (including, without limitation, Rule 415(a)(5) under the Act); the Registration Statement did not, as of the Effective Time, and will not, as of the Time of Purchase and the Additional Time of Purchase, as the case may be, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; the Basic Prospectus complied as of its date and the date it was filed with the Commission, complies as of the date hereof and, at the Time of Purchase and at the Additional Time of Purchase, as the case may be, and at all times during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Securities, will comply, in all material respects, with the requirements of the Act; the Disclosure Package did not, as of the Time of Sale, and will not, as of the Time of Purchase and the Additional Time of Purchase, as the case may be, contain an untrue statement of a material fact or 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; each of the Prospectus Supplement and the Prospectus will comply, as of the date that it is filed with the Commission, the date of the Prospectus Supplement, the Time of Purchase and the Additional Time of Purchase, as the case may be, and at all times during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Securities, in all material respects, with the requirements of the Act (in the case of the Prospectus, including, without limitation, Section 10(a) of the Act); at no time during the period that begins on the earlier of the date of the Prospectus Supplement and the date the Prospectus and ends at the later of the Time of Purchase, the Additional Time of Purchase and the end of the period during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Securities did or will any Prospectus Supplement or the Prospectus, as then amended or supplemented, include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading; each Permitted Free Writing Prospectus does not conflict with the information contained in the Registration Statement, the Disclosure Package or the Prospectus, and at no time during the period that begins on the date of such Permitted Free Writing Prospectus and ends at the Time of Purchase and at the Additional Time of Purchase, as the case may be, did or will any Permitted Free Writing Prospectus include an untrue statement of a material fact or 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; provided, however, that the Company makes no representation or warranty in this Section 3(A) with respect to any statement contained in the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus in reliance upon and in conformity with information concerning the Underwriter and furnished in writing by such Underwriter to the Company expressly for use in the Registration Statement, the Prospectus or such Permitted Free Writing Prospectus, it being understood and agreed that the only such information furnished by the Underwriter consists of the information described as such in Section 8(G); each Incorporated Document, at the time such document was filed with the Commission, complied, in all material respects, with the requirements of the Exchange Act and did not include an untrue statement of a material fact or 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.

(B) <u>Distributed Materials; Not an Ineligible Issuer.</u> Prior to the execution of this Agreement, the Company has not, directly or indirectly, offered or sold any Securities by means of any "prospectus" (within the meaning of the Act) or used any "prospectus" (within the meaning of the Act) in connection with the offer or sale of the Securities, in each case other than the Basic Prospectus and the Permitted Free Writing Prospectuses, if any; the Company has not, directly or indirectly, prepared, used or referred to any Permitted Free Writing Prospectus except in compliance with Rule 163 or with Rules 164 and 433 under the Act; assuming that such Permitted Free Writing Prospectus is so sent or given after the Registration Statement was filed with the Commission (and after such Permitted Free Writing Prospectus was, if required pursuant to Rule 433(d) under the Act, filed with the Commission), the sending or giving, by the Underwriter, of any Permitted Free Writing Prospectus will satisfy the provisions of Rule 164 and Rule 433 (without reliance on subsections (b), (c) and (d) of Rule 164); the conditions set forth in one or more of subclauses (i) through (iv), inclusive, of Rule 433(b)(1) under the Act are satisfied, and the registration statement relating to the offering of the Securities contemplated hereby, as initially filed with the Commission, includes a prospectus that, other than by reason of Rule 433 or Rule 431 under the Act, satisfies the requirements of Section 10 of the Act; neither the Company nor the Underwriter are disqualified, by reason of subsection (f) or (g) of Rule 164 under the Act, from using, in connection with the offer and sale of the Securities, "free writing prospectuses" (as defined in Rule 405 under the Act) pursuant to Rules 164 and 433 under the Act; the Company is not an "ineligible issuer" (as defined in Rule 405 under the Act) as of the eligibility determination date for purposes of Rules 164 and 433 under the Act with respect to the offering of the Securities contemplated by t

- Organization and Qualification. All of the direct and indirect subsidiaries (individually, a "Subsidiary") of the Company are set forth on (C)Schedule 3(C). The Company owns, directly or indirectly, all of the capital stock or other equity interests of each Subsidiary free and clear of any "Liens" (which, for purposes of this Agreement, shall mean a lien, charge, security interest, encumbrance, right of first refusal, preemptive right or other restriction), and all the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. Each of the Company and each Subsidiary is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization (as applicable), with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any Subsidiary is in violation or default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and the Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in (i) a material adverse effect on the legality, validity or enforceability of this Agreement, (ii) a material adverse effect on the results of operations, assets, business or condition (financial or otherwise) of the Company and the Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform, in any material respect and on a timely basis, its obligations under this Agreement (any of clauses (i), (ii) or (iii), a "Material Adverse Effect", and no "Proceeding" (which, for purposes of this Agreement, shall mean any action, claim, suit, investigation or proceeding (including, without limitation, an investigation or partial proceeding, such as a deposition), whether commenced or, to the Company's knowledge, threatened) has been instituted in any such jurisdiction revoking, limiting or curtailing, or seeking to revoke, limit or curtail, such power and authority or qualification.
- (D) <u>Authorization; Enforcement</u>. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement by the Company and the consummation by it of the transactions contemplated thereby have been duly authorized by all necessary action on the part of the Company, and no further action is required by the Company, the Company's board of directors (the "Board of Directors") or the Company's stockholders in connection therewith other than in connection with the Required Approvals (as defined in subsection 3(F) below). This Agreement has been duly executed by the Company and constitutes the valid and binding obligation of the Company enforceable against the Company in accordance with its terms except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as 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.

- (E) No Conflicts. The execution, delivery and performance of this Agreement by the Company, the issuance and sale of the Securities and the consummation by the Company of the other transactions contemplated hereby do not and will not (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, or (ii) result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, or conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected which has not been waived pursuant to a waiver which is in full force and effect, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected, except, in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.
- (F) <u>Filings, Consents and Approvals</u>. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other individual, corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind, including, without limitation, any NYSE Amex (as defined below) (collectively, "<u>Persons</u>") in connection with the execution, delivery and performance by the Company of this Agreement, other than such filings as are required to be made under applicable federal and state securities laws (collectively, the "<u>Required Approvals</u>").
- (G) <u>Issuance of the Securities; Registration</u>. The Securities are duly authorized and, when issued and paid for in accordance with this Agreement will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Registration Statement is effective and available for the issuance of the Securities thereunder, and the Company has not received any notice that the Commission has issued or intends to issue a stop order with respect to the Registration Statement or that the Commission otherwise has suspended or withdrawn the effectiveness of the Registration Statement, either temporarily or permanently, or intends or has threatened in writing to do so.
- (H) <u>Capitalization</u>. The capitalization of the Company is as set forth on Schedule 3(H). The Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of stock options under the Company's stock option plans, the issuance of shares of Common Stock to employees pursuant to the Company's employee stock purchase plan and pursuant to the conversion or exercise of securities exercisable, exchangeable or convertible into Common Stock ("<u>Common Stock Equivalents</u>"). No Person has any right of first refusal, preemptive right, right of participation or any similar right to participate in the transactions contemplated by this Agreement. Except as described in the Registration Statement, the Disclosure Package and the Prospectus, there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire, any shares of Common Stock, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents. The issuance and sale of the Securities will not obligate the Company to issue shares of Common Stock or other securities to any Person (other than the Underwriter) and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange or reset price under such securities. All of the outstanding shares of capital stock of the Company are validly issued, fully paid and nonassessable. No further approval or authorization of any stockholder, the Board of Directors or others is required for the issuance and sale of the Securities. There are no stockholders agreements, votting agreements or other similar agreements with respect to the Company's capital stock to which the Compan

- SEC Reports; Financial Statements. The Company has complied in all material respects with requirements to file all reports, schedules, (I) forms, statements and other documents required to be filed by it under the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "SEC Reports") on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Exchange Act and the rules and regulations of the Commission promulgated thereunder, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The financial statements of the Company included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved ("GAAP"), except as may be otherwise specified in such financial statements or the notes thereto and except to the extent that unaudited financial statements may not contain all footnotes required by GAAP, and such statements fairly present in all material respects the financial position of the Company and its consolidated subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.
- Material Changes; Undisclosed Events, Liabilities or Developments. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, since the date of the latest audited financial statements included the Registration Statement, the Disclosure Package and the Prospectus, (i) there has been no event, occurrence or development that has had, or that could reasonably be expected to result in, a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company's financial statements pursuant to GAAP or required to be disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (v) the Company has not issued any equity securities to any officer, director or "Affiliate" (defined as any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 144 under the Act), except pursuant to existing Company stock option plans. As of the date hereof, the Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by this Agreement or as set forth on Schedule 3(J), no event, liability or development has occurred or exists, with respect to the Company or its Subsidiaries or their respective business, properties, operations or financial condition, that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made.

- (K) <u>Litigation</u>. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, there is no action, suit, inquiry, notice of violation, Proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an "<u>Action</u>") (i) adversely affects or challenges the legality, validity or enforceability of any of this Agreement or the Securities or (ii) could, if there were an unfavorable decision, reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any Subsidiary, nor any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. There has not been, and, to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. No executive officer, to the knowledge of the Company, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant, and the continued employment of each such executive officer does not subject the Company or any of its Subsidiaries to any material liability with respect to any of the foregoing matters. The Company and its Subsidiaries are in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have
- (L) <u>Labor Relations</u>. None of the Company's or its Subsidiaries' employees is a member of a union that relates to such employee's relationship with the Company, neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement, and the Company and its Subsidiaries believe that their relationships with their employees are good. No material labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company that could reasonably be expected to result in a Material Adverse Effect.
- (M) Compliance. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, neither the Company nor any Subsidiary (i) is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company or any Subsidiary under), nor has the Company or any Subsidiary received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is in violation of any order of any court, arbitrator or governmental body or (iii) is or has been in violation of any statute, rule or regulation of any governmental authority, including, without limitation, all foreign, federal, state and local laws applicable to its business and all such laws that affect the environment, except in each case as could not reasonably be expected to have a Material Adverse Effect.
- (N) <u>Regulatory Permits</u>. The Company and the Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct their respective businesses as described in the Registration Statement, the Disclosure Package and the Prospectus, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect ("<u>Material Permits</u>"), and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of any Material Permit.

- (O) <u>Title to Assets</u>. The Company and the Subsidiaries have good and marketable title in fee simple to all real property owned by them that is material to the business of the Company and the Subsidiaries and good and marketable title to all personal property owned by them that is material to the business of the Company and the Subsidiaries, in each case free and clear of all Liens, except for Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and Liens for the payment of federal, state or other taxes, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and the Subsidiaries are held by them under valid, subsisting and enforceable leases of which the Company and the Subsidiaries are in compliance with such exceptions as are not material and do not materially interfere with the use made and proposed to be made of such property and building by the Company and the Subsidiaries.
- (P) <u>Patents and Trademarks</u>. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, to its knowledge the Company and the Subsidiaries have, or have rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other similar intellectual property rights necessary or material for use in connection with their respective businesses as described in the Registration Statement, the Disclosure Package and the Prospectus and which the failure to so have could reasonably be expected to have a Material Adverse Effect (collectively, the "<u>Intellectual Property Rights</u>"). Neither the Company nor any Subsidiary has received a notice (written or otherwise) from a third party that the Intellectual Property Rights used by the Company or any Subsidiary violates or infringes upon the rights of such third party. The Company also has no knowledge of existing infringement by another Person of any of the Intellectual Property Rights of the Company or its Subsidiaries. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy and confidentiality of their confidential information, except where the failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.
- (Q) <u>Insurance</u>. The Company and the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company and the Subsidiaries are engaged. To the knowledge of the Company, such insurance contracts and policies are accurate and complete. Neither the Company nor any Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.
- (R) <u>Transactions with Affiliates and Employees</u>. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, none of the officers, directors or, to the knowledge of the Company, employees of the Company is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee or partner, other than (i) for payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) for other employee benefits, including stock option agreements under any stock option plan of the Company.
- (S) <u>Sarbanes-Oxley.</u> The Company is in material compliance with all provisions of the Sarbanes-Oxley Act of 2002 that are applicable to it as of the date hereof and the Closing Date.
 - (T) NYSE Amex Rules. The issuance and sale of the Securities does not contravene the rules and regulations of the NYSE Amex.
- (U) <u>Investment Company</u>. The Company is not, is not an Affiliate of and, immediately after receipt of payment for the Securities, will not be, or be an Affiliate of, an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

- (V) <u>Registration Rights</u>. No Person has any right to cause the Company to effect the registration under the Act of any securities of the Company as a result of the transactions contemplated by this Agreement.
- (W) <u>Listing and Maintenance Requirements</u>. The Company's Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to, or that to its knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act, nor has the Company received any notification that the Commission is contemplating terminating such registration. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, the Company has not, in the twelve (12) months preceding the date hereof, received notice from the NYSE Amex to the effect that the Company is not in compliance with the listing or maintenance requirements of the NYSE Amex. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, the Company is in compliance with all such listing and maintenance requirements. The issuance and listing of the Securities on the NYSE Amex requires no further approval of the Company's stockholders.
- (X) <u>Tax Status</u>. 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 and each Subsidiary has filed all necessary federal, state and foreign income and franchise tax returns and has paid or accrued all taxes shown as due thereon, and the Company has no knowledge of a tax deficiency that has been asserted or threatened against the Company or any Subsidiary.
- (Y) <u>Foreign Corrupt Practices</u>. Neither the Company nor, to the knowledge of the Company, any agent or other person acting on behalf of the Company has (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company (or made by any person acting on its behalf of which the Company is aware) that is in violation of law or (iv) violated in any material respect any provision of the Foreign Corrupt Practices Act of 1977, as amended.
- (Z) Accountants. Ernst & Young LLP, the Company's independent registered public accounting firm, is a registered public accounting firm as required by the Act.
- (AA) <u>Regulation M Compliance</u>. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or, paid any compensation for soliciting purchases of, any of the Securities or (iii) paid or agreed to pay to any person any compensation for soliciting another to purchase any other securities of the Company.
- (BB) <u>FINRA Affiliations</u>. 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.
- (CC) <u>Conversions</u>. As disclosed in the Registration Statement, the Disclosure Package and the Prospectus, the Company has received executed, irrevocable notices of conversion (the "<u>Notices of Conversion</u>") from the holders of \$8,550,129 in aggregate principal of and accrued interest (as of the Closing) on the Company's 10% unsecured senior convertible notes due July 2011 (the "<u>Notes</u>") pursuant to which such holders have agreed to convert the principal and accrued interest of their Notes (the "<u>Converted Notes</u>") into an aggregate of 3,363,984 shares of Common Stock in accordance with the terms of the Notes upon and subject to consummation of the sale of the Firm Securities (the "<u>Conversion Shares</u>"). The Notices of Conversion are in full force and effect. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, the Company has not offered any consideration as an inducement for the conversion of the Notes.

In addition, any certificate signed by any officer of the Company or any of the Subsidiaries and delivered to the Underwriter or counsel for the Underwriter in connection with the offering of the Securities shall be deemed to be a representation and warranty by the Company, as to matters covered thereby, to the Underwriter.

SECTION 4 CERTAIN COVENANTS OF THE COMPANY. The Company covenants and agrees with the Underwriter as follows:

- (A) Reporting Obligations; Exchange Act Compliance. The Company will (i) file the Preliminary Prospectus Supplement, if any, and the Prospectus Supplement with the Commission within the time periods specified by Rule 424(b) and Rules 430A, 430B and 430C, as applicable under the Act, (ii) file any "free writing prospectus" to the extent required by Rule 433 under the Act, if applicable ("Free Writing Prospectus"), (iii) file promptly all reports required to be filed by the Company with the Commission pursuant to Section 13(a), 13(c) or 15(d) of the Exchange Act subsequent to the date of the Prospectus and during such period as the Prospectus would be required by law to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) (the "Prospectus Delivery Period"), and (iv) furnish copies of each Free Writing Prospectus, if any, (to the extent not previously delivered) to the Underwriter prior to 11:00 a.m. Eastern time, on the second business day next succeeding the date of this Agreement in such quantities as the Underwriter shall reasonably request.
- (B) <u>Abbreviated Registration Statement.</u> If the Company elects to rely upon Rule 462(b) under the Act, the Company shall file a registration statement under Rule 462(b) with the Commission in compliance with Rule 462(b) by 8:00 a.m., Eastern time, on the business day next succeeding the date of this Agreement, and the Company shall at the time of filing either pay to the Commission the filing fee for such Rule 462(b) registration statement or give irrevocable instructions for the payment of such fee pursuant to the Act.
- (C) <u>Amendments or Supplements</u>. The Company will not, during the Prospectus Delivery Period in connection with the offering contemplated by this Agreement, file any amendment or supplement to the Registration Statement or the Prospectus unless a copy thereof shall first have been submitted to the Underwriter within a reasonable period of time prior to the filing thereof and the Underwriter shall not have reasonably objected thereto in good faith.
- (D) Free Writing Prospectuses. The Company will (i) not make any offer relating to the Securities that would constitute an "issuer free writing prospectus" (as defined in Rule 433) or that would otherwise constitute a "free writing prospectus" (as defined in Rule 405 under the Act) required to be filed by the Company with the Commission under Rule 433 under the Act other than a Permitted Free Writing Prospectus; provided that the prior written consent of the Underwriter hereto shall be deemed to have been given in respect of the Permitted Free Writing Prospectus(es) included in Schedule I hereto; (ii) treat each Permitted Free Writing Prospectus as an "issuer free writing prospectus"; (iii) comply with the requirements of Rules 164 and 433 under the Act applicable to any "issuer free writing prospectus", including the requirements relating to timely filing with the Commission, legending and record keeping and (iv) not take any action that would result in the Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Act a free writing prospectus prepared by or on behalf of such Underwriter that such Underwriter otherwise would not have been required to file thereunder. The Company will use its commercially reasonable best efforts to satisfy the conditions in Rule 433 under the Act to avoid a requirement to file with the Commission any electronic road show.

- (E) Notice to Underwriter. The Company will notify the Underwriter promptly, and will, if requested, confirm such notification in writing regarding: (i) the receipt of any comments of, or requests for additional information from, the Commission; (ii) the time and date of any filing of any post-effective amendment to the Registration Statement or any amendment or supplement to the Disclosure Package or the Prospectus, (iii) the time and date when any post-effective amendment to the Registration Statement becomes effective, but only during the Prospectus Delivery Period; (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, or any post-effective amendment thereto or any order preventing or suspending the use of any Prospectus Supplement, the Disclosure Package, the Prospectus or any Permitted Free Writing Prospectus, or the initiation of any proceedings for that purpose or the threat thereof, but only during the Prospectus Delivery Period; (v) of receipt by the Company of any notification with respect to any suspension or the approval of the Securities from any securities exchange upon which it is listed for trading or included or designated for quotation, or the initiation or threatening of any proceeding for such purpose. The Company will use its commercially reasonable best efforts to prevent the issuance or invocation of any such stop order or suspension by the Commission and, if any such stop order or suspension is so issued or invoked, to obtain as soon as possible the withdrawal or removal thereof.
- Filing of Amendments or Supplements. If, during the Prospectus Delivery Period, any event shall occur or condition exist as a result of which it is (F) necessary to amend or supplement the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Disclosure Package) in order to make the statements therein, in the light of the circumstances when the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Disclosure Package) is delivered to an investor, not misleading, or if, in the opinion of counsel for the Underwriter, it is necessary to amend or supplement the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Disclosure Package) to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriter, either amendments or supplements to the Prospectus (or, if the Prospectus is not vet available to prospective purchasers, the Disclosure Package) so that the statements in the Prospectus (or, if the Prospectus is not vet available to prospective purchasers, the Disclosure Package) as so amended or supplemented will not, in the light of the circumstances when the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Disclosure Package) is delivered to an Investor, be misleading or so that the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Disclosure Package), as amended or supplemented, will comply with law. If at any time following issuance of a Permitted Free Writing Prospectus there occurred or occurs an event or development as a result of which such Permitted Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement relating to the Securities or included or 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 prevailing at that subsequent time, not misleading, the Company promptly will notify the Underwriter and will promptly amend or supplement, at its own expense, such Permitted Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.
- Delivery of Copies. The Company will deliver promptly to the Underwriter and its counsel such number of the following documents as the Underwriter shall reasonably request: (i) conformed copies of the Registration Statement as originally filed with the Commission and each amendment thereto (in each case excluding exhibits), (ii) copies of any Prospectus Supplement or Permitted Free Writing Prospectus, (iii) during the Prospectus Delivery Period, copies of the Prospectus (or any amendments or supplements thereto); (iii) any document incorporated by reference in the Prospectus (other than any such document that is filed with the Commission electronically via EDGAR or any successor system) and (iv) all correspondence to and from, and all documents issued to and by, the Commission in connection with the registration of the Securities under the Act.

- (H) <u>Earnings Statement</u>. As soon as practicable, but in any event not later than 15 months after the end of the Company's current fiscal quarter, the Company will make generally available to holders of its securities and deliver to the Underwriter, an earnings statement of the Company (which need not be audited) that will satisfy the provisions of Section 11(a) and Rule 158 of the Securities Act.
- (I) <u>Use of Proceeds</u>. The Company will apply the net proceeds from the sale of the Securities in the manner set forth in the Registration Statement, Disclosure Package and the Prospectus under the heading "Use of Proceeds".
- (J) <u>Public Communications</u>. Prior to any Closing Date, the Company will not issue any press release or other communication directly or indirectly or hold any press conference with respect to the Company, its condition, financial or otherwise, or the earnings, business, operations or prospects of any of them, or the offering of the Securities, without the prior written consent of the Underwriter, which consent shall not be unreasonably withheld, unless in the reasonable judgment of the Company and its counsel, and after notification to the Underwriter, such press release or communication is required by law, in which case the Company shall use its commercially reasonable best efforts to allow the Underwriter reasonable time to comment on such release or other communication in advance of such issuance.
- Lock-Up Period. For a period of 30 days after the date hereof (the "Lock-Up Period"), the Company will not directly or indirectly, (1) offer to sell, (K) hypothecate, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase (to the extent such option or contract to purchase is exercisable within one year from the Closing Date), purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act, with respect to, any shares of Common Stock, or any securities convertible into or exercisable or exchangeable for shares of Common Stock; (2) file or cause to become effective a registration statement under the Act relating to the offer and sale of any shares of Common Stock or securities convertible into or exercisable or exchangeable for shares of Common Stock or (3) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clauses (1), (2) or (3) above is to be settled by delivery of shares of Common Stock or such other securities, in cash or otherwise, without the prior written consent of the Underwriter (which consent may be withheld in its sole discretion), other than (i) the Securities to be sold hereunder, (ii) the issuance of employee stock options or shares of restricted stock pursuant to equity compensation plans described in the Registration Statement (excluding the exhibits thereto) and the Disclosure Package and the Prospectus, (iii) issuances of shares of Common Stock upon the exercise of options or warrants disclosed as outstanding in the Registration Statement (excluding the exhibits thereto) and the Disclosure Package and the Prospectus or upon the conversion or exchange of convertible or exchangeable securities outstanding as of the date of this Agreement; (iv) the issuance by the Company of any shares of Common Stock or securities convertible or exchangeable into shares of Common Stock 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 (iv) agrees that all such shares remain subject to restrictions substantially similar to those contained in this subsection 4(k); or (v) the purchase or sale of the Company's securities pursuant to a plan, contract or instruction that satisfies all of the requirements of Rule 10b5-1(c)(1)(i)(B) that was in effect prior to the date hereof. Notwithstanding the foregoing, for the purpose of allowing the Underwriter to comply with FINRA Rule 2711(f)(4), if (1) during the last 17 days of the Lock-Up Period, the Company releases earnings results or publicly announces other material news or a material event relating to the Company occurs or (2) prior to the expiration of the Lock-Up Period, the Company announces that it will release earnings results during the 16 day period beginning on the last day of the 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 public announcement regarding the material news or the occurrence of the material event, as applicable, unless the Underwriter waives, in writing, such extension. The Underwriter agrees to waive such extension if the provisions of FINRA Rule 2711(f)(4) are not applicable to the Offering. The Company agrees not to accelerate the vesting of any option or warrant or the lapse of any repurchase right prior to the expiration of the Lock-Up Period.

- (L) <u>Stabilization</u>. The Company will not take directly or indirectly any action designed, or that might reasonably be expected to cause or result in, or that will constitute, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities.
- (M) <u>Transfer Agent</u>. The Company shall engage and maintain, at its expense, a transfer agent and, if necessary under the jurisdiction of incorporation of the Company, a registrar for the Securities.
- (N) <u>Investment Company Act</u>. The Company shall not invest, or otherwise use the proceeds received by the Company from its sale of Securities in such a manner as would require the Company to register as an investment company under the Investment Company Act.
- (O) <u>Sarbanes-Oxley Act</u>. The Company will comply with all effective applicable provisions of the Sarbanes Oxley Act.
- (P) <u>Periodic Reports</u>. The Company will file with the Commission such periodic and special reports as required by the Act.
- (R) <u>NYSE Amex</u>. The Company will use its commercially reasonable best efforts to obtain approval for, and maintain the listing of the Securities on the NYSE Amex for so long as the Common Stock is listed thereon.
- (S) Stale Registration Statement. If the third anniversary of the initial effective date of the Registration Statement (within the meaning of Rule 415(a) (5) under the Act) shall occur at any time during the period when a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with any sale of Securities, to file with the Commission, prior to such third anniversary, a new registration statement under the Act relating to the Securities, which new registration statement shall comply with the requirements of the Act (including, without limitation, Rule 415(a)(6) under the Act) and shall be in a form satisfactory to the Underwriter; the Company shall use its best efforts to cause such new registration statement to become effective under the Act as soon as practicable, but in any event within 180 days after such third anniversary and promptly notify the Underwriter of such effectiveness; the Company shall take all other action necessary or appropriate to permit the public offering and sale of the Securities to continue as contemplated in the Prospectus; all references herein to the Registration Statement shall be deemed to include each such new registration statement, if any.

Expenses. To pay all costs, expenses, fees and taxes in connection with (i) the preparation and filing of the Registration Statement, each Basic Prospectus, the Prospectus Supplement, the Prospectus, each Permitted Free Writing Prospectus and any amendments or supplements thereto, and the printing and furnishing of copies of each thereof to the Underwriter and to dealers (including costs of mailing and shipment), (ii) the registration, issue, sale and delivery of the Securities including any stock or transfer taxes and stamp or similar duties payable upon the sale, issuance or delivery of the Securities to the Underwriter, (iii) the preparation of this Agreement, any agreement among underwriters, any dealer agreements, any powers of attorney and any closing documents (including compilations thereof) and the reproduction and/or printing and furnishing of copies of each thereof to the Underwriter and (except closing documents) to dealers (including costs of mailing and shipment), (iv) the qualification of the Securities for offering and sale under state or foreign laws and the determination of their eligibility for investment under state or foreign law (including the legal fees and filing fees and other disbursements of counsel for the Underwriter) and the printing and furnishing of copies of any blue sky surveys or legal investment surveys to the Underwriter and to dealers, (v) any listing of the Securities on any securities exchange or qualification of the Securities for listing on the NYSE Amex, (vi) any filing for review of the public offering of the Securities by FINRA, including the legal fees and filing fees and other disbursements of counsel to the Underwriter relating to FINRA matters, (vii) the fees and disbursements of any transfer agent or registrar for the Securities, (viii) the costs and expenses of the Company relating to presentations or meetings undertaken in connection with the marketing of the offering and sale of the Securities to prospective investors and the Underwriter's sales forces, including, without limitation, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations, travel, lodging and other expenses incurred by the officers of the Company and any such consultants, and the cost of any aircraft chartered in connection with the road show, (ix) the out-of-pocket expenses of the Underwriter, including the fees and other disbursements of counsel to the Underwriter in an amount (net of any advance previously paid to the Underwriter) and (x) the performance of the Company's other obligations hereunder. Notwithstanding the foregoing, the expenses of the Underwriter (other than the fees and expenses set forth in clauses (iv) and (vi) above) which the Company shall be obligated to reimburse hereunder shall not exceed (x) \$15,000 for all expenses other than attorneys fees and expenses and (y) \$40,000 for the Underwriter's attorneys fees and expenses. In no event shall the total compensation payable to the Underwriter and any other FINRA member or independent broker-dealer (including any financial advisor) in connection with the sale of the Securities (including any expense reimbursement) exceed 8% of the gross proceeds received by the Company from the sale of the Securities.

<u>SECTION 5.</u> <u>REIMBURSEMENT OF THE UNDERWRITER'S EXPENSES.</u> If the Securities are not delivered for any reason other than the default of the Underwriter in its obligations hereunder, the Company shall, in addition to paying the amounts described in <u>Section 4(T)</u> hereof, reimburse the Underwriter for all of its out-of-pocket expenses, including the fees and disbursements of its counsel.

<u>SECTION 6.</u> <u>CONDITIONS OF THE UNDERWRITER'S OBLIGATIONS</u>. The obligations of the Underwriter hereunder are subject to the accuracy of the representations and warranties on the part of the Company on the date hereof, at the Time of Purchase and at the Additional Time of Purchase, as the case may be, the performance by the Company of its obligations hereunder and to the following additional conditions precedent:

- (A) <u>Company Counsel Legal Opinion and Negative Assurance Statement</u>. The Company shall furnish to the Underwriter at the Time of Purchase and at the Additional Time of Purchase, as the case may be, (i) an opinion of Company counsel, addressed to the Underwriter, and dated the Time of Purchase and the Additional Time of Purchase, as the case may be, in form and substance reasonably satisfactory to the Underwriter and (ii) a customary "negative assurances" statement from Company counsel, addressed to the Underwriter, and dated the Time of Purchase and the Additional Time of Purchase, as the case may be.
- (B) <u>Comfort Letter</u>. The Underwriter shall have received from Ernst & Young LLP letters dated, respectively, the date of the Prospectus Supplement (and delivered as promptly as practicable after the date hereof), the Time of Purchase and the Additional Time of Purchase, as the case may be, and addressed to the Underwriter in the forms satisfactory to the Underwriter, which letters shall cover, without limitation, the various financial disclosures contained in the Registration Statement, the Disclosure Package and the Prospectus.

- (C) <u>Note Conversion</u>. The Converted Notes shall have been converted into the Conversion Shares effective as of the Closing.
- (D) <u>Objection of Underwriter</u>. No Prospectus or amendment or supplement to the Registration Statement or the Prospectus shall have been filed to which the Underwriter shall have objected in writing.
- (E) <u>Filings with the Commission</u>. The Prospectus Supplement shall have been filed with the Commission pursuant to Rule 424(b) under the Act at or before 5:30 P.M., New York time, on the second full business day after the date of this Agreement (or such earlier time as may be required under the Act).
- No Stop Orders. Prior to and at the Time of Purchase and at the Additional Time of Purchase, as the case may be, (i) no stop order with respect to the effectiveness of the Registration Statement shall have been issued under the Act or proceedings initiated under Section 8(d) or 8(e) of the Act; (ii) the Registration Statement and all amendments thereto shall not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; (iii) neither the Prospectus nor amendment or supplement thereto shall include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading; (iv) no Disclosure Package, and no amendment or supplement thereto, shall include an untrue statement of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading; and (v) none of the Permitted Free Writing Prospectuses, if any, shall include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading.
- (G) <u>No Material Adverse Change</u>. (i) Prior to the Closing or the closing of the Additional Securities, as applicable, there shall not have occurred any change, or any development involving a prospective change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company from that set forth in the Disclosure Package and the Prospectus that, in the Underwriter's judgment, impracticable to market the Securities on the terms and in the manner contemplated in the Disclosure Package.
 - (ii) There shall not have occurred any of the following: (i) a suspension or material limitation in trading in securities generally on the New York Stock Exchange, the NYSE Amex or NASDAQ Global Market or the establishing on such exchanges by the Commission or by such exchanges of minimum or maximum prices that are not in force and effect on the date hereof; (ii) a suspension or material limitation in trading in the Company's securities on the NYSE Amex or the establishing on such market by the Commission or by such market of minimum or maximum prices that are not in force and effect on the date hereof; (iii) a general moratorium on commercial banking activities declared by either federal or any state authorities; (iv) the outbreak or material escalation of hostilities or acts of terrorism involving the United States or the declaration by the United States of a national emergency or war, which in your reasonable judgment makes it impracticable or inadvisable to proceed with the public offering or the delivery of the Securities in the manner contemplated in the Prospectus; or (v) any calamity or crisis, change in national, international or world affairs, act of God, change in the international or domestic markets, or change in the existing financial, political or economic conditions in the United States or elsewhere, that in your reasonable judgment makes it impracticable or inadvisable to proceed with the public offering or the delivery of the Firm Securities or the Additional Securities, as applicable, in the manner contemplated in each of the Disclosure Package and the Prospectus.

- (H) Officers' Certificate. The Company shall have, at the Time of Purchase and at the Additional Time of Purchase, as the case may be, delivered to the Underwriter a certificate of its Chief Executive Officer and its Chief Financial Officer, dated the Time of Purchase and the Additional Time of Purchase, as the case may be, in the form and substance reasonably satisfactory to the Underwriter.
- (I) <u>Secretary's Certificate</u>. The Company shall have, at the Time of Purchase and at the Additional Time of Purchase, as the case may be, delivered to the Underwriter a certificate of its Secretary, dated the Time of Purchase and the Additional Time of Purchase, as the case may be, , in the form and substance reasonably satisfactory to the Underwriter.
- (J) <u>Company Corporate Documents</u>. The Company shall have, at the Time of Purchase and at the Additional Time of Purchase, as the case may be, delivered to the Underwriter a certificate evidencing the incorporation and good standing of the Company in the state of Delaware issued by the Secretary of State of the state of Delaware, dated as of a date within five calendar days of the Time of Purchase and Additional Time of Purchase, as the case may be.
- (K) <u>Subsidiary Corporate Documents</u>. The Company shall have, at the Time of Purchase and at the Additional Time of Purchase, as the case may be, delivered to the Underwriter a certificate evidencing the incorporation or formation, as the case may be, and good standing of each of its Subsidiaries in their respective state of incorporation or formation (or comparable authority), as the case may be, issued by the Secretary of State of such state of incorporation or formation, as the case may be, dated as of a date within five calendar days of the Time of Purchase and Additional Time of Purchase, as the case may be.
- (L) <u>Foreign Qualifications</u>. The Company shall have, at the Time of Purchase and at the Additional Time of Purchase, as the case may be, delivered to the Underwriter a certificate evidencing the Company's qualification as a foreign corporation in good standing issued by the Secretary of State (or comparable office) of each jurisdiction in which the Company conducts business and is required to so qualify, dated as of a date within five calendar days of the Time of Purchase and Additional Time of Purchase, as the case may be.
- (M) <u>Certified Charter</u>. The Company shall have delivered to the Underwriter at the Time of Purchase and at the Additional Time of Purchase, as the case may be, a certified copy of the Certificate of Incorporation of the Company as certified by the Secretary of State of the state of Delaware within five calendar days of the Time of Purchase and Additional Time of Purchase, as the case may be.
- (N) <u>Additional Documents</u>. The Company shall have furnished to the Underwriter such other documents and certificates as to the accuracy and completeness of any statement in the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus as of the Time of Purchase and the Additional Time of Purchase, as the case may be, as the Underwriter may reasonably request.
- (O) NYSE Amex Listing. The Securities shall have been approved for listing on the NYSE Amex, subject only to official notice of issuance at or prior to the Time of Purchase.
- (P) <u>No FINRA Objection</u>. FINRA shall not have raised any objection with respect to the fairness or reasonableness of the underwriting, or other arrangements of the transactions, contemplated hereby.

(Q) Other Filings with the Commission. The Company shall have prepared and filed with the Commission a Current Report on Form 8-K with respect to the transactions contemplated hereby, including as an exhibit thereto this Agreement and any other documents relating thereto.

<u>SECTION 7.</u> <u>EFFECTIVE DATE OF AGREEMENT; TERMINATION</u>. This Agreement shall become effective when the parties hereto have executed and delivered this agreement.

The obligations of the Underwriter hereunder shall be subject to termination in the absolute discretion of the Underwriter, if (1) since the time of execution of this Agreement or the earlier respective dates as of which information is given in the Registration Statement, the Disclosure Package and the Prospectus, there has been any change or any development involving a prospective change in the business, properties, management, financial condition or results of operations of the Company and the Subsidiaries taken as a whole, the effect of which change or development is, in the sole judgment of the Underwriter, so material and adverse as to make it impractical or inadvisable to proceed with the public offering or the delivery of the Securities on the terms and in the manner contemplated in the Registration Statement, the Disclosure Package and the Prospectus, or (2) since the time of execution of this Agreement, there shall have occurred: (A) a suspension or material limitation in trading in securities generally on the New York Stock Exchange, the NASDAQ Global Market or the NYSE Amex; (B) a suspension or material limitation in trading in the Company's securities on the NYSE Amex; (C) a general moratorium on commercial banking activities declared by either federal or New York State authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States; (D) an outbreak or escalation of hostilities or acts of terrorism involving the United States or a declaration by the United States of a national emergency or war; or (E) any other calamity or crisis or any change in financial, political or economic conditions in the United States or elsewhere, if the effect of any such event specified in clause (D) or (E), in the sole judgment of the Underwriter, makes it impractical or inadvisable to proceed with the public offering or the delivery of the Securities on the terms and in the manner contemplated in the Registration Statement, the Disclosure Package and the Pr

If the Underwriter elects to terminate this Agreement as provided in this <u>Section 7</u>, the Company shall be notified promptly in writing.

If the sale to the Underwriter of the Securities, as contemplated by this Agreement, is not carried out by the Underwriter for any reason permitted under this Agreement, or if such sale is not carried out because the Company shall be unable to comply with any of the terms of this Agreement, the Company shall not be under any obligation or liability under this Agreement (except to the extent provided in <u>Sections 4(S)</u>, <u>5</u> and <u>8</u> hereof), and the Underwriter shall be under no obligation or liability to the Company under this Agreement (except to the extent provided in <u>Section 8</u> hereof).

SECTION 8. INDEMNITY AND CONTRIBUTION.

- (A) The Company agrees to indemnify, defend and hold harmless the Underwriter, its partners, directors and officers, any person who controls the Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and the successors and assigns of all of the foregoing persons, from and against any loss, damage, expense, liability or claim (including the reasonable cost of investigation) which, jointly or severally, such Underwriter or any such person may incur under the Act, the Exchange Act, the common law or otherwise, insofar as such loss, damage, expense, liability or claim arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or in the Registration Statement as amended by any post-effective amendment thereof by the Company) or arises out of or is based upon any omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as any such loss, damage, expense, liability or claim arises out of or is based upon any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by such Underwriter to the Company expressly for use in (it being understood and agreed that the only such information furnished by the Underwriter consists of the information described as such in Section 8(G)), the Registration Statement or arises out of or is based upon any omission or alleged omission to state a material fact in the Registration Statement in connection with such information, which material fact was not contained in such information and which material fact was required to be stated in such Registration Statement or was necessary to make such information not misleading or (ii) any untrue statement or alleged untrue statement of a material fact included in any Prospectus (the term Prospectus for the purpose of this Section 8 being deemed to include any Basic Prospectus, the Prospectus Supplement, the Prospectus and any amendments or supplements to the foregoing), in any Permitted Free Writing Prospectus, in any "issuer information" (as defined in Rule 433 under the Act) of the Company or in any Prospectus together with any combination of one or more of the Permitted Free Writing Prospectuses, if any, or arises out of or is based upon any omission or alleged omission 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, except, with respect to such Prospectus or Permitted Free Writing Prospectus, insofar as any such loss, damage, expense, liability or claim arises out of or is based upon any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by such Underwriter to the Company expressly for use in (it being understood and agreed that the only such information furnished by the Underwriter consists of the information described as such in Section 8(g)), such Prospectus or Permitted Free Writing Prospectus or arises out of or is based upon any omission or alleged omission to state a material fact in such Prospectus or Permitted Free Writing Prospectus in connection with such information, which material fact was not contained in such information and which material fact was necessary in order to make the statements in such information, in the light of the circumstances under which they were made, not misleading.
- (B) The Underwriter agrees to indemnify, defend and hold harmless the Company, its directors and officers, and any person who controls the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and the successors and assigns of all of the foregoing persons, from and against any loss, damage, expense, liability or claim (including the reasonable cost of investigation) which, jointly or severally, the Company or any such person may incur under the Act, the Exchange Act, the common law or otherwise, insofar as such loss, damage, expense, liability or claim arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by such Underwriter to the Company expressly for use in (it being understood and agreed that the only such information furnished by the Underwriter consists of the information described as such in Section 8(G)), the Registration Statement (or in the Registration Statement as amended by any post-effective amendment thereof by the Company), or arises out of or is based upon any omission or alleged omission to state a material fact in such Registration Statement in connection with such information, which material fact was not contained in such information and which material fact was required to be stated in such Registration Statement or was necessary to make such information not misleading or (ii) any untrue statement or alleged untrue statement of a material fact contained in, and in conformity with information concerning such Underwriter furnished in writing by such Underwriter to the Company expressly for use in (it being understood and agreed that the only such information furnished by the Underwriter consists of the information described as such in Section 8(G)), a Prospectus or a Permitted Free Writing Prospectus, or arises out of or is based upon any omission or alleged omission to state a material fact in such Prospectus or Permitted Free Writing Prospectus in connection with such information, which material fact was not contained in such information and which material fact was necessary in order to make the statements in such information, in the light of the circumstances under which they were made, not misleading.

If any action, suit or proceeding (each, a "Proceeding") is brought against a person (an "indemnified party") in respect of which indemnity may be (C) sought against the Company or the Underwriter (as applicable, the "indemnifying party") pursuant to subsection (A) or (B), respectively, of this Section 8, such indemnified party shall promptly notify such indemnifying party in writing of the institution of such Proceeding and such indemnifying party shall assume the defense of such Proceeding, including the employment of counsel reasonably satisfactory to such indemnified party and payment of all fees and expenses; provided, however, that the omission to so notify such indemnifying party shall not relieve such indemnifying party from any liability which such indemnifying party may have to any indemnified party or otherwise. The indemnified party or parties shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such indemnified party or parties unless the employment of such counsel shall have been authorized in writing by the indemnifying party in connection with the defense of such Proceeding or the indemnifying party shall not have, within a reasonable period of time in light of the circumstances, employed counsel to defend such Proceeding or such indemnified party or parties shall have reasonably concluded that there may be defenses available to it or them which are different from, additional to or in conflict with those available to such indemnifying party (in which case such indemnifying party shall not have the right to direct the defense of such Proceeding on behalf of the indemnified party or parties), in any of which events such fees and expenses shall be borne by such indemnifying party and paid as incurred (it being understood, however, that such indemnifying party shall not be liable for the expenses of more than one separate counsel (in addition to any local counsel) in any one Proceeding or series of related Proceedings in the same jurisdiction representing the indemnified parties who are parties to such Proceeding). The indemnifying party shall not be liable for any settlement of any Proceeding effected without its written consent, such consent not to be unreasonably withheld, but, if settled with its written consent, such indemnifying party agrees to indemnify and hold harmless the indemnified party or parties from and against any loss or liability by reason of such settlement. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by the second sentence of this Section 8(C), then the indemnifying party agrees that it shall be liable for any settlement of any Proceeding effected without its written consent if (i) such settlement is entered into more than 60 business days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall not have fully reimbursed the indemnified party in accordance with such request prior to the date of such settlement and (iii) such indemnified party shall have given the indemnifying party at least 30 days' prior notice of its intention to settle. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened Proceeding 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 includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such Proceeding and does not include an admission of fault or culpability or a failure to act by or on behalf of such indemnified party.

If the indemnification provided for in this Section 8 is unavailable to an indemnified party under subsections (A) and (B) of this Section 8 or insufficient to hold an indemnified party harmless in respect of any losses, damages, expenses, liabilities or claims referred to therein, then each applicable indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, damages, expenses, liabilities or claims (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriter on the other hand from the offering of the Securities 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 of the Underwriter on the other in connection with the statements or omissions which resulted in such losses, damages, expenses, liabilities or claims, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriter on the other shall be deemed to be in the same respective proportions as the total proceeds from the offering (net of underwriting discounts and commissions but before deducting expenses) received by the Company, and the total underwriting discounts and commissions received by the Underwriter, bear to the aggregate public offering price of the Securities. The relative fault of the Company on the one hand and of the Underwriter on the other shall be determined by reference to, among other things, whether the untrue statement or alleged untrue statement of a material fact or omission or alleged omission relates to information supplied by the Company or by the Underwriter (it being understood and agreed that the only such information supplied by the Underwriter consists of the information described as such in Section 8(G)) and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The amount paid or payable by a party as a result of the losses, damages, expenses, liabilities and claims referred to in this Section 8(d) shall be deemed to include any legal or other fees or expenses reasonably incurred by such party in connection with investigating, preparing to defend or defending any Proceeding.

- (E) The Company and the Underwriter agree that it would not be just and equitable if contribution pursuant to this Section 8 were determined by pro rata allocation or by any other method of allocation that does not take account of the equitable considerations referred to in subsection (E) above. Notwithstanding the provisions of this Section 8, the Underwriter shall not be required to contribute any amount in excess of the amount by which the total price at which the Securities underwritten by such Underwriter and distributed to the public were offered to the public exceeds the amount of any damage which such Underwriter has otherwise been required to pay by reason of such untrue statement 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 indemnity and contribution agreements contained in this Section 8 and the covenants, warranties and representations of the Company contained in this Agreement shall remain in full force and effect regardless of any investigation made by or on behalf of the Underwriter, its partners, directors or officers or any person (including each partner, director or officer of such person) who controls the Underwriter within the meaning of Section 15 of the Exchange Act, or by or on behalf of the Company, its directors or officers or any person who controls the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and shall survive any termination of this Agreement or the issuance and delivery of the Securities. The Company and the Underwriter agree promptly to notify each other of the commencement of any Proceeding against it and, in the case of the Company, against any of the Company's officers or directors in connection with the issuance and sale of the Securities, or in connection with the Registration Statement, any Basic Prospectus, the Prospectus or any Permitted Free Writing Prospectus.
- (G) The Underwriter confirms and the Company acknowledges that the statements with respect to the public offering of the Securities by the Underwriter set forth in the first paragraph under the subheading "Commissions and Expenses" and in the subheading "Stabilization, Short Positions and Penalty Bids," each under the heading "Underwriting" in the Prospectus, constitute the only information concerning the Underwriter and furnished in writing or otherwise supplied by such Underwriter to the Company expressly for use in the Registration Statement, the Prospectus or such Permitted Free Writing Prospectus.

SECTION 9. NOTICES. Except as otherwise herein provided, all statements, requests, notices and agreements shall be in writing or by telegram or facsimile and, if to the Underwriter, shall be sufficient in all respects if delivered or sent to Roth Capital Partners, LLC, 24 Corporate Plaza Drive, Newport Beach, California, attention: Aaron Gurewitz (fax no.:949-720-7227), with a copy (for informational purposes only) to Lowenstein Sandler PC, 65 Livingston Avenue, Roseland, New Jersey 07068, attention: John D. Hogoboom (fax: 973-597-2383); and if to the Company, shall be sufficient in all respects if delivered or sent to PharmAthene, Inc., One Park Place Annapolis, Maryland, attention: General Counsel (fax: 410-269-2601), with a copy (for informational purposes only) to SNR Denton US LLP, 1221 Avenue of the Americas, New York, New York 10020, attention: Jeffrey A. Baumel (fax: 212-768-6800).

SECTION 10. GOVERNING LAW; CONSTRUCTION. This Agreement and any claim, counterclaim or dispute of any kind or nature whatsoever arising out of or in any way relating to this agreement ("Claim"), directly or indirectly, shall be governed by, and construed in accordance with, the laws of the State of New York. The section headings in this agreement have been inserted as a matter of convenience of reference and are not a part of this agreement.

SECTION 11. SUBMISSION TO JURISDICTION. Except as set forth below, no claim may be commenced, prosecuted or continued in any court other than the courts of the State of New York located in the city and county of New York or in the United States District Court for the Southern District of New York, which courts shall have jurisdiction over the adjudication of such matters, and the Company and the Underwriter consent to the jurisdiction of such courts and personal service with respect thereto. The Company hereby consents to personal jurisdiction, service and venue in any court in which any claim arising out of or in any way relating to this Agreement is brought by any third party against the Underwriter or any indemnified party. The Underwriter and the Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) waives all right to trial by jury in any action, proceeding or counterclaim (whether based upon contract, tort or otherwise) in any way arising out of or relating to this Agreement. The Company agrees that a final judgment in any such action, proceeding or counterclaim brought in any such court shall be conclusive and binding upon the Company and may be enforced in any other courts to the jurisdiction of which the Company or is or may be subject, by suit upon such judgment.

<u>SECTION 12. PARTIES AT INTEREST.</u> This Agreement has been and is made solely for the benefit of the Underwriter and the Company and to the extent provided in Section 8 hereof the controlling persons, partners, directors and officers referred to in such Section 8, and their respective successors, assigns, heirs, personal representatives and executors and administrators. No other person, partnership, association or corporation (including a purchaser, as such purchaser, from the Underwriter) shall acquire or have any right under or by virtue of this Agreement.

SECTION 13. NO FIDUCIARY RELATIONSHIP. The Company hereby acknowledges that the Underwriter is acting solely as underwriter in connection with the purchase and sale of the Company's securities. The Company further acknowledges that the Underwriter is acting pursuant to a contractual relationship created solely by this Agreement entered into on an arm's length basis, and in no event do the parties intend that the Underwriter act or be responsible as a fiduciary to the Company, its management, stockholders or creditors or any other person in connection with any activity that the Underwriter may undertake or have undertaken in furtherance of the purchase and sale of the Company's securities, either before or after the date hereof. The Underwriter hereby expressly disclaims any fiduciary or similar obligations to the Company, either in connection with the transactions contemplated by this Agreement or any matters leading up to such transactions, and the Company hereby confirms its understanding and agreement to that effect. The Company and the Underwriter agree that they are each responsible for making their own independent judgments with respect to any such transactions and that any opinions or views expressed by the underwriter to the company regarding such transactions, including, but not limited to, any opinions or views with respect to the price or market for the Company's securities, do not constitute advice or recommendations to the Company. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against the Underwriter with respect to any breach or alleged breach of any fiduciary or similar duty to the Company in connection with the transactions contemplated by this Agreement or any matters leading up to such transactions.

<u>SECTION 14.</u> <u>COUNTERPARTS</u>. This Agreement may be signed by the parties in one or more counterparts which together shall constitute one and the same agreement among the parties. Delivery of a signed counterpart of this Agreement by facsimile or e-mail/.pdf transmission shall constitute valid and sufficient delivery thereof, and any counterpart so delivered shall be binding and valid as if an original.

<u>SECTION 15.</u> <u>SUCCESSORS AND ASSIGNS</u>. This Agreement shall be binding upon the Underwriter and the Company and their successors and assigns and any successor or assign of any substantial portion of the Company's and any of the Underwriter's respective businesses and/or assets.

If the foregoing correctly sets forth the understanding among the Company and the Underwriter, please so indicate in the space provided below for that purpose, whereupon this Agreement and the Underwriter's acceptance shall constitute a binding agreement among the Company and the Underwriter.

Very truly yours,

PHARMATHENE, INC.

By: /s/ Eric I. Richman__

Name: Eric I. Richman

Title: President and Chief Executive Officer

Accepted and agreed to as of the date first above written

ROTH CAPITAL PARTNERS, LLC

By: /s/ Aaron Gurewitz_

Name: Aaron Gurewitz

Title: Head of Equity Capital Markets

[SIGNATURE PAGE TO PHARMATHENE, INC. UNDERWRITING AGREEMENT]

SCHEDULE I

PERMITTED FREE WRITING PROSPECTUSES

None.

[SIGNATURE PAGE TO PHARMATHENE, INC. UNDERWRITING AGREEMENT]

SCHEDULE II

PRICING INFORMATION

Number of Securities: 4,300,000

Public Offering Price Per Share: \$3.50

Underwriting Discount Per Share: \$0.21. The Securities may be offered to certain dealers selected by the Underwriter at a price that represents a concession not in excess of \$0.105 per share under the Public Offering Price Per Share. Pursuant to an agreement between the Company and the Underwriter, the Underwriter will pay \$75,000 to Noble Financial Group in consideration of its services as a financial advisor to the Company in connection with the offering.

Proceeds to Company (before expenses): \$14,147,000.

[SIGNATURE PAGE TO PHARMATHENE, INC. UNDERWRITING AGREEMENT]

[FORM]EARLY CONVERSION AGREEMENT

THIS EARLY CONVERSION AGREEMENT (as amended, supplemented, restated or otherwise modified from time to time, the "Agreement") made effective as of this __ day of October 2010 (the "Effective Date"), by and among Pharmathene, Inc. (the "Company") and the investors identified on schedule 1 attached hereto (collectively, the "Holders" and each, a "Holder") who execute and deliver this Agreement.

WHEREAS, the Company issued 10% unsecured convertible notes (individually, a "Note" and collectively, the "Notes"), in connection with a Note and Warrant Purchase Agreement, dated as of July 24, 2009 (as amended, supplemented, restated or otherwise modified from time to time, the "Purchase Agreement"), by and among the Company and the Holders. Capitalized terms not defined herein shall have the meaning assigned thereto in the Purchase Agreement or the respective Note, as applicable.

WHEREAS, the Company desires and certain of the Holders have agreed upon an arrangement whereby the Holders shall be granted the opportunity to convert their Note(s) prior to the Maturity Date subject to the terms set forth herein.

WHEREAS, MPM BioVentures III, L.P. ("MPM III"), MPM BioVentures III-QP, L.P. ("MPM QP"), MPM BioVentures III Parallel Fund, L.P. ("MPM Parallel"), MPM BioVentures III GMBH & Co. Parallel-Beteiligungs KG ("MPM KG"), MPM Asset Management Investors 2004 BVIII LLLC ("MPM Asset") and Healthcare Ventures VII, L.P. ("Healthcare Ventures"), Eric I. Richman ("Richman"), Joel McCleary ("McCleary", and together with, MPM III, MPM OP, MPM Parallel, MPM KG, MPM Asset and Richman, the "Converting Holders" and each, a "Converting Holder") desire to convert their respective Notes subject to the terms of the Notes and hereof.

NOW, THEREFORE, in consideration of the covenants, promises, representations, warranties and conditions contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and each Holder, intending to be legally bound, hereby agree as follows:

1. Early Conversion

Notwithstanding anything to the contrary in the Purchase Agreement or any Note, as applicable, each Converting Holder hereby agrees to convert its Note(s), effective upon the Company's completion, on or prior to November 4, 2010, of a firm commitment underwritten offering as contemplated in that certain Underwriting Agreement, dated as of October 29, 2010, by and between the Company and Roth Capital Partners, LLC (the "Offering") of its shares of common stock, \$0.001 par value (the "Common Stock"). Upon the effective date of such conversion, such Converting Holder shall be entitled to receive as the Conversion Amount (A) shares on conversion at the Conversion Price in accordance with the terms of the Note; and (B) an amount in cash equal to the Interest the Holder would have received for the period beginning on the date that the Offering is consummated (the "Closing Date") and ending on, and including, the Maturity Date, had the Holder held the Note throughout such period. The Conversion Date, as that term is used in the Note and herein, shall be deemed to be the Closing Date.

Simultaneously, with the execution of this Agreement, the Accepting Holders are delivering a duly completed Conversion Notice to the Company which shall be irrevocable as provided herein, until 5:00 p.m., New York time on November 4, 2010 on and after which time it shall be automatically null and void, and of no further effect.

It is understood and agreed that the Company may make available to all Holders the same opportunity to receive the conversion consideration set forth above in accordance with the terms of the Purchase Agreement.

2. Modification of Agreement

This Agreement may only be amended by written agreement of each of the parties hereto expressly stating that such instrument is intended to modify, amend or supplement this Agreement.

3. Assignment of Agreement

A Holder may only assign this Agreement with the written consent of the Company. The Company may freely assign this Agreement without the consent of any other party. Any assignment of this Agreement in violation of this Section is null and void. This Agreement shall be binding and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

4. Choice of Law

THIS AGREEMENT SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, AND ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY, INTERPRETATION AND PERFORMANCE OF THIS AGREEMENT SHALL BE GOVERNED BY, THE INTERNAL LAWS OF THE STATE OF DELAWARE, WITHOUT GIVING EFFECT TO ANY CHOICE OF LAW OR CONFLICT OF LAW PROVISION OR RULE (WHETHER OF THE STATE OF DELAWARE OR ANY OTHER JURISDICTIONS) THAT WOULD CAUSE THE APPLICATION OF THE LAWS OF ANY JURISDICTIONS OTHER THAN THE STATE OF DELAWARE.

5. Headings

The section and paragraph headings contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation of this Agreement.

6. Rules of Construction

Unless the context otherwise requires, (a) words in the singular include the plural, and words in the plural include the singular and (b) "including" means, where not already so indicated, "including without limitation." Unless otherwise stated in this Agreement, in the computation of a period of time from a specified date to a later specified date, the word "from" means "from and including" and the words "to" and "until" each mean "to but excluding." "Herein," "hereof" and other words of similar import refer to this Agreement as a whole and not to any particular Article, Section or other subdivision. Unless otherwise specified, references in this Agreement to any Article or Section are references to such Article or Section of this Agreement, and references in any Article, Section or definition. All references in this Agreement to an agreement, instrument or other document shall be construed as a reference to that agreement, instrument or document as the same may be amended, modified, varied, supplemented or novated from time to time. This Agreement was negotiated by the parties and any rule of construction or interpretation otherwise requiring this Agreement to be construed or interpreted against any party shall not apply to any construction or interpretation hereof or thereof.

7. No Waiver; Cumulative Remedies

No failure on the part of any party hereto to exercise, and no delay in exercising, any right, power or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, power or remedy by such party preclude any other or further exercise thereof or the exercise of any other right, power or remedy. All rights, powers and remedies under this Agreement are cumulative and are not exclusive of any other rights, powers and remedies provided by law.

8. Counterparts

This Agreement may be executed in counterparts, which, together, shall be considered one and the same agreement. Copies of executed counterparts transmitted by facsimile or other electronic transmission service shall be considered original, executed counterparts, provided receipt of such counterparts is confirmed.

9. Entire Agreement

This Agreement contains a final and complete integration of all prior expressions by the parties hereto with respect to the subject matter thereof and shall constitute the entire agreement between the parties hereto with respect to the subject matter thereof, superseding all prior oral or written understandings. There are no unwritten agreements between the parties hereto.

[signature page follows]

PHARMATHENE, INC.

Title:

Series A Member

By:				
Name:				
Title:				
MPM BIOVENTURES III, L.P.				
By: MPM BioVentures III GP, L.P., its General Partner				
By: MPM BioVentures III LLC, its General Partner				
By:				
Name: Ansbert K. Gadicke				
Title: Series A Member				
MPM BIOVENTURES III-QP, L.P.				
By: MPM BioVentures III GP, L.P., its General Partner				
By: MPM BioVentures III LLC, its General Partner				
By:				
Name: Ansbert K. Gadicke	_			
Title: Series A Member				
MPM BIOVENTURES III PARALLEL FUND, L.P.				
By: MPM BioVentures III GP, L.P., its General Partner				
By: MPM BioVentures III LLC, its General Partner				
By:				
Name: Ansbert K. Gadicke				
Title: Series A Member				
MPM BIO VENTURES III GMBH & CO. PARALLEL-				
BETEILIGUNGS KG				
By: MPM BioVentures III GP, L.P., in its capacity as the				
Managing Limited Partner				
By: MPM BioVentures III LLC, its General Partner				
By:				
Name: Ansbert K. Gadicke				

MPM ASSET MANAGEMENT INVESTORS 2004 BVIII LLC

By:
Name: Ansbert K. Gadicke
Title: Manager
HEALTHCARE VENTURES VII, L.P.
By: HealthCare Partners VII, L.P., its General Partner
By:
Name:
Title:
Eric Richman
Joel McCleary
·

October 29, 2010

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

Re: Sale of Common Stock 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 October 29, 2010 (the "Prospectus Supplement"), in connection with the offer and sale by the Company of up to 4,945,000 shares (the "Shares") of common stock, par value \$0.0001 per share, of the Company (the "Common Stock"), including up to 645,000 Shares that may be sold pursuant to the exercise of an over-allotment option.

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 to date and in effect on the date hereof, (ii) the Company's By-Laws in effect on the date hereof, (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 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 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.

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

PharmAthene Announces Proposed Common Stock Public Offering

ANNAPOLIS, Md., October 28, 2010 /PRNewswire via COMTEX/ —

PharmAthene, Inc. (NYSE Amex: PIP), a biodefense company developing medical countermeasures against biological and chemical threats, today announced that it intends to offer and sell shares of its common stock in an underwritten public offering. The offering is subject to market conditions and there can be no assurance as to whether or when the offering may be completed, or as to the actual size or terms of the offering. Roth Capital Partners, LLC. is acting as sole underwriter for the offering.

The shares are being offered by PharmAthene pursuant to a shelf registration statement previously filed with and declared effective by the Securities and Exchange Commission ("SEC") on February 13, 2009. A preliminary prospectus supplement relating to the offering will be filed with the SEC and will be available on the SEC's website located at www.sec.gov. Copies of the preliminary prospectus supplement and the accompanying prospectus relating to this offering may be obtained from Roth Capital Partners, LLC Syndicate Department, 24 Corporate Plaza, Newport Beach, CA 92660, at 800-678-9147 and Rothecm@roth.com. Before you invest, you should read the prospectus and prospectus supplement in that registration statement and other documents PharmAthene has filed or will file with the SEC for more complete information about PharmAthene and the offering.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such jurisdiction.

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 PharmAthene will satisfy the NYSE Amex continuing listing standards by January 26, 2012, or that during the compliance period the Exchange will not deem PharmAthene's progress to

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.

Contact:

Stacey Jurchison PharmAthene, Inc. Phone: 410-269-2610

Stacey.Jurchison@PharmAthene.com

PHARMATHENE ANNOUNCES PRICING OF \$15 MILLION PUBLIC OFFERING

ANNAPOLIS, Md., Oct 29, 2010 /PRNewswire via COMTEX/ — PharmAthene, Inc. (NYSE Amex: PIP) ("PharmAthene" or the "Company"), a biodefense company developing medical countermeasures against biological and chemical threats, today announced that it has priced a registered public offering of 4,300,000 shares of its common stock at a price to the public of \$3.50 per share.

The Company expects that the offering will yield net proceeds, before expenses, of approximately \$14.1 million and intends to use the net proceeds of the offering for repayment of debt and general corporate purposes.

Roth Capital Partners, LLC served as sole underwriter for the offering. Noble Financial Capital Markets served as the Company's financial advisor in connection with the offering. In connection with the offering, the Company also granted the underwriter a 30-day option to purchase up to an additional 645,000 shares to cover over-allotments, if any. The offering is expected to close on or about November 3, 2010, subject to satisfaction of customary closing conditions

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 on February 13, 2009. This press release shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. The securities may be offered only by means of a prospectus, including a prospectus supplement, forming a part of the effective registration statement. Copies of the prospectus and the final prospectus supplement may be obtained, when available, at the Securities and Exchange Commission's website at http://www.sec.gov/. Copies of the prospectus and the final prospectus supplement may also be obtained from Roth Capital Partners, LLC Equity Capital Markets, 24 Corporate Plaza, Newport Beach, CA 92660, at 800-678-9147 and Rothecm@roth.com.

About PharmAthene, Inc.

PharmAthene was formed to meet the critical needs of the United States and its allies by developing and commercializing medical countermeasures against biological and chemical weapons. PharmAthene's lead product development programs include:

- * SparVax(TM) a second generation recombinant protective antigen (rPA) anthrax vaccine
- * Valortim(R) a fully human monoclonal antibody for the prevention and treatment of anthrax infection
- * Countermeasures for nerve agent poisoning by organophosphate compounds, including nerve gases and pesticides, whose active ingredient is the recombinant enzyme (butyrylcholinesterase) (or "rBChE").

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 PharmAthene will satisfy the NYSE Amex continuing listing standards by January 26, 2012, or that during the compliance period the Exchange will not deem PharmAthene's progress to

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.

SOURCE PharmAthene, Inc.