
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 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 23, 2013

DELCATH SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-16133
(Commission
File Number)

06-1245881
(IRS Employer
Identification Number)

810 Seventh Avenue, 35th Floor, New York, New York, 10019
(Address of principal executive offices, including zip code)

(212) 489-2100
(Registrant's telephone number, including area code)

NONE
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- 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))
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Item 8.01. Other Events.

A form of warrant to purchase common stock, form of subscription agreement and form of placement agency agreement are filed as Exhibits 4.1, 10.1 and 10.2, respectively, to this Current Report on Form 8-K and incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

The following exhibit is filed herewith:

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
4.1	Form of Warrant to purchase shares of Common Stock
10.1	Form of Subscription Agreement
10.2	Form of Placement Agency Agreement

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.

DELCATH SYSTEMS, INC.

Dated: October 23, 2013

By: /s/ Peter J. Graham

Name: Peter J. Graham

Title: Executive Vice President, General Counsel

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
4.1	Form of Warrant to purchase shares of Common Stock
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DEL CATH SYSTEMS, INC.

WARRANT

Warrant No.

Original Issue Date: [], 2013

DEL CATH SYSTEMS, INC., a Delaware corporation (the "**Company**"), hereby certifies that, for value received, or its permitted registered assigns (the "**Holder**"), is entitled to purchase from the Company up to a total of shares of common stock, \$0.01 par value (the "**Common Stock**"), of the Company (each such share, a "**Warrant Share**" and all such shares, the "**Warrant Shares**") at an exercise price equal to \$[] per share (as adjusted from time to time as provided herein, the "**Exercise Price**"), at any time and from time to time on or after the date occurring six months after the Closing Date (the "**Trigger Date**") and through and including 5:00 P.M., New York City time, on [], 20[] (the "**Expiration Date**"), and subject to the following terms and conditions:

All such warrants are referred to herein, collectively, as the "**Warrants**." The original issuance of the Warrants and the Warrant Shares by the Company has been registered pursuant to a Registration Statement on Form S-3 (File No. 333-183675) (together with any registration statement filed by the Company pursuant to Rule 462(b) under the Securities Act, the "**Registration Statement**").

1. Definitions.

"**Affiliate**" of a person means a person that, directly or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with, the person specified.

"**Convertible Securities**" means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock.

"**Options**" means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

"**Person**" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and a government or any department or agency thereof.

"**Trading Day**" means any day on which trading of the Common Stock occurs on the applicable Trading Market.

"**Trading Market**" means the NASDAQ Capital Market or, if the Company's Common Stock is not then listed on the NASDAQ Capital Market, then such exchange or quotation system on which the Common Stock then primarily trades.

"**VWAP**" means, for any security as of any date, the dollar volume-weighted average price for such security on the applicable Trading Market during the period beginning at 9:30:01 a.m., New York City time, and ending at 4:00:00 p.m., New York City time, as reported by Bloomberg through its "Volume at Price" function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York City time, and ending at 4:00:00 p.m., New York City time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market

makers for such security as reported in the “pink sheets” by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 15(b) hereof. All such determinations shall be appropriately adjusted for any share dividend, share split or other similar transaction during such period.

2. List of Warrant Holders. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the “**Warrant Register**”), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any registered assignee to which this Warrant is permissibly assigned hereunder from time to time). The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

3. List of Transfers.

(a) This Warrant and the Warrant Shares are transferable.

(b) The Company shall register any such transfer of all or any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, with the Form of Assignment attached hereto duly completed and signed, to the Company at its address specified herein. Upon any such registration or transfer, a new Warrant to purchase Common Stock, in substantially the form of this Warrant (any such new Warrant, a “**New Warrant**”), evidencing the portion of this Warrant so transferred shall be issued to the transferee and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder has in respect of this Warrant.

4. Exercise and Duration of Warrants.

(a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by Section 10 hereof at any time and from time to time on or after the Trigger Date and through and including the Expiration Date. Subject to Section 11 hereof, at 5:00 p.m., New York City time, on the Expiration Date, the portion of this Warrant not exercised prior thereto shall be and become void and of no value and this Warrant shall be terminated and no longer outstanding. In addition, if cashless exercise would be permitted under Section 10(b) hereof, then all or part of this Warrant may be exercised by the registered Holder utilizing such cashless exercise provisions at any time, or from time to time, on or after the Trigger Date and through and including the Expiration Date.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached hereto (the “**Exercise Notice**”), completed and duly signed, and (ii) if such Holder is not utilizing the cashless exercise provisions set forth in this Warrant, payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised. The date the Exercise Notice is delivered to the Company (as determined in accordance with the notice provisions hereof) is an “**Exercise Date**,” provided that the Exercise Price is paid by Holder to Company within two Trading Days of such Exercise Date. For the avoidance of doubt, the Exercise Notice does not need to be notarized or contain a medallion guarantee or any other guarantee of any nature. The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant evidencing the right to

purchase the remaining number of Warrant Shares. On or before the first (1st) business day following the date on which the Company has received the Exercise Notice, the Company shall transmit a confirmation of receipt of the Exercise Notice to the Holder and also will notify the Company's transfer agent.

5. Delivery of Warrant Shares.

(a) Upon exercise of this Warrant, the Company shall promptly (but in no event later than three Trading Days after the Exercise Date) issue or cause to be issued and cause to be delivered to or upon the written order of the Holder and in such name or names as the Holder may designate (provided that, if the Registration Statement is not then effective and the Holder directs the Company to deliver a certificate for the Warrant Shares in a name other than that of the Holder or an Affiliate of the Holder, it shall deliver to the Company on the Exercise Date an opinion of counsel reasonably satisfactory to the Company to the effect that the issuance of such Warrant Shares in such other name may be made pursuant to an available exemption from the registration requirements of the Securities Act of 1933, as amended (the "**Securities Act**") and all applicable state securities or blue sky laws), a certificate for the Warrant Shares issuable upon such exercise, free of restrictive legends unless the Registration Statement is not then effective or the Warrant Shares are not freely transferable without volume restrictions pursuant to Rule 144 under the Securities Act. The Holder, or any Person permissibly so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date. If the Warrant Shares can be issued without restrictive legends, the Company shall, upon the written request of the Holder, use its best efforts to deliver, or cause to be delivered, Warrant Shares hereunder electronically through the Depository Trust and Clearing Corporation ("**DTC**") or another established clearing corporation performing similar functions, if available; provided, that, the Company may, but will not be required to, change its transfer agent if its current transfer agent cannot deliver Warrant Shares electronically through DTC.

(b) If by the close of the third Trading Day after delivery of an Exercise Notice, duly completed and executed by the Holder, the Company fails to deliver to the Holder a certificate representing the required number of Warrant Shares in the manner required pursuant to Section 5(a) hereof, and if after such third Trading Day and prior to the receipt of such Warrant Shares, the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "**Buy-In**"), then the Company shall, within three Trading Days after the Holder's request, and in the Holder's sole discretion, either (i) pay in cash to the Holder an amount equal to the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to issue such Warrant Shares) shall terminate or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Warrant Shares and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of Warrant Shares, times (B) the closing bid price on the date of the event giving rise to the Company's obligation to deliver such certificate.

(c) To the extent permitted by law, the Company's obligations to issue and deliver Warrant Shares in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company or any

violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

6. Charges, Taxes and Expenses. Issuance and delivery of certificates for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, withholding tax, transfer agent fee or other incidental tax or expense in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company; *provided, however*, that the Company shall not be required to pay any tax that may be payable in respect of any transfer involved in the registration of any certificates for Warrant Shares or Warrants in a name other than that of the Holder. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.

7. Replacement of Warrant. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction and customary and reasonable indemnity (which shall not include a surety bond), if requested. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

8. Reservation of Warrant Shares. The Company covenants that it will at all times reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares that are then issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (taking into account the adjustments and restrictions of Section 9 hereof). The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and nonassessable.

9. Certain Adjustments. The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 9.

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

(b) **Pro Rata Distributions.** If the Company, at any time while this Warrant is outstanding, distributes to all holders of Common Stock for no consideration (i) evidences of its indebtedness, (ii) any security (other than a distribution of Common Stock covered by the preceding paragraph), (iii) rights or warrants to subscribe for or purchase any security, or (iv) any other asset (including cash) (in each case, "**Distributed Property**"), then the Holder shall receive with respect to all Warrant Shares the Distributed Property that such Holder would have been entitled to receive in respect of such number of Warrant Shares had the Holder been the record holder of such Warrant Shares immediately prior to the record date for such Distributed Property.

(c) **Fundamental Transactions.** If, at any time while this Warrant is outstanding (i) the Company effects any merger or consolidation of the Company with or into another Person, (ii) the Company effects any sale of all or substantially all of its assets in one or a series of related transactions, (iii) any tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of a majority of the outstanding shares of Common Stock tender or exchange their shares for other securities, cash or property, or (iv) the Company effects any reclassification of its outstanding Common Stock or any compulsory share exchange pursuant to which outstanding Common Stock is effectively converted into or exchanged for other securities, cash or property (each, a "**Fundamental Transaction**"), then the Holder shall have the right thereafter to receive, upon any subsequent exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant (the "**Alternate Consideration**"). The Company shall not effect any such Fundamental Transaction unless prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or the corporation purchasing or otherwise acquiring such assets or other appropriate corporation or entity shall assume the obligation to deliver to the Holder, such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to purchase, and the other obligations under this Warrant. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction, the Company or any successor entity shall pay in exchange for this Warrant at the Holder's option, exercisable at any time concurrently with or within 30 days after the consummation of the Fundamental Transaction, an amount of cash equal to the value of this Warrant as determined in accordance with the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg L.P. using (i) a price per share of Common Stock equal to the VWAP of the Common Stock for the Trading Day immediately preceding the date of consummation of the applicable Fundamental Transaction, (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of this Warrant as of the date of consummation of the applicable Fundamental Transaction and (iii) an expected volatility equal to the greater of 100% and the 60 day volatility obtained from the "HVT" function on Bloomberg L.P. determined as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction. The provisions of this paragraph (c) shall similarly apply to subsequent Fundamental Transactions.

(d) **Number of Warrant Shares.** Simultaneously with any adjustment to the Exercise Price pursuant to paragraph (a) of this Section 9, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment.

(e) [RESERVED]

(f) Calculations. All calculations under this Section 9 shall be made to the nearest cent or the nearest 1/100th of a share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issue or sale of Common Stock.

(g) De Minimis Adjustments. No adjustment in the Exercise Price shall be required unless such adjustment would require an increase or decrease of at least \$0.01 in such price; provided, however, that any adjustment which by reason of this Section 9(g) is not required to be made shall be carried forward and taken into account in any subsequent adjustments under this Section 9. All calculations under this Section 9 shall be made by the Company in good faith and shall be made to the nearest cent or to the nearest one hundredth of a share, as applicable. No adjustment need be made for a change in the par value or no par value of the Company's Common Stock.

(h) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 9, the Company at its expense will, notify the Holder in writing of the occurrence of such adjustment and, at the written request of the Holder, promptly compute such adjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the American Stock Transfer & Trust Company, the transfer agent of the Company.

(i) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including without limitation any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any Subsidiary, (ii) authorizes or approves, enters into any definitive agreement for or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then, except if such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall deliver to the Holder a notice describing the material terms and conditions of such transaction at least 10 Trading Days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction, and the Company will take all reasonable steps to give Holder the practical opportunity to exercise this Warrant prior to such time; *provided, however*, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

10. Payment of Exercise Price. The Holder may pay the Exercise Price in one of the following manners:

(a) Cash Exercise. The Holder may deliver immediately available funds; or

(b) Cashless Exercise. If an Exercise Notice is delivered at a time when the Registration Statement is not then effective, then the Holder may notify the Company in an Exercise Notice of its election to utilize cashless exercise, in which event the Company shall issue to the Holder the number of Warrant Shares determined as follows:

$$X = Y [(A-B)/A]$$

Where

X = the number of Warrant Shares to be issued to the Holder

Y = the number of Warrant Shares with respect to which this Warrant is being exercised

A = the VWAP for the five Trading Days immediately prior to (but not including) the Exercise Date

B = the Exercise Price

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in a cashless exercise transaction shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued.

After the Trigger Date, the Company shall use commercially reasonable efforts to maintain an effective Registration Statement registering the Warrant Shares.

(c) Company-Elected Conversion. (i) The Company shall provide to the Holder prompt written notice of any time that the Company is unable to issue the Warrant Shares via DTC transfer (or otherwise without restrictive legend), because (A) the Securities and Exchange Commission (the "**Commission**") has issued a stop order with respect to the Registration Statement, (B) the Commission otherwise has suspended or withdrawn the effectiveness of the Registration Statement, either temporarily or permanently, (C) the Company has suspended or withdrawn the effectiveness of the Registration Statement, either temporarily or permanently, or (D) otherwise (each a "**Restrictive Legend Event**"). To the extent that a Restrictive Legend Event occurs after the Holder has exercised this Warrant in accordance with Section 4(b) but prior to the delivery of the Warrant Shares, the Company shall (i) if the VWAP (as calculated above) of the Warrant Shares is greater than the Exercise Price, provide written notice to the Holder that the Company will deliver that number of Warrant Shares to the Holder as should be delivered in a cashless exercise transaction in accordance with Section 10(b), and return to the Holder all consideration paid to the Company in connection with the Holder's attempted exercise of this Warrant pursuant to Section 4(b) (a "**Company-Elected Conversion**"), or (ii) at the election of the Holder to be given within five (5) days of receipt of notice of a Company-Elected Conversion, the Holder shall be entitled to rescind the previously submitted Exercise Notice and the Company shall return all consideration paid by Holder for such shares upon such rescission. The Company shall provide to the Holder prompt written notice of the termination of the Restrictive Legend Event. If a Restrictive Legend Event is occurring as of the Expiration Date, the term of this Warrant shall be extended until the fifth (5th) business day after the termination of such Restrictive Legend Event.

11. Limitations on Exercise. Notwithstanding anything to the contrary contained herein, the number of Warrant Shares that may be acquired by the Holder upon any exercise of this Warrant (or otherwise in respect hereof) shall be limited to the extent necessary to ensure that, following such exercise (or other issuance), the total number of shares of Common Stock then beneficially owned by the Holder and its affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), does not exceed 9.99% of the total number of issued and outstanding shares of Common Stock (including for such purpose the shares of Common Stock issuable upon such exercise). For such purposes, beneficial ownership shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. Each delivery of an Exercise

Notice by the Holder will constitute a representation by the Holder that it has evaluated the limitation set forth in this Section and determined that issuance of the full number of Warrant Shares requested in such Exercise Notice is permitted under this Section. The Company's obligation to issue shares of Common Stock in excess of the limitation referred to in this Section shall be suspended (and, except as provided below, shall not terminate or expire notwithstanding any contrary provisions hereof) until such time, if any, as such shares of Common Stock may be issued in compliance with such limitation; provided, that, if, as of 5:30 p.m., New York City time, on the Expiration Date, the Company has not received written notice that the shares of Common Stock may be issued in compliance with such limitation, the Company's obligation to issue such shares shall terminate. This provision shall not restrict the number of shares of Common Stock which a Holder may receive or beneficially own in order to determine the amount of securities or other consideration that such Holder may receive in the event of a Fundamental Transaction as contemplated in Section 9 of this Warrant. By written notice to the Company, which will not be effective until the 61st day after such notice is delivered to the Company, the Holder may waive the provisions of this Section to change the beneficial ownership limitation to 4.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant, and the provisions of this Section 11 shall continue to apply. Upon such a change by a Holder of the beneficial ownership limitation from such 9.99% limitation to such 4.99% limitation, the beneficial ownership limitation may not be further waived by such Holder.

12. No Fractional Shares. No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. In lieu of any fractional shares that would otherwise be issuable, the Company shall pay cash equal to the product of such fraction multiplied by the closing price of one Warrant Share as reported by the applicable Trading Market on the Exercise Date.

13. Notices. Any and all notices or other communications or deliveries hereunder (including, without limitation, any Exercise Notice) shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile or email at the facsimile number or email address, respectively, specified in this Section 13 at or prior to 5:00 p.m. (New York City time) on a Trading Day, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in this Section 13 on a day that is not a Trading Day or later than 5:00 p.m. (New York City time) on any Trading Day, (iii) the Trading Day following the date of mailing, if sent by nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. The addresses for such notices or communications shall be: (a) if to the Company, to Delcath Systems, Inc., 810 Seventh Avenue, Suite 3505, New York, New York 10019, Attention: VP Controller, Facsimile No.: (212) 489-2102, email: warrants@delcath.com (or such other address as the Company shall indicate in writing in accordance with this Section 13) or (b) if to the Holder, to the address or facsimile number appearing on the Warrant Register (or such other address as the Company shall indicate in writing in accordance with this Section 13).

14. Warrant Agent. The Company shall serve as warrant agent under this Warrant. Upon 30 days' notice to the Holder, the Company may appoint a new warrant agent provided. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.

15. Miscellaneous.

(a) This Warrant shall be binding on and inure to the benefit of the parties hereto and their respective successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any Person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant. This Warrant may be amended only in writing signed by the Company and the Holder, or their successors and assigns.

(b) All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of this Warrant and the transactions herein contemplated (**“Proceedings”**) (whether brought against a party hereto or its respective Affiliates, employees or agents) shall be commenced exclusively in 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 (the **“New York Courts”**). Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any Proceeding, any claim that it is not personally subject to the jurisdiction of any New York Court, or that such Proceeding has been commenced in an improper or inconvenient forum. Each party hereto hereby irrevocably waives personal service of process and consents to process being served in any such Proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Warrant and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Each party hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Warrant or the transactions contemplated hereby. If either party shall commence a Proceeding to enforce any provisions of this Warrant, then the prevailing party in such Proceeding shall be reimbursed by the other party for its attorney’s fees and other costs and expenses incurred with the investigation, preparation and prosecution of such Proceeding.

(c) The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.

(d) In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby and the parties will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefore, and upon so agreeing, shall incorporate such substitute provision in this Warrant.

(e) Prior to exercise of this Warrant, the Holder hereof shall not, by reason of by being a Holder, be entitled to any rights of a stockholder with respect to the Warrant Shares

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above.

DELCATH SYSTEMS, INC.

By: _____
Name: []
Title: []

EXERCISE NOTICE

DELCATH SYSTEMS, INC.

WARRANT NO. DATED , 20

Ladies and Gentlemen:

(1) The undersigned hereby elects to exercise the above-referenced Warrant with respect to _____ shares of Common Stock. Capitalized terms used herein and not otherwise defined herein have the respective meanings set forth in the Warrant.

(2) The Holder intends that payment of the Exercise Price shall be made as (check one):

- Cash Exercise under Section 10(a)
- Cashless Exercise under Section 10(b)

(3) If the Holder has elected a Cash Exercise, the holder shall pay the sum of \$ _____ to the Company in accordance with the terms of the Warrant.

(4) Pursuant to this Exercise Notice, the Company shall deliver to the Holder the number of Warrant Shares determined in accordance with the terms of the Warrant.

(5) By its delivery of this Exercise Notice, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder will not beneficially own in excess of the number of shares of Common Stock (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934) permitted to be owned under Section 11 of this Warrant to which this notice relates.

(6) The DWAC information for the transfer of the shares of Common Stock is set out below.

HOLDER:

(Print Name)

By: _____

Name: _____

Title: _____

DWAC Information

Name of Holder's broker: _____

Broker's DTC No.: _____

Name on Holder's brokerage account: _____

Holder's brokerage account number: _____

WARRANT ORIGINALLY ISSUED , 2013
WARRANT NO.

FORM OF ASSIGNMENT

To be completed and signed only upon transfer of Warrant

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto _____ the right represented by the within Warrant to purchase shares of Common Stock to which the within Warrant relates and appoints _____ attorney to transfer said right on the books of the Company with full power of substitution in the premises.

Dated:

TRANSFEROR:

(Print Name)

By: _____

Name: _____

Title: _____

TRANSFeree:

(Print Name)

(Address of Transferee)

In the presence of:

Form of Subscription Agreement

Delcath Systems, Inc.
810 Seventh Avenue, 35th Fl
New York, New York 10019

Ladies and Gentlemen:

The undersigned (the “**Investor**”) hereby confirms its agreement with Delcath Systems, Inc., a Delaware corporation (the “**Company**”), as follows:

1. This Subscription Agreement, including the Terms and Conditions For Purchase of Securities attached hereto as Annex I, which is incorporated herein by this reference as if fully set forth herein (collectively, this “**Agreement**”), is made as of the date set forth below between the Company and the Investor. “**Common Stock**” means (i) the Company’s shares of common stock, par value \$0.01 per share, and (ii) any capital stock into which such common stock shall have been changed or any share capital resulting from a reclassification of such common stock.

2. The Company has authorized the sale and issuance to certain investors of (i) up to an aggregate of [] shares of Common Stock (the “**Shares**”) and (ii) warrants to purchase up to an aggregate of [] shares of Common Stock (the “**Warrants**”; as exercised, collectively, the “**Warrant Shares**”). Each Warrant will entitle the holder to purchase one (1) share of Common Stock at an exercise price of \$[] per share of Common Stock (subject to adjustment) and is exercisable commencing six months after the Closing Date (as defined in Annex I) for a period of [] years from the Closing Date. The certificate representing the Warrants shall be in substantially the form of Exhibit B attached hereto (the “**Warrant Certificate**”; the Warrant Shares together with the Warrants and Shares are referred to herein as the “**Securities**”).

3. The offering and sale of the Shares and Warrants (the “**Offering**”) is being made pursuant to (1) the Company’s effective Registration Statement, including a base prospectus (the “**Base Prospectus**”), on Form S-3 (File No. 333-183675) (which, together with all amendments or supplements thereto is referred to herein as the “**Registration Statement**”) filed by the Company with the United States Securities and Exchange Commission (the “**Commission**”), (2) if applicable, certain “free writing prospectuses” (as that term is defined in Rule 405 under the U.S. Securities Act of 1933, as amended (the “**Securities Act**”), that have or will be filed with the Commission and delivered to the Investor on or prior to the date hereof (each, an “**Issuer Free Writing Prospectus**”), and (3) a Prospectus Supplement (the “**Prospectus Supplement**” and together with the Base Prospectus, the “**Prospectus**”) containing certain supplemental information regarding the Securities and terms of the Offering that has been or will be filed with the Commission and delivered to the Investor (or made available to the Investor by the filing by the Company of an electronic version thereof with the Commission).

4. The Company and the Investor agree that the Investor will purchase from the Company and the Company will issue and sell to the Investor the Shares and Warrants set forth

below for the aggregate purchase price set forth below. The Shares and Warrants shall be purchased pursuant to the Terms and Conditions for Purchase of Securities attached hereto as Annex I. The Investor acknowledges that the Offering is not being underwritten by Roth Capital Partners, LLC (the “**Placement Agent**”), the placement agent for the Offering named in the Prospectus Supplement, and that there is no minimum offering amount.

5. The manner of settlement of the Shares and Warrants purchased by the Investor shall be as follows: on the Closing Date, (i) the Investors will wire the purchase price for their respective Shares and Warrants through their delivery versus payment (“DVP”) account set up at the Placement Agent as executing broker. The Placement Agent will use its Syndicate account as a facilitation account to settle Investors purchases. The Company shall deliver or cause to be delivered the Shares to the Placement Agent on behalf of the Investors, with the delivery of the Shares to be made, through the facilities of The Depository Trust Company’s DWAC system, and the delivery of the Warrants to be made by mail to the Investors to the addresses set forth on the applicable Subscription Agreement. Upon confirmation of the Shares by the Placement Agent on behalf of the Investors, the Placement Agent will instruct its clearing firm to release the wire to the Company. This will all occur during a closing call scheduled to settle the transaction.

IT IS THE INVESTOR’S RESPONSIBILITY TO MAKE THE NECESSARY WIRE TRANSFER OR CONFIRM THE PROPER ACCOUNT BALANCE IN A TIMELY MANNER. IF THE INVESTOR DOES NOT DELIVER THE AGGREGATE PURCHASE PRICE FOR THE SHARES AND WARRANTS, THE SHARES AND WARRANTS MAY NOT BE DELIVERED AT CLOSING TO THE INVESTOR OR THE INVESTOR MAY BE EXCLUDED FROM THE CLOSING ALTOGETHER.

6. The executed Warrants shall be delivered in accordance with the terms thereof.

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

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

8. The Investor represents that it has received (or otherwise had made available to it by the filing by the Company of an electronic version thereof with the Commission) the Base Prospectus, which is a part of the Company’s Registration Statement, the documents incorporated by reference therein, and any Issuer Free Writing Prospectus (collectively, the “**Disclosure Package**”), prior to or in connection with the execution of this Agreement.

9. No offer by the Investor to buy the Shares and Warrants will be accepted and no part of the purchase price will be delivered to the Company until the Investor has received (or otherwise had made available to it by the filing by the Company of an electronic version thereof with the Commission) the Disclosure Package and the Prospectus Supplement and the Company has accepted such offer by countersigning a copy of this Agreement, and any such offer may be withdrawn or revoked, without obligation or commitment of any kind, at any time prior to the Company (or the Placement Agent on behalf of the Company) sending (orally, in writing or by electronic mail) notice of its acceptance of such offer. An indication of interest will involve no obligation or commitment of any kind until the Investor has been delivered (or otherwise had made available to it by the filing by the Company of an electronic version thereof with the Commission) the Disclosure Package and the Prospectus Supplement and this Agreement is accepted and countersigned by or on behalf of the Company.

[Remainder of Page Intentionally Left Blank; Signature Page Follows]

Number of Shares: _____

Number of Warrants: _____

Purchase Price: \$[]

PLEASE ALSO ENSURE THAT YOU HAVE COMPLETED IN FULL THE INVESTOR QUESTIONNAIRE ATTACHED AS EXHIBIT A TO ANNEX I HERETO.

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

Dated as of: _____, 2013

INVESTOR

By: _____

Print Name: _____

Title: _____

Address: _____

Agreed and Accepted

this day of _____, 2013:

DELCATH SYSTEMS, INC.

By: _____

Name:

Title:

[Signature Page to Subscription Agreement]

ANNEX 1

TERMS AND CONDITIONS FOR PURCHASE OF SECURITIES

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

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

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

2.2 The Company proposes to enter into substantially this same form of Subscription Agreement with each investor (collectively, the “**Other Investors**”) and expects to complete sales of Shares and Warrants to them. The Investor and the Other Investors are hereinafter sometimes collectively referred to as the “**Investors**,” and this Agreement and the Subscription Agreements executed by the Other Investors are hereinafter sometimes collectively referred to as the “**Agreements**.”

2.3 Investor acknowledges that the Company intends to pay the Placement Agent a fee (the “**Placement Fee**”) and certain expenses in respect of the sale of the Shares and Warrants.

2.4 The Company has entered into a Placement Agent Agreement, dated the date hereof (the “**Placement Agreement**”), with the Placement Agent that contains certain representations, warranties, covenants and agreements of the Company that may be relied upon by the Investor, which shall be a third party beneficiary thereof. The Company confirms that neither it nor any other Person acting on its behalf has provided the Investor or their agents or counsel with any information that constitutes or could reasonably be expected to constitute material, nonpublic information, except as has been or will be disclosed in the Prospectus and/or in any Current Report on Form 8-K furnished or to be furnished by the Company to the Commission. The Company understands and confirms that the Investor will rely on the foregoing representations in effecting transactions in securities of the Company.

3. Closings and Delivery of the Shares and Warrants and Funds.

3.1 Closing. The completion of the purchase and sale of the Shares and Warrants (the “**Closing**”) will occur at a place and time (the “**Closing Date**”) to be specified by the Company and the Placement Agent, and of which the Investors will be notified in advance by the Placement Agent in accordance with Rule 15c6-1 promulgated under the U.S. Securities Exchange Act of 1934, as amended (the “**Exchange Act**”). At the Closing, (a) the Company shall cause American Stock Transfer & Trust Company, the Company’s United States transfer agent (the “**Transfer Agent**”), to deliver to the Placement Agent on behalf of the Investor the number of Shares set forth on the Signature Page registered in the name of such Investor or, if so indicated on the Investor Questionnaire attached hereto as Exhibit A, in the name of a nominee

designated by the Investor, (b) the Company shall cause to be delivered to the Investor one Warrant Certificate representing the right to purchase the number of Warrant Shares set forth on the Signature Page, and (c) the aggregate purchase price for the Shares and Warrants being purchased by the Investor will be delivered by or on behalf of the Investor to the Placement Agent.

3.2 Conditions to the Obligations of the Parties.

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

(b) Conditions to the Investor's Obligations. The Investor's obligation to purchase the Shares and Warrants will be subject to the accuracy of the representations and warranties made by the Company and the fulfillment of those undertakings of the Company to be fulfilled prior to the Closing Date, including, without limitation, those contained in the Placement Agreement, and to the condition that the Placement Agent shall not have: (a) terminated the Placement Agreement pursuant to the terms thereof or (b) determined that the conditions to the closing in the Placement Agreement have not been satisfied. The Investor's obligations are expressly not conditioned on the purchase by any or all of the Other Investors of the Shares and Warrants that they have agreed to purchase from the Company. The Investor understands and agrees that, in the event that the Placement Agent, in its sole discretion, determines that the conditions to closing of the Offering set forth in the Placement Agreement have not been satisfied or if the Placement Agreement may be terminated for any other reason permitted by such Placement Agreement, then the Placement Agent may, but shall not be obligated to, terminate such Agreement, which shall have the effect of terminating this Subscription Agreement pursuant to Section 14 below.

3.3 Delivery of Funds. *Delivery by Electronic Book-Entry at The Depository Trust Company.* **No later than one (1) business day after the execution of this Agreement by the Investor and the Company,** the Investor shall remit by wire transfer the amount of funds equal to the aggregate purchase price for the Shares and Warrants being purchased by the Investor to the Placement Agent.

3.4 Delivery of Shares. *Delivery by Electronic Book-Entry at The Depository Trust Company.* **No later than one (1) business day after the execution of this Agreement by the Investor and the Company,** the Investor shall direct the Placement Agent regarding the account or accounts that are to be credited with the Shares being purchased by such Investor in order to set up a DWAC instructing the Transfer Agent to credit such account or accounts with the Shares. Such DWAC instruction shall indicate the settlement date for the deposit of the Shares, which date shall be provided to the Investor by the Placement Agent. Upon the closing of the Offering, the Company shall direct the Transfer Agent to credit the Investor's account or accounts with the Shares pursuant to the information contained in the DWAC.

4. Representations, Warranties and Covenants of the Investor.

The Investor acknowledges, represents and warrants to, and agrees with, the Company and the Placement Agent that:

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

4.2 The Investor acknowledges: (a) that no securities commission or similar regulatory authority has reviewed or passed on the merits of the Shares or Warrants, (b) there is no government or other insurance covering the Shares or Warrants and (c) there are risks associated with the purchase of the Shares and Warrants.

4.3 (a) No action has been or will be taken in any jurisdiction outside the United States by the Company or the Placement Agent that would permit an offering of the Shares and Warrants, or possession or distribution of offering materials in connection with the issue of the Shares and Warrants, in any jurisdiction outside the United States where action for that purpose is required, (b) the Investor will comply with all applicable laws and regulations in each jurisdiction in which it purchases, offers, sells or delivers Shares and Warrants or has in its possession or distributes any offering material, in all cases at its own expense, and (c) the Placement Agent is not authorized to make and has not made any representation, disclosure or use of any information in connection with the issue, placement, purchase and sale of the Shares and Warrants, except as set forth or incorporated by reference in the Prospectus.

4.4 (a) The Investor has full right, power, authority and capacity to enter into this Agreement and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Agreement, and (b) this Agreement constitutes a valid and binding obligation of the Investor enforceable against the Investor in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law) and except as to the enforceability of any rights to indemnification or contribution that may be violative of the public policy underlying any law, rule or regulation (including any federal or state securities law, rule or regulation).

4.5 The Investor understands that nothing in this Agreement, the Prospectus, the Disclosure Package or any other materials presented to the Investor in connection with the purchase and sale of the Shares and Warrants constitutes legal, tax or investment advice. The

Investor has consulted such legal, tax and investment advisors and made such investigation as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of Shares and Warrants. The Investor also understands that there is no established public trading market for the Warrants being offered in the Offering, and that the Company does not expect such a market to develop. In addition, the Company does not intend to apply for listing of the Warrants on any securities exchange. The Investor understands that without an active market, the liquidity of the Warrants will be limited.

4.6 The Investor will maintain the confidentiality of all information acquired as a result of the transactions contemplated hereby prior to the public disclosure of that information by the Company in accordance with Section 13 of this Annex.

4.7 Since the time at which the Placement Agent first contacted such Investor about the Offering, the Investor has not disclosed any information regarding the Offering to any third parties (other than its legal, accounting and other advisors in connection with the Offering) and has not engaged in any purchases or sales of the securities of the Company (including, without limitation, any Short Sales (as defined herein) involving the Company's securities). Except for the transactions contemplated by this Agreement, the Investor represents that it has not engaged, and covenants that it will not engage, in any purchases or sales of the securities of the Company (including Short Sales) beginning when the Investor was informed of this Transaction and ending when the transactions contemplated by this Agreement are publicly disclosed. The Investor agrees that it will not use any of the Shares and Warrants acquired pursuant to this Agreement to cover any short position in the Common Stock if doing so would be in violation of applicable securities laws. For purposes hereof, "Short Sales" include, without limitation, all "short sales" as defined in Rule 200 promulgated under Regulation SHO under the Exchange Act, whether or not against the box, and all types of direct and indirect share pledges, forward sales contracts, options, puts, calls, short sales, swaps, "put equivalent positions" (as defined in Rule 16a-1(h) under the Exchange Act) and similar arrangements (including on a total return basis), and sales and other transactions through non-U.S. broker dealers or foreign regulated brokers.

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

6. Notices. All notices, requests, consents and other communications hereunder will be in writing, will be mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, or by facsimile, and will be deemed given (i) if delivered by first-class registered or certified mail domestic, three business days after so mailed, (ii) if delivered by nationally recognized overnight carrier, one business day after so mailed and (iii) if delivered by facsimile, upon electronic confirmation of receipt and will be delivered and addressed as follows:

if to the Company, to:

Delcath Systems, Inc.
810 Seventh Avenue, 35th Fl
New York, New York 10019
Attn: General Counsel
Facsimile No.: (646) 562-1124

with a copy to:

Skadden, Arps, Slate, Meagher & Flom LLP
Four Times Square
New York, New York 10036
Attention: Andrea Nicolas, Esq.
Facsimile No.: (917) 777-3416

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

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

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

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

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

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

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

13. Press Release. The Company and the Investor agree that the Company shall (a) prior to the opening of the financial markets in New York City on [], 2013 issue a press release announcing the Offering and disclosing all material information regarding the Offering and (b) as promptly as practicable thereafter, furnish a Current Report on Form 8-K to the Commission including, but not limited to, a form of this Agreement and a form of the Warrant Certificate.

14. Termination. In the event that the Placement Agreement is terminated by the Placement Agent pursuant to the terms thereof, this Agreement shall terminate without any further action on the part of the parties hereto.

DEL CATH SYSTEMS, INC.

FORM OF PLACEMENT AGENCY AGREEMENT

October , 2013

Roth Capital Partners, LLC
888 San Clemente Drive
Newport Beach, CA 92660

Ladies and Gentlemen:

Delcath Systems, Inc., a Delaware corporation (the "Company"), proposes, subject to the terms and conditions herein, to issue and sell an aggregate of up to (i) [] shares (the "Shares") of its common stock, par value \$0.01 per share (the "Common Stock"), and (ii) [] warrants to purchase shares of Common Stock (the "Warrants") to certain investors (each an "Investor" and, collectively, the "Investors"), in an offering under its registration statement on Form S-3 (Registration No. 333-183675). The shares of Common Stock issuable upon exercise of the Warrants are hereinafter referred to as the "Warrant Shares" and the Shares, the Warrants and the Warrant Shares are hereinafter referred to as the "Securities". The Securities are more fully described in the Prospectus (as defined below). The Company desires to engage Roth Capital Partners, LLC ("Roth") in connection with such issuance and sale of the Securities.

The Company hereby confirms its agreement with you as follows:

1. Agreement to Act as Placement Agent.

(a) On the basis of the representations, warranties and agreements of the Company herein contained, and subject to all the terms and conditions of this Agreement between the Company and you, Roth shall be the Company's exclusive placement agent (in such capacity, the "Placement Agent"), on a best efforts basis, in connection with the issuance and sale by the Company of the Securities to the Investors in a proposed takedown under the Registration Statement (as defined below), with the terms of each offering to be subject to market conditions and negotiations between the Company, the Placement Agent and the prospective Investors (such takedown shall be referred to herein as the "Offering"). As compensation for services rendered, and provided that any of the Securities are sold to Investors in the Offering, on the Closing Date (as defined below) of the Offering, the Company shall pay to the Placement Agent an amount equal to 7.0% of the gross proceeds received by the Company from the sale of the Securities to all Investors (the "Placement Fee") plus reimbursable costs and expenses of the Placement Agent pursuant to Section 4. The Placement Fee shall be payable to the Placement Agent at Closing, based upon the sale of the Shares, as provided in the Subscription Agreements (defined below). The sale of the Securities shall be made pursuant to securities purchase agreements in the form included as Exhibit A hereto (the "Subscription Agreements") on the terms described on Exhibit B hereto. The Company shall have the sole right to accept offers to purchase the Securities and may reject any such offer in whole or in part. Notwithstanding the foregoing, it is understood and agreed that the Placement Agent or any of their respective affiliates may, solely at their discretion and without any obligation to do so, purchase Securities as principal; *provided, however*, that any such purchases by the Placement Agent (or their respective affiliates) shall be fully disclosed to the Company and approved by the Company in accordance with the previous sentence.

(b) This Agreement shall not give rise to any commitment by the Placement Agent to purchase any of the Securities, and the Placement Agent shall have no authority to bind the Company. The Placement Agent shall act on a best efforts basis and does not guarantee that it will be able to raise new capital in the Offering. The Placement Agent may retain other brokers or dealers to act as sub-agents on its behalf in connection with the Offering, the fees of which shall be paid out of the Placement Fee.

(c) The Company acknowledges and agrees that the Placement Agent shall act as an independent contractor, and not as a fiduciary, and any duties of the Placement Agent with respect to investment banking services to the Company, including the offering of the Securities contemplated hereby (including in connection with determining the terms of the Offering), shall be contractual in nature, as expressly set forth herein, and shall be owed solely to the Company. Each party disclaims any intention to impose any fiduciary or similar duty on the other. Additionally, the Placement Agent has not advised, nor is it advising, the Company or any other person as to any legal, tax, investment, accounting or regulatory matters in any jurisdiction with respect to the transactions contemplated hereby. The Company shall consult with its own advisors concerning such matters and shall be responsible for making its own independent investigation and appraisal of the transactions contemplated hereby, and the Placement Agent shall have no responsibility or liability to the Company with respect thereto. Any review by the Placement Agent of the Company, the transactions contemplated hereby or other matters relating to such transactions has been and will be performed solely for the benefit of the Placement Agent and has not been and shall not be on behalf of the Company or any other person. It is understood that the Placement Agent has not and will not be rendering an opinion to the Company as to the fairness of the terms of the Offering. Notwithstanding anything in this Agreement to the contrary, the Company acknowledges that the Placement Agent may have financial interests in the success of the Offering contemplated hereby that are not limited to the Placement Fee. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against the Placement Agent with respect to any breach or alleged breach of fiduciary duty.

(d) Payment of the purchase price for, and delivery of, the Securities shall be made at a closing (the "Closing") at the offices of LeClairRyan, A Professional Corporation, counsel for the Placement Agent, located at 885 Third Avenue, New York, New York, at [], local time, as soon as practicable after the determination of the public offering price of the Securities, but not later than on [], 2013 except as otherwise agreed upon by the Company and the Placement Agent (such date of payment and delivery being herein called the "Closing Date"). All such actions taken at the Closing shall be deemed to have occurred simultaneously. No Securities which the Company has agreed to sell pursuant to this Agreement and the Subscription Agreements shall be deemed to have been purchased and paid for, or sold by the Company, until such Securities shall have been delivered to the Investor thereof against payment therefor by such Investor. If the Company shall default in its obligations to deliver Securities to an Investor whose offer it has accepted, the Company shall indemnify and hold the Placement Agent harmless against any loss, claim or damage incurred by the Placement Agent arising from or as a result of such default by the Company.

(e) On the Closing Date, (i) the Investors will wire the purchase price for their respective Securities through their delivery versus payment ("DVP") account set up at Roth as executing broker. Roth will use its Syndicate account as a facilitation account to settle Investors purchases. The Company shall deliver or cause to be delivered the Securities to Roth on behalf of the Investors, with the delivery of the Shares to be made, through the facilities of The Depository Trust Company's DWAC system, and the delivery of the Warrants to be made by mail to the Investors to the addresses set forth on the applicable Subscription Agreement. Upon confirmation of the Shares by Roth on behalf of the Investors, Roth will instruct its clearing firm to release the wire to the Company. This will all occur during a closing call scheduled to settle the transaction.

(f) The Securities shall be registered in such names and in such denominations as the Placement Agent shall request by written notice to the Company.

2. Representations, Warranties and Agreements of the Company.

The Company hereby represents, warrants and covenants to the Placement Agent as of the date hereof, and as of the Closing Date of the Offering, as follows:

(a) *Filing of Registration Statement.* The Company has prepared and filed, in conformity with the requirements of the Securities Act of 1933, as amended (the "Securities Act"), and the published rules and regulations thereunder (the "Rules and Regulations") adopted by the Securities and Exchange Commission (the "Commission"), a registration statement, including a prospectus, on Form S-3 (File No. 333-183675), which became effective on October 9, 2012, relating to the Securities and the offering thereof (the "Offering") from time to time in accordance with Rule 415(a)(1)(x) of the Rules and Regulations, and such amendments thereof as may have been required to the date of this Agreement. The term "Registration Statement" as used in this Agreement means the aforementioned registration statement, as amended at the time of such registration statement's effectiveness for purposes of Section 11 of the Securities Act, as such section applies to the Placement Agent (the "Effective Time"), including (i) all documents filed as a part thereof or incorporated or deemed to be incorporated by reference therein and (ii) any information in the corresponding Base Prospectus (as defined below) or a prospectus supplement filed with the Commission pursuant to Rule 424(b) under the Securities Act, to the extent such information is deemed pursuant to Rule 430A ("Rule 430A"), 430B ("Rule 430B") or 430C ("Rule 430C") under the Securities Act to be a part thereof at the Effective Time. If the Company has filed an abbreviated registration statement to register additional Securities pursuant to Rule 462(b) under the Rules and Regulations (the "Rule 462(b) Registration Statement"), then any reference herein to the term "Registration Statement" shall also be deemed to include such Rule 462(b) Registration Statement. For purposes of this Agreement, all references to the Registration Statement, the Base Prospectus, the Prospectus (as defined below) or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System ("EDGAR"). All references in this Agreement to amendments or supplements to the Registration Statement or the Prospectus shall be deemed to mean and include the subsequent filing of any document under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and which is deemed to be incorporated therein by reference.

(b) *Effectiveness of Registration Statement; Certain Defined Terms.* The Company and the transactions contemplated by this Agreement meet the requirements and comply with the conditions for the use of Form S-3 under the Securities Act. The aggregate market value of the Company's voting and non-voting common equity held by non-affiliates of the Company was at least \$75 million within 60 days prior to March 13, 2013 (the date of filing the Company's 2012 Annual Report on Form 10-K with the Commission). The Company has complied, to the Commission's satisfaction, with all requests of the Commission for additional or supplemental information. No stop order preventing or suspending use of the Registration Statement or the Prospectus or the effectiveness of the Registration Statement has been issued by the Commission, and no proceedings for such purpose pursuant to Section 8A of the Securities Act against the Company or related to the Offering have been instituted or are pending or, to the Company's knowledge, are contemplated or threatened by the Commission, and any request received by the Company on the part of the Commission for additional information has been complied with. As used in this Agreement:

(1) "Base Prospectus" means the prospectus included in the Registration Statement at the Effective Time.

(2) “Disclosure Package” means (i) the Base Prospectus, (ii) each Issuer Free Writing Prospectus, if any, filed or used by the Company on or before the Time of Sale and listed on Schedule I hereto (other than a roadshow that is an Issuer Free Writing Prospectus but is not required to be filed under Rule 433 of the Rules and Regulations) and (iii) the information included on Exhibit B hereto all considered together.

(3) “Issuer Free Writing Prospectus” means any “issuer free writing prospectus,” as defined in Rule 433 of the Rules and Regulations relating to the Securities in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company’s records pursuant to Rule 433(g) of the Rules and Regulations.

(4) “Prospectus” means the prospectus supplement (including the Base Prospectus) relating to the Securities in the form it was first filed with the Commission pursuant to Rule 424(b) and 430B of the Securities Act.

(5) “Time of Sale” means [] [a].m., New York time, on the date of this Agreement.

(c) *Contents of Registration Statement.* The Registration Statement complied when it became effective, complies as of the date hereof and, as amended or supplemented, at the Time of Sale and at all times during which a prospectus is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) in connection with any sale of Securities (the “Prospectus Delivery Period”), will comply, in all material respects, with the requirements of the Securities Act; the Registration Statement did not, as at the Effective Time, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading, *provided*, that the Company makes no representation or warranty in this Section 2(c) with respect to statements in or omissions from the Registration Statement in reliance upon, and in conformity with, written information furnished to the Company by the Placement Agent specifically for inclusion therein, which information the parties hereto agree is limited to the Placement Agent Information (as defined in Section 7 hereof).

(d) *Contents of Prospectus.* The Prospectus will comply, as of the date that it is filed with the Commission, the date of its delivery to prospective purchasers and at all times during the Prospectus Delivery Period, in all material respects, with the requirements of the Securities Act; at no time during the period that begins on the date the Prospectus is filed with the Commission and ends at the end of the Prospectus Delivery Period will 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 the light of the circumstances under which they were made, not misleading, *provided*, that the Company makes no representation or warranty with respect to statements in or omissions from the Prospectus in reliance upon, and in conformity with, written information furnished to the Company by the Placement Agent specifically for inclusion therein, which information the parties hereto agree is limited to the Placement Agent Information.

(e) *Incorporated Documents.* Each of the documents incorporated or deemed to be incorporated by reference in the Registration Statement, at the time such document was filed with the Commission or at the time such document became effective, as applicable, complied, in all material respects, with the requirements of the Exchange Act, were filed on a timely basis with the Commission 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.

(f) *Disclosure Package.* The Disclosure Package, as of the Time of Sale, did not, and at the Closing Date will not, contain any untrue statement of a material fact or omit to state any 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; *provided*, that the Company makes no representations or warranty in this paragraph with respect to statements in or omissions from the Disclosure Package in reliance upon, and in conformity with, written information furnished to the Company by the Placement specifically for inclusion therein, which information the parties hereto agree is limited to the Placement Agent Information.

(g) *Distributed Materials; Conflict with Registration Statement.* Other than the Base Prospectus and the Prospectus, the Company has not made, used, prepared, authorized, approved or referred to and will not make, use, prepare, authorize, approve or refer to any “written communication” (as defined in Rule 405 under the Securities Act) that constitutes an offer to sell or a solicitation of an offer to buy the Securities other than (i) any document not constituting a prospectus pursuant to Section 2(a)(10)(a) of the Securities Act or Rule 134 under the Securities Act or (ii) the documents listed on Schedule I hereto and other written communications approved in advance by the Placement Agent.

(h) *Issuer Free Writing Prospectuses.* Each Issuer Free Writing Prospectus, if any, conformed or will conform in all material respects to the requirements of the Securities Act on the date of first use, and the Company has complied or will comply with any filing requirements applicable to such Issuer Free Writing Prospectus pursuant to the Securities Act. Each Issuer Free Writing Prospectus, if any, when considered together with the Disclosure Package, as of its issue date and at all subsequent times through the completion of the Prospectus Delivery Period did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement or the Prospectus, including any document incorporated by reference therein and any prospectus supplement deemed to be a part thereof that has not been superseded or modified; or includes an untrue statement of a material fact or omitted or would omit 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 prevailing at the subsequent time, not misleading; *provided*, that the Company makes no representation or warranty with respect to statements in or omissions from any Issuer Free Writing Prospectus in reliance upon, and in conformity with, written information furnished to the Company by the Placement Agent specifically for inclusion therein, which information the parties hereto agree is limited to the Placement Agent Information.

(i) *Not an Ineligible Issuer.* (1) At the earliest time after the filing of the Registration Statement that the Company or another offering participant made a bona fide offer (within the meaning of Rule 164(h)(2) under the Securities Act) of the Securities and (2) at the date hereof, the Company was not and is not an “ineligible issuer,” as defined in Rule 405 (“Rule 405”) under the Securities Act.

(j) *Due Incorporation.* The Company and each Subsidiary (defined below) has been duly organized and is validly existing as a corporation in good standing under the laws of its jurisdiction of organization, with the corporate power and authority to own its properties and to conduct its business as currently being conducted and as described in the Registration Statement, the Prospectus and the Disclosure Package. The Company and each Subsidiary is duly qualified to transact business and is in good standing as a foreign corporation or other legal entity in each other jurisdiction in which its ownership or leasing of property or the conduct of its business requires such qualification, except where the failure to be so qualified and in good standing or have such power or authority (i) would not have, individually or in the aggregate, a material adverse effect upon, the general affairs, business, operations, prospects, properties, financial condition, or results of operations of the Company, taken as a whole, or (ii) impair in any material respect the power or ability of the Company to perform its obligations under this Agreement or to consummate any transactions contemplated by this Agreement, including the issuance and sale of the Securities (any such effect as described in clauses (i) or (ii), a “Material Adverse Effect”).

(k) *Subsidiaries.* The Company has no subsidiaries (as defined in Rule 405 of the Securities Act) other than those entities listed on Schedule V hereto (each a “Subsidiary” and collectively, the “Subsidiaries”). The Company, directly or indirectly, owns all of the issued and outstanding capital stock or other equity interests of each Subsidiary and, except as otherwise described in the Disclosure Package, does not own any beneficial interest, directly or indirectly, in any other corporation, partnership, joint venture or other business entity.

(l) *Due Authorization and Enforceability.* The Company has the full right, power and authority to enter into this Agreement, the Subscription Agreements, and the Warrants and to perform and discharge its obligations hereunder and thereunder; and this Agreement and the Warrants have been duly authorized, executed and delivered by the Company, and each constitutes the valid, legal and binding obligation of the Company, enforceable against the Company in accordance with their respective terms, except as rights to indemnity hereunder may be limited by federal or state securities laws and except as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization or similar laws affecting the rights of creditors generally and subject to general principles of equity.

(m) *The Securities.* The issuance of the Shares and the Warrant Shares have been duly and validly authorized by the Company and when issued, delivered and paid for in accordance with the terms of this Agreement or the Warrants, as applicable, will have been duly and validly issued and will be fully paid and nonassessable, will not be subject to any statutory or contractual preemptive rights or other rights to subscribe for or purchase or acquire any shares of Common Stock of the Company, which have not been waived or complied with and will conform in all material respects to the description thereof contained in the Disclosure Package and the Prospectus and such description conforms in all material respects to the rights set forth in the instruments defining the same. The Warrant Shares have been duly authorized and reserved for issuance pursuant to the terms of the Warrants, and when issued by the Company upon valid exercise of the Warrants and payment of the exercise price, will be duly and validly issued, fully paid and nonassessable and free of any preemptive or similar rights and will conform to the description thereof and contained in the Disclosure Package and the Prospectus.

(n) *Capitalization.* The information set forth under the caption “Capitalization” in the Disclosure Package and the Prospectus is fairly presented on a basis consistent with the Company’s financial statements. The authorized capital stock of the Company conforms as to legal matters to the

description thereof contained in the Prospectus under the caption “Description of Securities We Are Offering” and in the Disclosure Package. The issued and outstanding shares of capital stock of the Company have been duly authorized and validly issued, are fully paid and nonassessable, and have been issued in compliance with all federal and state securities laws. None of the outstanding shares of Common Stock were issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase or acquire any securities of the Company. There are no authorized or outstanding shares of capital stock, options, warrants, preemptive rights, rights of first refusal or other rights to purchase, or equity or debt securities convertible into or exchangeable for, any capital stock of the Company other than those described in the Prospectus and the Disclosure Package. The description of the Company’s stock option, stock bonus and other stock plans or arrangements, and the options or other rights granted thereunder, as described in the Prospectus and the Disclosure Package, accurately and fairly present the information required to be shown with respect to such plans, arrangements, options and rights.

(o) *No Conflict.* The execution, delivery and performance by the Company of this Agreement, each Subscription Agreement, and the Warrants and the consummation of the transactions contemplated hereby, and thereby including the issuance and sale by the Company of the Securities, will not conflict with or result in a breach or violation of, or constitute a default under (nor constitute any event which with notice, lapse of time or both would result in any breach or violation of or constitute a default under), give rise to any right of termination or other right or the cancellation or acceleration of any right or obligation or loss of a benefit under, or give rise to the creation or imposition of any lien, encumbrance, security interest, claim or charge upon any property or assets of the Company or any Subsidiary pursuant to (i) any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any Subsidiary is a party or by which any of them or any of their respective properties may be bound or to which any of the property or assets of the Company or any Subsidiary is subject, (ii) result in any violation of the provisions of the charter or by-laws of the Company or any Subsidiary, or (iii) result in any violation of any law, statute, rule, regulation, judgment, order or decree of any court or governmental agency or body, domestic or foreign, having jurisdiction over the Company or any Subsidiary or any of their properties or assets.

(p) *No Consents Required.* No approval, authorization, consent or order of or filing, qualification or registration with, any court or governmental agency or body, foreign or domestic, which has not been made, obtained or taken and is not in full force and effect, is required in connection with the execution, delivery and performance of this Agreement or the Warrants by the Company, the issuance and sale of the Securities or the consummation by the Company of the transactions contemplated hereby or thereby other than (i) as may be required under the Securities Act, (ii) any necessary qualification of the Shares and Warrant Shares under the securities or blue sky laws of the various jurisdictions in which the Securities are being offered, (iii) under the rules and regulations of the Financial Industry Regulatory Authority (“FINRA”) or (iv) the NASDAQ in connection with the distribution of the Securities.

(q) *Preemptive Rights.* Except as otherwise described in the Registration Statement, the Prospectus and the Disclosure Package, there are no preemptive rights or other rights (other than rights which have been waived in writing in connection with the transactions contemplated by this Agreement or otherwise satisfied) to subscribe for or to purchase any shares of Common Stock or shares of any other capital stock or other equity interests of the Company, or any agreement or arrangement between the Company and any of the Company’s stockholders, or to the Company’s knowledge, between or among any of the Company’s stockholders, which grant special rights with respect to any shares of the Company’s capital stock or which in any way affect any stockholder’s ability or right freely to alienate or vote such shares.

(r) *Registration Rights*. Except as otherwise described in the Registration Statement, Prospectus and the Disclosure Package, there are no contracts, agreements or understandings between the Company and any person granting such person the right (other than rights which have been waived in writing in connection with the transactions contemplated by this Agreement or otherwise satisfied) to require the Company to register any securities with the Commission.

(s) *Independent Accountants*. Ernst & Young LLP (“*E&Y LLP*”), whose reports on the consolidated financial statements of the Company are incorporated by reference in the Registration Statement, the Prospectus and the Disclosure Package, is (A) an independent public accounting firm within the meaning of the Securities Act, (B) a registered public accounting firm (as defined in Section 2(a)(12) of the Sarbanes-Oxley Act of 2002 (the “*Sarbanes-Oxley Act*”)), and (C) to the Company’s knowledge, not in violation of the auditor independence requirements of the Sarbanes-Oxley Act.

(t) *Financial Statements*. The financial statements of the Company, together with the related schedules and notes thereto, included or incorporated by reference in the Prospectus and the Disclosure Package, comply in all material respects with the applicable requirements of the Securities Act and the Exchange Act, as applicable, and present fairly in all material respects (i) the financial condition of the Company as of the dates indicated and (ii) the consolidated results of operations, stockholders’ equity and changes in cash flows of the Company for the periods therein specified; and such financial statements and related schedules and notes thereto have been prepared in conformity with United States generally accepted accounting principles, consistently applied throughout the periods involved (except as otherwise stated therein and subject, in the case of unaudited financial statements, to the absence of footnotes and normal year-end adjustments). There are no other financial statements (historical or pro forma) that are required to be included or incorporated by reference in the Registration Statement, the Prospectus or the Disclosure Package; and all disclosures contained in the Registration Statement, the Disclosure Package and the Prospectus regarding “non-GAAP financial measures” (as such term is defined by the rules and regulations of the Commission) comply with Regulation G of the Exchange Act and Item 10(e) of Regulation S-K under the Securities Act, to the extent applicable, and present fairly the information shown therein and the Company’s basis for using such measures.

(u) *Absence of Material Changes*. Subsequent to the respective dates as of which information is given in the Registration Statement, the Prospectus and the Disclosure Package, and except as may be otherwise stated or incorporated by reference in the Registration Statement, the Prospectus and the Disclosure Package, there has not been (i) any Material Adverse Effect, (ii) any transaction which is material to the Company or any Subsidiary, (iii) any obligation, direct or contingent (including any off-balance sheet obligations), incurred by the Company or any Subsidiary, which is material to the Company, (iv) any dividend or distribution of any kind declared, paid or made on the capital stock of the Company, (v) any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants or the conversion of convertible indebtedness), or material change in the short-term debt or long-term debt of the Company or any Subsidiary (other than upon conversion of convertible indebtedness) or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock (other than grants of stock options under the Company’s stock option plans existing on the date hereof) of the Company or any Subsidiary.

(v) *Legal Proceedings*. There are no legal or governmental actions, suits, claims or proceedings pending or, to the Company’s knowledge, threatened or contemplated to which the

Company or any Subsidiary is or would be a party or of which any of their respective properties is or would be subject at law or in equity, before or by any federal, state, local or foreign governmental or regulatory commission, board, body, authority or agency, or before or by any self-regulatory organization or other non-governmental regulatory authority (including, without limitation, the Food and Drug Administration of the U.S. Department of Health and Human Services (the “FDA”)) which are required to be described in the Registration Statement, the Disclosure Package or the Prospectus and are not so described therein, or which, singularly or in the aggregate, if resolved adversely to the Company or any Subsidiary, would reasonably be likely to result in a Material Adverse Effect or prevent or materially and adversely affect the ability of the Company to consummate the transactions contemplated hereby.

(w) *No Violation*. Neither the Company nor any Subsidiary is in breach or violation of or in default (nor has any event occurred which with notice, lapse of time or both would result in any breach or violation of, or constitute a default) (i) under the provisions of its charter or bylaws (or analogous governing instrument, as applicable) or (ii) in the performance or observance of any term, covenant, obligation, agreement or condition contained in any indenture, mortgage, deed of trust, bank loan or credit agreement or other evidence of indebtedness, or any license, lease, contract or other agreement or instrument to which the Company or any Subsidiary is a party or by which it or any of its properties may be bound or affected, or (iii) in the performance or observance of any statute, law, rule, regulation, ordinance, judgment, order or decree of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or any Subsidiary or any of its properties, as applicable (including, without limitation, those administered by the FDA or by any foreign, federal, state or local governmental or regulatory authority performing functions similar to those performed by the FDA), except, with respect to clauses (ii) and (iii) above, to the extent any such contravention has been waived or would not result in a Material Adverse Effect.

(x) *Permits*. The Company and each Subsidiary has made all filings, applications and submissions required by, and owns or possesses all approvals, licenses, certificates, certifications, clearances, consents, exemptions, marks, notifications, orders, permits and other authorizations issued by, the appropriate federal, state or foreign regulatory authorities (including, without limitation, the FDA, and any other foreign, federal state or local government or regulatory authorities performing functions similar to those performed by the FDA) necessary to conduct its business as described in the Disclosure Package and the Prospectus (collectively, “Permits”), except for such Permits which the failure to obtain would not have a Material Adverse Effect (the “Immaterial Permits”), and is in compliance in all material respects with the terms and conditions of all such Permits other than the Immaterial Permits (the “Required Permits”). All such Required Permits held by the Company or any Subsidiary are valid and in full force and effect. Neither the Company nor any Subsidiary has received any notice of any proceedings relating to revocation or modification of, any such Required Permit, which, individually or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a Material Adverse Effect.

(y) *Not an Investment Company*. Neither the Company nor any Subsidiary is or, after giving effect to the offering and sale of the Securities and the application of the proceeds thereof as described in the Disclosure Package and the Prospectus, will be (i) required to register as an “investment company” as defined in the Investment Company Act of 1940, as amended (the “Investment Company Act”), and the rules and regulations of the Commission thereunder or (ii) a “business development company” (as defined in Section 2(a)(48) of the Investment Company Act).

(z) *No Price Stabilization.* Neither the Company nor any Subsidiary nor, to the Company's knowledge, any of the Company's or any Subsidiary's officers, directors, affiliates or controlling persons has taken or will take, directly or indirectly, any action designed to or that might be reasonably expected to cause or result in, or which has constituted or which might reasonably be expected to constitute the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

(aa) *Good Title to Property.* The Company and each Subsidiary has good and marketable title to all property (whether real or personal) described in the Registration Statement, the Disclosure Package and the Prospectus as being owned by it, in each case free and clear of all liens, claims, security interests, other encumbrances or defects (collectively, "Liens"), except such as are described in the Registration Statement, the Disclosure Package and the Prospectus and those that would not, individually or in the aggregate 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 or any Subsidiary. All of the property described in Disclosure Package and the Prospectus as being held under lease by the Company or any Subsidiary is held thereby under leases that are in full force and effect.

(bb) *Intellectual Property Rights.* The Company and each Subsidiary owns or possesses the right to use all patents, trademarks, trademark registrations, service marks, service mark registrations, trade names, copyrights, licenses, inventions, software, databases, know-how, Internet domain names, trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures, and other intellectual property (collectively, "Intellectual Property") necessary to carry on their respective businesses as currently conducted, and as proposed to be conducted and described in the Disclosure Package and the Prospectus, and neither the Company nor any Subsidiary is aware of any claim to the contrary or any challenge by any other person to the rights of the Company or any Subsidiary with respect to the foregoing except for those that could not have a Material Adverse Effect. The Intellectual Property licenses described in the Disclosure Package and the Prospectus are, to the knowledge of the Company, valid, binding upon, and enforceable by or against the parties thereto in accordance to their terms. The Company and each Subsidiary has complied in all material respects with, and is not in breach nor has received any asserted or threatened claim of breach of, any Intellectual Property license, and neither the Company nor any Subsidiary has knowledge of any breach or anticipated breach by any other person to any Intellectual Property license. The Company's and each Subsidiary's businesses as now conducted and as proposed to be conducted, to the knowledge of the Company, do not and will not infringe or conflict with any patents, trademarks, service marks, trade names, copyrights, trade secrets, licenses or other Intellectual Property or franchise right of any person. Neither the Company nor any Subsidiary has received notice of any material claim against the Company or any Subsidiary alleging the infringement by the Company or any Subsidiary of any patent, trademark, service mark, trade name, copyright, trade secret, license in or other intellectual property right or franchise right of any person. The Company and each Subsidiary has taken all reasonable steps to protect, maintain and safeguard its rights in all Intellectual Property, including the execution of appropriate intellectual property assignment, nondisclosure and confidentiality agreements, and no current or former employee or contractor is in violation of any such agreement or has retained any rights in such Intellectual Property. The consummation of the transactions contemplated by this Agreement will not result in the loss or impairment of or payment of any additional amounts with respect to, nor require the consent of any other person in respect of, the Company's or any Subsidiary's right to own, use, or hold for use any of the Intellectual Property as owned, used or held for use in the conduct of the businesses as currently conducted. Neither the Company nor any Subsidiary has entered into any agreement to indemnify any third party against a claim of intellectual property infringement.

The Company and each Subsidiary has duly and properly filed or caused to be filed with the United States Patent and Trademark Office (the “PTO”) and applicable foreign and international patent authorities all patent applications owned by the Company or any Subsidiary (collectively, the “Company Patent Applications”). To the knowledge of the Company, the Company each Subsidiary has complied with the PTO’s duty of candor and disclosure for the Company Patent Applications and has made no material misrepresentation in the Company Patent Applications. Neither the Company nor any Subsidiary is aware of any information material to a determination of patentability regarding the Company Patent Applications not called to the attention of the PTO or similar foreign authority. Neither the Company nor any Subsidiary is aware of any information not called to the attention of the PTO or similar foreign authority that would preclude the grant of a patent for the Company Patent Applications. Neither the Company nor any Subsidiary has knowledge of any information that would preclude the Company or any Subsidiary, as applicable, from having clear title to the Company Patent Applications. Neither the Company nor any Subsidiary has used any open source software in any Company product. The Company and each Subsidiary is in compliance with all relevant local, state, federal, and foreign laws related to the collection, storage and distribution of personally identifiable information and with all Company and any Subsidiary privacy policies and all applicable agreements. The consummation of the transactions contemplated by this Agreement will not violate any Company or any Subsidiary privacy obligations nor require the Company or any Subsidiary to provide any notice to, or seek any consent from, any employee, customer, supplier, service provide or other third party.

(cc) *No Labor Disputes.* No labor problem or dispute with the employees of the Company or any Subsidiary exists, or, to the Company’s knowledge, is threatened or imminent, which would reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any Subsidiary is aware that any key employee or significant group of employees of the Company or any Subsidiary plans to terminate employment with the Company or any Subsidiary. Neither the Company nor any Subsidiary has engaged in any unfair labor practice; except for matters which would not, individually or in the aggregate, result in a Material Adverse Effect, (i) there is (A) no unfair labor practice complaint pending or, to the Company’s knowledge, threatened against the Company or any Subsidiary before the National Labor Relations Board, and no grievance or arbitration proceeding arising out of or under collective bargaining agreements is pending or to the Company’s knowledge, threatened, (B) no strike, labor dispute, slowdown or stoppage pending or, to the Company’s knowledge, threatened against the Company and (C) no union representation dispute currently existing concerning the employees of the Company or any Subsidiary and (ii) to the Company’s knowledge, (A) no union organizing activities are currently taking place concerning the employees of the Company and (B) there has been no violation of any federal, state, local or foreign law relating to discrimination in the hiring, promotion or pay of employees, any applicable wage or hour laws or any provision of the Employee Retirement Income Security Act of 1974 (“ERISA”) or the rules and regulations promulgated thereunder concerning the employees of the Company or any Subsidiary.

(dd) *Taxes.* The Company and each Subsidiary has (i) timely filed all necessary federal, state, local and foreign income and franchise tax returns (or timely filed applicable extensions therefore) that have been required to be filed and (ii) is not in default in the payment of any taxes which were payable pursuant to said returns or any assessments with respect thereto, other than any which the Company or any Subsidiary is contesting in good faith and for which adequate reserves have been provided and reflected in the Company’s financial statements included in the Registration Statement, the Disclosure Package and the Prospectus. Neither the Company nor any Subsidiary has any tax deficiency that has been or, to the knowledge of the Company, is reasonably likely to be asserted or threatened against it that would result in a Material Adverse Effect.

(ee) *ERISA*. The Company and each Subsidiary is in compliance in all material respects with all presently applicable provisions of ERISA; no “reportable event” (as defined in ERISA) has occurred with respect to any “pension plan” (as defined in ERISA) for which the Company or any Subsidiary would have any liability; neither the Company nor any Subsidiary has incurred and does not expect to incur liability under (i) Title IV of ERISA with respect to termination of, or withdrawal from, any “pension plan” or (ii) Sections 412 or 4971 of the Internal Revenue Code of 1986, as amended, including the regulations and published interpretations thereunder (the “Code”); and each “pension plan” for which the Company or any Subsidiary would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified in all material respects and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification.

(ff) *Compliance with Environmental Laws*. The Company and each Subsidiary (i) is in compliance with any and all applicable foreign, federal, state and local laws, orders, rules, regulations, directives, decrees and judgments relating to the use, treatment, storage and disposal of hazardous or toxic substances or waste and protection of human health and safety or the environment which are applicable to their businesses (“*Environmental Laws*”), (ii) has received and is in compliance with all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct its business; and (iii) is in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, individually or in the aggregate, result in a Material Adverse Effect. There are no costs or liabilities associated with Environmental Laws (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties) which would, individually or in the aggregate, result in a Material Adverse Effect.

(gg) *Insurance*. The Company and each Subsidiary maintains or is covered by insurance provided by recognized, financially sound and reputable institutions with insurance policies in such amounts and covering such risks as is adequate for the conduct of its business and the value of its properties and as is customary for companies engaged in similar businesses in similar industries. All such insurance is fully in force on the date hereof and will be fully in force as of the Closing Date. Neither the Company nor any Subsidiary has 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 at a cost that would not have a Material Adverse Effect.

(hh) *Accounting Controls*. The Company and each Subsidiary maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management’s general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management’s general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(ii) *Disclosure Controls*. The Company and each Subsidiary has established, maintains and evaluates “disclosure controls and procedures” (as such term is defined in Rule 13a-15(e) and 15d-15(e) under the Exchange Act), which (i) are designed to ensure that material information

relating to the Company is made known to the Company's and any Subsidiary's principal executive officer and its principal financial officer by others within those entities, (ii) have been evaluated for effectiveness as of the end of the last fiscal period covered by the Registration Statement; and (iii) such disclosure controls and procedures are effective in all material respects to perform the functions for which they were established. There are no significant deficiencies and material weaknesses in the design or operation of internal controls which could adversely affect the Company's or any Subsidiary's ability to record, process, summarize, and report financial data to management and the Board of Directors of the Company. The Company is not aware of any fraud, whether or not material, that involves management or other employees who have a role in the Company's or any Subsidiary's internal controls; and since the date of the most recent evaluation of such disclosure controls and procedures, there have been no significant changes in internal controls or in other factors that could significantly affect internal controls, including any corrective actions with regard to significant deficiencies and material weaknesses.

(jj) *Contracts; Off-Balance Sheet Interests.* There is no document, contract, permit or instrument, or off-balance sheet transaction (including without limitation, any "variable interests" in "variable interest entities," as such terms are defined in Financial Accounting Standards Board Interpretation No. 46) of a character required by the Securities Act to be described in the Registration Statement, the Disclosure Package or the Prospectus or to be filed as an exhibit to the Registration Statement or document incorporated by reference therein, which is not described or filed as required. The contracts described in the immediately preceding sentence to which the Company or any Subsidiary is a party have been duly authorized, executed and delivered by the Company or such Subsidiary, constitute valid and binding agreements of the Company or such Subsidiary, are enforceable against and by the Company or such Subsidiary in accordance with the terms thereof and are in full force and effect on the date hereof.

(kk) *No Undisclosed Relationships.* No relationship, direct or indirect, exists between or among the Company on the one hand and the directors, officers, stockholders, customers or suppliers of the Company or any of their affiliates on the other hand, which is required to be described in the Registration Statement, Disclosure Package and the Prospectus or a document incorporated by reference therein and which has not been so described.

(ll) *Brokers Fees.* There are no contracts, agreements or understandings between the Company and any person (other than this Agreement) that would give rise to a valid claim against the Company or the Placement Agent for a brokerage commission, finder's fee or other like payment in connection with the offering and sale of the Securities.

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

(nn) *NASDAQ; Exchange Act Registration.* The Common Stock is registered pursuant to Section 12(b) and/or 12(g) of the Exchange Act and is listed on the NASDAQ Capital Market. Other than as described in the Disclosure Package, the Company has taken no action designed to, or reasonably likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from the NASDAQ Capital Market, nor has the Company received any notification that the Commission or the NASDAQ Capital Market is contemplating terminating such registration or listing. Other than as described in the Disclosure Package, the Company has complied in all material respects with the applicable requirements of the

NASDAQ Capital Market for maintenance of inclusion of the Common Stock thereon. The Company has filed a notification of the listing of the Shares and the Warrant Shares on the NASDAQ Capital Market.

(oo) *Sarbanes-Oxley Act*. The Company, each Subsidiary, and to the Company's knowledge, all of the Company's and each Subsidiary's directors or officers, in their capacities as such, are in compliance in all material respects with all applicable effective provisions of the Sarbanes-Oxley Act and any related rules and regulations promulgated by the Commission. Each of the principal executive officer and the principal financial officer of the Company (or each former principal executive officer of the Company and each former principal financial officer of the Company as applicable) has made all certifications required by Sections 302 and 906 of the Sarbanes-Oxley Act with respect to all reports, schedules, forms, statements and other documents required to be filed by it with the Commission. For purposes of the preceding sentence, "principal executive officer" and "principal financial officer" shall have the meanings given to such terms in the Sarbanes-Oxley Act.

(pp) *Corporate Records*. The minute books of the Company and each Subsidiary, representing all existing records of all meetings and actions of the board of directors (including, Audit, Compensation and Stock Option, and Nominating Committees) and stockholders of the Company and each Subsidiary (collectively, the "*Corporate Records*") through the date of the latest meeting and action have been made available to the Placement Agent and counsel for the Placement Agent. All such Corporate Records are complete and accurately reflect, in all material respects, all transactions referred to in such Corporate Records. There are no material transactions, agreements or other actions that have been consummated by the Company or any Subsidiary that are not properly approved and/or recorded in the Corporate Records of the Company and the Subsidiaries.

(qq) *Foreign Corrupt Practices*. Neither the Company, any Subsidiary, nor, to the Company's knowledge, any other person associated with or acting on behalf of the Company or any Subsidiary, including without limitation any director, officer, agent or employee of the Company or any Subsidiary, has, directly or indirectly, while acting on behalf of the Company or any Subsidiary (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity or failed to disclose fully any contribution in violation of law, (ii) made any payment to any federal or state governmental officer or official, or other person charged with similar public or quasi-public duties, other than payments required or permitted by the laws of the United States or any jurisdiction thereof, (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended or (iv) made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment.

(rr) *Statistical or Market-Related Data*. Any statistical, industry-related and market-related data included or incorporated by reference in the Registration Statement, the Prospectus or the Disclosure Package, are based on or derived from sources that the Company reasonably and in good faith believes to be reliable and accurate, and such data agree with the sources from which they are derived.

(ss) *Money Laundering Laws*. The operations of the Company and each Subsidiary are and have been conducted at all times in compliance in all material respects with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "*Money Laundering Laws*") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any Subsidiary with respect to the Money Laundering Laws is pending, or to the knowledge of the Company, threatened against the Company or any Subsidiary.

(tt) *OFAC*. Neither the Company, the Subsidiaries, nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department (“*OFAC*”); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any affiliate, joint venture partner or other person or entity, which, to the Company’s knowledge, will use such proceeds for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by *OFAC*.

(uu) *Margin Securities*. The Company does not own any “margin securities” as that term is defined in Regulation U of the Board of Governors of the Federal Reserve System (the “*Federal Reserve Board*”), and none of the proceeds of the sale of the Securities will be used, directly or indirectly, for the purpose of purchasing or carrying any margin security, for the purpose of reducing or retiring any indebtedness which was originally incurred to purchase or carry any margin security or for any other purpose which might cause any of the Securities to be considered a “purpose credit” within the meanings of Regulation T, U or X of the Federal Reserve Board.

(vv) *Rated Securities*. At the Time of Sale there were, and as of the Closing Date there will be, no securities of or guaranteed by the Company that are rated by a “nationally recognized statistical rating organization,” as that term is defined in Rule 436(g)(2) promulgated under the Securities Act.

(ww) *FINRA*. There are no affiliations or associations between (i) any member of *FINRA* and (ii) the Company or any of the Company’s officers, directors or 5% or greater securityholders or any beneficial owner of the Company’s unregistered equity securities that were acquired at any time on or after the one hundred eightieth (180th) day immediately preceding the date the Registration Statement was initially filed with the Commission, except as set forth in the Registration Statement, the Disclosure Package and the Prospectus.

(xx) *Exchange Act Requirements*. The Company has filed in a timely manner all reports required to be filed pursuant to Sections 13(a), 13(e), 14 and 15(d) of the Exchange Act during the preceding 12 months (except to the extent that Section 15(d) requires reports to be filed pursuant to Sections 13(d) and 13(g) of the Exchange Act, which shall be governed by the next clause of this sentence); and the Company has filed in a timely manner all reports required to be filed pursuant to Sections 13(d) and 13(g) of the Exchange Act since January 1, 2010, except where the failure to timely file could not reasonably be expected individually or in the aggregate to have a Material Adverse Effect.

(yy) *Trading Market*. No approval of the stockholders of the Company under the rules and regulations of any trading market (including Rule 5635 of the NASDAQ Marketplace Rules) is required for the Company to issue and deliver the Securities to prospective purchasers.

(zz) *Regulatory Compliance*.

(i) The clinical, pre-clinical and other studies and tests conducted by or on behalf of or sponsored by the Company or any Subsidiary or in which the Company or any

Subsidiary or products or product candidates have participated that are described in the Registration Statement, the Disclosure Package and the Prospectus were and, if still pending, are being conducted in accordance in all material respects with all applicable federal, state or foreign statutes, laws, rules and regulations, as applicable (including, without limitation, those administered by the FDA or by any foreign, federal, state or local governmental or regulatory authority performing functions similar to those performed by the FDA and current Good Laboratory and Good Clinical Practices) and in accordance in all material respects with experimental protocols, procedures and controls pursuant to, where applicable, accepted professional and scientific standards. The descriptions in the Registration Statement, the Prospectus and the Disclosure Package of the results of such studies, tests and trials are accurate and complete in all material respects and fairly present the published data derived from such studies, tests and trials. Neither the Company nor any Subsidiary has received any notices or other correspondence from the FDA or any other foreign, federal, state or local governmental or regulatory authority performing functions similar to those performed by the FDA with respect to any ongoing clinical or pre-clinical studies or tests requiring the termination, suspension or material modification of such studies, tests or preclinical or clinical trials, which termination, suspension or material modification would reasonably be expected to result in a Material Adverse Effect. To the Company's knowledge, no filing or submission to the FDA or any other federal, state or foreign regulatory body, that is intended to be the basis for any approval, contains any material misstatement or omission. The Company and each Subsidiary is in compliance with all applicable federal, state, local and foreign laws, regulations, orders and decrees governing their business as prescribed by the FDA, or any other federal, state or foreign agencies or bodies, including those bodies and agencies engaged in the regulation of pharmaceuticals or biohazardous substances or materials, except where noncompliance would not, singly or in the aggregate, result in a Material Adverse Effect.

(ii) Neither the Company nor any Subsidiary has received any written notice or other communication from the FDA or any other foreign, federal, state or local governmental or regulatory authority performing functions similar to those performed by the FDA regarding non-compliance with the Federal Food, Drug, and Cosmetic Act ("FDCA") and applicable FDA regulations or similar laws, statutes, ordinances, rules, or regulations of any other foreign, federal, state or local governmental or regulatory authority, including, but not limited to, any regulatory or warning letter, untitled letter, adverse inspection finding, finding of deficiency, any other compliance or enforcement action. To the Company's knowledge, there has not been any non-compliance with or violation of any statute, law, rule, regulation, ordinance, judgment, injunction, writ, order or decree of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company, any Subsidiary or any of their properties, as applicable (including, without limitation, the Public Health Service Act, the FDCA and those administered by the FDA or by any foreign, federal, state or local governmental or regulatory authority performing functions similar to those performed by the FDA), that could reasonably be expected to require the issuance of any such communication, or an investigation, corrective action or enforcement action by the FDA or similar governmental or regulatory authorities. To the Company's knowledge, no review or investigation by governmental or regulatory authorities is pending and no such review or investigation has been threatened.

(iii) Neither the Company, any Subsidiary nor, to the Company's knowledge, any of their respective directors, officers, employees or agents has been convicted of any crime or has been the subject of an FDA debarment proceeding. Neither the Company

nor any Subsidiary has been nor is now subject to FDA's Applications Integrity Policy. To the Company's knowledge, neither the Company, any Subsidiary nor any of its directors, officers, employees or agents, has made, or caused the making of, any false statements on, or material omissions from, any applications, approvals, reports or other submissions to the FDA or any other governmental or regulatory authority, or made any false statements on, or material omissions from, any other records or documentation prepared or maintained to comply with the requirements of the FDA or any other governmental or regulatory authority.

(iv) Neither the Company, any Subsidiary nor, to the Company's knowledge, any of their respective directors, officers, employees or agents, have with respect to each of the following statutes, or regulations promulgated thereto: (i) engaged in activities under 42 U.S.C. §§ 1320a-7 or 1395nn; (ii) knowingly engaged in any activities under 42 U.S.C. § 1320a-7a or the Federal False Claims Act, 31 U.S.C. § 3729; or (iii) knowingly and willfully engaged in any activities under 42 U.S.C. § 1320a-7b, which are, as applicable, prohibited, cause for civil penalties, or mandatory or permissive exclusion from Medicare, Medicaid, or any other State Health Care Program or Federal Health Care Program.

Any certificate signed by any officer of the Company and delivered to the Placement Agent or to counsel for the Placement Agent in connection with the Offering shall be deemed a representation and warranty by the Company to the Placement Agent and the Investors as to the matters covered thereby.

3. Covenants. The Company covenants and agrees with the Placement Agent as follows:

(a) *Reporting Obligations; Exchange Act Compliance.* The Company will (i) file the Prospectus with the Commission within the time periods specified by Rule 424(b) and Rules 430A, 430B and 430C, as applicable under the Securities Act, (ii) file any Issuer Free Writing Prospectus to the extent required by Rule 433 under the Securities Act, if applicable, (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 Securities Act or any similar rule) (the "Prospectus Delivery Period"), and (iv) furnish copies of each Issuer Free Writing Prospectus, if any, (to the extent not previously delivered) to the Placement Agent 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 Placement Agent shall reasonably request.

(b) *Abbreviated Registration Statement.* If the Company elects to rely upon Rule 462(b) under the Securities 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 Rules and Regulations.

(c) *Amendments or Supplements.* 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 Placement Agent within a reasonable period of time prior to the filing thereof and the Placement Agent 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 Securities Act) required to be filed by the Company with the Commission under Rule 433 under the Securities Act unless the Placement Agent approve its use in writing prior to first use (each, a “Permitted Free Writing Prospectus”); *provided*, that the prior written consent of the Placement Agent hereto shall be deemed to have been given in respect of the Issuer 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 Securities 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 Placement Agent or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of such Placement Agent that such Placement Agent otherwise would not have been required to file thereunder. The Company will satisfy the conditions in Rule 433 under the Securities Act to avoid a requirement to file with the Commission any electronic road show.

(e) *Notice to Placement Agent.* During the Prospectus Delivery Period, the Company will notify the Placement Agent promptly, and will, if requested, confirm such notification in writing: (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; (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 the Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus, or the initiation of any proceedings for that purpose or the threat thereof; (v) of receipt by the Company of any notification with respect to any suspension or the approval of the Shares and Warrant Shares 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 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.

(f) *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 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 Placement Agent, 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 Placement Agent, either amendments or supplements to the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Disclosure Package) so that the statements in the Prospectus (or, if the Prospectus is not yet 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 an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer 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 Placement Agent and will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(g) *Delivery of Copies.* The Company will deliver promptly to the Placement Agent and their counsel such number of the following documents as the Placement Agent 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 Issuer 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 Securities Act.

(h) *Lock-Up Period.* The Company hereby agrees that, without the prior written consent of Roth, it will not, during the period ending on and including the 30th day after the date hereof (as the same may be extended as described below, the "Lock-Up Period"), (i) offer, pledge, issue, sell, contract to sell, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for shares of Common Stock, including, but not limited to, any pursuant to the Company's Sales Agreement with Cowen and Company, LLC dated March 13, 2013 and the Company's Stock Purchase Agreement with Terrapin Opportunity, L.P. dated December 5, 2012; or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of shares of Common Stock or such other securities, in cash or otherwise; or (iii) file any registration statement with the Commission relating to the offering of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for shares of Common Stock. The restrictions contained in the preceding sentence shall not apply to (1) the Shares to be sold hereunder, (2) the issuance of shares of Common Stock upon the exercise of options or warrants disclosed as outstanding in the Registration Statement (excluding exhibits thereto) or the Prospectus, and (3) the issuance of employee stock options not exercisable during the Lock-Up Period and the grant of restricted stock awards or restricted stock units pursuant to equity incentive plans described in the Registration Statement (excluding exhibits thereto) and the Prospectus. Notwithstanding the foregoing, if (x) the Company issues an earnings release or material news, or a material event relating to the Company occurs, during the last 17 days of the Lock-Up Period, or (y) 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, the restrictions imposed by this clause shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event, unless Roth waives such extension in writing; provided, however, that this sentence shall not apply if (A) the Company meets the applicable requirements of Rule 139(a)(1) under the Securities Act in the manner contemplated by NASD Conduct Rule 2711(f)(4) (B) the Company's securities are "actively traded" as defined in Rule 101(c)(1) of Regulation M of the Exchange Act and (C) the provisions of NASD Conduct Rule 2711(f)(4) do not restrict the publication or distribution, by the Placement Agent, of any research reports relating to the Company during the 15 days before or after the last day of the Lock-up Period (before giving effect to such extension).

(i) *Earnings Statement.* 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 Placement Agent, 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.

(j) *Use of Proceeds.* 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".

(k) *Public Communications.* Prior to the 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 Placement Agent, unless in the reasonable judgment of the Company and its counsel, and after notification to the Placement Agent, such press release or communication is required by law or the rules of NASDAQ, in which case the Company shall use its reasonable best efforts to allow the Placement Agent reasonable time to comment on such release or other communication in advance of such issuance.

(l) *Stabilization.* 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) *Transfer Agent.* 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 Shares and Warrant Shares.

(n) *Investment Company Act.* The Company shall not invest, or otherwise use the proceeds received by the Company from its sale of the Securities in such a manner as would require the Company to register as an investment company under the Investment Company Act.

(o) *Sarbanes-Oxley Act.* The Company will comply with all effective applicable provisions of the Sarbanes Oxley Act.

(p) *Periodic Reports.* During the Prospectus Delivery Period, the Company will file with the Commission such periodic and special reports as required by the Exchange Act.

(q) *NASDAQ.* The Company will use its reasonable best efforts to obtain approval for, and maintain the listing of the Shares and Warrant Shares on the NASDAQ for so long as the Common Stock is listed thereon.

4. Costs and Expenses. The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, will pay or reimburse, if paid by the Placement Agent, all actual out-of-pocket costs and expenses incident to the performance of the obligations of the Company under this Agreement and in connection with the transactions contemplated

hereby, including but not limited to costs and expenses of or relating to: (i) the preparation, printing, filing, delivery and shipping of the Registration Statement, any Issuer Free Writing Prospectus, the Disclosure Package and the Prospectus, and any amendment or supplement to any of the foregoing and the printing and furnishing of copies of each thereof to the Placement Agent and 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, and the printing, delivery, and shipping of the certificates representing the Shares and Warrants, (iii) the fees and expenses of any transfer agent or registrar for the Shares and Warrant Shares, (iv) the filing fees required to be paid by the Placement Agent or the Company with FINRA, (v) fees, disbursements and other charges of counsel to the Company (vi) listing fees, if any, for the listing or quotation of the Shares and Warrant Shares on the NASDAQ, (vii) fees and disbursements of the Company's auditor incurred in delivering the letter(s) described in Section 5(h) of this Agreement, (viii) reasonable fees and disbursements of counsel to the Placement Agent, and (ix) the costs and expenses of the Company and the Placement Agent in connection with the marketing of the offering and the sale of the Securities to prospective investors including, but not limited to, those related to any presentations or meetings undertaken in connection therewith including, without limitation, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged with the written consent of the Company 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 or other transportation chartered by the Company in connection with the road show. Notwithstanding the foregoing, the expenses of the Placement Agent (other than the filing fees set forth in clause (iv) above), including attorneys' fees and expenses of counsel to the Placement Agent, which the Company shall be obligated to reimburse hereunder, shall not exceed the lesser of (a) \$20,000 or (b) 8% of the gross proceeds received by the Company from the sale of the Securities, less the Placement Fee if the Offering is consummated. It is understood that except as provided in this Section 4, Section 6 and Section 8(b), the Placement Agent shall pay all of its own expenses.

5. Conditions of Placement Agent's Obligations. The obligations of the Placement Agent hereunder are subject to the following conditions:

(a) *Filings with the Commission.* The Prospectus shall have been filed with the Commission pursuant to Rule 424(b) under the Securities Act at or before 5:30 p.m., Eastern time, within two full business days of the date of this Agreement (or such earlier time as may be required under the Securities Act).

(b) *Abbreviated Registration Statement.* If the Company has elected to rely upon Rule 462(b), the registration statement filed under Rule 462(b) shall have become effective under the Securities Act by 8:00 a.m., Eastern time, on the business day next succeeding the date of this Agreement.

(c) *No Stop Orders.* Prior to the Closing: (i) no stop order suspending the effectiveness of the Registration Statement shall have been issued under the Securities Act and no proceedings initiated under Section 8(d) or 8(e) of the Securities Act for that purpose shall be pending or threatened by the Commission, and (ii) any request for additional information on the part of the Commission (to be included in the Registration Statement, the Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus or otherwise) shall have been complied with to the reasonable satisfaction of the Placement Agent.

(d) *Action Preventing Issuance.* No action shall have been taken and no statute, rule, regulation or order shall have been enacted, adopted or issued by any governmental agency or body

which would, as of the Closing Date, prevent the issuance or sale of the Securities; and no injunction, restraining order or order of any other nature by any federal or state court of competent jurisdiction shall have been issued as of the Closing Date which would prevent the issuance or sale of the Securities.

(e) *Objection of Placement Agent.* No Prospectus or amendment or supplement to the Registration Statement shall have been filed to which the Placement Agent shall have objected in writing, which objection shall not be unreasonable. The Placement Agent shall not have advised the Company that the Registration Statement, the Disclosure Package or the Prospectus, or any amendment thereof or supplement thereto, or any Issuer Free Writing Prospectus contains an untrue statement of fact which, in their opinion, is material, or omits to state a fact which, in their opinion, is material and is required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(f) *No Material Adverse Change.* (i) Prior to the Closing, 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 Placement Agent's reasonable judgment, is material and adverse and that makes it, in the Placement Agent's reasonable judgment, impracticable to market the Securities on the terms and in the manner contemplated in the Disclosure Package.

(i) 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 MKT, the NASDAQ Stock Market, NASDAQ Global Select Market, the NASDAQ Global Market, the NASDAQ Capital Market or the over the counter market or the establishing on such exchanges or market by the SEC or by such exchanges or markets 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 NASDAQ or any other exchange or market or the establishing on any such market or exchange by the SEC 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 escalation of hostilities involving the United States or the declaration by the United States of a national emergency or war, which in the Placement Agent's sole 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 the Placement Agent's judgment makes it impracticable or inadvisable to proceed with the public offering or the delivery of the Securities in the manner contemplated in each of the Disclosure Package and the Prospectus.

(g) *Representations and Warranties.* Each of the representations and warranties of the Company contained herein shall be true and correct, in all material respects (other than those

representations, warranties and agreements that are qualified as to materiality, which shall be true and correct in all respects), as of the date hereof and the Closing Date, and all covenants and agreements herein contained to be performed on the part of the Company and all conditions herein contained to be fulfilled or complied with by the Company at or prior to the Closing Date shall have been duly performed, fulfilled or complied with.

(h) *Comfort Letter*. On the Closing Date, the Placement Agent shall have received a letter from Ernst & Young LLP, addressed to the Placement Agent, executed and dated such date, confirming that they are independent public accountants within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualifications of accountants under Rule 2-01 of Regulation S-X of the Commission, and confirming, as of the date of such letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the Disclosure Package, as of a date not more than three business days prior to the date of such letter), the conclusions and findings of said firm, of the type ordinarily included in accountants' "comfort letters" to underwriters, with respect to the financial information, including any financial information contained in reports filed pursuant to the Exchange Act by the Company or incorporated by reference in the Registration Statement, the Disclosure Package and the Prospectus, and other matters required by the Placement Agent.

(i) On the Closing Date, there shall have been furnished to the Placement Agent the opinion and negative assurance letter of Skadden, Arps, Slate, Meagher & Flom LLP, counsel for the Company, dated the Closing Date and addressed to the Placement Agent, in form and substance reasonably satisfactory to the Placement Agent.

(j) *Officer's Certificate*. The Placement Agent shall have received on the Closing Date a certificate, addressed to the Placement Agent and dated the Closing Date, of the co-chief executive officers of the Company to the effect that:

(i) each of the representations, warranties and agreements of the Company in this Agreement are true and correct, in all material respects (other than those representations, warranties and agreements that are qualified as to materiality, which are true and correct in all respects), as of the Time of Sale and the Closing Date; and the Company has complied with all agreements and satisfied all the conditions on its part required under this Agreement to be performed or satisfied at or prior to the Closing Date;

(ii) subsequent to the respective dates as of which information is given in the Disclosure Package, there has not been (A) a material adverse change or any development involving a prospective material adverse change in the general affairs, business, properties, management, financial condition or results of operations of the Company and the Subsidiaries taken as a whole, (B) any transaction that is material to the Company and the Subsidiaries taken as a whole, except transactions entered into in the ordinary course of business, (C) any obligation, direct or contingent, that is material to the Company and the Subsidiaries taken as a whole, incurred by the Company or the Subsidiaries, except obligations incurred in the ordinary course of business, (D) except as disclosed in the Disclosure Package and in the Prospectus, any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants) or any material change in the short term or long term indebtedness of the Company or any of the Subsidiaries taken as a whole, (E) any dividend or distribution of any kind declared, paid or made on the capital stock of the Company or any of the Subsidiaries or (F) any loss or damage (whether or not insured) to the property of the Company or any of its Subsidiaries which has been sustained or will have been sustained which has had or is reasonably likely to result in a Material Adverse Effect;

(iii) no stop order suspending the effectiveness of the Registration Statement or any part thereof or any amendment thereof or the qualification of the Securities for offering or sale, nor suspending or preventing the use of the Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus shall have been issued, and no proceedings for that purpose shall be pending or to their knowledge, threatened by the Commission or any state or regulatory body; and

(iv) the signers of said certificate have reviewed the Registration Statement, the Disclosure Package and the Prospectus, and any amendments thereof or supplements thereto (and any documents filed under the Exchange Act and deemed to be incorporated by reference into the Disclosure Package and the Prospectus), and (A) (i) the Registration Statement and any amendment thereof did not contain when the Registration Statement (or such amendment) became effective, any untrue statement of a material fact or omit to state when the Registration Statement (or such amendment) became effective, any material fact required to be stated therein or necessary to make the statements therein not misleading and (ii) as of the Time of Sale, neither the Disclosure Package nor any individual Issuer Limited Use Free Writing Prospectus, when considered together with the Disclosure Package, contained any untrue statement of material fact or omitted to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading and (iii) the Prospectus, as amended or supplemented, does not and did not contain, as of the time of filing and as of the Closing Date, any untrue statement of material fact or omit to state and did not omit to state as of such date, a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and (B) since the Time of Sale, there has occurred no event required to be set forth in an amendment or supplement to the Registration Statement, the Disclosure Package or the Prospectus which has not been so set forth and there has been no document required to be filed under the Exchange Act that upon such filing would be deemed to be incorporated by reference in to the Disclosure Package and into the Prospectus that has not been so filed.

(k) *Secretary's Certificate.* On the Closing Date, the Company shall have furnished to the Placement Agent a Secretary's Certificate of the Company.

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

(m) *No FINRA Objection.* FINRA shall not have raised any objection with respect to the fairness and reasonableness of the placement agency terms and arrangements relating to the issuance and sale of the Securities; provided, that if any such objection is raised, the Company and the Placement Agent shall negotiate promptly and in good faith appropriate modifications to such placement agency terms and arrangements in order to satisfy such objections.

(n) *NASDAQ.* The Shares and the Warrant Shares shall have been approved for listing on The NASDAQ Capital Market, subject to official notice of issuance.

(o) *Additional Documents.* Prior to the Closing Date, the Company shall have furnished to the Placement Agent such further information, certificates or documents as the Placement Agent shall have reasonably requested for the purpose of enabling them to pass upon the issuance and

sale of the Securities as contemplated herein, or in order to evidence the accuracy of any of the representations and warranties, or the satisfaction of any of the conditions or agreements, herein contained.

All opinions, letters, evidence and certificates mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Placement Agent.

If any condition specified in this Section 5 is not satisfied when and as required to be satisfied, this Agreement may be terminated by the Placement Agent by notice to the Company at any time prior to the Closing Date, which termination shall be without liability on the part of any party to any other party, except that Section 4, Section 6 and Section 8 shall at all times be effective and shall survive such termination.

6. Indemnification and Contribution.

(a) *Indemnification of the Placement Agent.* The Company agrees to indemnify, defend and hold harmless each of the Placement Agent, its respective directors and officers, and each person, if any, who controls such Placement Agent within the meaning of either Section 15 of the Securities 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, claim or liability, which, jointly or severally, such Placement Agent or any such person may become subject under the Securities Act, the Exchange Act, or other federal or state statutory law or regulation, the common law or otherwise, (including in settlement of any litigation, if such settlement is effected with the written consent of the Company), insofar as such loss, damage, claim or liability (or actions in respect thereof as contemplated below) 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 any amendment thereto or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading; or (ii) any untrue statement or alleged untrue statement of a material fact contained in any Issuer Free Writing Prospectus or the Prospectus (or any amendment or supplement thereto), or the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements made therein, in light of the circumstances under which they were made, not misleading; and, in the case of (i) and (ii) above, to reimburse such Placement Agent and each such controlling person for any and all reasonable expenses (including reasonable fees and disbursements of counsel) as such expenses are incurred by such Placement Agent or such controlling person in connection with investigating, defending, settling, compromising or paying any such loss, claim, damage, liability, expense or action; *provided, however*, that the foregoing indemnity shall not apply to any loss, claim, damage, liability or expense to the extent, but only to the extent, it arises out of or is based upon any untrue statement or alleged untrue statement of a material fact contained in or omitted from, and in conformity with information concerning such Placement Agent furnished in writing by or on behalf of such Placement Agent to the Company expressly for use therein, which information the parties hereto agree is limited to the Placement Agent Information or (iii) any untrue statement or alleged untrue statement of any material fact contained in the Company's investor presentation slides in the form furnished by the Company under Form 8-K on October 17, 2013. Notwithstanding the foregoing, the Company will not be liable to the Placement Agent pursuant to this Section 6(a) to the extent that any such loss, damage, claim or liability is found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from the Placement Agent's willful misconduct or gross negligence.

(b) *Indemnification of the Company.* The Placement Agent will indemnify, defend and hold harmless the Company, its directors and officers, and any person, if any, who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act, and the successors and assigns of all of the foregoing persons, from and against any loss, claim, damage, liability or expense, as incurred to which, jointly or severally, the Company or any such person may become subject under the Securities Act, the Exchange Act, or other federal or state statutory law or regulation, the common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Placement Agent), insofar as such loss, claim, damage, liability or expense (or actions in respect thereof as contemplated below) 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 any amendment thereto, or the omission or alleged omission therefrom to state a material fact required to be stated therein or necessary to make the statements therein not misleading; or (ii) any untrue statement or alleged untrue statement of a material fact contained in any Issuer Free Writing Prospectus or the Prospectus (or any amendment or supplement thereto), or the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements made therein, in light of the circumstances under which they were made, not misleading, in the case of each of (i) and (ii) above, to the extent but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, any Issuer Free Writing Prospectus or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with information concerning such Placement Agent furnished in writing by or on behalf of such Placement Agent to the Company expressly for use therein and to reimburse the Company, or any such director, officer or controlling person for any legal and other expense reasonably incurred by the Company, or any such director, officer or controlling person in connection with investigating, defending, settling, compromising or paying any such loss, claim, damage, liability, expense or action; *provided*, that the parties hereto hereby agree that such written information provided by the Placement Agent consists solely of the Placement Agent Information. Notwithstanding the provisions of this Section 6(b), in no event shall any indemnity by the Placement Agent under this Section 6(b) exceed the Placement Fee.

(c) *Notice and Procedures.* If any action, suit or proceeding (each, a “Proceeding”) is brought against a person (an “indemnified party”) in respect of which indemnity may be sought against the Company or the Placement Agent (as applicable, the “indemnifying party”) pursuant to subsection (a) or (b), respectively, of this Section 6, 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, except to the extent such failure results in the forfeiture by the indemnifying party of substantial rights or defenses. 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 (i) the employment of such counsel shall have been authorized in writing by the indemnifying party in connection with the defense of such Proceeding, (ii) the indemnifying party shall not have, within a reasonable period of time in light of the circumstances, employed counsel to defend such Proceeding or (iii) 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 any of which events such reasonable 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). An indemnifying party shall not be liable for any settlement of any Proceeding (including by consent to the entry of any judgment) effected without its written consent but, if settled with its written consent or if there be a final judgment for the plaintiff, 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 or judgment. 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 (which fees and expenses shall be reasonably documented) as contemplated by the second sentence of this Section 6(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 90 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, compromise or consent to the entry of judgment in 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.

(d) *Contribution.* If the indemnification provided for in this Section 6 is unavailable to an indemnified party under subsections (a) or (b) of this Section 6 or insufficient to hold an indemnified party harmless in respect of any losses, claims, damages, liabilities or expenses referred to therein, then each applicable indemnifying party shall, in lieu of indemnifying such indemnified party, shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages, liabilities or expenses referred to in subsection (a) or (b) above, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Placement Agent on the other 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 the Placement Agent on the other hand in connection with the statements or omissions that resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Placement Agent on the other hand shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Securities (before deducting expenses) received by the Company and the Placement Fee received by the Placement Agent, in each case as set forth on the cover of the Prospectus, bear to the aggregate public offering price of the Securities. The relative fault of the Company on the one hand and the Placement Agent on the other hand shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company, on the one hand, or by the Placement Agent, on the other hand, and the parties' relevant intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the Placement Agent agree that it would not be just and equitable if contribution pursuant to this subsection (d) were to be determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the first sentence of this Section 6(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities referred to in the first sentence of this Section 6(d) shall be deemed to include any legal or

other expenses reasonably incurred by such indemnified party in connection with investigating or defending against any action or claim which is the subject of this Section 6(d). Notwithstanding the provisions of this Section 6(d), the Placement Agent shall not be required to contribute any amount in excess of the Placement Fee. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

(e) *Representations and Agreements to Survive Delivery.* The obligations of the Company under this Section 6 shall be in addition to any liability which the Company may otherwise have. The indemnity and contribution agreements of the parties contained in this Section 6 and the covenants, warranties and representations of the Company contained in this Agreement shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of the Placement Agent, any person who controls the Placement Agent within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act or any affiliate of the Placement Agent, or by or on behalf of the Company, its directors or officers or any person who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act, and (iii) the issuance and delivery of the Securities. The Company and the Placement Agent 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, the Disclosure Package or the Prospectus.

7. Information Furnished by Placement Agent. The Company acknowledges that the statements set forth in the tenth paragraph under the heading "Plan of Distribution" in the Prospectus (the "Placement Agent Information") constitute the only information relating to the Placement Agent furnished in writing to the Company by the Placement Agent as such information is referred to in Sections 2 and 6 hereof.

8. Termination.

(a) The Placement Agent shall have the right to terminate this Agreement by giving notice as hereinafter specified at any time at or prior to the Closing Date, without liability on the part of the Placement Agent to the Company, if (i) prior to delivery and payment for the Securities (A) trading in securities generally shall have been suspended or materially limited on or by the New York Stock Exchange, the NASDAQ Stock Market, the NASDAQ Global Select Market, the NASDAQ Global Market, the NASDAQ Capital Market, or the NYSE MKT (each, a "Trading Market"), (B) trading in the Common Stock of the Company shall have been suspended or materially limited on any exchange or in the over-the-counter market, (C) a general moratorium on commercial banking activities shall have been declared by federal or New York state authorities, (D) there shall have occurred any outbreak or material escalation of hostilities or acts of terrorism involving the United States or there shall have been a declaration by the United States of a national emergency or war, (E) there shall have occurred any other calamity or crisis or any material change in general economic, political or financial conditions in the United States or elsewhere, if the effect of any such event specified in clause (D) or (E), in the reasonable judgment of the Placement Agent, makes it impractical or inadvisable to proceed with the completion of the sale of and payment for the Securities on the Closing Date on the terms and in the manner contemplated by this Agreement, the Disclosure Package and the Prospectus, or (ii) since the time of execution of this Agreement or the earlier respective dates as of which information is given in the Disclosure Package, there has been, (A) any Material Adverse Effect or (B) the Company shall have sustained a loss by strike, fire, flood, earthquake, accident or other calamity of such character that, in

the reasonable judgment of the Placement Agent would, individually or in the aggregate, result in a Material Adverse Effect and which would, in the reasonable judgment of the Placement Agent, make it impracticable or inadvisable to proceed with the offering or the delivery of the Securities on the terms and in the manner contemplated in the Disclosure Package. Any such termination shall be without liability of any party to any other party except that the provisions of Section 4, Section 6, Section 8(b) and Section 11 hereof shall at all times be effective notwithstanding such termination.

(b) If this Agreement shall be terminated by the Placement Agent pursuant to Section 5, Section 8(a)(i)(B) or Section 8(a)(ii)(A) or (2) the sale of the Securities to Investors is not consummated because of any failure, refusal or inability on the part of the Company to comply with the terms or perform any agreement or obligation of this Agreement or any Subscription Agreement, other than by reason of a default by the Placement Agent, the Company will, in addition to paying the amounts described in Section 4 hereof, reimburse the Placement Agent for all of their reasonable and actual out-of-pocket disbursements (including, but not limited to, the reasonable fees and disbursements of its counsel).

9. Notices. All statements, requests, notices and agreements hereunder shall be in writing or by facsimile, and:

(a) if to the Placement Agent, shall be delivered or sent by mail, telex or facsimile transmission to:

Roth Capital Partners, LLC
888 San Clemente Drive
Newport Beach, California 92660
Attention: Aaron Gurewitz, Managing Director and Head of Equity Capital Markets
Facsimile No.: (858) 720-7227

with a copy (which shall not constitute notice) to:

LeClairRyan, A Professional Corporation
885 Third Avenue
New York, New York 10022
Attention: James T. Seery
Facsimile No.: (973) 491- 3415
E-mail address: james.seery@leclairryan.com

(b) if to the Company shall be delivered or sent by mail, telex or facsimile transmission to:

Delcath Systems, Inc.
810 Seventh Avenue, 35th Fl
New York, New York 10019
Attn: General Counsel
Facsimile No.: (646) 562-1124

with a copy (which shall not constitute notice) to:

Skadden, Arps, Slate, Meagher & Flom LLP
Four Times Square
New York, New York 10036
Attention: Andrea Nicolas, Esq.
Facsimile No.: (917) 777-3416
E-mail address: andrea.nicolas@skadden.com

Any such notice shall be effective only upon receipt. Any party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose.

10. Persons Entitled to Benefit of Agreement. This Agreement shall inure to the benefit of and shall be binding upon the Placement Agent, the Company and their respective successors and assigns and the controlling persons, officers and directors referred to in [Section 7](#). Nothing in this Agreement is intended or shall be construed to give to any other person, firm or corporation (including the Investors), other than the persons, firms or corporations mentioned in the preceding sentence, any legal or equitable remedy or claim under or in respect of this Agreement, or any provision herein contained. The term “successors and assigns” as herein used shall not include any purchaser of the Securities by reason merely of such purchase.

11. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without giving effect to the conflicts of laws provisions thereof.

12. No Fiduciary Relationship. The Company hereby acknowledges that the Placement Agent is acting solely as Placement Agent in connection with the offering of the Company’s securities. The Company further acknowledges that the Placement Agent 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 Placement Agent act or be responsible as a fiduciary to the Company, its management, stockholders, creditors or any other person in connection with any activity that the Placement Agent may undertake or have undertaken in furtherance of the offering of the Company’s securities, either before or after the date hereof. The Placement Agent 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 Placement Agent 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 Placement Agent 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 Placement Agent 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.

13. Entire Agreement. This Agreement, together with the schedule and exhibits attached hereto and as the same may be amended from time to time in accordance with the terms hereof, contains the entire agreement among the parties hereto relating to the subject matter hereof and there are no other or further agreements outstanding not specifically mentioned herein.

14. Headings. The Section headings in this Agreement have been inserted as a matter of convenience of reference and are not a part of this Agreement.

15. Amendments and Waivers. No supplement, modification or waiver of this Agreement shall be binding unless executed in writing by the party to be bound thereby. The failure of a party to exercise any right or remedy shall not be deemed or constitute a waiver of such right or remedy in the future. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (regardless of whether similar), nor shall any such waiver constitute a continuing waiver unless otherwise expressly provided.

16. Submission to Jurisdiction. Except as set forth below, no Proceeding 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 hereby consents 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 Proceeding arising out of or in any way relating to this Agreement is brought by any third party against the Placement Agent. The Company hereby waives all right to trial by jury in any Proceeding (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 Proceeding brought in any such court shall be conclusive and binding upon the Company and may be enforced in any other courts in the jurisdiction of which the Company is or may be subject, by suit upon such judgment.

17. Counterparts. This Agreement may be executed in one or more counterparts and, if executed in more than one counterpart, the executed counterparts shall each be deemed to be an original and all such counterparts shall together constitute one and the same instrument. Delivery of an executed counterpart by facsimile shall be effective as delivery of a manually executed counterpart thereof.

[Signature pages follow]

If the foregoing is in accordance with your understanding of the agreement between the Company and the Placement Agent, kindly indicate your acceptance in the space provided for that purpose below.

Very truly yours,

DELCATH SYSTEMS, INC.

By: _____

Name:

Title:

Accepted as of
the date first above written:

ROTH CAPITAL PARTNERS, LLC

By: _____

Name:

Title:

Signature Page to Placement Agency Agreement