

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM S-3  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

**DELCATH SYSTEMS, INC.**  
(Exact name of registrant as specified in its charter)

**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**06-1245881**  
(I.R.S. Employer  
Identification No.)

**810 Seventh Avenue  
35<sup>th</sup> Floor  
New York, NY 10019  
(212) 489-2100**

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

**Eamonn P. Hobbs  
Chief Executive Officer  
Delcath Systems, Inc.  
810 Seventh Avenue  
35<sup>th</sup> Floor  
New York, NY 10019  
(212) 489-2100**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

**Copies to:  
Andrea L. Nicolas, Esq.  
Skadden, Arps, Slate, Meagher & Flom LLP  
Four Times Square  
New York, NY 10036  
Telephone: (212) 735-3000  
Facsimile: (212) 735-2000**

**Approximate date of commencement of proposed sale to the public:  
From time to time after this registration statement becomes effective.**

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer  Accelerated filer   
Non-accelerated filer  (Do not check if a smaller reporting company) Smaller reporting company

Title of Each Class of	Amount	Proposed	Proposed	Amount of
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Securities to be Registered	to be Registered <sup>(1)(2)</sup>	Maximum Offering Price Per Share <sup>(1)(2)</sup>	Maximum Aggregate Offering Price	Registration Fee <sup>(3)</sup>
Common stock, par value \$0.01 per share				
<b>TOTAL</b>			\$50,000,000	\$6,820.00

- (1) This registration statement covers up to \$50,000,000 of an indeterminate number of shares of common stock.
- (2) Pursuant to Rule 416 under the Securities Act, the securities being registered hereunder include such indeterminate (A) number of shares of common stock and such shares of common stock issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.
- (3) Calculated pursuant to Rule 457(o) under the Securities Act.

**The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

[Table of Contents](#)

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated March 13, 2013

PROSPECTUS

\$50,000,000



**Common Stock**

Delcath Systems, Inc. (the "Company") has entered into a sales agreement with Cowen and Company, LLC, or Cowen, relating to shares of our common stock, \$0.01 par value per share, offered by this prospectus. In accordance with the terms of the sales agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to \$50,000,000.

Our common stock is traded on the NASDAQ Capital Market under the symbol "DCTH." On March 12, 2013, the last reported sale price of our common stock on the NASDAQ Capital Market was \$1.91.

**Investing in our common stock involves a high degree of risk. You should review carefully the risks and uncertainties referenced under the heading "[Risk Factors](#)" on page 6 of this prospectus.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

**Cowen and Company**

The date of this prospectus is \_\_\_\_\_ .

[Table of Contents](#)

TABLE OF CONTENTS

	<u>Page</u>
<a href="#">PROSPECTUS SUMMARY</a>	6
<a href="#">RISK FACTORS</a>	6
<a href="#">DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS</a>	7
<a href="#">WHERE YOU CAN FIND ADDITIONAL INFORMATION</a>	7
<a href="#">USE OF PROCEEDS</a>	8
<a href="#">DESCRIPTION OF CAPITAL STOCK</a>	8
<a href="#">PLAN OF DISTRIBUTION</a>	10
<a href="#">LEGAL MATTERS</a>	11
<a href="#">EXPERTS</a>	11

## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission. We may sell shares of common stock described in this prospectus in one or more offerings up to a total aggregate dollar amount of \$50,000,000. This prospectus provides you with a general description of the securities we may offer. We may provide a prospectus supplement that will contain additional or amended information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with additional information described under the heading “Where You Can Find Additional Information.”

You should rely only on the information contained in this prospectus and any accompanying prospectus supplement or incorporated by reference in these documents. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained or incorporated by reference in this prospectus or the accompanying prospectus supplement. If anyone provides you with different, inconsistent or unauthorized information or representations, you must not rely on them. This prospectus and the accompanying prospectus supplement are an offer to sell only the securities offered by these documents, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus or any prospectus supplement is current only as of the date on the front of those documents.

## PROSPECTUS SUMMARY

*This summary highlights information contained elsewhere or incorporated by reference into this prospectus. Because it is a summary, it does not contain all of the information that you should consider before investing in our securities. You should read this entire prospectus carefully, including the section entitled "Risk Factors," any applicable prospectus supplement and the documents that we incorporate by reference into this prospectus and any prospectus supplement, before making an investment decision.*

### DEL CATH SYSTEMS, INC.

We are a specialty pharmaceutical and medical device company focused on oncology. Our proprietary technology is designed to administer high-dose chemotherapy and other therapeutic agents to diseased organs or regions of the body, while controlling the systemic exposure of those agents. Our initial focus is on the treatment of primary and metastatic liver cancers. We believe that the proprietary technology is a platform that may have broader applicability, including the use of other drugs to treat the liver, as well as for the treatment of cancers in other organs and regions of the body. In 2010, we announced that our randomized Phase 3 clinical trial for patients with metastatic melanoma in the liver had successfully achieved the study's primary endpoint of extended hepatic progression-free survival. We have also completed a multi-arm Phase 2 trial to treat other liver cancers.

Outside of the United States, our proprietary system to deliver and filter melphalan hydrochloride is marketed as a device under the trade name Delcath Hepatic CHEMOSAT® Delivery System (CHEMOSAT Delivery System for Melphalan). In April 2012, we obtained authorization to affix a CE Mark for the Generation Two CHEMOSAT Delivery System for Melphalan. The right to affix the CE mark allows the Company to market and sell the CHEMOSAT System for Melphalan in Europe. We have initiated commercialization efforts in Europe. In October 2012, we satisfied all of the requirements to affix the CE Mark to the Hepatic CHEMOSAT Delivery System device for intra-hepatic arterial delivery and extracorporeal filtration of doxorubicin hydrochloride injection (CHEMOSAT System for Doxorubicin), which we believe will provide a regulatory pathway for approval in Asia.

In the United States, our proprietary system for the administration of melphalan hydrochloride to the liver is considered a combination drug and device product and is regulated as a drug by the United States Food and Drug Administration (FDA). We submitted our New Drug Application (NDA) to the FDA on August 15, 2012, with the proposed trade name Melblez Kit™ (Melblez (melphalan) for Injection for use with the Delcath Hepatic Delivery System) (Melblez Kit), and are seeking approval for commercial sale of the Melblez Kit in the treatment of patients with unresectable metastatic ocular melanoma in the liver. Our NDA was accepted for filing by the FDA on October 15, 2012 and has been designated for standard review with a Prescription Drug User Fee Act (PDUFA) goal date of June 15, 2013. An Oncologic Drugs Advisory Committee (ODAC) panel will be convened May 2, 2013 as part of the FDA's review.

We have financed our operations primarily through public and private placements of equity securities. We have incurred net losses since we were founded and we expect to continue to incur significant net losses throughout 2013. We expect that the average amount of capital required for operations to increase in the foreseeable future, as we commercialize the Delcath CHEMOSAT system in Europe, continue research and development activities, continue the approval process with the FDA and prepare for potential US commercialization.

Our principal executive office is located at 810 Seventh Avenue, 35<sup>th</sup> Floor, New York, NY 10019. Our telephone number is (212) 489-2100. Our website address is <http://www.delcath.com>. Information contained in, or accessible through, our website does not constitute a part of this prospectus.

### RISK FACTORS

Investing in our securities involves a high degree of risk. You should consider carefully the risk factors set forth in the documents and reports filed by us with the Securities and Exchange Commission, which we refer to as the SEC, that are incorporated by reference into this prospectus, as well as any risks described in any applicable prospectus supplement, before deciding whether to buy our securities. Additional risks not known to us or that we believe are immaterial may also significantly impair our business operations and could result in a complete loss of your investment.

## DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the documents incorporated by reference into this prospectus contain certain “forward-looking statements” within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995 with respect to our business, financial condition, liquidity and results of operations. Words such as “anticipates,” “expects,” “intends,” “plans,” “predicts,” “believes,” “seeks,” “estimates,” “could,” “would,” “will,” “may,” “can,” “continue,” “potential,” “should,” and the negative of these terms or other comparable terminology often identify forward-looking statements. Statements in this prospectus and the other documents incorporated by reference that are not historical facts are hereby identified as “forward-looking statements” for the purpose of the safe harbor provided by Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended. These forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results to differ materially from the results contemplated by the forward-looking statements, including the risks discussed in this prospectus, in our Annual Report on Form 10-K for the fiscal year ended December 31, 2012 in Item 1A under “Risk Factors” as well as in Item 7A “Quantitative and Qualitative Disclosures About Market Risk” and the risks detailed from time to time in our future SEC reports. These forward-looking statements include, but are not limited to, statements about:

- our estimates regarding sufficiency of our cash resources, anticipated capital requirements and our need for additional financing;
- the progress and results of our research and development programs;
- the commencement of future clinical trials and the results and timing of those clinical trials;
- submission and timing of applications for regulatory approval and approval thereof;
- our ability to successfully source certain components of the system and enter into supplier contracts;
- our ability to successfully manufacture the Delcath CHEMOSAT/Melblez kitsystem;
- our ability to successfully commercialize the Delcath CHEMOSAT/Melblez kit system and successfully obtain reimbursement; and
- our ability to successfully negotiate and enter into agreements with strategic and corporate partners.

Many of the important factors that will determine these results are beyond our ability to control or predict. You are cautioned not to put undue reliance on any forward-looking statements, which speak only as of the date of this prospectus or, in the case of documents incorporated by reference, as of the date of such documents. Except as otherwise required by law, we do not assume any obligation to publicly update or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events.

## WHERE YOU CAN FIND ADDITIONAL INFORMATION

**This prospectus is part of a registration statement we filed with the SEC. You should rely only on the information contained in this prospectus, any applicable prospectus supplement or documents incorporated by reference into this prospectus. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front page of this prospectus, regardless of the time of delivery of this prospectus or any sale of securities.**

We file reports, proxy statements and other information with the SEC. You may read and copy any reports, proxy statements or other information filed by us at the SEC’s Public Reference Room at 100 F Street NE, Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at (800) SEC-0330. The SEC maintains a website that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC, including Delcath Systems, Inc. The address of the SEC website is <http://www.sec.gov>.

### Important Information Incorporated By Reference

The SEC allows us to “incorporate by reference” information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The documents incorporated by reference into this prospectus contain important information that you should read about us.

The following documents are incorporated by reference into this document:

<u>SEC Filing (File No. 001-16133)</u>	<u>Date of Filing</u>
Annual Report on Form 10-K for year ended December 31, 2012	March 13, 2013
Current Report on Form 8-K	March 13, 2013

We also incorporate by reference into this prospectus all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial registration statement and prior to effectiveness of the registration statement, or (ii) from the date of this prospectus but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus, other than exhibits which are specifically incorporated by reference into such documents. Requests should be directed to Controller at Delcath Systems, Inc., 810 Seventh Avenue, 35<sup>th</sup> Floor, New York, New York 10019 or by calling us at 212-489-2100.

### USE OF PROCEEDS

We intend to use the net proceeds from the sale of our shares of common stock covered by this prospectus for general corporate purposes, including, but not limited to, obtaining regulatory approvals, commercialization of our products, funding of our clinical trials, research and development projects, capital expenditures and working capital.

### DESCRIPTION OF CAPITAL STOCK

The following description of our common stock, together with the additional information we include in any prospectus supplement and in any related free writing prospectuses, summarizes the material terms and provisions of the common stock that we may offer under this prospectus. The following description of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, our Amended and Restated Certificate of Incorporation, as amended, and our Amended and Restated By-Laws, which are exhibits to the registration statement of which this prospectus forms a part, and by applicable law. We refer in this section to our Amended and Restated Certificate of Incorporation, as amended, as our certificate of incorporation, and we refer to our Amended and Restated By-Laws as our by-laws. The terms of our common stock may also be affected by Delaware law.

#### Authorized Capital Stock

Our authorized capital stock consists of 170,000,000 shares of our common stock, \$0.01 par value per share, and 10,000,000 shares of undesignated preferred stock, \$0.01 par value per share. As of March 11, 2013, we had 91,173,443 shares of common stock outstanding and no shares of preferred stock outstanding.



## [Table of Contents](#)

### **Common Stock**

#### ***Voting***

Holders of our common stock are entitled to one vote per share on matters to be voted on by stockholders and also are entitled to receive such dividends, if any, as may be declared from time to time by our board of directors in its discretion out of funds legally available therefor. Holders of our common stock have exclusive voting rights for the election of our directors and all other matters requiring stockholder action, except with respect to amendments to our certificate of incorporation that alter or change the powers, preferences, rights or other terms of any outstanding preferred stock if the holders of such affected series of preferred stock are entitled to vote on such an amendment or filling vacancies on the board of directors.

#### ***Dividends***

Holders of common stock are entitled to share ratably in any dividends declared by our board of directors, subject to any preferential dividend rights of any outstanding preferred stock. Dividends consisting of shares of common stock may be paid to holders of shares of common stock. We do not intend to pay cash dividends in the foreseeable future.

#### ***Liquidation and Dissolution***

Upon our liquidation or dissolution, the holders of our common stock will be entitled to receive pro rata all assets remaining available for distribution to stockholders after payment of all liabilities and provision for the liquidation of any shares of preferred stock at the time outstanding.

#### ***Other Rights and Restrictions***

Our common stock has no preemptive or other subscription rights, and there are no conversion rights or redemption or sinking fund provisions with respect to such stock. Our common stock is not subject to redemption by us. Our certificate of incorporation and bylaws do not restrict the ability of a holder of common stock to transfer the stockholder's shares of common stock. If we issue shares of common stock under this prospectus, the shares will be fully paid and non-assessable and will not have, or be subject to, any preemptive or similar rights.

#### ***Listing***

Our common stock is listed on The NASDAQ Capital Market under the symbol "DCTH."

#### ***Transfer Agent and Registrar***

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company.

### **Certain Anti-Takeover Provisions of Delaware Law and our Certificate of Incorporation and Bylaws**

We are not subject to Section 203 of the Delaware General Corporation Law, which prohibits Delaware corporations from engaging in a wide range of specified transactions with any interested stockholder, defined to include, among others, any person other than such corporation and any of its majority owned subsidiaries who own 15% or more of any class or series of stock entitled to vote generally in the election of directors, unless, among other exceptions, the transaction is approved by (i) our board of directors prior to the date the interested stockholder obtained such status or (ii) the holders of two thirds of the outstanding shares of each class or series of stock entitled to vote generally in the election of directors, not including those shares owned by the interested stockholder.

#### ***Staggered Board of Directors***

Our certificate of incorporation and by-laws provide that our board of directors be classified into three classes of directors of approximately equal size. As a result, in most circumstances, a person can gain control of our board only by successfully engaging in a proxy contest at two or more annual meetings.

#### ***Authorized But Unissued Shares***

Our authorized but unissued shares of common stock and preferred stock are available for future issuances without stockholder approval and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, corporate acquisitions, employee benefit plans and stockholder rights plans. The existence of authorized but unissued and unreserved common stock and preferred stock could render more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

## PLAN OF DISTRIBUTION

We have entered into a sales agreement with Cowen and Company, LLC, or Cowen, under which we may issue and sell from time to time up to \$50,000,000 of our common stock through Cowen as our sales agent. Sales of the common stock, if any, will be made at market prices by any method that is deemed to be an “at the market” offering as defined in Rule 415 under the Securities Act, including sales made directly on The NASDAQ Capital Market and any other trading market for the common stock, and sales to or through a market maker other than on an exchange.

Cowen will offer the common stock subject to the terms and conditions of the sales agreement on a daily basis or as otherwise agreed upon by us and Cowen. We will designate the maximum amount of common stock to be sold through Cowen on a daily basis or otherwise determine such maximum amount together with Cowen. Subject to the terms and conditions of the sales agreement, Cowen will use its commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us. We may instruct Cowen not to sell common stock if the sales cannot be effected at or above the price designated by us in any such instruction. We or Cowen may suspend the offering of the common stock being made through Cowen under the sales agreement upon proper notice to the other party. We and Cowen each have the right, by giving written notice as specified in the sales agreement, to terminate the sales agreement in each party’s sole discretion at any time.

The aggregate compensation payable to Cowen as sales agent shall not exceed 3.0% of the gross sales price of the shares sold through it pursuant to the sales agreement.

The remaining sales proceeds, after deducting any expenses payable by us and any transaction fees imposed by any governmental, regulatory, or self-regulatory organization in connection with the sales, will equal our net proceeds for the sale of such common stock.

Cowen will provide written confirmation to us following the close of trading on The NASDAQ Capital Market as applicable, each day in which common stock is sold through it as sales agent under the sales agreement. Each confirmation will include the number of shares of common stock sold through it as sales agent on that day, the gross sales price per share, the net proceeds to us and the compensation payable by us to Cowen.

We will report at least quarterly the number of shares of common stock sold through Cowen under the sales agreement, the net proceeds to us and the compensation paid by us to Cowen in connection with the sales of common stock.

Settlement for sales of common stock will occur, unless the parties agree otherwise, on the third business day that is also a trading day following the date on which any sales were made in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sales of the common stock on our behalf, Cowen may be deemed to be an “underwriter” within the meaning of the Securities Act, and the compensation paid to Cowen may be deemed to be underwriting commissions or discounts. We have agreed in the sales agreement to provide indemnification and contribution to Cowen against certain liabilities, including liabilities under the Securities Act. In addition, we have agreed, under certain circumstances, to reimburse a portion of the expenses of Cowen in connection with this offering up to a maximum of \$35,000. As sales agent, Cowen will not engage in any transactions that stabilize our common stock.

We estimate that the total expenses of the offering payable by us, excluding commissions payable to Cowen under the sales agreement, will be approximately \$250,000.

**LEGAL MATTERS**

Unless otherwise indicated in the applicable prospectus supplement, Skadden, Arps, Slate, Meagher & Flom LLP, New York, New York will provide opinions regarding the authorization and validity of the securities. Skadden, Arps, Slate, Meagher & Flom LLP may also provide opinions regarding certain other matters. Certain legal matters will be passed upon for the sales agent by LeClairRyan, A Professional Corporation, Newark, New Jersey.

**EXPERTS**

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2012 and the effectiveness of our internal control over financial reporting as of December 31, 2012, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports given on their authority as experts in accounting and auditing.

**PART II**  
**INFORMATION NOT REQUIRED IN THE PROSPECTUS**

**Item 14. Other Expenses of Issuance and Distribution.**

The expenses relating to the registration of the securities will be borne by the registrant. Such expenses (except the SEC Registration Fee) are estimated to be as follows:

	<b>Amount to be paid</b>
SEC Registration Fee	\$ 6,820
Accounting Fees and Expenses	\$ 50,000
Legal Fees and Expenses	\$ 80,000
Printing expenses	\$ 20,000
Miscellaneous expenses	\$ 50,000
Total	\$206,820

\* Since an indeterminate amount of securities is covered by this registration statement, the expenses in connection with the issuance and distribution of the securities are not currently determinable. The amounts shown are estimates of expenses payable by us in connection with the filing of this registration statement and one offering of securities hereunder, but do not limit the amount of securities that may be offered.

**Item 15. Indemnification of Directors and Officers.**

The registrant's amended and restated certificate of incorporation, as amended, contains provisions permitted under Delaware law relating to the liability of directors. These provisions eliminate a director's personal liability for monetary damages resulting from a breach of fiduciary duty, except in circumstances involving wrongful acts, such as:

- any breach of the director's duty of loyalty to the registrant or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of the law;
- any act related to unlawful stock repurchases, redemptions or other distribution or payments of dividends; or
- any transaction from which the director derived an improper personal benefit.

These provisions do not limit or eliminate the registrant's rights or any stockholder's rights to seek non-monetary relief, such as an injunction or rescission, in the event of a breach of a director's fiduciary duty. These provisions will not alter a director's liability under federal securities laws.

The registrant has entered into indemnification agreements with each of its directors and executive officers that require it to indemnify such persons against any and all expenses (including attorneys' fees), witness fees, judgments, fines, settlements and other amounts incurred (including expenses of a derivative action) in connection with any action, suit or proceeding or alternative dispute

## [Table of Contents](#)

resolution mechanism, inquiry hearing or investigation, whether threatened, pending or completed, to which any such person may be made a party by reason of the fact that such person is or was a director, an officer or an employee of the registrant or is or was serving at the request of the Company as a director, officer or employee of another corporation, limited liability company, partnership or other enterprise, provided that such person's conduct did not constitute a breach of his or her duty of loyalty to the registrant or its stockholders, and was not an act or omission not in good faith or which involved intentional misconduct or a knowing violation of laws. The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder. At present, there is no pending litigation or proceeding involving any of the registrant's directors, officers or employees for which indemnification is sought, nor is the registrant aware of any threatened litigation that may result in claims for indemnification by the registrant.

The registrant is required to indemnify its other employees and other agents, as permitted by the DGCL or any other applicable law.

The registrant maintains directors' and officers' liability insurance. The policy insures the registrant's directors and officers against unindemnified losses arising from certain wrongful acts in their capacities as directors and officers and reimburses the registrant for those losses for which the registrant has lawfully indemnified the directors and officers.

### **Item 16. Exhibits.**

See the Exhibit Index which is incorporated herein by reference.

### **Item 17. Undertakings.**

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
  - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
  - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

*provided, however*, that paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

## Table of Contents

- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
  - (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
  - (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
  1. Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
  2. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
  3. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
  4. Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

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## Table of Contents

- (7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.
- (8) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under section 305(b)(2) of the Trust Indenture Act.

**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in New York, NY, on March 13, 2013.

DELCATH SYSTEMS, INC.

By: /s/ Eamonn P. Hobbs  
Name: Eamonn P. Hobbs  
Title: President and Chief Executive Officer

**POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Eamonn P. Hobbs and Graham G. Miao, and each or any one of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and to sign any and all additional registration statements relating to the Registration Statement and filed pursuant to Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent or his substitute or substitutes, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Eamonn P. Hobbs</u> Eamonn P. Hobbs	President and Chief Executive Officer, and Director (Principal Executive Officer)	March 13, 2013
<u>/s/ Graham G. Miao</u> Graham G. Miao, Ph.D.	Executive Vice President, Chief Financial Officer (Principal Financial Officer)	March 13, 2013



[Table of Contents](#)

Signature	Title	Date
<hr/> <i>/s/ Barbra C. Keck</i> <hr/> Barbra C. Keck	Vice President, Controller (Principal Accounting Officer)	March 13, 2013
<hr/> <i>/s/ Harold S. Koplewicz</i> <hr/> Harold S. Koplewicz, M.D.	Chairman of the Board	March 13, 2013
<hr/> <i>/s/ Laura Philips</i> <hr/> Laura Philips, Ph.D.	Director	March 13, 2013
<hr/> <i>/s/ Douglas Watson</i> <hr/> Douglas Watson	Director	March 13, 2013
<hr/> <i>/s/ Tasos Konidaris</i> <hr/> Tasos Konidaris	Director	March 13, 2013
<hr/> <i>/s/ Gabriel Leung</i> <hr/> Gabriel Leung	Director	March 13, 2013
<hr/> <i>/s/ Roger Stoll</i> <hr/> Roger Stoll, Ph.D.	Director	March 13, 2013
<hr/> <i>/s/ Laura Brege</i> <hr/> Laura Brege	Director	March 13, 2013

**EXHIBIT INDEX**

<u>Exhibit Number</u>	<u>Description of the Document</u>
1.1*	Sales Agreement, dated March 13, 2013, between Delcath Systems, Inc. and Cowen and Company, LLC
3.1	Amended and Restated Certificate of Incorporation of the Company, as amended to May 23, 2012 (incorporated by reference to Exhibit 3.1 to Company's Current Report on Form 8-K filed May 29, 2012 (Commission File No. 001-16133)).
3.2	Amended and Restated By-Laws of the Company (incorporated by reference to Exhibit 3.2 to Amendment No. 1 to Company's Registration Statement on Form SB-2 (Registration No. 333-39470))
5.1*	Opinion of Skadden, Arps, Slate, Meagher & Flom LLP
23.1*	Consent of Ernst & Young LLP.
23.3	Consent of Skadden, Arps, Slate, Meagher & Flom LLP (included in Exhibit 5.1).

\* Filed herewith

## DEL CATH SYSTEMS, INC.

\$50,000,000

## SALES AGREEMENT

March 13, 2013

Cowen and Company, LLC  
599 Lexington Avenue  
New York, NY 10022

Ladies and Gentlemen:

Delcath Systems, Inc. (the "**Company**"), confirms its agreement (this "**Agreement**") with Cowen and Company, LLC ("**Cowen**"), as follows:

1. **Issuance and Sale of Shares.** The Company agrees that, from time to time during the term of this Agreement, on the terms and subject to the conditions set forth herein, it may issue and sell through Cowen, acting as agent and/or principal, shares of the Company's common stock, par value 0.01 per share (the "**Common Stock**") having an aggregate offering price of up to \$50,000,000. Notwithstanding anything to the contrary contained herein, the parties hereto agree that compliance with the limitation set forth in this **Section 1** on the number of Common Stock issued and sold under this Agreement shall be the sole responsibility of the Company, and Cowen shall have no obligation in connection with such compliance. The issuance and sale of Common Stock through Cowen will be effected pursuant to the Registration Statement (as defined below) filed by the Company and declared effective by the Securities and Exchange Commission (the "**Commission**"), although nothing in this Agreement shall be construed as requiring the Company to use the Registration Statement (as defined below) to issue the Common Stock.

The Company has filed or will file, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the "**Securities Act**"), with the Commission a registration statement on Form S-3, including one or more base prospectuses, relating to certain securities, including the Common Stock, to be issued from time to time by the Company, and which incorporates by reference documents that the Company has

filed or will file in accordance with the provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the “**Exchange Act**”). The Company will prepare, if necessary, a prospectus supplement specifically relating to the Common Stock (the “**Prospectus Supplement**”) to the base prospectus included as part of such registration statement. The Company will furnish to Cowen, for use by Cowen, copies of the prospectus included as part of such registration statement, as supplemented, if at all, by the Prospectus Supplement, relating to the Common Stock. Except where the context otherwise requires, such registration statement, as amended when it became effective, including all documents filed as part thereof or incorporated by reference therein, and including any information contained in a Prospectus (as defined below) subsequently filed with the Commission pursuant to Rule 424(b) under the Securities Act or deemed to be a part of such registration statement pursuant to Rule 430B or 462(b) of the Securities Act, is herein called the “**Registration Statement**.” The base prospectus specifically relating to the Common Stock to be issued from time to time by the Company pursuant to this Agreement, including all documents incorporated therein by reference, included in the Registration Statement, as it may be supplemented by the Prospectus Supplement, in the form in which such prospectus and/or Prospectus Supplement have most recently been filed by the Company with the Commission pursuant to Rule 424(b) under the Securities Act, together with any “issuer free writing prospectus,” as defined in Rule 433 of the Securities Act Regulations (“Rule 433”), relating to the Common Stock that (i) is required to be filed with the Commission by the Company or (ii) is exempt from filing pursuant to Rule 433(d)(5)(i), in each case 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), is herein called the “**Prospectus**.” Any reference herein to the Registration Statement, the Prospectus or any amendment or supplement thereto shall be deemed to refer to and include the documents incorporated by reference therein, and any reference herein to the terms “amend,” “amendment” or “supplement” with respect to the Registration Statement or the Prospectus shall be deemed to refer to and include the filing after the execution hereof of any document with the Commission deemed to be incorporated by reference therein. For purposes of this Agreement, all references to the Registration Statement, the Prospectus or to any amendment or supplement thereto shall be deemed to include any copy filed with the Commission pursuant to either the Electronic Data Gathering Analysis and Retrieval System or Interactive Data Electronic Applications (collectively “**IDEA**”).

2. **Placements.** Each time that the Company wishes to issue and sell the Common Stock hereunder (each, a “**Placement**”), it will notify Cowen by email notice (or other method mutually agreed to in writing by the parties) (a “**Placement Notice**”) containing the parameters in accordance with which it desires the Common Stock to be sold, which shall at a minimum include the number of shares of Common Stock to be issued (the “**Placement Shares**”), the time period during which sales are requested to be made, any limitation on the number of shares of Common Stock that may be sold in any one Trading Day (as defined in **Section 3**) and any minimum price below which sales may not be made, a form of which containing such minimum sales parameters necessary is attached hereto as **Schedule 1**. The Placement Notice shall originate from any of the individuals from the Company set forth on **Schedule 2** (with a copy to each of the other individuals from the Company listed on such schedule), and shall be addressed to each of the individuals from Cowen set forth on **Schedule 2**, as such **Schedule 2** may be supplemented or revised by written notice from time to time. The Placement Notice shall be

effective upon receipt by Cowen unless and until (i) in accordance with the notice requirements set forth in Section 4, Cowen declines to accept the terms contained therein for any reason, in its sole discretion, (ii) the entire amount of the Placement Shares have been sold, (iii) in accordance with the notice requirements set forth in Section 4, the Company suspends or terminates the Placement Notice, (iv) the Company issues a subsequent Placement Notice with parameters superseding those on the earlier dated Placement Notice, or (v) the Agreement has been terminated under the provisions of Section 11. The amount of any discount, commission or other compensation to be paid by the Company to Cowen in connection with the sale of the Placement Shares shall be calculated in accordance with the terms set forth in Schedule 3. It is expressly acknowledged and agreed that neither the Company nor Cowen will have any obligation whatsoever with respect to a Placement or any Placement Shares unless and until the Company delivers a Placement Notice to Cowen and Cowen does not decline such Placement Notice pursuant to the terms set forth above, and then only upon the terms specified therein and herein. In the event of a conflict between the terms of this Agreement and the terms of a Placement Notice, the terms of the Placement Notice will control.

3. Sale of Placement Shares by Cowen. Subject to the terms and conditions herein set forth, upon the Company's issuance of a Placement Notice, and unless the sale of the Placement Shares described therein has been declined, suspended, or otherwise terminated in accordance with the terms of this Agreement, Cowen, for the period specified in the Placement Notice, will use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable state and federal laws, rules and regulations and the rules of the Nasdaq Stock Market, Inc. ("**Nasdaq**") to sell such Placement Shares up to the amount specified, and otherwise in accordance with the terms of such Placement Notice. Cowen will provide written confirmation to the Company (including by email correspondence to each of the individuals from the Company set forth on Schedule 2, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) no later than the opening of the Trading Day (as defined below) immediately following the Trading Day on which it has made sales of Placement Shares hereunder setting forth the number of Placement Shares sold on such day, the compensation payable by the Company to Cowen pursuant to Section 2 with respect to such sales, and the Net Proceeds (as defined below) payable to the Company, with an itemization of the deductions made by Cowen (as set forth in Section 5(a)) from the gross proceeds that it receives from such sales. Cowen may sell Placement Shares by any method permitted by law deemed to be an "at the market" offering as defined in Rule 415 of the Securities Act, including without limitation sales made through Nasdaq, on any other existing trading market for the Common Stock or to or through a market maker. Cowen may also sell Placement Shares in privately negotiated transactions. The Company acknowledges and agrees that (i) there can be no assurance that Cowen will be successful in selling Placement Shares, and (ii) Cowen will incur no liability or obligation to the Company or any other person or entity if it does not sell Placement Shares for any reason other than a failure by Cowen to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such Placement Shares as required under this Section 3. For the purposes hereof, "**Trading Day**" means any day on which the Company's Common Stock is purchased and sold on the principal market on which the Common Stock is listed or quoted.

#### 4. Suspension of Sales.

(a) The Company or Cowen may, upon notice to the other party in writing (including by email correspondence to each of the individuals of the other party set forth on **Schedule 2**, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) or by telephone (confirmed immediately by verifiable facsimile transmission or email correspondence to each of the individuals of the other party set forth on **Schedule 2**), suspend any sale of Placement Shares; *provided, however*, that such suspension shall not affect or impair either party's obligations with respect to any Placement Shares sold hereunder prior to the receipt of such notice. Each of the Parties agrees that no such notice under this **Section 4** shall be effective against the other unless it is made to one of the individuals named on **Schedule 2** hereto, as such schedule may be amended from time to time.

(b) Notwithstanding any other provision of this Agreement, during any period in which the Company's is in possession of material non-public information, the Company and Cowen agree that (i) no sale of Placement Shares will take place, (ii) the Company shall not request the sale of any Placement Shares, and (iii) Cowen shall not be obligated to sell or offer to sell any Placement Shares.

(c) If either Cowen or the Company has reason to believe that the exemptive provisions set forth in Rule 101(c)(1) of Regulation M under the Exchange Act are not satisfied with respect to the Common Stock, it shall promptly notify the other party, and Cowen may, at its sole discretion, suspend sales of the Placement Shares under this Agreement. Cowen shall calculate on a weekly basis the average daily trading volume (as defined by Rule 100 of Regulation M under the Exchange Act) of the Common Stock.

#### 5. Settlement.

(a) **Settlement of Placement Shares.** Unless otherwise specified in the applicable Placement Notice, settlement for sales of Placement Shares will occur on the third (3<sup>rd</sup>) Trading Day (or such earlier day as is industry practice for regular-way trading) following the date on which such sales are made (each, a "**Settlement Date**" and the first such settlement date, the "**First Delivery Date**"). The amount of proceeds to be delivered to the Company on a Settlement Date against receipt of the Placement Shares sold (the "**Net Proceeds**") will be equal to the aggregate sales price received by Cowen at which such Placement Shares were sold, after deduction for (i) Cowen's commission, discount or other compensation for such sales payable by the Company pursuant to **Section 2** hereof, (ii) any other amounts due and payable by the Company to Cowen hereunder pursuant to **Section 7(g)** (Expenses) hereof, and (iii) any transaction fees imposed by any governmental or self-regulatory organization in respect of such sales.

(b) Delivery of Placement Shares. On or before each Settlement Date, the Company will, or will cause its transfer agent to, electronically transfer the Placement Shares being sold by crediting Cowen's or its designee's account (provided Cowen shall have given the Company written notice of such designee prior to the Settlement Date) at The Depository Trust Company through its Deposit and Withdrawal at Custodian System or by such other means of delivery as may be mutually agreed upon by the parties hereto which in all cases shall be freely tradeable, transferable, registered shares in good deliverable form. On each Settlement Date, Cowen will deliver the related Net Proceeds in same day funds to an account designated by the Company on, or prior to, the Settlement Date. The Company agrees that if the Company, or its transfer agent (if applicable), defaults in its obligation to deliver Placement Shares on a Settlement Date, the Company agrees that in addition to and in no way limiting the rights and obligations set forth in Section 9(a) (Indemnification and Contribution) hereto, it will (i) hold Cowen harmless against any loss, claim, damage, or expense (including reasonable legal fees and expenses), as incurred, arising out of or in connection with such default by the Company and (ii) pay to Cowen any commission, discount, or other compensation to which it would otherwise have been entitled absent such default.

6. Representations and Warranties of the Company. The Company represents and warrants to, and agrees with, Cowen that, except as limited in subsection (a), (b) and (c) below, as of each Applicable Time (as defined in Section 20(a)):

(a) Compliance with Registration Requirements. As of each Applicable Time occurring on and after the date of the first Placement Notice hereunder, the Registration Statement and any Rule 462(b) Registration Statement have been declared effective by the Commission under the Securities Act. The Company has complied to the Commission's satisfaction with all requests of the Commission for additional or supplemental information. No stop order suspending the effectiveness of the Registration Statement or any Rule 462(b) Registration Statement is in effect and no proceedings for such purpose have been instituted or are pending or, to the best knowledge of the Company, are contemplated or threatened by the Commission. The Company meets the requirements for 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 the date of filing the Registration Statement or the most recent Annual Report on Form 10-K.

(b) No Misstatement or Omission. As of each Applicable Time occurring on and after the date of the first Placement Notice hereunder, the Prospectus when filed complied and, as amended or supplemented, if applicable, will comply in all material respects with the Securities Act. Each of the Registration Statement, any Rule 462(b) Registration Statement and any post-effective amendment thereto, at the time it became effective, complied and, as of each Applicable Time and as of each of the Settlement Dates, if any, will comply in all material respects with the Securities Act and did not and, as of each Applicable Time and as of each of the Settlement Dates, if any, will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Prospectus, as amended or supplemented, as of its date, did not and, as of each

Applicable Time and as of each of the Settlement Dates, if any, will not contain any 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. The representations and warranties set forth in the two immediately preceding sentences do not apply to statements in or omissions from the Registration Statement, any Rule 462(b) Registration Statement, or any post-effective amendment thereto, or the Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with information relating to Cowen furnished to the Company in writing by Cowen expressly for use therein. There are no contracts or other documents required to be described in the Prospectus or to be filed as exhibits to the Registration Statement which have not been described or filed as required.

(c) Offering Materials Furnished to Cowen. As of each Applicable Time occurring on and after the date of the first Placement Notice hereunder, the Company has delivered to Cowen one complete copy of the Registration Statement and a copy of each consent and certificate of experts filed as a part thereof, and conformed copies of the Registration Statement (without exhibits) and the Prospectus, as amended or supplemented, in such quantities and at such places as Cowen has reasonably requested.

(d) Distribution of Offering Material By the Company. The Company has not distributed and will not distribute, prior to the later of the Closing Date and the completion of Cowen's distribution of the Common Stock, any offering material in connection with the offering and sale of the Common Stock other than the Prospectus or the Registration Statement.

(e) The Sales Agreement. This Agreement has been duly authorized, executed and delivered by, and is a valid and binding agreement of, the Company, enforceable in accordance with its terms, except as rights to indemnification hereunder may be limited by applicable law and except as the enforcement hereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles.

(f) Authorization of the Placement Shares. The Placement Shares have been duly authorized for issuance and sale pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement, will be validly issued, fully paid and nonassessable, and the issuance and sale of the Placement Shares is not subject to any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase the Placement Shares.

(g) No Applicable Registration or Other Similar Rights. There are no persons with registration or other similar rights to have any equity or debt securities registered for sale under the Registration Statement or included in the offering contemplated by this Agreement, except for such rights as have been duly waived.



(h) **No Material Adverse Change.** Subsequent to the respective dates as of which information is contained in the Prospectus Supplement, except as disclosed or incorporated by reference in the Prospectus Supplement, (i) neither the Company nor Delcath Systems Limited (the “**Subsidiary**”) has not incurred any liabilities, direct or contingent, including without limitation any losses or interference with its business from fire, explosion, flood, earthquakes, accident or other calamity, whether or not covered by insurance, or from any strike, labor dispute or court or governmental action, order or decree, that are material, individually or in the aggregate, to the Company and the Subsidiary, or has entered into any transactions not in the ordinary course of business, (ii) there has not been any material decrease in the capital stock or any material increase in any short-term or long-term indebtedness of the Company or the Subsidiary, or any payment of or declaration to pay any dividends or any other distribution with respect to the Company, and (iii) there has not been any material adverse change in the properties, business, prospects, operations, earnings, assets, liabilities or condition (financial or otherwise) of the Company and the Subsidiary (each of clauses (i), (ii) and (iii), a “**Material Adverse Change**”).

(i) **Independent Accountant.** Ernst & Young LLP (“**Ernst & Young**”), who have certified and expressed their opinion with respect to the financial statements including the related notes thereto and supporting schedules contained or incorporated by reference in the Registration Statement, Prospectus Supplement and the Prospectus, is (i) an independent registered public accounting firm with respect to the Company within the applicable rules and regulations adopted by the Commission and as required by the Securities Act, (ii) in compliance with the applicable requirements relating to the qualification of accountants under Regulation S-X and (iii) a registered public accounting firm as defined by the Public Company Accounting Oversight Board (United States) (the “**PCAOB**”) whose registration has not been suspended or revoked and who has not requested such registration to be withdrawn.

(j) **Preparation of the Financial Statements.** The financial statements of the Company, together with the related schedules and notes thereto, included or incorporated by reference in the Registration Statement, Prospectus Supplement and the Prospectus (the “**Financial Statements**”), 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) and in accordance with the requirements of Regulation S-X. The financial data set forth under the captions “Summary Historical Financial Data” and “Selected Financial Data” included or incorporated by reference in the Registration Statement, Prospectus Supplement and the Prospectus has been prepared on a basis consistent with that of the Financial Statements and present fairly the financial position and results of operations of the Company as of the respective dates and for the respective periods indicated. There are no other financial statements (historical or pro forma) that would be required to be included or incorporated by

reference in the Registration Statement, Prospectus Supplement and the Prospectus; and all disclosures contained in the Registration Statement, Prospectus Supplement 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. No forward-looking statement (within the meaning of Section 27A of the Act and Section 21E of the Exchange Act) contained in the Registration Statement, Prospectus Supplement and the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed in other than good faith.

(k) Company’s Accounting System. Each of the Company and the 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.

(l) Incorporation and Good Standing of the Company and the Subsidiary. Each of the Company and the Subsidiary has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware, with the corporate power and authority to own its properties and to conduct its business as currently being conducted and as described in the Prospectus Supplement and the Prospectus. Each of the Company and the Subsidiary is duly qualified to transact business and is in good standing as a foreign corporation 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, individually or in the aggregate, would not result in a Material Adverse Change. The Company has no subsidiaries (as defined in Rule 405 of the Securities Act) other than the Subsidiary; the Company owns all of the issued and outstanding capital stock or other equity interests of the Subsidiary; and, except as otherwise described in the Prospectus Supplement and the Prospectus, does not own any beneficial interest, directly or indirectly, in any other corporation, partnership, joint venture or other business entity.

(m) Capitalization and Other Capital Stock Matters. All of the issued and outstanding shares of capital stock of the Company and the Subsidiary have been duly authorized and validly issued, are fully paid and nonassessable and were not issued in violation of, and are not subject to, any preemptive or similar rights. The information set forth under the caption “Capitalization” in the Prospectus Supplement and the Prospectus (and any similar sections, if any, contained in the Prospectus Supplement and the Prospectus) is fairly and accurately presented on a basis consistent with the Company’s Financial Statements. All of the outstanding shares of capital stock or other equity interests of the Subsidiary is owned, directly or indirectly, by the Company,

free and clear of all liens, security interests, mortgages, pledges, charges, equities, claims or restrictions on transferability or encumbrances of any kind (collectively, "**Liens**"), other than those Permitted Liens and those imposed by the Securities Act and the securities or "Blue Sky" laws of certain U.S. state or non-U.S. jurisdictions. The authorized capital stock of the Company conforms as to legal matters to the description thereof contained in the Prospectus Supplement and the Prospectus under the caption "Description of Capital Stock" (and any similar sections or information, if any, contained in the Prospectus Supplement and the Prospectus).

(n) Stock Exchange Listing; 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, and the Company has taken no action designed to terminate, 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. 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 Placement Shares on The NASDAQ Capital Market.

(o) Non-Contravention of Existing Instruments; No Consents. 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, the "**Charter Documents**") 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 the Subsidiary is a party or by which it or any of its properties may be bound or affected (collectively, the "**Applicable Agreements**"), or (iii) in the performance or observance 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, the Subsidiary or any of their properties, as applicable (including, without limitation, the Public Health Service Act, the Federal Food, Drug, and Cosmetic Act ("**FDCA**") and those administered by the Food and Drug Administration (the "**FDA**") or by any foreign, federal, state or local governmental or regulatory authority performing functions similar to those performed by the FDA) (collectively, "**Applicable Laws**"), 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 Change. 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 consummation of the offering of the Placement Shares by the Company other than as may be required (i) under the securities or "Blue Sky" laws of U.S. state or non-U.S. jurisdictions or other non-U.S. laws applicable to the purchase of the Securities outside the U.S. in connection with the Transactions or (ii) by The NASDAQ Capital Market in connection with an additional share listing application for the Placement Shares.

(p) **No Material Actions or Proceedings.** (i) 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 the 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 FDA), which would be required to be described in the Prospectus Supplement and the Prospectus and are not so described therein, that, singularly or in the aggregate, if resolved adversely to the Company or the Subsidiary, would reasonably be likely to result in a Material Adverse Change or prevent or materially and adversely affect the ability of the Company to consummate the offering of the Placement Shares.

(q) **Intellectual Property Rights.** Each of the Company and the 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 Prospectus Supplement and the Prospectus, and neither the Company nor the Subsidiary is aware of any claim to the contrary or any challenge by any other person to the rights of the Company or the Subsidiary with respect to the foregoing except for those that could not result in a Material Adverse Change. To the Company's knowledge, the Intellectual Property is valid and enforceable, and is not infringed by any third party. All Company and Subsidiary products are properly marked with any applicable U.S. patent numbers and no Company or Subsidiary products are falsely marked with inapplicable, lapsed or expired U.S. patent numbers. The Intellectual Property licenses described in the Prospectus Supplement and the Prospectus are, to the Company's knowledge, valid, binding upon, and enforceable by or against the parties thereto in accordance to their terms. Each of the Company and the 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 the Subsidiary has knowledge of any breach or anticipated breach by any other person to any Intellectual Property license. The Company's and the Subsidiary's businesses as now conducted and as proposed to be conducted, to the Company's knowledge, 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 the Subsidiary has received notice of any material claim against the Company or the Subsidiary alleging the infringement by the Company or the 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. Each of the Company and the 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 and the 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 the Subsidiary has entered into any agreement to indemnify any third party against a claim of intellectual property infringement. Each of the Company and the 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 the Subsidiary (the "**Company Patent Applications**"). To the Company's knowledge, each of the Company and the 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 the 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 the 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 the Subsidiary has knowledge of any information that would preclude the Company from having clear title to the Company Patent Applications. Neither the Company nor the Subsidiary has used any open source software in any Company product. Each of the Company and the 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 Subsidiary privacy policies and all applicable agreements. The consummation of the transactions contemplated by this agreement will not violate any Company or Subsidiary privacy obligations, nor require the Company or the Subsidiary to provide any notice to, or seek any consent from, any employee, customer, supplier, service provider or other third party.

(r) All Necessary Permits, etc. Each of the Company and the 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 Prospectus Supplement and the Prospectus (collectively, "**Permits**"), except for such Permits which the failure to obtain would not result in a Material Adverse Change (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 and the Subsidiary are valid and in full force and effect. Neither the Company nor the 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 result in a Material Adverse Change.

(s) Title to Properties. Each of the Company and the Subsidiary has good and marketable title to all property (whether real or personal) described in the Prospectus Supplement and the Prospectus as being owned by it, in each case free and clear of all Liens, except such as are described in the Prospectus Supplement 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 and the Subsidiary. All of the property described in the Prospectus Supplement and the Prospectus as being held under lease by the Company or the Subsidiary is held thereby under leases that are in full force and effect.

(t) Regulatory Compliance.

1. Neither the Company nor the 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 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 Applicable Laws by the Company or the Subsidiary 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 a governmental or regulatory authorities is pending and no such review or investigation has been threatened.

2. The clinical, pre-clinical and other studies and tests conducted by or on behalf of or sponsored by the Company or the Subsidiary or in which the Company or the Subsidiary or products or product candidates have participated that are described in the Prospectus Supplement 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 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 Prospectus Supplement and the Prospectus 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 the 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 Change. 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. Each of the Company and the 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 Change.

3. Neither the Company, the 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 the Subsidiary has been nor is now subject to FDA's Applications Integrity Policy. To the Company's knowledge, neither the Company, the 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.

4. Neither the Company, the 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.

(u) Tax Law Compliance. Each of the Company and the Subsidiary (i) has 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 the Subsidiary is contesting in good faith and for which adequate reserves have been provided and reflected in the Company's financial statements included or incorporated by reference in the Prospectus Supplement and the Prospectus or except if such failure to file or pay would not, individually or in the aggregate, result in a Material Adverse Change. Neither the Company nor the Subsidiary has any tax deficiency that has been or, to the Company's knowledge, is reasonably likely to be asserted or threatened against it that would result in a Material Adverse Change.

(v) Company Not an “Investment Company”. The Company has been advised of the rules and requirements under the Investment Company Act of 1940, as amended (the “**Investment Company Act**”). The Company is not, and will not be, either after receipt of payment for the Placement Shares or after the application of the proceeds therefrom as described under “Use of Proceeds” in the Prospectus, an “**investment company**” within the meaning of Investment Company Act and will conduct its business in a manner so that it will not become subject to the Investment Company Act.

(w) Insurance. Each of the Company and the 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. Neither the Company nor the 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 result in a Material Adverse Change.

(x) No Price Stabilization or Manipulation; Compliance with Regulation M. Neither the Company nor, to the Company’s knowledge, any of its officers, directors, affiliates or controlling persons has, (i) taken, directly or indirectly, any action designed to cause or to result in, or that has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company, whether to facilitate the sale or resale of any of the Placement Shares or otherwise, in each case, in a manner that violates Regulation M under the Securities Act, (ii) sold, bid for, purchased, or paid anyone any compensation for soliciting purchases of, any of the Placement Shares, or (iii) except as disclosed in the Prospectus Supplement and the Prospectus, paid or agreed to pay to any person any compensation for soliciting another to purchase any other securities of the Company.

(y) 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 would be required to be described in the Registration Statement, Prospectus Supplement and the Prospectus or a document incorporated by reference therein, which has not been so described.

(z) Statistical and Market-Related Data. Any statistical, industry-related and market-related data included or incorporated by reference in the Registration Statement, the Prospectus Supplement and the Prospectus, 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.



(aa) No Unlawful Contributions or Other Payments. Neither the Company nor the Subsidiary nor, to the best of the Company's knowledge, any employee or agent of the Company or the Subsidiary, has made any contribution or other payment to any official of, or candidate for, any federal, state or foreign office in violation of any law or of the character required to be disclosed in the Registration Statement, the Prospectus Supplement and the Prospectus.

(bb) Disclosure Controls and Procedures; Deficiencies in or Changes to Internal Control Over Financial Reporting. The Company and the Subsidiary have established, maintain and evaluate "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 the 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 Prospectus Supplement and the Prospectus, 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 the 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 the 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.

(cc) Compliance with Environmental Laws. Each of the Company and the 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 Change. 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 Change.

(dd) ERISA Compliance. Neither the Company, nor the Subsidiary nor any other entity that together with the Company and the Subsidiary would be considered a single employer within the meaning of Section 4001(b) of the Employee Retirement Income Security Act of 1974 (“ERISA”) (each single employer, an “ERISA Affiliate”) maintains or contributes to or ever maintained was required to contribute to a plan subject to Title IV of ERISA or Section 412 of the Internal Revenue Code of 1986, as amended (the “Code”). Each benefit plan sponsored by the Company or an ERISA Affiliate has been maintained in substantial compliance with its terms and applicable laws. Each such plan intended to be “qualified” within the meaning of Section 401(a) of the Code is the subject of a favorable determination letter from the Internal Revenue Service as to its qualification (or the period for timely requesting such a determination has not expired) and the Company and the Subsidiary are aware of no circumstances that would reasonably be expected to result in the disqualification of such plan.

(ee) Brokers. 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 Cowen for a brokerage commission, finder’s fee or other like payment in connection with the offering and sale of the Placement Shares.

(ff) No Outstanding Loans or Other Extensions of Credit. Since the adoption of Section 13(k) of the Exchange Act, neither the Company nor the Subsidiary has extended or maintained credit, arranged for the extension of credit, or renewed any extension of credit, in the form of a personal loan, to or for any director or executive officer (or equivalent thereof) of the Company and/or such Subsidiary except for such extensions of credit as are expressly permitted by Section 13(k) of the Exchange Act.

(gg) Compliance with Laws. The Company has not been advised, and has no reason to believe, that it and the Subsidiary are not conducting business in compliance with all applicable laws, rules and regulations of the jurisdictions in which it is conducting business, except where failure to be so in compliance would not result in a Material Adverse Change.

(hh) No Conflicts. Neither the execution, delivery or performance of this Agreement nor the consummation of any of the transactions contemplated herein will (i) 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 the Subsidiary pursuant to any Applicable Agreement, (ii) result in any violation of the provisions of the charter or by-laws of the Company or the Subsidiary, or (iii) result in any violation of any Applicable Law.

(ii) Sarbanes-Oxley Act. The Company, the Subsidiary, and to its knowledge, all of the Company’s and the Subsidiary’s directors or officers, in their capacities as such, is 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.

(jj) Corporate Records. The minute books of the Company and the 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 the Subsidiary (collectively, the “Corporate Records”) through the date of the latest meeting and action have been made available to Cowen and its counsel. 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 the Subsidiary that are not properly approved and/or recorded in the Corporate Records of the Company and the Subsidiary.

(kk) Dividend Restrictions. Except as otherwise disclosed in the Prospectus Supplement and the Prospectus, there will be no encumbrances or restrictions on the ability of the Subsidiary (x) to pay dividends or make other distributions on such Subsidiary’s capital stock or to pay any indebtedness to the Company, (y) to make loans or advances or pay any indebtedness to, or investments in, the Company or (z) to transfer any of its property or assets to the Company.

(ll) No Labor Disputes. No labor problem or dispute with the employees of the Company or the Subsidiary exists, or, to the Company’s knowledge, is threatened or imminent, which would reasonably be expected to result in a Material Adverse Change. Neither the Company nor the Subsidiary is aware that any key employee or significant group of employees of the Company plans to terminate employment with the Company. Neither the Company nor the Subsidiary has engaged in any unfair labor practice; except for matters which would not, individually or in the aggregate, result in a Material Adverse Change, (i) there is (A) no unfair labor practice complaint pending or, to the Company’s knowledge, threatened against the Company or the 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 or the Subsidiary and (C) no union representation dispute currently existing concerning the employees of the Company and (ii) to the Company’s knowledge, (A) no union organizing activities are currently taking place concerning the employees of the Company or the Subsidiary 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 ERISA or the rules and regulations promulgated thereunder concerning the employees of the Company or the Subsidiary.

(mm) Foreign Corrupt Practices Act. Neither the Company, the Subsidiary nor, to the Company's knowledge, any other person associated with or acting on behalf of the Company or the Subsidiary, including without limitation any director, officer, agent or employee of the Company or the Subsidiary has, directly or indirectly, while acting on behalf of the Company or the 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.

(nn) Money Laundering Laws. The operations of the Company and the 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 the Subsidiary with respect to the Money Laundering Laws is pending, or to the Company's knowledge, threatened against the Company or the Subsidiary.

(oo) OFAC. Neither the Company, the Subsidiary nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or the 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 neither the Company nor the Subsidiary will 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.

(pp) Cowen Purchases. The Company acknowledges and agrees that Cowen has informed the Company that Cowen may, to the extent permitted under the Securities Act and the Exchange Act, purchase and sell shares of Common Stock for its own account while this Agreement is in effect.

Any certificate signed by an officer of the Company and delivered to Cowen or to counsel for Cowen shall be deemed to be a representation and warranty by the Company to Cowen as to the matters set forth therein.

The Company acknowledges that Cowen and, for purposes of the opinions to be delivered pursuant to Section 7 hereof, counsel to the Company and counsel to Cowen, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

7. Covenants of the Company. The Company covenants and agrees with Cowen that:

(a) Registration Statement Amendments. After the date of this Agreement and during any period in which a Prospectus relating to any Placement Shares is required to be delivered by Cowen under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), (i) the Company will notify Cowen promptly of the time when any subsequent amendment to the Registration Statement, other than documents incorporated by reference, has been filed with the Commission and/or has become effective or any subsequent supplement to the Prospectus has been filed and of any request by the Commission for any amendment or supplement to the Registration Statement or Prospectus or for additional information, (ii) the Company will prepare and file with the Commission, promptly upon Cowen's request, any amendments or supplements to the Registration Statement or Prospectus that, in Cowen's reasonable opinion, may be necessary or advisable to comply with applicable law, including the Securities Act; (iii) the Company will not file any amendment or supplement to the Registration Statement or Prospectus, other than documents incorporated by reference, relating to the Placement Shares or a security convertible into the Placement Shares unless a copy thereof has been submitted to Cowen within a reasonable period of time before the filing and Cowen has not reasonably objected thereto (*provided, however*, that the failure of Cowen to make such objection shall not relieve the Company of any obligation or liability hereunder, or affect Cowen's right to rely on the representations and warranties made by the Company in this Agreement) and the Company will furnish to Cowen at the time of filing thereof a copy of any document that upon filing is deemed to be incorporated by reference into the Registration Statement or Prospectus, except for those documents available via IDEA; and (iv) the Company will cause each amendment or supplement to the Prospectus, other than documents incorporated by reference, to be filed with the Commission as required pursuant to the applicable paragraph of Rule 424(b) of the Securities Act.

(b) Notice of Commission Stop Orders. The Company will advise Cowen, promptly after it receives notice or obtains knowledge thereof, of the issuance or threatened issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, of the suspension of the qualification of the Placement Shares for offering or sale in any jurisdiction, or of the initiation or threatening of any proceeding for any such purpose; and it will promptly use its commercially reasonable efforts to prevent the issuance of any stop order or to obtain its withdrawal if such a stop order should be issued.

(c) Delivery of Prospectus; Subsequent Changes. During any period in which a Prospectus relating to the Placement Shares is required to be delivered by Cowen under the Securities Act with respect to a pending sale of the Placement Shares, (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the

Securities Act), the Company will comply with all requirements imposed upon it by the Securities Act, as from time to time in force, and to file on or before their respective due dates all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14, 15(d) or any other provision of or under the Exchange Act. If during such period any event occurs as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary to amend or supplement the Registration Statement or Prospectus to comply with the Securities Act, the Company will promptly notify Cowen to suspend the offering of Placement Shares during such period and the Company will promptly amend or supplement the Registration Statement or Prospectus (at the expense of the Company) so as to correct such statement or omission or effect such compliance.

(d) Listing of Placement Shares. During any period in which the Prospectus relating to the Placement Shares is required to be delivered by Cowen under the Securities Act with respect to a pending sale of the Placement Shares (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act), the Company will use its commercially reasonable efforts to cause the Placement Shares to be listed on Nasdaq and to qualify the Placement Shares for sale under the securities laws of such jurisdictions as Cowen reasonably designates and to continue such qualifications in effect so long as required for the distribution of the Placement Shares; **provided, however**, that the Company shall not be required in connection therewith to qualify as a foreign corporation or dealer in securities or file a general consent to service of process in any jurisdiction.

(e) Delivery of Registration Statement and Prospectus. The Company will furnish to Cowen and its counsel (at the expense of the Company) copies of the Registration Statement, the Prospectus (including all documents incorporated by reference therein) and all amendments and supplements to the Registration Statement or Prospectus that are filed with the Commission during any period in which a Prospectus relating to the Placement Shares is required to be delivered under the Securities Act (including all documents filed with the Commission during such period that are deemed to be incorporated by reference therein), in each case as soon as reasonably practicable and in such quantities as Cowen may from time to time reasonably request and, at Cowen's request, will also furnish copies of the Prospectus to each exchange or market on which sales of the Placement Shares may be made; *provided, however*, that the Company shall not be required to furnish any document (other than the Prospectus) to Cowen to the extent such document is available on IDEA.

(f) Earnings Statement. The Company will make generally available to its security holders as soon as practicable, but in any event not later than 15 months after the end of the Company's current fiscal quarter, an earnings statement (which need not be audited) covering a 12-month period that satisfies the provisions of Section 11(a) and Rule 158 of the Securities Act.

(g) Expenses. The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, in accordance with the provisions of Section 11 hereunder, will pay the following expenses all incident to the performance of its obligations hereunder, including, but not limited to, expenses relating to (i) the preparation, printing and filing of the Registration Statement and each amendment and supplement thereto, of each Prospectus and of each amendment and supplement thereto, (ii) the preparation, issuance and delivery of the Placement Shares, (iii) the qualification of the Placement Shares under securities laws in accordance with the provisions of Section 7(d) of this Agreement, including filing fees, (iv) the printing and delivery to Cowen of copies of the Prospectus and any amendments or supplements thereto, and of this Agreement, (v) the fees and expenses incurred in connection with the listing or qualification of the Placement Shares for trading on Nasdaq, and (vi) filing fees and expenses, if any, of the Commission and the FINRA Corporate Financing Department. If Placement Shares have not been sold under this Agreement for gross proceeds of \$10,000,000 or more by twelve (12) months from the date of this Agreement (or such earlier date at which the Company terminates this Agreement), the Company shall reimburse Cowen for all the reasonable fees and disbursements of counsel to Cowen incurred by it in connection with the transactions contemplated by this Agreement, up to a maximum reimbursement of \$35,000, within ten (10) days of the presentation by Cowen to the Company of a reasonably detailed statement therefor. In no event shall Cowen be entitled to reimbursement of expenses hereunder to the extent it would cause Cowen to receive total compensation in excess of eight percent (8%) of the total proceeds for the sale of Placement Shares hereunder. Except as provided in this Section 7(g), Cowen shall not be entitled to reimbursement for any fees, including but not limited to, fees and disbursements of counsel to Cowen.

(h) Use of Proceeds. The Company will use the Net Proceeds as described in the Prospectus in the section entitled "Use of Proceeds."

(i) Notice of Other Sales. During the pendency of any Placement Notice given hereunder, the Company shall provide Cowen notice as promptly as reasonably possible before it offers to sell, contracts to sell, sells, grants any option to sell or otherwise disposes of any shares of Common Stock (other than Placement Shares offered pursuant to the provisions of this Agreement) or securities convertible into or exchangeable for Common Stock, warrants or any rights to purchase or acquire Common Stock; *provided*, that such notice shall not be required in connection with the (i) issuance, grant or sale of Common Stock, options to purchase shares of Common Stock or Common Stock issuable upon the exercise of options or other equity awards pursuant to the any stock option, stock bonus or other stock plan or arrangement described in the Prospectus, (ii) the issuance of securities in connection with an acquisition, merger or sale or purchase of assets or (iii) the issuance or sale of Common Stock pursuant to any dividend reinvestment plan that the Company may adopt from time to time provided the implementation of such is disclosed to Cowen in advance or (iv) any shares of common stock issuable upon the exchange, conversion or redemption of securities or the exercise of warrants, options or other rights in effect or outstanding.

(j) Change of Circumstances. The Company will, at any time during a fiscal quarter in which the Company intends to tender a Placement Notice or sell Placement Shares, advise Cowen promptly after it shall have received notice or obtained knowledge thereof, of any information or fact that would alter or affect in any material respect any opinion, certificate, letter or other document provided to Cowen pursuant to this Agreement.

(k) Due Diligence Cooperation. The Company will cooperate with any reasonable due diligence review conducted by Cowen or its agents in connection with the transactions contemplated hereby, including, without limitation, providing information and making available documents and senior corporate officers, during regular business hours and at the Company's principal offices, as Cowen may reasonably request.

(l) Required Filings Relating to Placement of Placement Shares. The Company agrees that on such dates as the Securities Act shall require, the Company will (i) file a prospectus supplement with the Commission under the applicable paragraph of Rule 424(b) under the Securities Act (each and every filing under Rule 424(b), a "**Filing Date**"), which prospectus supplement will set forth, within the relevant period, the amount of Placement Shares sold through Cowen, the Net Proceeds to the Company and the compensation payable by the Company to Cowen with respect to such Placement Shares, and (ii) deliver such number of copies of each such prospectus supplement to each exchange or market on which such sales were effected as may be required by the rules or regulations of such exchange or market.

(m) Representation Dates; Certificate. On or prior to the First Delivery Date and each time after the First Delivery Date the Company (i) files the Prospectus relating to the Placement Shares or amends or supplements the Registration Statement or the Prospectus relating to the Placement Shares (other than a prospectus supplement filed in accordance with Section 7(l) of this Agreement) by means of a post-effective amendment, sticker, or supplement but not by means of incorporation of document(s) by reference to the Registration Statement or the Prospectus relating to the Placement Shares; (ii) files an annual report on Form 10-K under the Exchange Act; (iii) files its quarterly reports on Form 10-Q under the Exchange Act; or (iv) files a report on Form 8-K containing amended financial information (other than an earnings release) under the Exchange Act (each date of filing of one or more of the documents referred to in clauses (i) through (iv) shall be a "**Representation Date**"); the Company shall furnish Cowen with a certificate, in the form attached hereto as Exhibit 7(m) within three (3) Trading Days of any Representation Date if requested by Cowen. The requirement to provide a certificate under this Section 7(m) shall be waived for any Representation Date occurring at a time at which no Placement Notice is pending, which waiver shall continue until the earlier to occur of the date the Company delivers a Placement Notice hereunder (which for such calendar quarter shall be considered a Representation Date) and the next occurring Representation Date; *provided, however*, that such waiver shall not apply for any Representation Date on which the Company files its annual report on Form 10-K. Notwithstanding the foregoing, if the Company subsequently decides to sell Placement Shares following a Representation Date when the Company relied on such waiver and did not provide Cowen with a certificate under this Section 7(m), then before the Company delivers the Placement Notice or Cowen sells any Placement Shares, the Company shall provide Cowen with a certificate, in the form attached hereto as Exhibit 7(m), dated the date of the Placement Notice.



(n) **Legal Opinion.** On or prior to the First Delivery Date and within three (3) Trading Days of each Representation Date with respect to which the Company is obligated to deliver a certificate in the form attached hereto as Exhibit 7(m) for which no waiver is applicable, the Company shall cause to be furnished to Cowen a written opinion of Skadden, Arps, Slate, Meagher & Flom LLP (“Company Counsel”), or other counsel satisfactory to Cowen, in form and substance satisfactory to Cowen and its counsel, dated the date that the opinion is required to be delivered, substantially similar to the form attached hereto as Exhibit 7(n), respectively, modified, as necessary, to relate to the Registration Statement and the Prospectus as then amended or supplemented; *provided, however,* that in lieu of such opinions for subsequent Representation Dates, counsel may furnish Cowen with a letter (a “**Reliance Letter**”) to the effect that Cowen may rely on a prior opinion delivered under this Section 7(n) to the same extent as if it were dated the date of such letter (except that statements in such prior opinion shall be deemed to relate to the Registration Statement and the Prospectus as amended or supplemented at such Representation Date).

(o) **Comfort Letter.** On or prior to the First Delivery Date and within three (3) Trading Days of each Representation Date with respect to which the Company is obligated to deliver a certificate in the form attached hereto as Exhibit 7(m) for which no waiver is applicable, the Company shall cause its independent accountants to furnish Cowen letters (the “**Comfort Letters**”), dated the date of the Comfort Letter is delivered, in form and substance satisfactory to Cowen, (i) confirming that they are an independent registered public accounting firm within the meaning of the Securities Act and the PCAOB, (ii) stating, as of such date, the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants’ “comfort letters” to Cowen in connection with registered public offerings (the first such letter, the “**Initial Comfort Letter**”) and (iii) updating the Initial Comfort Letter with any information that would have been included in the Initial Comfort Letter had it been given on such date and modified as necessary to relate to the Registration Statement and the Prospectus, as amended and supplemented to the date of such letter.

(p) **Market Activities.** The Company will not, directly or indirectly, (i) take any action designed to cause or result in, or that constitutes or 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 Common Stock or (ii) sell, bid for, or purchase the Common Stock to be issued and sold pursuant to this Agreement, or pay anyone any compensation for soliciting purchases of the Common Stock other than Cowen; provided, however, that the Company may bid for and purchase shares of its common stock in accordance with Rule 10b-18 under the Exchange Act.

(q) **Insurance.** The Company and its Subsidiaries shall maintain, or caused to be maintained, insurance in such amounts and covering such risks as is reasonable and customary for the business for which it is engaged.

(r) Compliance with Laws. The Company and each of its Subsidiaries shall maintain, or cause to be maintained, all material environmental permits, licenses and other authorizations required by federal, state and local law in order to conduct their businesses as described in the Prospectus, and the Company and each of its Subsidiaries shall conduct their businesses, or cause their businesses to be conducted, in substantial compliance with such permits, licenses and authorizations and with applicable environmental laws, except where the failure to maintain or be in compliance with such permits, licenses and authorizations could not reasonably be expected to result in a Material Adverse Change.

(s) Investment Company Act. The Company will conduct its affairs in such a manner so as to reasonably ensure that neither it nor the Subsidiaries will be or become, at any time prior to the termination of this Agreement, an “investment company,” as such term is defined in the Investment Company Act, assuming no change in the Commission’s current interpretation as to entities that are not considered an investment company.

(t) Securities Act and Exchange Act. The Company will use its best efforts to comply with all requirements imposed upon it by the Securities Act and the Exchange Act as from time to time in force, so far as necessary to permit the continuance of sales of, or dealings in, the Placement Shares as contemplated by the provisions hereof and the Prospectus.

(u) No Offer to Sell. Other than a free writing prospectus (as defined in Rule 405 under the Act) approved in advance by the Company and Cowen in its capacity as principal or agent hereunder, neither Cowen nor the Company (including its agents and representatives, other than Cowen in its capacity as such) will make, use, prepare, authorize, approve or refer to any written communication (as defined in Rule 405 under the Act), required to be filed with the Commission, that constitutes an offer to sell or solicitation of an offer to buy Common Stock hereunder

(v) Sarbanes-Oxley Act. The Company and the Subsidiaries will use their best efforts to comply with all effective applicable provisions of the Sarbanes-Oxley Act.

8. Conditions to Cowen’s Obligations. The obligations of Cowen hereunder with respect to a Placement will be subject to the continuing accuracy and completeness of the representations and warranties made by the Company herein, to the due performance by the Company of its obligations hereunder, to the completion by Cowen of a due diligence review satisfactory to Cowen in its reasonable judgment, and to the continuing satisfaction (or waiver by Cowen in its sole discretion) of the following additional conditions:

(a) Registration Statement Effective. The Registration Statement shall be effective and shall be available for (i) all sales of Placement Shares issued pursuant to all prior Placement Notices and (ii) the sale of all Placement Shares contemplated to be issued by any Placement Notice; no stop order suspending the effectiveness of the Registration Statement shall have been

issued and no proceeding for that purpose shall have been initiated by the Commission or any other federal or state governmental authority; and all requests for additional information on the part of the Commission or any other federal or state governmental authority shall have been complied with to the reasonable satisfaction of Cowen.

(b) Material Changes. Except as contemplated in the Prospectus, or disclosed in the Company's reports filed with the Commission, there shall not have been any material adverse change, on a consolidated basis, in the authorized capital stock of the Company or any Material Adverse Change or any development that could reasonably be expected to result in a Material Adverse Change, or any downgrading in or withdrawal of the rating assigned to any of the Company's securities (other than asset backed securities) by any rating organization or a public announcement by any rating organization that it has under surveillance or review its rating of any of the Company's securities (other than asset backed securities), the effect of which, in the case of any such action by a rating organization described above, in the reasonable judgment of Cowen (without relieving the Company of any obligation or liability it may otherwise have), is so material as to make it impracticable or inadvisable to proceed with the offering of the Placement Shares on the terms and in the manner contemplated in the Prospectus.

(c) Legal Opinions. Cowen shall have received the legal opinions required to be delivered pursuant Section 7(n) on or before the date on which such delivery of such opinion is required pursuant to Section 7(n).

(d) Cowen Counsel Legal Opinion. Cowen shall have received from LeClairRyan, A Professional Corporation, counsel for Cowen, such opinion or opinions, on or before the date on which the delivery of the Company Counsel legal opinion is required pursuant to Section 7(n), with respect to such matters as Cowen may reasonably require, and the Company shall have furnished to such counsel such documents as they request for enabling them to pass upon such matters.

(e) Comfort Letter. Cowen shall have received the Comfort Letter required to be delivered pursuant Section 7(o) on or before the date on which such delivery of such opinion is required pursuant to Section 7(o).

(f) Representation Certificate. Cowen shall have received the certificate required to be delivered pursuant to Section 7(m) on or before the date on which delivery of such certificate is required pursuant to Section 7(m).

(g) No Suspension. Trading in the Common Stock shall not have been suspended on Nasdaq.

(h) Other Materials. On each date on which the Company is required to deliver a certificate pursuant to Section 7(m), the Company shall have furnished to Cowen such appropriate further information, certificates and documents as Cowen may have reasonably requested. All such opinions, certificates, letters and other documents shall have been in compliance with the provisions hereof. The Company will furnish Cowen with such conformed copies of such opinions, certificates, letters and other documents as Cowen shall have reasonably requested.

(i) Securities Act Filings Made. All filings with the Commission required by Rule 424 under the Securities Act to have been filed prior to the issuance of any Placement Notice hereunder shall have been made within the applicable time period prescribed for such filing by Rule 424.

(j) Approval for Listing. The Placement Shares shall either have been (i) approved for listing on Nasdaq, subject only to notice of issuance, or (ii) the Company shall have filed an application for listing of the Placement Shares on Nasdaq at, or prior to, the issuance of any Placement Notice.

(k) No Termination Event. There shall not have occurred any event that would permit Cowen to terminate this Agreement pursuant to Section 11(a).

#### 9. Indemnification and Contribution.

(a) Company Indemnification. The Company agrees to indemnify and hold harmless Cowen, the directors, officers, partners, employees and agents of Cowen and each person, if any, who (i) controls Cowen within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, or (ii) is controlled by or is under common control with Cowen (a "Cowen Affiliate") from and against any and all losses, claims, liabilities, expenses and damages (including, but not limited to, any and all reasonable investigative, legal and other expenses incurred in connection with, and any and all amounts paid in settlement (in accordance with Section 9(c)) of, any action, suit or proceeding between any of the indemnified parties and any indemnifying parties or between any indemnified party and any third party, or otherwise, or any claim asserted), as and when incurred, to which Cowen, or any such person, may become subject under the Securities Act, the Exchange Act or other federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, liabilities, expenses or damages arise out of or are based, directly or indirectly, on (x) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or the Prospectus or any amendment or supplement to the Registration Statement or the Prospectus or in any free writing prospectus or in any application or other document executed by or on behalf of the Company or based on written information furnished by or on behalf of the Company filed in any jurisdiction in order to qualify the Common Stock under the securities laws thereof or filed with the Commission, (y) the omission or alleged omission to state in any such document a material fact required to be stated in it or necessary to make the statements in it not misleading or (z) any breach by any of

the indemnifying parties of any of their respective representations, warranties and agreements contained in this Agreement; *provided, however*, that this indemnity agreement shall not apply to the extent that such loss, claim, liability, expense or damage arises from the sale of the Placement Shares pursuant to this Agreement and is caused directly or indirectly by an untrue statement or omission made in reliance upon and in conformity with written information relating to Cowen and furnished to the Company by Cowen expressly for inclusion in any document as described in clause (x) of this Section 9(a). This indemnity agreement will be in addition to any liability that the Company might otherwise have.

(b) Cowen Indemnification. Cowen agrees to indemnify and hold harmless the Company and its directors and each officer of the Company that signed the Registration Statement, and each person, if any, who (i) controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act or (ii) is controlled by or is under common control with the Company (a "Company Affiliate") against any and all loss, liability, claim, damage and expense described in the indemnity contained in Section 9(a), as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendments thereto) or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with written information relating to Cowen and furnished to the Company by Cowen expressly for inclusion in any document as described in clause (x) of Section 9(a).

(c) Procedure. Any party that proposes to assert the right to be indemnified under this Section 9 will, promptly after receipt of notice of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 9, notify each such indemnifying party of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party will not relieve the indemnifying party from (i) any liability that it might have to any indemnified party otherwise than under this Section 9 and (ii) any liability that it may have to any indemnified party under the foregoing provision of this Section 9 unless, and only to the extent that, such omission results in the forfeiture of substantive rights or defenses by the indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any legal or other expenses except as provided below and except for the reasonable costs of investigation subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (1) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (2) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the

indemnifying party, (3) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party) or (4) the indemnifying party has not in fact employed counsel to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, in each of which cases the reasonable fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction at any one time for all such indemnified party or parties. All such fees, disbursements and other charges will be reimbursed by the indemnifying party promptly as they are incurred. An indemnifying party will not, in any event, be liable for any settlement of any action or claim effected without its written consent. No indemnifying party shall, without the prior written consent of each indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this Section 9 (whether or not any indemnified party is a party thereto), unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising or that may arise out of such claim, action or proceeding.

(d) Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of this Section 9 is applicable in accordance with its terms but for any reason is held to be unavailable from the Company or Cowen, the Company and Cowen will contribute to the total losses, claims, liabilities, expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted, but after deducting any contribution received by the Company from persons other than Cowen, such as persons who control the Company within the meaning of the Securities Act, officers of the Company who signed the Registration Statement and directors of the Company, who also may be liable for contribution) to which the Company and Cowen may be subject in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and Cowen on the other. The relative benefits received by the Company on the one hand and Cowen on the other hand shall be deemed to be in the same proportion as the total Net Proceeds from the sale of the Placement Shares (before deducting expenses) received by the Company bear to the total compensation received by Cowen from the sale of Placement Shares on behalf of the Company. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and Cowen, on the other, with respect to the statements or omission that resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or Cowen, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company

and Cowen agree that it would not be just and equitable if contributions pursuant to this Section 9(d) were to be determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, liability, expense, or damage, or action in respect thereof, referred to above in this Section 9(d) shall be deemed to include, for the purpose of this Section 9(d), any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim to the extent consistent with Section 9(c) hereof. Notwithstanding the foregoing provisions of this Section 9(d), Cowen shall not be required to contribute any amount in excess of the commissions received by it under this Agreement and no person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 9(d), any person who controls a party to this Agreement within the meaning of the Securities Act, and any officers, directors, partners, employees or agents of Cowen, will have the same rights to contribution as that party, and each officer of the Company who signed the Registration Statement will have the same rights to contribution as the Company, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 9(d), will notify any such party or parties from whom contribution may be sought, but the omission to so notify will not relieve that party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 9(d) except to the extent that the failure to so notify such other party materially prejudiced the substantive rights or defenses of the party from whom contribution is sought. Except for a settlement entered into pursuant to the last sentence of Section 9(c) hereof, no party will be liable for contribution with respect to any action or claim settled without its written consent if such consent is required pursuant to Section 9(c) hereof.

10. Representations and Agreements to Survive Delivery. The indemnity and contribution agreements contained in Section 9 of this Agreement and all representations and warranties of the Company herein or in certificates delivered pursuant hereto shall survive, as of their respective dates, regardless of (i) any investigation made by or on behalf of Cowen, any controlling persons, or the Company (or any of their respective officers, directors or controlling persons), (ii) delivery and acceptance of the Placement Shares and payment therefor or (iii) any termination of this Agreement.

11. Termination.

(a) Cowen shall have the right by giving notice as hereinafter specified at any time to terminate this Agreement if (i) any Material Adverse Change, or any development that could reasonably be expected to result in a Material Adverse Change has occurred that, in the reasonable judgment of Cowen, may materially impair the ability of Cowen to sell the Placement Shares hereunder, (ii) the Company shall have failed, refused or been unable to perform any agreement on its part to be performed hereunder; *provided, however*, in the case of any failure of the Company to deliver (or cause another person to deliver) any certification, opinion, or letter

required under Sections 7(m), 7(n), or 7(o), Cowen's right to terminate shall not arise unless such failure to deliver (or cause to be delivered) continues for more than thirty (30) days from the date such delivery was required; or (iii) any other condition of Cowen's obligations hereunder is not fulfilled, or (iv), any suspension or limitation of trading in the Placement Shares or in securities generally on Nasdaq shall have occurred. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(g) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 16 (Applicable Law; Consent to Jurisdiction) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination. If Cowen elects to terminate this Agreement as provided in this Section 11(a), Cowen shall provide the required notice as specified in Section 12 (Notices).

(b) The Company shall have the right, by giving ten (10) days notice as hereinafter specified to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(g), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.

(c) Cowen shall have the right, by giving ten (10) days notice as hereinafter specified to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(g), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.

(d) Unless earlier terminated pursuant to this Section 11, this Agreement shall automatically terminate upon the issuance and sale of all of the Placement Shares through Cowen on the terms and subject to the conditions set forth herein; *provided* that the provisions of Section 7(g), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.

(e) This Agreement shall remain in full force and effect unless terminated pursuant to Sections 11(a), (b), (c), or (d) above or otherwise by mutual agreement of the parties; *provided, however*, that any such termination by mutual agreement shall in all cases be deemed to provide that Section 7(g), Section 9, Section 10, Section 16 and Section 17 shall remain in full force and effect.

(f) Any termination of this Agreement shall be effective on the date specified in such notice of termination; *provided, however*, that such termination shall not be effective until the close of business on the date of receipt of such notice by Cowen or the Company, as the case may be. If such termination shall occur prior to the Settlement Date for any sale of Placement Shares, such Placement Shares shall settle in accordance with the provisions of this Agreement.



(g) Subject to the additional limitations set forth in Section 7 of this Agreement, in the event of termination of this Agreement prior to the sale of any Placement Shares, Cowen shall be entitled only to reimbursement of its out-of-pocket expenses actually incurred.

12. Notices. All notices or other communications required or permitted to be given by any party to any other party pursuant to the terms of this Agreement shall be in writing, unless otherwise specified in this Agreement. Each such notice or other communication shall be deemed given (i) when delivered on a Business Day (as defined below), or, if such day is not a Business Day on the next succeeding Business Day, (ii) on the next Business Day after timely delivery to a nationally-recognized overnight courier and (iii) on the Business Day actually received if deposited in the U.S. mail (certified or registered mail, return receipt requested, postage prepaid). For purposes of this Agreement, "**Business Day**" shall mean any day on which the NYSE and commercial banks in the City of New York are open for business. All notices and other communications shall be mailed, hand delivered or telecopied and confirmed to the parties hereto as follows:

If to Cowen:

Cowen and Company, LLC  
599 Lexington Avenue  
New York, NY 10022  
Facsimile: (646) 562-1124  
Attention: General Counsel

If to the Company:

Delcath Systems, Inc.  
810 Seventh Avenue, 35<sup>th</sup> Floor  
New York, NY 10019  
Facsimile: (212) 489-2102  
Attention: General Counsel

Each 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.

13. Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Company and Cowen and their respective successors and the affiliates, controlling persons, officers and directors referred to in Section 9 hereof. References to any of the parties contained in this Agreement shall be deemed to include the successors and permitted

assigns of such party. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. Neither party may assign its rights or obligations under this Agreement without the prior written consent of the other party; *provided, however*, that Cowen may assign its rights and obligations hereunder to an affiliate of Cowen without obtaining the Company's consent.

14. Adjustments for Share Splits. The parties acknowledge and agree that all share-related numbers contained in this Agreement shall be adjusted to take into account any share split, share dividend or similar event effected with respect to the Common Stock.

15. Entire Agreement; Amendment; Severability. This Agreement (including all schedules and exhibits attached hereto and Placement Notices issued pursuant hereto) constitutes the entire agreement and supersedes all other prior and contemporaneous agreements and undertakings, both written and oral, among the parties hereto with regard to the subject matter hereof. Neither this Agreement nor any term hereof may be amended except pursuant to a written instrument executed by the Company and Cowen. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable as written by a court of competent jurisdiction, then such provision shall be given full force and effect to the fullest possible extent that it is valid, legal and enforceable, and the remainder of the terms and provisions herein shall be construed as if such invalid, illegal or unenforceable term or provision was not contained herein, but only to the extent that giving effect to such provision and the remainder of the terms and provisions hereof shall be in accordance with the intent of the parties as reflected in this Agreement.

16. Applicable Law; Consent to Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of New York without regard to the principles of conflicts of laws. Each party hereby irrevocably submits to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York, borough of Manhattan, for the adjudication of any dispute hereunder or in connection with any transaction contemplated hereby, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof (certified or registered mail, return receipt requested) to such party at the address in effect for notices to it under this Agreement 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.

17. Waiver of Jury Trial. The Company and Cowen each hereby irrevocably waives any right it may have to a trial by jury in respect of any claim based upon or arising out of this Agreement or any transaction contemplated hereby.

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

(a) Cowen has been retained solely to act as underwriter in connection with the sale of the Common Stock and that no fiduciary, advisory or agency relationship between the Company and Cowen has been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether Cowen has advised or is advising the Company on other matters;

(b) the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement;

(c) the Company has been advised that Cowen and its affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that Cowen has no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and

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

19. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery of an executed Agreement by one party to the other may be made by facsimile transmission.

20. Definitions. As used in this Agreement, the following term has the meaning set forth below:

(a) "*Applicable Time*" means the date of this Agreement, each Representation Date, the date on which a Placement Notice is given, and any date on which Placement Shares are sold hereunder.

**[Remainder of Page Intentionally Blank]**

If the foregoing correctly sets forth the understanding between the Company and Cowen, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement between the Company and Cowen.

Very truly yours,

**COWEN AND COMPANY, LLC**

By: /s/ Grant Miller

Name: Grant Miller

Title: Managing Director

**ACCEPTED as of the date first-above written:**

**DELCATH SYSTEMS, INC.**

By: /s/ Eamonn Hobbs

Name: Eamonn Hobbs

Title: CEO

**FORM OF PLACEMENT NOTICE**

From: [ ]  
Cc: [ ]  
To: [ ]  
Subject: Cowen at the Market Offering—Placement Notice

Gentlemen:

Pursuant to the terms and subject to the conditions contained in Sales Agreement between Delcath Systems, Inc. (the "Company"), and Cowen and Company, LLC ("Cowen") dated March 13, 2013 (the "Agreement"), I hereby request on behalf of the Company that Cowen sell up to [ ] shares of the Company's common stock, par value 0.01 per share, at a minimum market price of \$\_\_\_\_\_ per share. Sales should begin on the date of this Notice and shall continue until [DATE] [all shares are sold].

**The Company**

Eamonn P. Hobbs  
Harold S. Koplewicz  
Laura Phillips  
Douglas Watson  
Gabriel Leung  
Roger Stoll  
Laura Brege  
Tasos G. Konidakis

President and Chief Executive Officer, and Director  
Chairman of the Board  
Director  
Director  
Director  
Director  
Director  
Director

**Cowen**

Robert Sine  
William Follis

Vice President  
Director

**Compensation**

Cowen shall be paid compensation not to exceed 3.0% of the gross proceeds from the sales of Common Stock pursuant to the terms of this Agreement.

**OFFICER CERTIFICATE**

The undersigned, the duly qualified and elected \_\_\_\_\_, of Delcath Systems, Inc. ("**Company**"), a Delaware corporation, does hereby certify in such capacity and on behalf of the Company, pursuant to Section 7(m) of the Sales Agreement dated March 13, 2013 (the "**Sales Agreement**") between the Company and Cowen and Company, LLC, that to the best of the knowledge of the undersigned.

(i) The representations and warranties of the Company in Section 6 of the Sales Agreement (A) to the extent such representations and warranties are subject to qualifications and exceptions contained therein relating to materiality or Material Adverse Change, are true and correct on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof, except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date, and (B) to the extent such representations and warranties are not subject to any qualifications or exceptions, are true and correct in all material respects as of the date hereof as if made on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date; and

(ii) The Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied pursuant to the Sales Agreement at or prior to the date hereof.

DELCATH SYSTEMS, INC.

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

Name:

Title:

Date: \_\_\_\_\_



**FORM OF COMPANY COUNSEL OPINION**

1. Based solely on our review of the Delaware Certificate, the Company has been duly incorporated and is validly existing in good standing under the DGCL.
2. Based solely on our review of the Foreign Qualification Certificate, the Company has the status identified on Schedule II hereto set forth opposite the jurisdiction identified on such Schedule as of the date identified on such Schedule.
3. The Company has the corporate power and authority to execute and deliver the Sales Agreement and to consummate the transactions contemplated thereby.
4. The Sales Agreement has been duly authorized, executed and delivered by all requisite corporate action on the part of the Company under the DGCL.
5. Neither the execution and delivery by the Company of the Sales Agreement nor the consummation by the Company of the transactions contemplated thereby, including the issuance and sale of the Securities: (i) conflicts with the Organizational Documents, (ii) constitutes a violation of, or a default under, any Scheduled Contract or (iii) contravenes any Scheduled Order.
6. Neither the execution and delivery by the Company of the Sales Agreement nor the consummation by the Company of the transactions contemplated thereby, including the issuance and sale of the Securities: (i) violates any law, rule, or regulation of the State of New York, the State of Delaware or the United States of America or (ii) requires the consent, approval, licensing or authorization of, or any filing, recording or registration with, any governmental authority under any law, rule or regulation of the State of New York, the State of Delaware or the United States of America except for those consent, approvals, licenses and authorizations already obtained and those filing, recordings and registrations already made.
7. The Company is not and, solely after giving effect to the offering and sale of the Securities and the application of the proceeds thereof as described in the Prospectus Supplement, will not be an “investment company” as such term is defined in the Investment Company Act of 1940.

8. The Securities have been duly authorized by all requisite corporate action on the part of the Company under the DGCL and, when the stock certificate is delivered to and paid for by the purchaser thereof in accordance with the terms of the Sales Agreement, will be validly issued, fully paid and non-assessable and free and clear of any preemptive rights or any similar rights arising under the DGCL, the Organizational Documents or any Scheduled Contract.

9. The Company has authority to issue 70,000,000 shares of Common Stock and 10,000,000 shares of preferred stock, par value \$0.01 per share, and such authorized capital stock of the Company conforms as to legal matters to the description thereof contained in the Prospectus under the caption "Description of Capital Stock."

10. The statements in the Prospectus under the caption "Plan of Distribution," insofar as such statements purport to summarize certain provisions of the Sales Agreement, fairly summarize such provisions in all material respects.

The Registration Statement was declared effective under the Securities Act at 4:00 p.m., on \_\_\_\_\_, 2013 and we have been orally advised by the Commission that no stop order suspending the effectiveness of the Registration Statement has been issued and, to our knowledge, no proceedings for that purpose have been instituted or are pending or threatened by the Commission.

In addition, we have participated in conferences with officers and other representatives of the Company, Latham & Watkins, LLP, the Company's regulatory counsel, Greenburg Traurig, LLP, the Company's intellectual property counsel, representatives of the independent registered public accountants of the Company and you and your counsel, LeClairRyan, A Professional Corporation, at which the contents of the Registration Statement, the Prospectus and related matters were discussed. We did not participate in the preparation of the Incorporated Documents but have, however, reviewed such documents and discussed the business and affairs of the Company with officers and other representatives of the Company. We do not pass upon, or assume any responsibility for, the accuracy, completeness or fairness of the statements contained or incorporated by reference in the Registration Statement or the Prospectus and have made no independent check or verification thereof.

On the basis of the foregoing, (i) the Registration Statement, at the Effective Time (as defined below), and the Prospectus, as of the date of the Prospectus Supplement, appeared on their face to be appropriately responsive in all material respects to the requirements of the Securities Act and the Rules and Regulations (except that in each case we do not express any view as to the financial statements, schedules and other financial information included or incorporated by reference therein or excluded therefrom) and (ii) no facts have come to our attention that have caused us to believe that the Registration Statement, at the Effective Time, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading, or that the Prospectus,

as of the date of the Prospectus Supplement and as of the date hereof contained or contains an untrue statement of a material fact or omitted or omits to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading (except that in each case we do not express any view as to the financial statements, schedules and other financial information included or incorporated by reference therein or excluded therefrom, the report of management's assessment of the effectiveness of internal controls over financial reporting or the auditors' reports regarding the Company's financial statements and the Company's internal controls over financial reporting, or the statements contained in the exhibits to the Registration Statement).

[Letterhead of Skadden, Arps, Slate, Meagher &amp; Flom LLP]

March 13, 2013

Delcath Systems, Inc.  
810 Seventh Avenue, 35<sup>th</sup> Floor  
New York, NY 10019

Re: Delcath Systems, Inc. Shelf Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as special counsel to Delcath Systems, Inc., a Delaware corporation (the "Company"), in connection with the shelf registration statement on Form S-3, to be filed on the date hereof by the Company (the "Registration Statement") with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), allowing for delayed offerings pursuant to Rule 415 of the General Rules and Regulations under the Securities Act (the "Rules and Regulations"). The Registration Statement relates to the issuance and sale from time to time by the Company of shares (the "Securities") of the Company's Common Stock, par value \$0.01 per share ("Common Stock"), having an aggregate gross sales price not to exceed \$50,000,000.

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

In rendering the opinions stated herein, we have examined and relied upon the following:

- (i) the Registration Statement;
- (ii) the Amended and Restated Certificate of Incorporation of the Company, as certified by the Secretary of the State of Delaware and as certified by the Secretary of the Company (the "Certificate of Incorporation");
- (iii) the Amended and Restated By-laws of the Company, as currently in effect and as certified by the Secretary of the Company (the "By-laws"); and

- (iv) a copy of certain resolutions of the board of directors of the Company (the "Board of Directors"), adopted on March 5, 2013, relating to the registration of the Securities, as certified by the Secretary of the Company.

We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such records of the Company and such agreements, certificates and receipts of public officials, certificates of officers or other representatives of the Company and others, and such other documents as we have deemed necessary or appropriate as a basis for the opinions stated below.

In our examination, we have assumed the genuineness of all signatures, including endorsements, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as facsimile, electronic, certified or photostatic copies and the authenticity of the originals of such copies. In making our examination of executed documents or documents to be executed, we have assumed that the parties thereto, other than the Company, will have been duly organized and be validly existing in good standing, had or will have the power, corporate or otherwise, to enter into and perform all obligations thereunder and have also assumed the due authorization by all requisite action, corporate or other, and the execution and delivery by such parties of such documents, and, as to parties other than the Company, the validity and binding effect thereof on such parties.

We do not express any opinion with respect to the laws of any jurisdiction other than (i) the General Corporations Law of the State of Delaware (the "DGCL") and (ii) the laws of the State of New York, and to the extent that judicial or regulatory orders or decrees or consents, approvals, licenses, authorizations, validations, filings, recordings or registrations with governmental authorities are relevant, to those required under such laws (all of the foregoing being referred to as "Opined on Law"). We do not express any opinion with respect to the law of any jurisdiction other than Opined on Law or as to the effect of any non-Opined on Law on the opinions stated herein. The Securities may be issued from time to time on a delayed or continuous basis, and this opinion is limited to the laws, including the rules and regulations, as in effect on the date hereof, which laws are subject to change with possible retroactive effect.

Based upon the foregoing and subject to the limitations, qualifications, exceptions and assumptions stated herein, we are of the opinion that:

With respect to any shares of any Common Stock offered by the Company, when (i) the Registration Statement, as finally amended (including all necessary post-effective amendments), has become effective under the Securities Act; (ii) if the Common Stock is to be sold pursuant to a firm commitment underwritten offering, the underwriting agreement with respect to the Common Stock has been duly authorized, executed and delivered by the Company and the other parties thereto; (iii) the Board of Directors, including any appropriate committee appointed thereby, has taken all necessary corporate action to approve the issuance of the Common Stock and related matters; (iv) terms of the issuance and sale of the Common Stock have been duly established and are then in conformity with the Certificate of Incorporation and By-laws so as not to violate any applicable law, the Certificate of Incorporation or By-laws or result in a default under or breach of any agreement or instrument binding upon the Company and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; (v) certificates in the form required under the DGCL representing the shares of Common Stock are duly executed and countersigned; and (vi) the shares of Common Stock are registered in the Company's share registry and delivered upon payment of the agreed-upon consideration therefor, the shares of Common Stock, when issued and sold or otherwise distributed in accordance with the Sales Agreement, if any, or any other duly authorized, executed and delivered valid and binding agreement, will be duly authorized, validly issued, fully paid and nonassessable, provided that the consideration therefor is not less than \$0.01 per share of Common Stock.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. We also hereby consent to the reference to our firm under the heading "Legal Matters" in the prospectus which forms a part of the Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the Rules and Regulations. This opinion is expressed as of the date hereof unless otherwise expressly stated, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable laws.

Very truly yours,

/s/ Skadden, Arps, Slate, Meagher & Flom LLP

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related prospectus of Delcath Systems, Inc. for the registration of its common stock and to the incorporation by reference therein of our reports dated March 13, 2013, with respect to the consolidated financial statements of Delcath Systems, Inc., and the effectiveness of internal control over financial reporting of Delcath Systems, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2012, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

MetroPark, New Jersey

March 13, 2013