

DELCATH SYSTEMS, INC.

Form POS AM

May 04, 2016

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As filed with the Securities and Exchange Commission on May 4, 2016

No. 333-204979

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Post-Effective Amendment No. 1

to

FORM S-1

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)**

3841
**(Primary Standard Industrial
Classification Code Number)**
1301 Avenue of the Americas

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

43rd Floor

New York, New York 10019

(212) 489-2100

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

Jennifer K. Simpson

President and

Chief Executive Officer

Delcath Systems, Inc.

1301 Avenue of the Americas

43rd Floor

New York, New York 10019

(212) 489-2100

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

Copies of all communications, including communications sent to agent for service, should be sent to:

Steven A. Navarro

Finnbarr D. Murphy

Morgan, Lewis & Bockius LLP

101 Park Avenue

New York, NY 10178

(212) 309-6000

Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective.

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, 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 post-effective amendment filed pursuant to Rule 462(d) 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.

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. (Check one):

Large accelerated filer

Accelerated filer

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

Smaller reporting company

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, as amended, or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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Explanatory Note

This Post-Effective Amendment No. 1 (this Post-Effective Amendment No. 1) to the registration statement on Form S-1, File No. 333-204979 (the Registration Statement) is being filed pursuant to Section 10(a)(3) of the Securities Act of 1933, as amended (the Securities Act), to (i) incorporate by reference the audited financial statements and the notes thereto included in the Company s Annual Report on Form 10-K for the year ended December 31, 2015 (the 2015 10-K), which was filed with the Securities and Exchange Commission (the SEC) on March 18, 2016, the Company s Current Reports on Form 8-K filed since December 31, 2015, and any documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act) (a) after the date of the Post-Effective Amendment No. 1 and prior to its effectiveness or (b) prior to the termination of the offering described in this prospectus and to (ii) update certain other information in the Registration Statement. The Registration Statement originally covered a primary offering of units, each consisting of one share of common stock, \$0.01 par value per share, 0.75 of one Series A Warrant to purchase one share of common stock, and one Series B Warrant to purchase one additional share of common stock and 0.75 of one additional Series A Warrant to purchase one additional share of common stock. As of the date of the filing of this Post-Effective Amendment No. 1, no further offering will be made of the units registered on Form S-1 and the Series B Warrants have all expired. Accordingly, this Post-Effective Amendment No. 1 concerns only the shares of common stock issuable upon exercise of the outstanding Series A Warrants. No additional securities are being registered under this Post-Effective Amendment No. 1. All applicable registration fees were paid at the time of the original filing of the Registration Statement.

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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 it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

8,685,452 Shares of Common Stock issuable upon Exercise of Outstanding Series A Warrants

In connection with our underwritten offering, which closed on July 21, 2015 (the July 2015 Offering), we previously issued and sold 9,350,000 units, each consisting of one share of common stock, \$0.01 par value per share, 0.75 of one Series A Warrant to purchase one share of our common stock, and one Series B Warrant to purchase one additional share of common stock and 0.75 of one additional Series A Warrant to purchase one additional share of common stock. The Series B Warrants have all expired, prior to which expiration 2,230,600 Series B warrants were exercised, resulting in the issuance of 2,230,600 shares of common stock and 1,672,952 Series A Warrants. The Series A Warrants may be exercised at any time prior to July 21, 2020, and currently have an exercise price of \$0.355 per share. This prospectus relates to the potential issuance of up to 8,685,452 shares of common stock upon exercise of the Series A Warrants issued in connection with the July 2015 Offering. This amount represents the 8,685,452 shares of common stock issuable upon exercise of the Series A Warrants originally issued in the July 2015 Offering plus 1,672,952 shares of common stock issuable upon exercise of the Series A Warrants that were issued upon the exercise of the Series B Warrants.

Our common stock is listed on The NASDAQ Capital Market under the symbol DCTH. The last reported sale price of our common stock on May 3, 2016 was \$0.32 per share. The shares of common stock issued upon the exercise of the Series A Warrants will be listed on the NASDAQ Capital Market under the same symbol. There is no established public trading market for the Series A Warrants and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Series A Warrants on any national securities exchange or other nationally recognized trading system.

Investing in our securities involves risks, including those described in the Risk Factors section beginning on page 6 of this prospectus.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is May 4, 2016

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We have not authorized anyone to provide you with any information other than that contained in this prospectus, incorporated by reference into this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where such offers and sales are permitted. The information in this prospectus or any free writing prospectus is accurate only as of its date, regardless of its time of delivery or the time of any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

Industry and Market Data

This prospectus includes industry data and forecasts that we obtained from industry publications and surveys, public filings and internal company sources. Industry publications and surveys and forecasts generally state that the information contained therein has been obtained from sources believed to be reliable, but there can be no assurance as to the accuracy or completeness of the included information. Statements as to our market position and market estimates are based on independent industry publications, government publications, third party forecasts, management's estimates and assumptions about our markets and our internal research. While we are not aware of any misstatements regarding the market, industry or similar data presented herein, such data involve risks and uncertainties and are subject to change based on various factors, including those discussed under the headings **Risk Factors** and **Cautionary Statement Concerning Forward-Looking Statements** in this prospectus.

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PROSPECTUS SUMMARY

The following summary highlights information contained elsewhere in this prospectus. It does not contain all the information you need to consider in making your investment decision. Before making an investment decision, you should read this entire prospectus carefully and should consider, among other things, the matters set forth under Risk Factors and our financial statements and related notes thereto appearing elsewhere in this prospectus or incorporated by reference into this prospectus. In this prospectus, except as otherwise indicated, Delcath, Delcath Systems, we, our, and us refer to Delcath Systems, Inc., a Delaware corporation and its subsidiaries. Delcath is our registered United States trademark.

About Delcath

Delcath Systems, Inc. is a late-stage clinical development company with early commercial activity in Europe focused on cancers of the liver. We are a specialty pharmaceutical and medical device company developing our proprietary product Melphalan Hydrochloride for Injection for use with the Delcath Hepatic Delivery System (Melphalan/HDS). In Europe, our proprietary system to deliver and filter melphalan hydrochloride is marketed as a device under the trade name Delcath Hepatic CHEMOSAT® Delivery System for Melphalan (CHEMOSAT).

Our primary focus is on the execution of our clinical development program in ocular melanoma liver metastases (mOM), intrahepatic cholangiocarcinoma (ICC), hepatocellular carcinoma (HCC or primary liver), and certain other cancers that are metastatic to the liver.

Our Market Opportunity

Currently there are few effective treatment options for certain cancers in the liver. Traditional treatment options include surgery, chemotherapy, liver transplant, radiation therapy, interventional radiology techniques, and isolated hepatic perfusion. We believe that CHEMOSAT/Melphalan/HDS represents a potentially important advancement in regional therapy for primary liver cancer and certain other cancers metastatic to the liver. We believe that CHEMOSAT/Melphalan/HDS is uniquely positioned to treat the entire liver either as a standalone therapy or as a complement to other therapies. CHEMOSAT/Melphalan/HDS administers concentrated regional chemotherapy to the liver. This whole organ therapy is performed by isolating the circulatory system of the liver, infusing the liver with chemotherapeutic agent, and then filtering the blood prior to returning it to the patient.

We believe cancers in the liver represent a multi-billion dollar global market opportunity and a clear unmet medical need. Our initial investigational focus for CHEMOSAT/Melphalan/HDS is in the following types of liver cancers:

Ocular Melanoma, with 8,600 cases diagnosed in the United States and Europe annually.

Hepatocellular Carcinoma (HCC), with 15,000 cases diagnosed in the United States and Europe annually.

Intrahepatic Cholangiocarcinoma (ICC), with 6,500 cases diagnosed in the United States and Europe annually.

About Our CHEMOSAT/Melphalan/HDS Product

CHEMOSAT/Melphalan/HDS administers concentrated regional chemotherapy to the liver. This whole organ therapy is performed by isolating the circulatory system of the liver, infusing the liver with chemotherapeutic agent, and then filtering the blood prior to returning it to the patient. During the procedure, known as percutaneous hepatic perfusion (PHP), three catheters are placed percutaneously through standard interventional radiology techniques. The catheters temporarily isolate the liver from the body's circulatory system, allow administration of the chemotherapeutic agent melphalan hydrochloride directly to the liver, and collect blood exiting the liver for filtration by our proprietary filters. The filters absorb chemotherapeutic agent in the blood, thereby reducing systemic exposure to the drug and related toxic side effects, before the filtered blood is returned to the patient's circulatory system.

The PHP procedure is performed in an interventional radiology suite in approximately two to three hours. Patients remain in an intensive care or step-down unit overnight for observation following the procedure. Treatment with CHEMOSAT/Melphalan/HDS is repeatable, and a new disposable CHEMOSAT/Melphalan/HDS is used for each treatment. Patients treated in both clinical and non-clinical settings have received up to 6 treatments. In the United States, melphalan hydrochloride for injection will be included with the system. In Europe, the system is sold separately and used in conjunction with melphalan hydrochloride commercially available from a third party. In our clinical trials, melphalan hydrochloride for injection is provided to both European and U.S. clinical trial sites.

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Risks of Investing

Investing in our securities involves risks. Potential investors are urged to read and consider the risk factors relating to an investment in the common stock set forth under **Risk Factors** in this prospectus as well as other information we include or incorporate by reference in this prospectus.

Corporate Information

We were incorporated in the State of Delaware in August 1988. Our principal executive offices are located at 1301 Avenue of the Americas, 43rd Floor, New York, New York 10019. Our telephone number is (212) 489-2100. Our website address is <http://www.delcath.com>. Information contained in our website is not a part of this prospectus.

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The Offering

Common stock we are offering	8,685,452 shares, issuable upon exercise of the outstanding Series A Warrants issued in connection with the July 2015 Offering, including 1,672,952 Series A Warrants issued upon exercise of Series B Warrants.
Exercise Price and Terms of Series A Warrants	The Series A Warrants have an exercise price of \$0.355 per share, subject to adjustment, and are exercisable at any time prior to July 21, 2020. The exercise price is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock. The exercise price of the warrants is subject to anti-dilution adjustments for any issuance of common stock or rights to acquire common stock for consideration per share less than the exercise price of the warrants.
Common stock to be outstanding after this offering	32,803,943 shares, including the 8,685,452 shares underlying the Series A Warrants.
Use of proceeds	We expect to use the net proceeds from any exercise of the Series A Warrants to fund the clinical and regulatory development of clinical studies, commercialization of our products, obtaining regulatory approvals, as well as for working capital and other general corporate purposes, including funding the costs of operating as a public company. See Use of Proceeds.
Dividend policy	We have never declared or paid any dividends to the holders of our common stock and we do not expect to pay cash dividends in the foreseeable future. We currently intend to retain any earnings for use in connection with the expansion of our business and for general corporate purposes.
NASDAQ Capital Market symbol for common stock	DCTH
Risk factors	See Risk Factors and other information included or incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to invest in our securities
Transfer agent and registrar	American Stock Transfer and Trust Company, LLC

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Unless otherwise indicated, all information in this prospectus is based on 24,118,491 shares of common stock outstanding on May 3, 2016 and excludes the following:

672,379 shares issuable upon the exercise of stock options at a weighted average exercise price of \$8.44 per share;

10,381,952 shares issuable upon the exercise of warrants, including 589,500 shares of common stock issuable upon exercise of the warrants issued in our October 2013 offering, 1,107,000 shares of common stock issuable upon exercise of the warrants issued in our February 2015 offering and 8,685,452 shares of common stock issuable upon exercise of the Series A Warrants offered hereby at a weighted average exercise price of \$0.73 per share; and

536,000 unvested restricted shares.

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You should read the selected financial data set forth below in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operation and the consolidated financial statements and the related notes included in the 2015 10-K, which are incorporated by reference herein. The statement of operations data set forth below for the years ended December 31, 2015, 2014, and 2013 and the balance sheet data set forth below as of December 31, 2015 and 2014 are derived from our audited financial statements included in the 2015 10-K, which is incorporated by reference herein. The balance sheet data set forth below as of December 31, 2013 are derived from our audited balance sheet for the year ended December 31, 2013, which is not included in our 2015 10-K, but is contained in our prior filings with the SEC. Our historical results are not necessarily indicative of our results of operations to be expected in the future.

<i>(Dollars in thousands)</i>	Year Ended December 31,		
	2015	2014	2013
Statement of Operations Data			
Total revenue	\$ 1,747	\$ 1,069	\$ 790
Total operating expenses	16,495	20,082	33,345
Operating loss	15,210	19,304	33,019
Net loss	14,704	17,381	30,324
Basic loss per share	(0.91)	(1.84)	(4.81)
<i>(Dollars in thousands)</i>	As of December 31,		
	2015	2014	2013
Balance Sheet Data			
Current assets	\$ 14,601	\$ 21,966	\$ 34,028
Total assets	15,733	23,764	37,097
Current liabilities	6,312	4,576	6,632
Stockholder's equity	8,601	18,145	30,099

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RISK FACTORS

This offering and an investment in our securities involve a high degree of risk. You should carefully consider the risks described below, together with the financial and other information set forth under "Risk Factors" in the 2015 10-K, which is incorporated herein by reference, and in other filings we make with the SEC, before you decide to purchase our securities. If any of the described risks actually occurs, our business, financial condition, results of operations, cash flows and prospects could be materially and adversely affected. In that event, the trading price of our common stock and the market value of the securities offered hereby could decline, and you may lose all or part of your investment.

Risks Related to this Offering

Our management team will have broad discretion over the use of the net proceeds from this offering.

Our management will use its discretion to direct the net proceeds from this offering. Our management's judgments may not result in positive returns on your investment and you will not have an opportunity to evaluate the economic, financial or other information upon which our management bases its decisions.

The exercise price and number of certain outstanding warrants will be adjusted in connection with certain other offerings.

The warrants issued in our February 2015 offering are subject to an exercise price adjustment upon certain equity issuances below \$0.355 per share and the Series A Warrants offered hereby are subject to an exercise price adjustment upon certain equity issuances below \$0.355 per share. In addition to the potential dilutive effect of this provision, there is the potential that a large number of the shares may be sold in the public market at any given time, which could place additional downward pressure on the trading price of our common stock.

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CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This prospectus 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, and the negative of these terms or other comparable terminology often identify forward-looking statements. Statements in this prospectus and the 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 Exchange Act, and Section 27A of the Securities Act. 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 2015 10-K 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 commencement of future clinical trials and the results and timing of those clinical trials;

our ability to successfully commercialize CHEMOSAT/Melphalan/HDS, generate revenue and successfully obtain reimbursement for the procedure and System;

the progress and results of our research and development programs;

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 CHEMOSAT/Melphalan/HDS;

our ability to successfully negotiate and enter into agreements with distribution, strategic and corporate partners; and

our estimates of potential market opportunities and our ability to successfully realize these opportunities. 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 such applicable date or to reflect the occurrence of unanticipated events.

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USE OF PROCEEDS

Assuming the exercise of all outstanding Series A Warrants for cash, we estimate that the net proceeds from the exercise of the Series A Warrants will be approximately \$3.1 million. We cannot predict when or if the Series A Warrants will be exercised, however, and it is possible that the Series A Warrants may expire and never be exercised.

We intend to use the net proceeds from this offering for the continued clinical development of our lead cancer treatment candidates and for other general corporate purposes.

Because our business does not generate positive cash flow from operating activities, we will need to raise additional capital in order to fund our clinical development and fully commercialize our product. We continue to believe that we will be able to raise additional capital in the event it is in our best interest to do so. We anticipate raising such additional capital by either borrowing money, selling additional shares of our capital stock or other securities, or entering into strategic alliances with appropriate partners. These methods could cause dilution to our existing shareholders, restrict our operations or require us to relinquish rights, and if additional capital is not available, we may have to delay, reduce or cease operations. See Risk Factors.

Our expected use of net proceeds from this offering represents our current intentions based upon our present plans and business condition.

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Our net tangible book value as of March 31, 2016 was approximately \$7.9 million, or \$0.326 per share of our common stock. Our net tangible book value per share represents our total tangible assets less total liabilities divided by the number of shares of our common stock outstanding on March 31, 2016. Assuming that we issue 8,685,452 shares of common stock upon the exercise of Series A Warrants at an exercise price of \$0.355 per share, our net tangible book value as of March 31, 2016 would have been approximately \$10.9 million, or \$0.334 per share of our common stock. This amount represents an immediate increase in net tangible book value of \$0.008 per share to our existing stockholders and an immediate dilution in net tangible book value of \$0.021 per share to holders of Series A Warrants exercising such warrants to purchase shares of our common stock in this offering.

We determine dilution by subtracting the adjusted net tangible book value per share after this offering from the exercise price of the Series A Warrants per share of our common stock. The following table illustrates the dilution in net tangible book value per share to holders of Series A Warrants:

Exercise price per Series A Warrant	\$ 0.355
Net tangible book value per share as of March 31, 2016	\$ 0.326
Increase per share attributable to exercises of Series A Warrants	\$ 0.008
Adjusted net tangible book value per share after this offering	\$ 0.334
Dilution in net tangible book value per share to holders of Series A Warrants	\$ 0.021

The information above excludes the following potentially dilutive securities as of March 31, 2016:

672,379 shares issuable upon the exercise of stock options at a weighted average exercise price of \$8.44 per share;

1,696,500 shares issuable upon the exercise of warrants, including 589,500 shares of common stock issuable upon exercise of the warrants issued in our October 2013 offering and 1,107,000 shares of common stock issuable upon exercise of the warrants issued in our February 2015 offering, at a weighted average exercise price of \$2.68 per share; and

536,000 unvested restricted shares.

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Our common stock is listed on The NASDAQ Capital Market under the symbol DCTH. The table below sets forth, for the periods indicated, the quarterly high and low last reported sale prices of our common stock since 2014. The information in the table below reflects a one-for-sixteen (1:16) reverse stock split effected on April 8, 2014.

	High	Low
2014		
First Quarter	\$ 6.24	\$ 4.16
Second Quarter	4.88	2.53
Third Quarter	2.68	1.93
Fourth Quarter	1.96	1.11
2015		
First Quarter	\$ 1.56	\$ 0.96
Second Quarter	1.44	0.81
Third Quarter	0.92	0.40
Fourth Quarter	0.62	0.39
2016		
First Quarter	\$ 0.54	0.25
Second Quarter (through May 3)	0.36	0.27

The last reported trading price of our common stock on May 3, 2016 was \$0.32. As of May 3, 2016, we had approximately 42 holders of record of our common stock.

We have never declared or paid any dividends to the holders of our common stock and we do not expect to pay cash dividends in the foreseeable future. We currently intend to retain any earnings for use in connection with the expansion of our business and for general corporate purposes.

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SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

A table containing information regarding the beneficial ownership of our common stock as of March 18, 2016 (unless otherwise specified) is included under the heading "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" in the 2015 10-K, which is incorporated herein by reference.

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DESCRIPTION OF CAPITAL STOCK

The following description of our common stock and preferred stock, together with the additional information incorporated by reference and in any related free writing prospectuses, summarizes the material terms and provisions of our common stock and preferred stock. 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 and preferred 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 May 3, 2016, we had 24,118,491 shares of common stock outstanding and no shares of preferred stock outstanding. As of May 3, 2016, we had 10,381,952 shares issuable upon the exercise of outstanding warrants or options to purchase warrants at a weighted average exercise price of \$0.73 per share, 672,379 shares issuable upon the exercise of stock options at a weighted average exercise price of \$8.44 per share, and 536,000 shares of unvested restricted stock.

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.

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Preferred Stock

Our board of directors has the authority to issue up to 10,000,000 shares of preferred stock in one or more series and to determine the rights and preferences of the shares of any such series without stockholder approval, none of which are outstanding. Our board of directors may issue preferred stock in one or more series and has the authority to fix the designation and powers, rights and preferences and the qualifications, limitations, or restrictions with respect to each class or series of such class without further vote or action by the stockholders. The ability of our board of directors to issue preferred stock without stockholder approval could have the effect of delaying, deferring or preventing a change of control of us or the removal of existing management.

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.

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CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following is a general discussion of the material U.S. federal income tax considerations with respect to the acquisition, ownership and disposition of our common stock obtained upon the exercise of outstanding Series A Warrants issued in connection with the July 2015 Offering applicable to non-U.S. holders (as defined below). This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended (referred to as the Code), existing and proposed U.S. Treasury regulations promulgated thereunder, and administrative rulings and court decisions in effect as of the date hereof, all of which are subject to change at any time, possibly with retroactive effect. No ruling has been or will be sought from the Internal Revenue Service, or IRS, with respect to the matters discussed below, and there can be no assurance the IRS will not take a contrary position regarding the tax consequences of the acquisition, ownership or disposition of our common stock or warrants, or that any such contrary position would not be sustained by a court.

For purposes of this discussion, a non-U.S. holder means a beneficial owner of our Series A Warrants that, for U.S. federal income tax purposes, is not any of the following:

an individual who is a citizen or resident of the United States;

a corporation (or any other entity treated as a corporation for U.S. federal income tax purposes) created or organized (or deemed to be created or organized) in or under the laws of the United States, any state thereof or the District of Columbia;

an estate the income of which is subject to U.S. federal income taxation regardless of its source;

a trust if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person for U.S. federal income tax purposes; or

an entity treated as a partnership or other pass-through entity for U.S. federal income tax purposes.

It is assumed in this discussion that a non-U.S. holder holds shares of our common stock and Series A Warrants as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all aspects of U.S. federal income taxation that may be important to a non-U.S. holder in light of such holder's particular circumstances or that may be applicable to holders subject to special treatment under U.S. federal income tax laws (including, for example, financial institutions, dealers in securities, traders in securities that elect mark-to-market treatment, insurance companies, tax-exempt entities, holders who acquired our common stock pursuant to the exercise of employee stock options or otherwise as compensation, controlled foreign corporations, passive foreign investment companies, entities or arrangements treated as partnerships for U.S. federal income tax purposes, holders subject to the alternative minimum tax, certain former citizens or former long-term residents of the United States, holders deemed to sell our common stock or Series A Warrants under the constructive sale provisions of the Code and holders who hold our common stock or Series A Warrants as part of a straddle, hedge, synthetic security or conversion transaction), nor does it address any aspects of the unearned income Medicare

contribution tax enacted pursuant to the Health Care and Education Reconciliation Act of 2010. In addition, except to the extent provided below, this discussion does not address U.S. federal tax laws other than those pertaining to the U.S. federal income tax, nor does it address any aspects of U.S. state, local or non-U.S. taxes. Accordingly, prospective investors are encouraged to consult with their own tax advisors regarding the U.S. federal, state, local, non-U.S. income and other tax considerations of acquiring, holding and disposing of shares of our common stock and Series A Warrants.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds shares of our common stock or Series A Warrants, the tax treatment of a partner generally will depend on the status of the partner and the activities of the partnership. Partnerships holding our common stock or Series A Warrants and partners in such partnerships are urged to consult their tax advisors as to the particular U.S. federal income tax consequences of acquiring, holding and disposing of our common stock and Series A Warrants.

THIS SUMMARY IS NOT INTENDED TO CONSTITUTE A COMPLETE DESCRIPTION OF ALL TAX CONSEQUENCES RELATING TO THE ACQUISITION, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK AND SERIES A WARRANTS. HOLDERS OF OUR COMMON STOCK AND SERIES A WARRANTS ARE ENCOURAGED TO CONSULT WITH THEIR TAX ADVISORS REGARDING THE TAX CONSEQUENCES TO THEM (INCLUDING THE APPLICATION AND EFFECT OF ANY STATE, LOCAL, NON-U.S. INCOME AND OTHER TAX LAWS) OF THE ACQUISITION, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK.

Allocation of Purchase Price and Characterization of a Unit

There is no authority addressing the treatment, for U.S. federal income tax purposes, of securities with terms substantially the same as the units being offered in the July 2015 Offering, and, therefore, that treatment is not entirely clear. Each unit may be treated for U.S.

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federal income tax purposes as an investment unit consisting of one share of our common stock, one Series A Warrant and one Series B Warrant (to purchase one share of our common stock and one Series A Warrant). If this is the case, then for U.S. federal income tax purposes, each holder of a unit may be required to allocate the purchase price of a unit among the shares of common stock and the warrants that comprise the unit based on the relative fair market value of each at the time of issuance. The price allocated to each such share or warrant generally will be the holder's tax basis in such share, right or warrant, as the case may be. Similarly, upon the exercise of a Series B Warrant, the holder's tax basis in the Series B Warrant and the exercise price paid on exercise of such Series B Warrant may be required to be allocated amount the common stock and warrant obtainable upon exercise.

Neither the foregoing description of the treatment of our common stock and warrants nor a holder's purchase price allocation is binding on the IRS or the courts. Because there are no authorities that directly address instruments that are similar to the units, no assurance can be given that the IRS or the courts will agree with the characterization described above or the discussion below. Accordingly, each holder is advised to consult its own tax advisor regarding the risks associated with an investment in a unit (including alternative characterizations of a unit) and regarding an allocation of the purchase price among the common stock and the warrant that comprise a unit. The balance of this discussion generally assumes that the characterization of the units described above is respected for U.S. federal income tax purposes.

Dividends

As discussed above under **Price Range of Common Stock and Dividend Policy**, we currently have no plans to make distributions of cash or other property on our common stock. In the event that we do make distributions of cash or other property on our common stock, generally such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from current and accumulated earnings and profits, as determined for U.S. federal income tax purposes. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and will first reduce a non-U.S. holder's adjusted basis in our common stock, but not below zero. Any excess will be treated as capital gain from the sale of our common stock in the manner described under **Gain on Sale or Other Disposition of Our Common Stock** below. In general, dividends, if any, paid by us to a non-U.S. holder will be subject to U.S. withholding tax at a rate of 30% of the gross amount (or a reduced rate prescribed by an applicable income tax treaty) unless the dividends are effectively connected with a trade or business carried on by the non-U.S. holder within the United States and, if required by an applicable income tax treaty, are attributable to a permanent establishment of the non-U.S. holder within the United States. Dividends effectively connected with this U.S. trade or business, and, if required by an applicable income tax treaty, attributable to such a permanent establishment of the non-U.S. holder, generally will not be subject to U.S. withholding tax if the non-U.S. holder provides the applicable withholding agent with certain forms, including IRS Form W-8ECI (or any successor form), and generally will be subject to U.S. federal income tax on a net income basis, in the same manner as if the non-U.S. holder were a U.S. person. A non-U.S. holder that is a corporation and receives effectively connected dividends may also be subject to an additional branch profits tax imposed at a 30% rate (or lower treaty rate), subject to certain adjustments.

In general, distributions on shares of our common stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent any such distributions exceed both our current and our accumulated earnings and profits, they will first be treated as a return of capital reducing a non-U.S. holder's tax basis in our common stock (determined on a share by share basis), but not below zero, and thereafter will be treated as gain from the sale of such stock, the treatment of which is discussed below under **Gain on Disposition of Shares of Common Stock**.

As discussed under **Dividend Policy** above, we do not currently expect to pay dividends. In the event that we do pay dividends, dividends paid to a non-U.S. holder generally will be subject to a U.S. federal withholding tax at a 30%

rate, or such lower rate as may be specified by an applicable income tax treaty. A non-U.S. holder of shares of our common stock who wishes to claim the benefit of an applicable treaty rate (and avoid backup withholding, as discussed below) for dividends generally will be required (a) to complete IRS Form W-8BEN (or other applicable form) and certify under penalty of perjury that such holder is not a United States person as defined under the Code and is eligible for treaty benefits, or (b) if shares of our common stock are held through certain foreign intermediaries (including certain foreign partnerships), satisfy the relevant certification requirements of applicable U.S. Treasury Regulations. This certification must be provided to us or our paying agent prior to the payment to the non-U.S. holder of any dividends, and may be required to be updated periodically.

Gain on Disposition of our Securities

Subject to the discussions below of backup withholding and the Foreign Account Tax Compliance Act (FATCA) legislation, any gain realized by a non-U.S. holder on the sale or other disposition of our common stock generally will not be subject to United States federal income tax, unless:

the gain is effectively connected with a trade or business carried on by the non-U.S. holder within the United States (in which case the branch profits tax discussed above may also apply if the non-U.S. holder is a corporation) and, if required by an applicable income tax treaty, the gain is attributable to a permanent establishment of the non-U.S. holder maintained in the United States;

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the non-U.S. holder is an individual and is present in the United States for 183 days or more in the taxable year of disposition and certain other conditions are satisfied; or

we are or have been a U.S. real property holding corporation (a USRPHC) for U.S. federal income tax purposes at any time during the shorter of the five-year period ending on the date of the disposition or the period that the non-U.S. holder held such securities.

Gain described in the first bullet point above will be subject to U.S. federal income tax on a net income basis at the regular graduated U.S. federal income tax rates in much the same manner as if such holder were a resident of the United States. A non-U.S. holder that is a corporation may also be subject to an additional branch profits tax equal to 30% (or such lower rate specified by an applicable income tax treaty) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items. Non-U.S. holders should consult any applicable income tax treaties that may provide for different rules.

Gain recognized by an individual described in the second bullet point above will be subject to U.S. federal income tax at a flat 30% rate (or such lower rate specified by an applicable income tax treaty), but may be offset by U.S.-source capital losses (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe that we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends on the fair market value of our interests in real property located within the United States relative to the fair market value of our interests in real property located outside the United States and our other business assets, however, there can be no assurance that we will not become a USRPHC in the future. Even if we were or were to become a USRPHC at any time during this period, generally gains realized upon a disposition of shares of our common stock (but not our warrants) by a non-U.S. holder that did not directly or indirectly own more than 5% of our common stock during this period would not be subject to U.S. federal income tax, provided that our common stock is regularly traded on an established securities market (within the meaning of Section 897(c)(3) of the Code). We expect our common stock to be regularly traded on an established securities market, although we cannot guarantee it will be so traded.

Acquisition of Common Stock Pursuant to the Exercise of a Series A Warrant

A non-U.S. holder generally will not recognize gain or loss upon the acquisition of common stock pursuant to the exercise of a Series A Warrant for cash. Common stock acquired pursuant to the exercise of a Series A Warrant for cash generally will have a tax basis equal to the non-U.S. holder's tax basis in the Series A Warrant, increased by the amount paid to exercise the Series A Warrant. The holding period of such common stock generally would begin on the day after the date of receipt of such common stock upon exercise of the Series A Warrant and will not include the period during which the non-U.S. holder held the Series A Warrant. If a Series A Warrant is allowed to lapse unexercised, a non-U.S. holder generally will recognize a capital loss equal to such holder's tax basis in the Series A Warrant.

The tax consequences of a cashless exercise of a Series A Warrant are not clear under current tax law. A cashless exercise may be tax-free, either because the exercise is not a gain realization event or because the exercise is treated as a recapitalization for U.S. federal income tax purposes. In either tax-free situation, a non-U.S. holder's basis in the common stock received would equal the holder's basis in the Series A Warrant. If the cashless exercise were treated as not being a gain realization event, a non-U.S. holder's holding period in the common stock or Series A Warrant would be treated as commencing on the date following the date of exercise of the Series A Warrant. If the cashless exercise were treated as a recapitalization, the holding period of the common stock would include the holding period of the

warrant being exercised. It is also possible that a cashless exercise could be treated as a taxable exchange in which gain or loss would be recognized. In such event, a non-U.S. holder could be deemed to have surrendered Series A Warrants equal to the number of shares of common stock having a value equal to the exercise price for the total number of Series A Warrants to be exercised. The non-U.S. holder would recognize capital gain or loss in an amount equal to the difference between the fair market value of the common stock represented by the Series A Warrants deemed surrendered and the non-U.S. holder's tax basis in the Series A Warrants deemed surrendered. In this case, a non-U.S. holder's tax basis in the common stock received would equal the sum of the fair market value of the common stock represented by the Series A Warrants deemed surrendered and the non-U.S. holder's tax basis in the Series A Warrants exercised. A non-U.S. holder's holding period for the common stock would commence on the date following the date of exercise of the Series A Warrant. Due to the absence of authority on the U.S. federal income tax treatment of a cashless exercise, there can be no assurance which, if any, of the alternative tax consequences and holding periods described above would be adopted by the IRS or a court of law. Accordingly, non-U.S. holders should consult their tax advisors regarding the tax consequences of a cashless exercise.

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If the cashless exercise of a Series A Warrant results in taxable gain to a non-U.S. holder, then the consequences to such holder will be as described above under Gain on Disposition of our Securities.

Information Reporting and Backup Withholding

As discussed above under Price Range of Common Stock and Dividend Policy, we currently have no plans to pay regular dividends on our common stock. In the event that we do pay dividends, generally we or certain financial middlemen must report annually to the Internal Revenue Service (referred to as the IRS) and to each non-U.S. holder the amount of dividends paid to, and the tax withheld with respect to, each non-U.S. holder. These reporting requirements apply regardless of whether withholding was reduced or eliminated. Copies of this information also may be made available under the provisions of a specific treaty or agreement with the tax authorities in the country in which the non-U.S. holder resides or is established.

U.S. backup withholding (currently at a rate of 28%) is imposed on certain payments to persons that fail to furnish the information required under the U.S. information reporting requirements. Dividends paid to a non-U.S. holder of our common stock generally will be exempt from backup withholding if the non-U.S. holder provides to the applicable withholding agent a properly executed IRS Form W-8BEN, W-8BEN-E or W-8ECI (as applicable) or otherwise establishes an exemption.

Under U.S. Treasury regulations, the payment of proceeds from the disposition of our common stock by a non-U.S. holder effected at a U.S. office of a broker generally will be subject to information reporting and backup withholding, unless the beneficial owner, under penalties of perjury, certifies, among other things, its status as a non-U.S. holder or otherwise establishes an exemption. The certification procedures described in the above paragraph will satisfy these certification requirements as well. The payment of proceeds from the disposition of our common stock by a non-U.S. holder effected at a non-U.S. office of a broker generally will not be subject to backup withholding and information reporting, except that information reporting (but generally not backup withholding) may apply to payments if the broker is:

a U.S. person;

a controlled foreign corporation for U.S. federal income tax purposes;

a foreign person, 50% or more of whose gross income from certain periods is effectively connected with a U.S. trade or business; or

a foreign partnership if at any time during its tax year (a) one or more of its partners are U.S. persons who, in the aggregate, hold more than 50% of the income or capital interests of the partnership or (b) the foreign partnership is engaged in a U.S. trade or business.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be credited against the non-U.S. holder's U.S. federal income tax liability, if any, and any excess refunded, provided that the required information is furnished to the IRS in a timely manner.

Legislation Affecting Taxation of Securities Held by or Through Foreign Entities

Withholding taxes may be imposed under FATCA on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends paid on, or gross proceeds from the sale or other disposition of, our common stock or warrants paid to a foreign financial institution or a non-financial foreign entity (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any substantial United States owners (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain specified United States persons or United States-owned foreign entities (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules. Under the applicable Treasury Regulations and IRS guidance, withholding under FATCA generally will apply to payments of dividends on our common stock, as well as to payments of gross proceeds from the sale or other disposition of such stock or warrants on or after January 1, 2017. Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.

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LEGAL MATTERS

The validity of the securities offered hereby has been passed upon for us by Morgan, Lewis & Bockius LLP, New York, New York.

EXPERTS

The financial statements of Delcath Systems, Inc. as of and for the year ended December 31, 2015 incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

The consolidated financial statements of Delcath Systems, Inc. at December 31, 2014 and for each of the two years in the period ended December 31, 2014 included in Delcath Systems, Inc.'s 2015 10-K have been audited by Ernst & Young LLP, the predecessor independent registered public accounting firm, as set forth in its respective report thereon, included therein, and incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

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>.

INFORMATION INCORPORATED BY REFERENCE

The SEC's rules allow us to incorporate by reference information into this prospectus. This means that we can disclose important information to you by referring you to another document. The information incorporated by reference is considered to be a part of this prospectus. This prospectus incorporates by reference the documents listed below:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2015;

our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2016;

our Current Reports on Form 8-K, filed on February 10, 2016; March 23, 2016; and April 7, 2016; and

the description of our common stock contained in our Registration Statement on Form 8-A filed on September 22, 2000, including all amendments and reports filed for the purpose of updating such description.

We also incorporate by reference all documents filed pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, as amended (i) after the date of this Post-Effective Amendment No. 1 and prior to its effectiveness or (ii) prior to the termination of the offering described in this prospectus. Any statement made in this prospectus or in a document incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

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 our Secretary at Delcath Systems, Inc., 1301 Avenue of the Americas, 43rd Floor, New York, New York 10019 or by calling us at 212-489-2100.

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8,685,452 Shares of Common Stock issuable upon Exercise of Outstanding Series A Warrants

Delcath Systems, Inc.

PROSPECTUS

May 4, 2016

Table of Contents**PART II****Item 13. Other expenses of issuance and distribution**

We estimate that expenses in connection with the distribution of securities described in this Registration Statement will be as set forth below. We will pay all of the expenses with respect to the distribution and such amounts, with the exception of the SEC registration fee, are estimates.

SEC registration fee	\$ 3,486
FINRA filing fee	5,000
Legal fees and expenses	150,000
Accounting fees and expenses	100,000
Printing and engraving expenses	30,000
Transfer agent and registrar fees and expenses	10,000
Other expenses	1,514
 Total	 \$ 300,000

Item 14. Indemnification of directors and officers

Section 102(b)(7) of the DGCL allows a corporation to provide in its certificate of incorporation that a director of the corporation will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except where the director breached the duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our amended and restated certificate of incorporation provides for this limitation of liability.

Section 145 of the DGCL, or Section 145, provides that a Delaware corporation may indemnify any person who was, is or is threatened to be made, party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person is or was an officer, director, employee or agent of such corporation or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was illegal. A Delaware corporation may indemnify any persons who are, were or are a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person is or was a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit, provided such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests, provided that no indemnification is permitted without judicial approval if the officer, director, employee or agent is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses which such officer or director has actually and reasonably incurred.

Section 145 further authorizes a corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or enterprise, against any liability asserted against him and incurred by him in any such capacity, or arising out of his or her status as such, whether or not the corporation would otherwise have the power to indemnify him under Section 145.

Our amended and restated bylaws provides that we must indemnify our directors and officers to the fullest extent permitted by the DGCL and must also pay expenses incurred in defending any such proceeding in advance of its final disposition upon delivery of an undertaking, by or on behalf of an indemnified person, to repay all amounts so advanced if it should be determined ultimately that such person is not entitled to be indemnified.

We have entered into indemnification agreements with certain of our executive officers and directors pursuant to which have agreed to indemnify such persons against all expenses and liabilities incurred or paid by such person in connection with any proceeding arising from the fact that such person is or was an officer or director of our company, and to advance expenses as incurred by or on behalf of such person in connection therewith.

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The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, provision of our certificate of incorporation, our bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

We maintain standard policies of insurance that provide coverage (1) to our directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act and (2) to us with respect to indemnification payments that we may make to such directors and officers.

The form of Underwriting Agreement filed as Exhibit 1.1 to this Registration Statement provides for indemnification of our directors and officers by the underwriter party thereto against certain liabilities. See Item 17. Undertakings for a description of the SEC's position regarding such indemnification provisions.

Item 15. Recent sales of unregistered securities

None.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits

The exhibit index attached hereto is incorporated herein by reference.

(b) Financial Statement Schedule

All schedules have been omitted because the information required to be set forth in the schedules is either not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings

(1) To file, during any period in which it offers or sales are being made, a post-effective amendment to this Registration Statement:

(a) To include any prospectus required by Section 10(a)(3) of the Exchange Act;

(b) 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 a 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(c) 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.

(2) 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.

(3) To deliver or cause to be delivered with the prospectus, to each person to whom the prospectus is sent or given, the latest annual report, to security holders that is incorporated by reference in the prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Exchange Act; and, where interim financial information required to be presented by Article 3 of Regulation S-X is not set forth in the prospectus, to deliver, or cause to be delivered to each person to whom the prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the prospectus to provide such interim financial information.

(4) Insofar as indemnification for liabilities arising under the Securities Act 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 SEC 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.

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(5) The undersigned registrant hereby undertakes that:

(a) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective; and

(b) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and this offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Table of Contents**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, Delcath Systems, Inc., a Delaware corporation, has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on May 4, 2016.

DELCATH SYSTEMS, INC.

By: /s/ Jennifer K. Simpson, Ph.D.

Name: Jennifer K. Simpson, Ph.D.

President and Chief Executive

Title: Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-1 has been signed by the following persons in the capacities indicated.

SIGNATURE	TITLE	DATE
/s/ Jennifer K. Simpson, Ph.D.	President and Chief Executive Officer	May 4, 2016
Jennifer K. Simpson, Ph.D.	(Principal Executive Officer)	
/s/ Barbra C. Keck, M.B.A.	Senior Vice President, Finance	May 4, 2016
Barbra C. Keck, M.B.A.	(Principal Financial Officer and Principal Accounting Officer)	
*	Chairman of the Board	May 4, 2016
Roger G. Stoll, Ph.D.		
*	Director	May 4, 2016
Harold S. Koplewicz, M.D.		
*	Director	May 4, 2016
William D. Rueckert		
*	Director	May 4, 2016
Marco Taglietti, M.D.		

*By: /s/ Barbra C. Keck, M.B.A.

Attorney-in-Fact

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EXHIBIT INDEX

Exhibit	Description
1.1	Form of Underwriting Agreement**
1.2	Form of Series A Warrant**
1.3	Form of Series B Warrant**
3.1	Amended and Restated Certificate of Incorporation of the Company, as amended to June 30, 2005 (incorporated by reference to Exhibit 3.1 to Company's Current Report on Form 8-K filed June 5, 2006 (Commission File No. 001-16133))
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Company, effective as of April 8, 2014 (incorporated by reference to Exhibit 3.1 to Company's Current Report on Form 8-K filed April 8, 2014 (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 Morgan, Lewis & Bockius LLP**
23.1	Consent of Ernst & Young LLP*
23.2	Consent of Grant Thornton LLP*
23.3	Consent of Morgan, Lewis & Bockius LLP (included as part of Exhibit 5.1)**
24.1	Powers of Attorney (included on signature page to this Registration Statement)**

* Filed herewith

** Previously filed