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

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-1 ON 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) 3841 (Primary Standard Industrial Classification Code Number) 06-1245881 (I.R.S. Employer Identification Number)

566 Queensbury Avenue Queensbury, New York 12805 (212) 489-2100

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

Gerard Michel Chief Executive Officer Delcath Systems, Inc. 566 Queensbury Avenue, Queensbury, NY 12804

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

Copies to:

Ryan S. Sansom Christina Roupas Cooley LLP 500 Boylston Street Boston, Massachusetts 02116 Tel: (617) 937-2300

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: From time to time after the effective date of this registration statement.

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. \Box

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. \Box

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

Large accelerated filer \mathbf{X}

Non-accelerated filer

 \times Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act. \Box

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 Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

Pursuant to Rule 429 under the Securities Act of 1933, as amended (the "Securities Act"), the prospectus contained in this Post-Effective Amendment No. 1 to Form S-1 (File No. 333-236100), declared effective by the Securities and Exchange Commission ("the SEC") on May 5, 2020 (referred to herein as the "Registration Statement") will be used as a combined prospectus in connection with this Registration Statement and (i) the Registration Statement on Form S-1 (file No. 333-235751) that was declared effective by the SEC on January 7, 2020 (the "2020 Registration Statement") and (ii) the Registration Statement on Form S-1 (file No. 333-233396) that was declared effective by the SEC on November 7, 2019 (the "2019 Registration Statement" and together with the 2020 Registration Statement and the Registration Statement, the "Registration Statements"). All numbers of shares of our common stock, par value \$0.01 per share (the "Common Stock"), included in this Registration Statement give effect to the one-for-700 reserve stock split of our Common Stock that took effect on December 24, 2019.

Pursuant to Rule 429 under the Securities Act, the prospectus included in this Registration Statement is a combined prospectus relating to:

- The resale of up to 1,455,775 shares of Common Stock issuable upon (i) the conversion of the Series E Convertible Preferred Stock and Series E-1 Convertible Preferred Stock and (ii) exercise of Series E Warrants and the Series E-1 Warrants previously registered as part of this Registration Statement;
- The resale of up to 3,429,680 shares of Common Stock issuable upon (i) the conversion of the Series E Convertible Preferred Stock and Series E-1 Convertible Preferred Stock and (ii) the exercise of the Series E Warrants and the Series E-1 Warrants previously registered as part of this 2020 Registration Statement; and
- The resale of up to 1,400,796 shares of Common Stock issuable upon (i) the conversion of the Series E Convertible Preferred Stock and Series E-1 Convertible Preferred Stock and (ii) the exercise of the Series E Warrants and the Series E-1 Warrants previously registered as part of this 2019 Registration Statement.

Pursuant to Rule 429(b) under the Securities Act, upon effectiveness, this Registration Statement, which is Post-Effective Amendment No. 1 to the Registration Statement, shall also constitute Post-Effective Amendment No. 1 to each of the 2019 Registration Statement and the 2020 Registration Statement. Such Post-Effective Amendments shall hereafter become effective concurrently with the effectiveness of this Registration Statement and in accordance with Section 8(c) of the Securities Act.

No additional securities are being registered under this Post-Effective Amendment No. 1. All applicable registration and filing fees were paid at the time of the original filing of the Registration Statements.

The information in this preliminary 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 preliminary prospectus is neither an offer to sell nor the solicitation of an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion Preliminary Prospectus dated September 18, 2024

Delcath

DELCATH SYSTEMS, INC.

2,762,657 Shares of Common Stock

This prospectus relates to the re-sale by the selling stockholders identified in this prospectus (each a "Selling Stockholder" and, collectively, the "Selling Stockholders") of up to an aggregate of 2,762,657 shares of common stock, \$0.01 par value per share (the "Common Stock"), of Delcath Systems, Inc., a Delaware corporation ("Delcath" or the "Company") issuable upon (i) the conversion of the Series E Convertible Preferred Stock and (ii) exercise of Series E Warrants and the Series E-1 Warrants previously registered on the Registration Statement on (a) Form S-1 (file No. 333-236100) that was originally declared effective by the Securities and Exchange Commission ("SEC") on May 5, 2020 (this "Registration Statement"), (b) Form S-1 (file No. 333-235751) that was originally declared effective by the SEC on January 7, 2020 (the "2020 Registration Statement"), and (c) Form S-1 (file No. 333-233396) that was originally declared effective by the SEC on November 7, 2019 (collectively with this Registration Statement and the 2020 Registration Statement, the "Registration Statements").

The Common Stock offered by this prospectus (the "Registered Shares") may be sold by the Selling Stockholders or their transferees, pledgees, donees or assigns or other successors-in-interest that receive any of the shares offered by this prospectus as a gift, distribution, or other non-sale related transfer. For additional information on the possible methods of sale that may be used by the Selling Stockholders, you should refer to the section of this prospectus entitled "Plan of Distribution."

We are registering shares that are issuable to the Selling Stockholders upon the conversion of the Series E Convertible Preferred Stock and Series E-1 Convertible Preferred Stock and the shares of Common Stock issuable upon the exercise of the Series E Warrants and the Series E-1 Warrants (such Series E Warrants and Series E-1 Warrants, the "Warrants").

All net proceeds from the sale of the shares of Common Stock covered by this prospectus will go to the Selling Stockholders. We will receive none of the proceeds from the sale of the shares of Common Stock covered by this prospectus by the Selling Stockholders. We may receive proceeds upon the exercise of outstanding Warrants for shares of Common Stock covered by this prospectus if the Warrants are exercised for cash. We will bear all expenses of registration incurred in connection with this offering, but all selling and other expenses incurred by the Selling Stockholders will be borne by them.

Our Common Stock is traded on The Nasdaq Capital Market under the symbol "DCTH." On September 17, 2024, the closing price for our Common Stock, as reported on The Nasdaq Capital Market, was \$9.38 per share. As of August 31, 2024, 28,000,843 shares of Common Stock were issued and outstanding.

The Selling Stockholders may be deemed "underwriters" within the meaning of the Securities Act of 1933, as amended, in connection with the resale of the Registered Shares.

This offering will terminate on the earlier of (i) the date when all of the Registered Shares have been sold pursuant to this prospectus or Rule 144 under the Securities Act, and (ii) the date that all of the securities may be sold pursuant to Rule 144 without volume or manner-of-sale restrictions, unless we terminate it earlier.

Investing in our common stock involves risks that are described in the section titled "<u>*Risk Factors*</u>" beginning on page 2 of this prospectus.

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

The date of this prospectus is , 2024.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the SEC using a "shelf" registration process. By using a shelf registration statement, the Selling Stockholders named in this prospectus may, from time to time, sell the securities described in this prospectus from time to time in one or more offerings as described in this prospectus. To the extent necessary, each time that the Selling Stockholders offer and sell securities, we or the Selling Stockholders may provide a prospectus supplement to this prospectus that contains specific information about the securities being offered and sold and the specific terms of that offering. To the extent permitted by law, we may also authorize one or more free writing prospectuses that may contain material information relating to these offerings. Such prospectus supplement or free writing prospectus may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus, as applicable. Before purchasing any securities, you should carefully read this prospectus and any applicable prospectus supplement and free writing prospectuses, together with the additional information described in the section titled "*Where You Can Find More Information; Incorporation by Reference.*"

Neither we nor the Selling Stockholders have authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, any applicable prospectus supplement or any free writing prospectuses prepared by or on behalf of us or to which we have referred you. Neither we nor the Selling Stockholders take any responsibility for, nor provide any assurance as to the reliability of, any other information that others may give you. Neither we nor the Selling Stockholders will make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and the applicable prospectus supplement to this prospectus is accurate only as of the date on its respective cover, that the information incorporated by reference herein is accurate only as of the date of the incorporated document, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus incorporates by reference, and any prospectus supplement or free writing prospectus may contain and incorporate by reference, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, neither we nor the Selling Stockholders guarantee the accuracy or completeness of this information and neither we nor the Selling Stockholders guarantee the accuracy or completeness of this information and neither we nor the Selling Stockholders supplement or any applicable free writing prospectus may involve estimates, assumptions and other risks and uncertainties and are subject to change based on various factors, including those discussed in the section titled *"Risk Factors"* contained in this prospectus, any applicable prospectus supplement and any applicable free writing prospectus, and under similar headings in other documents that are incorporated by reference in this prospectus. Accordingly, investors should not place undue reliance on this information.

Unless the context otherwise indicates, references in this prospectus to, "Delcath," "the Company," "we," "our," or "us" mean Delcath Systems, Inc. and its wholly owned subsidiaries. The term "Selling Stockholders" refers, collectively, to the selling stockholders named under the heading "Selling Stockholders" in this prospectus and, as applicable, any donees, pledgees, assignees, transferees or other successors-in-interest selling the shares offered by this prospectus received after the date of this prospectus from the Selling Stockholders as a gift, pledge, or other non-sale related transfer.

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PROSPECTUS SUMMARY

Company Overview

We are an interventional oncology company focused on the treatment of primary cancers metastatic to the liver. Our lead product, the HEPZATO KIT (melphalan for Injection/Hepatic Delivery System), a drug/device combination product, was approved by the US Food and Drug Administration (the "FDA") on August 14, 2023, indicated as a liver-directed treatment for adult patients with uveal melanoma with unresectable hepatic metastases affecting less than 50% of the liver and no extrahepatic disease, or extrahepatic disease limited to the bone, lymph nodes, subcutaneous tissues, or lung that is amenable to resection, or radiation. The first commercial use of HEPZATO for the treatment of metastatic hepatic dominant uveal melanoma ("mUM") took place in January 2024.

In the United States, HEPZATO is considered a combination drug and device product and is regulated as a drug by the FDA. Primary jurisdiction for regulation of HEPZATO has been assigned to the FDA's Center for Drug Evaluation and Research. The FDA has granted us six orphan drug designations (five for melphalan in the treatment of patients with ocular (uveal) melanoma, cutaneous melanoma, intrahepatic cholangiocarcinoma, hepatocellular carcinoma, and neuroendocrine tumor indications and one for doxorubicin in the treatment of patients with hepatocellular carcinoma).

We have sufficient raw material and component constituent parts of HEPZATO KIT to meet anticipated demand and we intend to manage supply chain risk through stockpiled inventory and contracting with multiple suppliers for critical components. As of July 31, 2024, eight facilities have treated at least one patient with the HEPZATO KIT.

In Europe, the hepatic delivery system is a stand-alone medical device having the same device components as HEPZATO, but without the melphalan hydrochloride and is approved for sale under the trade name CHEMOSAT Hepatic Delivery System for Melphalan, or CHEMOSAT, where it has been used at major medical centers to treat a wide range of cancers in the liver. On February 28, 2022, CHEMOSAT received Medical Device Regulation (MDR) certification under the European Medical Devices Regulation (EU)2017/745, which may be considered by jurisdictions when evaluating reimbursement. As of March 1, 2022, we have assumed direct responsibility for sales, marketing and distribution of CHEMOSAT in Europe.

Our clinical development program for HEPZATO was comprised of the FOCUS Clinical Trial for Patients with metastatic hepatic dominant Uveal Melanoma (the "FOCUS Trial"), a global registration clinical trial that investigated objective response rate in patients with mUM. The current focus of our clinical development program is to generate clinical data for CHEMOSAT and HEPZATO in patients with mUM, either as monotherapy or in combination with immunotherapy. On May 6, 2024, we announced the publication of results from our Phase 3 FOCUS Trial, including an Overall Response Rate ("ORR") of 36.35, which included 7.7% of patients with Complete Response, as determined by an Independent Review Committee. An ORR of 36.3% in the FOCUS study was statistically significantly better than the pooled ORR estimate (a weighted mean of the observed ORR) of 5.5% in the historical control group. We expect that the publication will support increased clinical adoption of and reimbursement for CHEMOSAT in Europe, and support reimbursement in various jurisdictions, including the United States.

In addition to HEPZATO's use to treat mUM, the Company believes that HEPZATO has the potential to treat other cancers in the liver, such as metastatic colorectal cancer, metastatic neuroendocrine tumors, metastatic breast cancer and intrahepatic cholangiocarcinoma, and plans to begin one or more studies of HEPZATO KIT to treat such conditions in late 2024 or early 2025. We believe that those and similar disease states are areas of unmet medical needs that represent significant market opportunities.

Corporate Information

We were incorporated in the State of Delaware in August 1988. Our corporate offices are located at 566 Queensbury Avenue, Queensbury, New York 12804. Our telephone number is (212) 489-2100 and our internet address is www.delcath.com. Information contained in, or accessible through, our website does not constitute any part of, and is not incorporated into, this prospectus.

RISK FACTORS

Investing in our Common Stock involves a high degree of risk. Before deciding whether to invest in our Common Stock, you should consider carefully the risks and uncertainties discussed in this section and under the sections titled Risk Factors contained in our most recent Annual Report on Form 10-K and in our subsequent Quarterly Reports on Form 10-Q for the quarterly periods ended subsequent to our filing of such Annual Report on Form 10-K, as well as any amendments or updates to our risk factors reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus, together with other information in this prospectus, the documents incorporated by reference, any prospectus supplement and any free writing prospectus that we may authorize. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any additional risks and uncertainties actually occur, our business, financial condition, results of operations and cash flow could be materially and adversely affected. In that case, the trading price of our Common Stock could decline and you might lose all or part of your investment. Please also read carefully the section titled "Cautionary Note Regarding Forward-Looking Statements."

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, and the documents incorporated by reference herein, contain, or will contain, "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements can be identified by words such as "intends," "believes," "anticipates," "indicates," "plans," "expects," "suggests," "may," "would," "should," "potential," "designed to," "will," "ongoing," "estimate," "forecast," "predict," "could," and similar references, although not all forward-looking statements contain these words. Forward-looking statements are neither historical facts nor assurances of future performance. These statements are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Risks that could cause actual results to vary from expected results expressed in our forward-looking statements include, but are not limited to:

- our estimates regarding sufficiency of our cash resources, anticipated capital requirements, future revenue and our need for additional financing;
- the commencement of future clinical trials, if any, and the results and timing of those clinical trials;
- our ability to successfully commercialize CHEMOSAT, HEPZATO, and future products, if any, and to generate revenue and successfully
 obtain reimbursement for the products and/or the associated procedures;
- our sales, marketing and distribution capabilities and strategies, including those relating to commercialization and manufacturing of CHEMOSAT, HEPZATO, and future products, if any;
- the rate and degree of market acceptance and clinical utility of CHEMOSAT, HEPZATO, and future products, if any;
- developments relating to our competitors and our industry;
- the initiation and success of our research and development programs;
- submission and timing of applications for regulatory approval and approval thereof;
- our ability to successfully source components of CHEMOSAT, HEPZATO, and future products, if any, and enter into supplier contracts;
- our ability to source melphalan for use in HEPZATO;
- our ability to successfully manufacture CHEMOSAT and HEPZATO;
- our ability to successfully negotiate and enter into agreements with distribution, strategic and corporate partners;
- our estimates of potential market opportunities and our ability to successfully realize these opportunities; and
- other factors discussed under the headings "Business," "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our most recent Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q for the quarterly periods ended subsequent to our filing of such Annual Report on Form 10-K, as well as any amendments thereto reflected in subsequent filings with the SEC, which sections are incorporated by reference.

Forward-looking statements speak only as of the date the statements are made. Except as required under the federal securities laws and rules and regulations of the SEC, we undertake no obligation to update or revise forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information. We caution you not to unduly rely on the forward-looking statements when evaluating the information presented herein.

USE OF PROCEEDS

We are not selling any of the shares of Common Stock being offered by this prospectus and will receive no proceeds from the sale of the shares by the Selling Stockholders. All of the proceeds from the sale of Common Stock offered by this prospectus will go to the Selling Stockholders at the time they offer and sell such shares. The Selling Stockholders will pay any underwriting fees, discounts, selling commissions, stock transfer taxes and certain legal expenses incurred by such Selling Stockholders in disposing of their shares of Common Stock, and we will bear all other costs, fees and expenses incurred in effecting the registration of such shares covered by this prospectus and any applicable prospectus supplement, including, without limitation, all registration and filing fees, if applicable, and fees and expenses of our counsel and our independent registered public accountants.

SELLING STOCKHOLDERS

The Common Stock being offered by the Selling Stockholders are those previously issued or issuable to the Selling Stockholders upon the conversion of Series E Convertible Preferred Stock and Series E-1 Convertible Preferred Stock, and those issuable to the Selling Stockholders upon exercise of Warrants. We are registering the securities in order to permit the Selling Stockholders to offer the Registered Shares for resale from time to time.

The table below lists (a) the names of the Selling Stockholders whose shares are being offered by this prospectus, (b) information regarding the beneficial ownership of shares of Common Stock by each of the Selling Stockholders, including the number of shares of Common Stock beneficially owned by each Selling Stockholder based on its ownership of the shares of Series E Convertible Preferred Stock, Series E-1 Convertible Preferred Stock, Series E-1 Warrants and Series E-1 Warrants as of August 31, 2024, assuming the conversion of the shares of Series E Convertible Preferred Stock and Series E-1 Convertible Preferred Stock and the exercise of the Series E Warrants and Series E-1 Warrants held by the Selling Stockholders on that date, without regard to any limitations on exercises; and (c) the amount and (if one percent or more) the percentage of the class to be owned by such security holder after completion of the offering.

In accordance with the terms of a Registration Rights Agreement between the Company and the Selling Stockholders, this prospectus generally covers the resale of the sum of (i) the number of shares of Common Stock issued or issuable to the Selling Stockholders upon the conversion in full of the Series E Convertible Preferred Stock and Series E-1 Convertible Preferred Stock (subject to adjustment for reverse and forward stock splits, recapitalizations and similar transactions) and (ii) the maximum number of shares of Common Stock issuable upon exercise of the Warrants (subject to adjustment for reverse and forward stock splits, recapitalizations and similar transactions following the date of the Securities Purchase Agreements), determined as if the outstanding Warrants were exercised in full as of the trading day immediately preceding the date this Registration Statement was initially filed with the Commission, each as of the trading day immediately preceding the applicable date of determination and all subject to adjustment as provided in the registration right agreement, without regard to any limitations on the exercise of the Warrants. The fourth column assumes the sale of all of the shares offered by the Selling Stockholders pursuant to this prospectus.

Under the terms of the Warrants, a Selling Stockholder may not exercise the Warrants to the extent such exercise would cause such Selling Stockholder, together with its affiliates and attribution parties, to beneficially own a number of shares of Common Stock which would exceed 4.99% (or, upon written election by a Holder which is delivered to the Company prior to the issuance of any shares of Series E Convertible Preferred Stock and Series E-1 Convertible Preferred Stock to such Holder, 9.99%) of the Company's then outstanding Common Stock following such exercise, excluding for purposes of such determination shares of Common Stock issuable upon exercise of the warrants which have not been exercised. The number of shares in the second column does not reflect this limitation. Percentage ownership is based on 28,000,824 shares of Common Stock outstanding as of August 31, 2024.

The information in the following table has been provided to us by or on behalf of the Selling Stockholders and the Selling Stockholders may have sold, transferred or otherwise disposed of all or a portion of their securities after the date on which they provided us with information regarding their securities. Any changed or new information given to us by the Selling Stockholders, including regarding the identity of, and the shares held by, each Selling Stockholder, will be set forth in a prospectus supplement or amendments to the registration statement of which this prospectus is a part, if and when necessary. The Selling Stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

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Investor Name	Total Shares Beneficially Owned Prior to Offering(1)	Maximum Number of Shares to be Sold Pursuant to the Prospectus(2)	Number of Shares Beneficially Owned After Offering(3)	% of Class Beneficially Owned After Offering*
Rosalind Advisors ⁽⁴⁾	2,800,968	1,944,075	2,805,208	9.99%
Hudson Bay Master Fund Ltd. ⁽⁵⁾	106,866	106,866		*%
Empery Asset Master Ltd ⁽⁶⁾	48,433	29,125	19,308	*%
Empery Tax Efficient, LP ⁽⁷⁾	14,279	8,733	5,546	*%
Empery Tax Efficient III, LP ⁽⁸⁾	60,508	55,362	5,146	*%
Sabby Volatility Warrant Master Fund, Ltd. (9)	139,606	65,106	74,500	*%
Bigger Capital Fund, LP ⁽¹⁰⁾	411,295	77,702	333,593	1.2%
District 2 Capital Fund LP ⁽¹¹⁾	184,422	34,723	149,699	*%
Verition Multi-Strategy Master Fund Ltd ⁽¹²⁾	76,943	56,043	20,900	*0⁄0
Andrew William Dunn	34,362	17,362	17,000	*0⁄0
John Mozas	8,681	8,681	—	*0⁄0
Puritan Partners LLC ⁽¹³⁾	15,193	15,193	—	*0⁄0
Simon Pedder	13,632	8,032	5,600	*%
Leede Jones Gable Inc. ITF Renita Saran	24,502	1,087	23,415	*%
Leede Jones Gable Inc. ITF Carson Seabolt	198,241	4,341	193,900	*0⁄0
Leede Jones Gable Inc. ITF Scott Koyich	56,956	3,256	53,700	*0⁄0
Leede Jones Gable Inc. ITF Shane Meyers	110,741	4,341	106,400	*%
Leede Jones Gable Inc. ITF Chris Wardle	547,921	8,681	539,240	1.9%
Leede Jones Gable Inc. ITF Jason Grelowski	132,756	3,256	129,500	*0⁄0
Leede Jones Gable Inc. ITF Marianne Wardle	444,681	8,681	436,000	1.6%

Total:	6,252,870	2,762,657	5,467,610	
Group of 16 holders with aggregate holdings under 1% (16)	318,657	127,657	220,082	*0⁄
Warberg WF XII LP (15)	93,751	52,085	41,666	*%
Warberg WF XI LP ⁽¹⁵⁾	97,743	97,743	—	*%
Andreas Bigger Irrevocable Trust Agreement (10)	39,341	4,341	35,000	*%
Mathias Bigger—UTMA (10)	39,341	4,341	35,000	*%
AlphaNorth Partners Fund Inc. (14)	83,681	8,681	75,000	*%
Leede Jones Gable Inc. ITF Victoria Ross	99,114	3,907	95,207	*%
Leede Jones Gable Inc. ITF Kathryn Mortimer	50,256	3,256	47,000	*%

Percentage not listed if less than 1%.

- (1) Includes the Registered Shares.
- (2) Represents the maximum number of shares each Selling Stockholder may sell pursuant to this prospectus.
- (3) Assumes the sale of all the Registered Shares, and assuming no further acquisitions of shares of Common Stock by the Selling Stockholders.
 (4) Based partially on the Company's records and in part on information provided on a Statement of Schedule 13D/A filed with the Commission on May 17, 2024, by and on behalf of Rosalind Advisors, Inc., Investor Company ITF Rosalind Master Fund L.P., Rosalind Opportunities Fund I L.P., Steven Salamon and Dr. Gilad Aharon (collectively, "Rosalind"), Rosalind beneficially owns (as reflected under "Total Shares Beneficially Owned Prior to Offering" in the above table) an aggregate of 2,763,468 shares of Common Stock and 37,500 shares of Common Stock that may be acquired through the exercise of options that are exercisable as of, or will become exercisable within 60 days of August 31, 2024. In addition, Rosalind also holds 1,418,909 shares of Common Stock issuable upon conversion of 11,986 shares of Preferred Stock, 235,387 shares of Common Stock issuable upon conversion of 2,332,256 shares of Common Stock issuable upon the exercise of warrants. Rosalind's shares of Preferred Stock and additional shares of Common Stock that may be acquired through the exercise of options are subject to a 9.99% blocker and Rosalind's warrant to purchase shares of Common Stock are subject to a 4.99% blocker. The address for Rosalind Advisor's, Inc. is 15 Wellesley Street West, Suite 326 Toronto, Ontario M4Y 0GY.
- (5) Hudson Bay Capital Management LP, the investment manager of Hudson Bay Master Fund Ltd., has voting and investment power over these securities. Sander Gerber is the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management LP. Each of Hudson Bay Master Fund Ltd. and Sander Gerber disclaims beneficial ownership over these securities. The investor's address is 777 Third Avenue, 30th Floor, New York, NY 10017.
- (6) Empery Asset Management LP, the authorized agent of Empery Asset Master Ltd ("EAM"), has discretionary authority to vote and dispose of the shares held by EAM and may be deemed to be the beneficial owner of these shares. Martin Hoe and Ryan Lane, in their capacity as investment managers of Empery Asset Management LP, may also be deemed to have investment discretion and voting power over the shares held by EAM. EAM, Mr. Hoe and Mr. Lane each disclaim any beneficial ownership of these shares. The investor's address is c/o Empery Asset Management, LP, 1 Rockefeller Plaza, Suite 1205, New York, NY 10020.
- (7) Empery Asset Management LP, the authorized agent of Empery Tax Efficient, LP ("ETE"), has discretionary authority to vote and dispose of the shares held by ETE and may be deemed to be the beneficial owner of these shares. Martin Hoe and Ryan Lane, in their capacity as investment managers of Empery Asset Management LP, may also be deemed to have investment discretion and voting power over the shares held by ETE. ETE, Mr. Hoe and Mr. Lane each disclaim any beneficial ownership of these shares. The investor's address is c/o Empery Asset Management, LP, 1 Rockefeller Plaza, Suite 1205, New York, NY 10020.

- (8) Empery Asset Management LP, the authorized agent of Empery Tax Efficient III, LP ("ETE III"), has discretionary authority to vote and dispose of the shares held by ETE III and may be deemed to be the beneficial owner of these shares. Martin Hoe and Ryan Lane, in their capacity as investment managers of Empery Asset Management LP, may also be deemed to have investment discretion and voting power over the shares held by ETE III. ETE III, Mr. Hoe and Mr. Lane each disclaim any beneficial ownership of these shares. The investor's address is c/o Empery Asset Management, LP, 1 Rockefeller Plaza, Suite 1205, New York, NY 10020.
- (9) Sabby Management, LLC serves as the investment manager of Sabby Volatility Warrant Master Fund, Ltd. Hal Mintz is the manager of Sabby Management, LLC and has voting and investment control of the securities held by Sabby Volatility Warrant Master Fund, Ltd. Each of Sabby Management, LLC and Hal Mintz disclaims beneficial ownership over the securities beneficially owned by Sabby Volatility Warrant Master Fund, Ltd., except to the extent of their respective pecuniary interest therein. The address of Sabby Volatility Warrant Master Fund, Ltd. is c/o Sabby Mgt. LLC, 10 Mountainview Rd., Suite 205, Upper Saddle River, NJ 07458.
- (10) Michael Bigger has the power to vote or dispose of the shares owned by Bigger Capital Fund, LP, Matthias Bigger UTMA and the Andreas Bigger Irrevocable Trust Agreement. The investor's address is 11700 W Charleston Blvd 170-659, Las Vegas, NV 89135. Michael Bigger disclaims beneficial ownership over these securities.
- (11) Michael Bigger has the power to vote or dispose of the shares owned by District 2 Capital Fund LP. The investor's address is 14 Wall Street, 2nd Floor, Huntington, NY 11743. Michael Bigger disclaims beneficial ownership over these securities.
- (12) Nick Maounis has the power to vote or dispose of the shares owned by Verition Multi Strategy Master Fund Ltd. The investor's address is c/o Maples Corporate Services Ltd., Ugland House, P.O. Box 309, George Town, Grand Cayman, KY1-1104. Nick Maounis disclaims beneficial ownership over these securities.
- (13) Richard Smithline has the power to vote or dispose of the shares owned by Puritan Partners LLC. The investor's address is c/o Centrecourt Asset Management, 369 Lexington Avenue, 25th Floor, New York, New York 10017. Richard Smithline disclaims beneficial ownership over these securities.
- (14) Steve Palmer has the power to vote or dispose of the shares owned by National Bank Financial ITF AlphaNorth Partners Fund Inc. The investor's address is 130 King Street West, Suite 2210, Toronto, Ontario M5X 1E4. Steve Palmer disclaims beneficial ownership over these securities.
- (15) Daniel Warsh has the power to vote or dispose of the shares owned by Warberg WF XI LP and Warberg WF XII LP. The investor's address is 716 Oak Street, Winnetka, Illinois 60093.
- (16) Represents shares held by 16 selling stockholders not listed above who, as a group, own less than 1.0% of our outstanding Common Stock prior to this offering.

Relationship with Selling Stockholders

On April 8, 2020, we entered into a Board Appointment Agreement, dated as of April 8, 2020, with Rosalind, pursuant to which Steven Salamon and Gil Aharon, who are principals of Rosalind, were appointed as directors of the Company's Board.

Other than this relationship with Rosalind, none of the Selling Stockholders have had a material relationship with us or any of our predecessors or affiliates within the past three years, other than as a result of the ownership of our shares of Common Stock or other securities.

PLAN OF DISTRIBUTION

Each Selling Stockholder of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the principal trading market (any of the markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, The Nasdaq Capital Market, The Nasdaq Global Market, The Nasdaq Global Select Market, The New York Stock Exchange, OTCQB or OTCQX, or the "Pink Sheets" published by OTC Markets Group, Inc. or any successors to any of the foregoing) or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. The Company will not receive any of the proceeds from the sale by the Selling Stockholders of the shares offered by this prospectus. A Selling Stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 5110.

In connection with the sale of the shares offered by this prospectus, the Selling Stockholders may enter into hedging transactions with brokerdealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to brokerdealers that in turn may sell these securities. The Selling Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The Selling Stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each Selling Stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be freely resold by the Selling Stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect, under circumstances in which any legend borne by such securities relating to restrictions on transferability thereof, under the Securities Act or otherwise, is removed. The Registered Shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the securities for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the securities by the Selling Stockholders or any other person. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser of the securities at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

LEGAL MATTERS

McCarter & English LLP, Newark, New Jersey has passed upon the validity of the shares of Common Stock offered by this prospectus. Certain legal matters with respect to the shares of Common Stock offered by this prospectus will be passed upon by Cooley LLP, Boston, Massachusetts. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements as of December 31, 2023 and 2022 and for each of the two years in the period ended December 31, 2023 incorporated by reference in this prospectus have been so incorporated in reliance on the report of Marcum, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION; INCORPORATION BY REFERENCE

Available Information

We file reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is *www.sec.gov*. You may access these materials free of charge as soon as reasonably practicable after they are electronically filed with or furnished to the SEC.

Our website address is *http://www.delcath.com*. The information on our website, however, is not, and should not be deemed to be, a part of, or incorporated by reference in, this prospectus.

This prospectus and any prospectus supplement are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided above. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement through the SEC's website, as provided above.

Incorporation by Reference

The SEC allows us to incorporate by reference into this prospectus the information contained in other documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded, for purposes of this prospectus, to the extent that a statement contained in or omitted from this prospectus, or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus. We incorporate by reference the documents listed below which have been filed by us:

- our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on March 26, 2024, including those portions of the Form 10-K incorporated by reference from our <u>definitive proxy statement</u> filed with the SEC on April 12, 2024;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2024, filed with the SEC on <u>May 14, 2024</u> and June 30, 2024, filed with the SEC on <u>August 5, 2024</u>;
- our Current Reports on Form 8-K, filed with the SEC on January 31, 2024, February 14, 2024, March 19, 2024, April 26, 2024, May 29, 2024, July 19, 2024 and August 28, 2024; and

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the description of our Common Stock contained in our registration on Form 8-Al2B (File No. 001-16133) filed with the SEC on April 30, 2020, including any amendment or report filed for the purpose of updating such description.

All documents we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except as to any portion of any report or documents that is not deemed filed under such provisions, (1) on or after the date of filing of the registration statement containing this prospectus and prior to the effectiveness of the registration statement and (2) on or after the date of this prospectus until the earlier of the date on which all of the securities registered hereunder have been sold or the registration statement of which this prospectus is a part has been withdrawn, shall be deemed incorporated by reference in this prospectus and to be a part of this prospectus from the date of filing of those documents and will be automatically updated and, to the extent described above, supersede information contained or incorporated by reference in this prospectus and previously filed documents that are incorporated by reference in this prospectus.

Nothing in this prospectus shall be deemed to incorporate information furnished but not filed with the SEC pursuant to Item 2.02, 7.01 or 9.01 of Form 8-K. Upon written or oral request, we will provide without charge to each person, including any beneficial owner, to whom a copy of the prospectus is delivered a copy of any or all of the reports or documents incorporated by reference herein (other than exhibits to such documents, unless such exhibits are specifically incorporated by reference herein). You may request a copy of these filings, at no cost, by writing or telephoning us at the following address: Delcath Systems, Inc., 566 Queensbury Avenue, Queensbury, NY 12804.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the estimated expenses to be borne by the registrant in connection with the issuance and distribution of the shares of common stock being registered hereby. The SEC registration fee was previously paid in connection with the filing of each of the Registration Statements.

SEC registration fee	\$ 21,346.56
Accounting fees and expenses*	\$ 15,000
Legal fees and expenses*	\$ 75,000
Financial printing and miscellaneous expenses*	\$ 5,000
Total	\$116,346.56

* Estimated solely for the purposes of this Item 14. Actual expenses may vary.

Item 15. Indemnification of Directors and Officers

The Company is incorporated under the laws of the State of Delaware. Section 102(b)(7) of Delaware's General Corporation Law (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 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 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

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.

Article SEVENTH of the Company's amended and restated certificate of incorporation provides that no person serving as a director of the Company shall be personally liable to the Company or its stockholders for breach of his or her fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or a knowing violation of law, authorized the payment of a dividend or approved a stock repurchase in violation of the DGCL or obtained an improper personal benefit.

Article EIGHTH of the Company's amended and restated certificate of incorporation requires the Company to indemnify any person who may be indemnified by a Delaware corporation pursuant to Section 145 of the DGCL in each situation where the Company is permitted to indemnify such persons.

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.

In addition, 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.

Item 16. Exhibits

Exhibit <u>Number</u>	Exhibit Description	Schedule / Form	File Number	Exhibit	File Date
3.1	Restated Certificate of Incorporation of the Registrant	Form S-1/A	333-233396	3.1	September 25, 2019
3.2	Amendment to the Amended and Restated Certificate of Incorporation of the Registrant dated October 17, 2019	Form 8-K	001-16133	3.1	October 23, 2019
3.3	Certificate of Correction to Amendment to the Amended and Restated Certificate of Incorporation of the Registrant dated October 22, 2019	Form 8-K	001-16133	3.2	October 23, 2019
3.4	Amendment to the Amended and Restated Certificate of Incorporation of the Registrant, effective December 24, 2019	Form 8-K	001-16133	3.1	December 30, 2019
3.5	<u>Certificate of Amendment to the Amended and Restated Certificate of</u> <u>Incorporation of the Registrant, dated November 23, 2020</u>	Form 8-K	001-16133	3.1	November 24, 2020
3.6	<u>Certificate of Amendment to the Amended and Restated Certificate of</u> <u>Incorporation of the Registrant, dated June 12, 2023.</u>	Form 8-K	001-16133	3.1	June 13, 2023
3.7	Amended and Restated Bylaws of the Registrant	Form 10-Q	001-16133	3.8	November 13, 2023
4.1	Form of Common Stock Purchase Warrant	Form 8-K	001-16133	4.1	July 11, 2019
4.2	Form of Common Stock Purchase Warrant	Form 8-K	001-16133	4.1	August 16, 2019
5.1	Opinion of McCarter & English LLP.	Form S-1/A	333-236100	5.1	May 1, 2020
5.2	Opinion of McCarter & English LLP.	Form S-1/A	333-235751	5.1	January 6, 2020
5.3	Opinion of McCarter & English LLP.	Form S-1/A	333-233396	5.1	November 1, 2019

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10.1	Form of Securities Purchase Agreement, dated March 14, 2024, by and among Delcath Systems, Inc. and the persons party thereto	Form 8-K	001-16133	10.1	March 19, 2024
10.2	Form of Registration Rights Agreement between the Company and each other party a signatory thereto	Form 8-K	001-16133	4.2	July 11, 2019
10.3	Form of Registration Rights Agreement between the Company and each other party a signatory thereto	Form 8-K	001-16133	4.2	August 16, 2019
10.4	Securities Purchase Agreement dated as of July 11, 2019 between the Company and each purchaser a signatory thereto	Form 8-K	001-16133	10.1	July 11, 2019
10.5	Securities Purchase Agreement dated as of August 15, 2019 between the Company and each purchaser a signatory thereto	Form 8-K	001-16133	10.1	August 16, 2019
10.6	Amendment dated as of August <u>15</u> , 2019 between the Company and each purchaser a signatory thereto to Securities Purchase Agreement dated as of July <u>11</u> , 2019 between the Company and the purchasers signatories thereto	Form 8-K	001-16133	10.3	August 16, 2019
23.1	Consent of Marcum LLP, independent registered public accounting firm				Filed Herewith
23.2	Consent of McCarter & English LLP (included in Exhibit 5.1)	Form S-1/A	333-236100	5.1	May 1, 2020
23.3	Consent of McCarter & English LLP (included in Exhibit 5.1)	Form S-1/A	333-235751	5.1	January 6, 2020
23.4	Consent of McCarter & English LLP (included in Exhibit 5.1)	Form S-1/A	333-233396	5.1	November 1, 2019
24.1	Power of Attorney (see signature page to the Registration Statement)				Filed Herewith

Item 17. Undertakings

(a) 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;

(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 SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% 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 (a)(1)(i), (a)(1)(ii), and (a)(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 SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act 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 a part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, 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.

(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 to any purchaser:

(A) 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

(B) 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 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 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 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.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act 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.

(c) 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 Securities 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 Securities Act and will be governed by the final adjudication of such issue.

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 Post-Effective Amendment to be signed on its behalf by the undersigned, thereunto duly authorized, in New York, New York, on September 18, 2024.

DELCATH SYSTEMS, INC.

By: /s/ Gerard Michel

Gerard Michel Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned officers and directors of Delcath Systems, Inc. hereby severally constitute and appoint Gerard Michel our true and lawful attorney with full power to sign for us and in our names in the capacities indicated below the Registration Statement on Form S-3 filed herewith and any and all amendments (including post-effective amendments) to said Registration Statement, and any registration statement filed pursuant to Rule 462 under the Securities Act of 1933, as amended, in connection with said Registration Statement, and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, and generally to do all such things in our name and on our behalf in our capacities as officers and directors to enable Delcath Systems, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney, or his substitute or substitutes, shall do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment has been signed by the following persons in the capacities and on the dates indicated.

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<u>Signature</u>	Title	Date
<u>/s/ Gerard Michel</u> Gerard Michel	Chief Executive Officer and Director (Principal Executive Officer)	September 18, 2024
<u>/s/ Sandra Pennell</u> Sandra Pennell	Principal Financial and Accounting Officer	September 18, 2024
<u>/s/ John R. Sylvester</u> John R. Sylvester	Chairman of the Board	September 18, 2024
<u>/s/ Elizabeth Czerepak</u> Elizabeth Czerepak	Director	September 18, 2024
<u>/s/ Steven Salamon</u> Steven Salamon	Director	September 18, 2024
<u>/s/ Gil Aharon</u> Gil Aharon	Director	September 18, 2024
<u>/s/ Bridget Martell, MA, MD</u> Bridget Martell, MA MD	Director	September 18, 2024

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Post-Effective Amendment No. 1 to Form S-1 on Form S-3 to the Registration Statement of Delcath Systems, Inc. (File No. 333-236100) of our report dated March 26, 2024, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, with respect to our audits of the consolidated financial statements of Delcath Systems, Inc. and Subsidiaries as of December 31, 2023 and 2022, and for the years ended December 31, 2023 and 2022 appearing in the Annual Report on Form 10-K of Delcath Systems, Inc. for the year ended December 31, 2023. We also consent to the reference to our firm under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Marcum LLP Marcum LLP New York, NY September 18, 2024