DELCATH SYSTEMS, INC. Form S-1/A
September 18, 2018
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As filed with the Securities and Exchange Commission on September 18, 2018

No. 333-226852

#### **UNITED STATES**

#### SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

**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

3841 (Primary Standard Industrial 06-1245881 (I.R.S. Employer

 $incorporation\ or\ organization)$ 

Classification Code Number) 1633 Broadway **Identification No.)** 

Suite 22C

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.

1633 Broadway

Suite 22C

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:

Jolie Kahn, Esq.

Wexler, Burkhart, Hirschberg & Unger

377 Oak Street

Garden City, NY 11530

(516) 222-2230

Approximate date of commencement of proposed sale to the public:

As soon as practicable 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 of 1933, 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, 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. (Check One):

Large accelerated filer Accelerated filer

Non-accelerated filer 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 the Securities Act.

#### CALCULATION OF REGISTRATION FEE

Title of each class of Proposed Amount of maximum securities to be registered aggregate registration fee

offering	

Common stock, \$.01 par value(2) \$6,000,000 \$747.00 Total \$6,000,000 \$747.00

- (1) Estimated solely for the purpose of calculating the registration fee under Rule 457(o) of the Securities Act.
- (2) The Company is registering 3,298,516 shares (based upon a closing price of \$1.819 per share on August 10, 2018).

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.

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.

Subject to Completion, Dated September 18, 2018

3,298,516 Shares of Common Stock

This prospectus relates to the offer and sale of up to 3,298,516 (based upon a closing price of \$1.819 per share on August 10, 2018) shares of common stock of Delcath Systems, Inc., a Delaware corporation, issuable to a certain selling stockholder, upon exercise of certain warrants issued to it at an exercise price of \$0.01 per share which warrants were issued and exercise price prepaid pursuant to a Securities Purchase Agreement between the Company (as defined below) and this selling stockholder, dated June 4, 2018.

This prospectus covers any additional shares of common stock that may become issuable by reason of stock splits, stock dividends, and other events described therein.

Unless otherwise noted, the terms the Company, our Company, Delcath, we, us and our refer to Delcath Syst and its subsidiaries.

The selling stockholder may offer its shares from time to time directly or through one or more underwriters, broker-dealers or agents, in the over-the-counter market at market prices prevailing at the time of sale, in one or more privately negotiated transactions at prices acceptable to the selling stockholder, or otherwise, so long as our common stock is trading on the Nasdaq Capital Market or the OTCQB, and if it is not trading on the OTCQB, OTCQX or a listed exchange, sales may only take place at fixed prices.

We are registering these shares of our common stock for resale by the selling stockholder named in this prospectus, or its transferees, pledgees, donees or assigns or other successors-in-interest that receive any of the shares as a gift, distribution, or other non-sale related transfer. We will not receive any proceeds from the sale of shares by the selling stockholder. These shares are being registered to permit the selling stockholder to sell shares from time to time, in amounts, at prices and on terms determined at the time of offering. The selling stockholder may sell this common stock through ordinary brokerage transactions, directly to market makers of our shares or through any other means described in the section entitled PLAN OF DISTRIBUTION beginning of page 87. In connection with any sales of the common stock offered hereunder, the selling stockholder, any underwriters, agents, brokers or dealers participating in such sales may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended (the Securities Act ).

We will pay the expenses related to the registration of the shares covered by this prospectus. The selling stockholder will pay any commissions and selling expenses they may incur.

Our common stock trades on the OTCQB under the symbol  $\,$  DCTH  $\,$  . The closing sale price on the OTCQB on September 14, 2018, was \$3.20 per share.

Our principal executive offices are located at 1633 Broadway, Suite 22C, New York, NY 10019. Our telephone number at that address is (212) 489-2100.

Investing in the common stock offered by this prospectus is speculative and involves a high degree of risk. See <u>Risk Factors</u> beginning on page 5.

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

The date of this prospectus is , 2018

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## **ABOUT THIS PROSPECTUS**

You should rely only on the information contained in this prospectus. We have not authorized any person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus is accurate only as of the date of this document, regardless of the time of delivery of this prospectus or the time of issuance or sale of any securities. Our business, financial condition, results of operations and prospects may have changed since that date. You should read this prospectus in its entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the section of this prospectus entitled. Where You Can Find More Information.

For investors outside of the United States, neither we nor the placement agent have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus outside of the United States.

## **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.

#### 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. 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.

Delcath Systems, Inc. is an interventional oncology company focused on the treatment of primary and metastatic liver cancers. Our investigational product Melphalan Hydrochloride for Injection for use with the Delcath Hepatic Delivery System (Melphalan/HDS) is designed to administer high-dose chemotherapy to the liver while controlling systemic exposure and associated side effects. In Europe, our system is in commercial development under the trade name Delcath Hepatic CHEMOSAT® Delivery System for Melphalan (CHEMOSAT®), where it has been used at major medical centers to treat a wide range of cancers of the liver.

Our primary research focus is on ocular melanoma liver metastases (mOM) and intrahepatic cholangiocarcinoma (ICC), a type of primary liver cancer, and certain other cancers that are metastatic to the liver. We believe the disease states we are investigating represent a multi-billion dollar global market opportunity and a clear unmet medical need.

In the United States, Melphalan/HDS is considered a combination drug and device product, and is regulated as a drug by the FDA. Although the Melphalan/HDS Kit has not been approved in the U.S., FDA has granted us six orphan drug designations, which apply to the orphan indication for the drug component even though approved as a drug/device, including three orphan designations for the use of the drug melphalan for the treatment of patients with mOM, hepatocellular carcinoma (HCC) and ICC. Melphalan/HDS has not been approved for sale in the United States. There are also orphan drug designations for melphalan for neurodendocrine tumors, cutaneous melanoma, and ocular tumors, as well as for the use of doxorubicin for HCC.

In Europe, the current version of our CHEMOSAT product is regulated as a Class IIb medical device and received its CE Mark in 2012. We are in an early phase of commercializing the CHEMOSAT system in select markets in the European Union (EU) where the prospect of securing adequate reimbursement for the procedure is strongest. In 2015 national reimbursement coverage for CHEMOSAT procedures was awarded in Germany. In 2016, coverage levels were negotiated between hospitals in Germany and regional sickness funds. Coverage levels determined via this process are expected to be renegotiated annually.

Our clinical development program for CHEMOSAT and Melphalan/HDS is comprised, in part, of The FOCUS Clinical Trial for Patients with Hepatic Dominant Ocular Melanoma (The FOCUS Trial), a Global Phase 3 clinical trial that is investigating overall survival in mOM. We have also initiated a separate clinical trial that also uses Melphalan/HDS Kit for intrahepatic cholangiocarcinoma (ICC). Our clinical development plan (CDP) also includes a commercial registry for CHEMOSAT non-clinical commercial cases performed in Europe and sponsorship of select investigator initiated trials (IITs) in colorectal cancer metastatic to the liver (mCRC) and pancreatic cancer metastatic to the liver.

The direction and focus of our CDP for CHEMOSAT and Melphalan/HDS is informed by prior clinical development conducted between 2004 and 2010, non-clinical, commercial CHEMOSAT cases performed on patients in Europe, and prior regulatory experience with the FDA. Experience gained from this research, development, early European commercial and United States regulatory activity has led to the implementation of several safety improvements to our product and the associated medical procedure.

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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 and 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 and Melphalan/HDS is uniquely positioned to treat the entire liver either as a standalone therapy or as a complement to other therapies.

## Cancers in the Liver A Significant Unmet Need

Cancer of the liver remain a major unmet medical need globally. According to the American Cancer Society s (ACS) *Cancer Facts & Figures 2017* report, cancer is the second leading cause of death in the United States, with an estimated 600,920 deaths and 1,688,780 new cases expected to be diagnosed in 2017. Cancer is one of the leading causes of death worldwide, accounting for approximately 8.2 million deaths and 14.1 million new cases in 2012 according to GLOBOCAN. The financial burden of cancer is enormous for patients, their families and society. The Agency for Healthcare Quality and Research estimates that the direct medical costs (total of all healthcare expenditures) for cancer in the U.S. in 2014 was \$87.8 billion. The liver is often the life-limiting organ for cancer patients and one of the leading causes of cancer death. Patient prognosis is generally poor once cancer has spread to the liver.

#### **Liver Cancers Incidence and Mortality**

There are two types of liver cancers: primary liver cancer and metastatic liver disease. Primary liver cancer (hepatocellular carcinoma or HCC, including intrahepatic bile duct cancers or ICC) originates in the liver or biliary tissue and is particularly prevalent in populations where the primary risk factors for the disease, suchas hepatitis-B, hepatitis-C, high levels of alcohol consumption, aflatoxin, cigarette smoking and exposure to industrial pollutants, are present. Metastatic liver disease, also called liver metastasis, or secondary liver cancer, is characterized by microscopic cancer cell clusters that detach from the primary site of disease and travel via the blood stream and lymphatic system into the liver, where they grow into new tumors. These metastases often continue to grow even after the primary cancer in another part of the body has been removed. Given the vital biological functions of the liver, including processing nutrients from food and filtering toxins from the blood, it is not uncommon for metastases to settle in the liver. In many cases patients die not as a result of their primary cancer, but from the tumors that metastasize to their liver. In the United States, metastatic liver disease is more prevalent than primary liver cancer.

#### Ocular Melanoma

Ocular melanoma is one of the cancer histologies with a high likelihood of metastasizing to the liver. Based on third party research conducted in 2016, we estimate that up to 4,700 cases of ocular melanoma are diagnosed in the United States and Europe annually, and that approximately 55% of these patients will develop metastatic disease. Of metastatic cases of ocular melanoma, we estimate that approximately 90% of patients will develop liver involvement. Once ocular melanoma has spread to the liver, current evidence suggests median overall survival for these patients is generally six to eight months. Currently there is no standard of care (SOC) for patients with ocular melanoma liver metastases. According to our 2016 research, we estimate that approximately 2,000 patients with ocular melanoma liver metastases in the United States and Europe may be eligible for treatment with the Melphalan/HDS.

#### Intrahepatic Cholangiocarcinoma

Hepatobiliary cancers include hepatocellular carcinoma (HCC) and intrahepatic cholangiocarcinoma (ICC), and are among the most prevalent and lethal forms of cancer. According to GLOBOCAN, an estimated 78,500 new cases of

hepatobiliary cancers are diagnosed in the United States and Europe annually. According to the ACS, approximately 40,710 new cases of these cancers were expected to be diagnosed in the United States in 2017.

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ICC is the second most common primary liver tumor and accounts for 3% of all gastrointestinal cancers and 15% of hepatobiliary cases diagnosed in the United States and Europe annually. We believe that 90% of ICC patients are not candidates for surgical resection, and that approximately 20-30% of these may be candidates for certain focal interventions. We estimate that approximately 9,300 ICC patients in the United States and Europe annually could be candidates for treatment with Melphalan/HDS, which we believe represents a significant market opportunity.

According to the ACS, the overall five-year survival rate for hepatobiliary cancers in the United States is approximately 18%. For patient diagnosed with a localized stage of disease, the ACS estimates 5-year survival at 31%. The ACS estimates that 5-year survival for all cancers is 68%.

# About CHEMOSAT and Melphalan/HDS Kit

CHEMOSAT and 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® therapy), 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.

PHP therapy 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 and Melphalan/HDS is repeatable, and a new disposable CHEMOSAT and Melphalan/HDS is used for each treatment. Patients treated in clinical trial settings are permitted up to six treatments. In non-clinical commercial settings patients have received up to eight treatments. In the United States, if we receive FDA approval, melphalan hydrochloride for injection will be included with the system and marketed as the drug/device melphalan/HDS Kit. 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 United States clinical trial sites.

#### **Risks of Investing**

Investing in our securities involves substantial 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 in this prospectus.

#### **Corporate Information**

We were incorporated in the State of Delaware in August 1988. Our principal executive offices are located at 1633 Broadway, Suite 22C, 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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#### **SUMMARY OF THE OFFERING**

Common stock

offered by the

Up to 3,298,516 shares of our common stock, par value \$0.01 per share, are being offered by the

selling stockholder.

selling

stockholder:

Offering prices: The shares offered by this prospectus may be offered and sold at prevailing market prices or such

other prices as the selling stockholder may determine.

Common stock

outstanding:

932,159 shares as of August 10, 2018(\*).

OTCQB: DCTH for common stock.

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 stockholder. All of the proceeds from the sale of common stock offered by this prospectus will go to the selling stockholder at the

time it sells its shares.

(\*) The total number of shares of our common stock outstanding after this offering is based on 932,158 shares outstanding as of August 10, 2018. Excludes as of that date, the following:

25.2 million shares issuable upon the exercise of outstanding warrants at a weighted average exercise price of \$7.76 per share.

Reverse Stock Split On May 2, 2018, we effected a 1-for-500 reverse stock split of our

outstanding shares of common stock.

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.

OTCQB symbol for common stock DCTH

Risk factors See Risk Factors and other information included 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

The number of shares of our common stock outstanding prior to and immediately after this offering, as set forth

above, excludes the following potentially dilutive securities as of August 10, 2018:

25.2 million shares issuable upon the exercise of outstanding warrants at a weighted average exercise price of \$7.76 per share

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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 contained in this prospectus, before you decide to purchase our securities. If any of the following risks actually occurs, our business, financial condition, results of operations, cash flows and prospects could be materially and adversely affected. If any of these risks actually occur, our business, financial condition and results of operations would suffer. 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 Our Business and Financial Condition

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 contained in this annual report, before you decide to purchase our securities. If any of the following risks actually occurs, our business, financial condition, results of operations, cash flows and prospects could be materially and adversely affected. If any of these risks actually occur, our business, financial condition and results of operations would suffer. 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.

Drug development is an inherently uncertain process with a high risk of failure at every stage of development. Delcath received a complete response letter from the FDA regarding our Melphalan/HDS Kit system, declining to approve our existing New Drug Application, or NDA, in its current form.

Preclinical testing and clinical trials are long, expensive and highly uncertain processes and failure can unexpectedly occur at any stage of clinical development. Drug development is very risky, and it takes several years to complete clinical trials. The start or end of a clinical trial is often delayed or halted due to changing regulatory requirements, manufacturing challenges, required clinical trial administrative actions, slower than anticipated patient enrollment, changing standards of care, availability or prevalence of use of a comparator treatment or required prior therapy, clinical outcomes including insufficient efficacy, safety concerns, or our own financial constraints.

In response to our New Drug Application (NDA), which the Company submitted to FDA in August 2012 seeking approval for use of our Melphalan/HDS Kit for the treatment of patients with ocular melanoma of the liver, in September 2013, the FDA denied approval of the NDA in its current form and issued a complete response letter (CRL). A CRL is issued by the FDA when the review of a file is completed, and questions remain that preclude approval of the NDA in its current form. The FDA comments in the CRL included, but were not limited to, a statement that Delcath must perform additional well-controlled randomized trial(s) to establish the safety and efficacy of Melphalan/HDS Kit using overall survival as the primary efficacy outcome measure and which demonstrates that the clinical benefits of Melphalan/HDS Kit outweigh its risks. The FDA also required that the additional clinical trial(s) be conducted using the product the company intends to market. Prior to conducting additional clinical trials, Delcath must satisfy certain other requirements of the CRL, including, but not limited to, product quality testing and human factors. Further, in January 2016 Delcath received agreement on a Special Protocol Assessment (SPA) from the FDA and has initiated a pivotal Phase 3 overall survival clinical trial in ocular melanoma liver metastases.

A SPA is a process whereby a sponsor and FDA reach agreement on clinical trials and protocol elements, as well as planned analyses. While a SPA agreement is not a guarantee that FDA will accept a NDA for filing or that the clinical trial design and results will be adequate to support approval it is hoped that clinical trial quality will be improved.

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In addition, Delcath conducts and participates in numerous clinical trials with a variety of study designs, patient populations and trial endpoints to support additional indications for Melphalan/HDS Kit and HDS with other drug therapies. In 2014, Delcath initiated a Phase 2 clinical trial with Melphalan/HDS Kit for HCC in both the United States and Europe. In 2015, the Phase 2 clinical trial for HCC was expanded to include a cohort of patients with ICC. The trial for this cohort will be conducted at the same centers participating in the Phase 2 HCC trial. Unfavorable or inconsistent clinical data from clinical trials, including the Phase 2 clinical trial for HCC, the market s perception of this clinical data or FDA s perception of this clinical data, may adversely impact our ability to obtain approval, and the financial condition. Additionally, even if the results of our Phase 2 clinical trial for HCC and ICC are positive, there is a substantial risk that it will fail to have positive results in Phase 3 clinical trials with regard to efficacy, safety or other clinical outcomes and may never obtain regulatory approval.

# Our former independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern.

Our former independent registered public accounting firm issued a report dated March 16, 2018 in connection with the audit of our financial statements as of December 31, 2017, which included an explanatory paragraph describing the existence of conditions that raise substantial doubt about our ability to continue as a going concern. In addition, our notes to our financial statements for the year ended December 31, 2017 included a disclosure describing the existence of conditions that raise substantial doubt about our ability to continue as a going concern. Our ability to continue as a going concern is dependent upon our ability to obtain substantial additional funding in connection with our continuing operations. Adequate additional financing may not be available to us on acceptable terms, or at all. If the Company is unable to raise additional capital and/or enter into strategic alliances when needed or on attractive terms, Delcath would be forced to delay, reduce or eliminate its research and development programs or any commercialization efforts. The Company s consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. If the Company is not able to continue as a going concern, it is likely that holders of its common stock will lose all of their investment.

#### The Company does not expect to generate significant revenue for the foreseeable future.

Delcath s entire focus has been on developing, commercializing, and obtaining regulatory authorizations and approvals of CHEMOSAT/Melphalan/HDS and currently has only developed this system for the treatment of cancers in the liver. If CHEMOSAT/Melphalan/HDS for the treatment of cancers in the liver fails as a commercial product, the Company has no other products to sell. In addition, since CHEMOSAT is currently only authorized for marketing in the EEA and limited other jurisdictions, if Delcath is unsuccessful in commercializing the product in the EEA and if Melphalan/HDS is not approved in the United States and elsewhere, there will be no means of generating revenue. In September 2013, the FDA issued a CRL with respect to the Company s NDA for Melphalan/HDS. A CRL is issued by the FDA when the review of a file is completed and questions remain that preclude approval of the NDA in its then current form. Accordingly, Delcath does not expect to realize any revenues from product sales in the United States in the next several years, if at all. As a result, our revenue sources are, and will remain, extremely limited until the Company s product candidates are approved by the FDA or other additional foreign regulatory agencies and successfully marketed. CHEMOSAT/Melphalan/HDS may not be successful in clinical trials, approved by the FDA or other additional foreign regulatory agency or marketed at any time in the foreseeable future or at all.

#### Continuing losses may exhaust our capital resources.

As of June 30, 2018, the Company had \$1.3 million in cash and cash equivalents. Delcath has had minimal revenue to date, and has a substantial accumulated deficit, recurring operating losses and negative cash flow. For the years ended December 31, 2017, 2016 and 2015, the Company incurred net losses of approximately \$45.1 million, \$18.0 million

and \$14.7 million, respectively and expects to continue to incur losses in 2018. Management believes its capital resources are adequate to fund operations through July 2018, without giving effect to the offering contemplated hereby. To date, the Company has funded operations through a combination of private placements and public offerings of its securities, including convertible notes. If Delcath continues to

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incur losses, the Company may exhaust its capital resources, and as a result may be unable to complete its clinical trials, product development, regulatory approval process and commercialization of CHEMOSAT/Melphalan/HDS or any other versions of the system. If Delcath is unable to raise capital or generate sufficient revenue, it may not be able to pay its debts when they become due and may have to seek protection from the bankruptcy courts or enter into a receivership.

If the Company cannot raise additional capital, its potential to generate future revenues will be significantly limited since it may not be able to further commercialize CHEMOSAT and Melphalan/HDS, complete its clinical trials or conduct future development and clinical trials.

The Company will require additional financing to complete its clinical trial program or seek other approvals, to conduct future development and clinical trials and to further commercialize its product in the EEA and any other markets where the Company may receive approval for its system. In addition, Delcath is obligated to make payments under long-term research and development obligations and lease agreements. If financing is unavailable to make the required payments under these agreements, the Company could be subject to legal liability and its ability to complete development projects or clinical trials could be impaired. The Company does not know if additional financing will be available when needed at all or on acceptable terms. If unable to obtain additional financing as needed, the Company may not be able to commercialize CHEMOSAT and Melphalan/HDS, obtain regulatory approvals or complete its development projects or clinical trials, which would result in a complete loss of your investment.

Our liquidity and capital requirements will depend on numerous factors, including:

clinical studies, including a Phase 3 clinical trial to investigate overall survival in ocular melanoma liver metastases and a registration trial in ICC;

the timing and costs of our various United States and foreign regulatory filings, obtaining approvals and complying with regulations;

the timing and costs associated with developing our manufacturing operations;

the timing of product commercialization activities, including marketing and distribution arrangements overseas;

the timing and costs involved in preparing, filing, prosecuting, defending and enforcing intellectual property rights; and

the impact of competing technological and market developments.

Insufficient funds may require us to curtail or stop our commercialization activities, regulatory submissions or ongoing activities for regulatory approval, research and development and clinical trials, which will significantly limit our potential to generate future revenues.

## Risks Related to FDA and Foreign Regulatory Approval

Our failure to obtain, or delays in obtaining, regulatory approvals may have a material adverse effect on our business, financial condition and results of operations.

CHEMOSAT and Melphalan/HDS is subject to extensive and rigorous government regulation by the FDA and other foreign regulatory agencies. The FDA regulates the research, development, pre-clinical and clinical testing, manufacture, safety, effectiveness, record keeping, reporting, labeling, storage, approval, advertising, promotion, sale, distribution, import and export of pharmaceutical and medical device products. Failure to comply with FDA and other applicable regulatory requirements may, either before or after product approval, subject us to either civil or criminal administrative or judicially-imposed sanctions and/or other penalties.

In the United States, the FDA regulates drug and device products under the Federal Food, Drug, and Cosmetic Act and its implementing regulations. Melphalan/HDS is subject to regulation by the FDA as a combination product, which means it is composed of both a drug product and device product. If marketed individually, each component would therefore be subject to different regulatory pathways and reviewed by different centers within the FDA. A combination product, however, is assigned to a center that will have primary jurisdiction over its pre-market review and regulation based on a determination of the product s primary mode of action, which is the single mode of action that provides the most important therapeutic action. In the case of Melphalan/HDS, the primary mode of action is attributable to the drug component of the product, which means that the Center for Drug Evaluation and Research has primary jurisdiction over its pre-market development and review.

The Company is not permitted to market Melphalan/HDS in the United States unless and until it obtains regulatory approval from the FDA. To market the product in the United States, Delcath must submit to the FDA and obtain FDA approval of an NDA. An NDA must be supported by extensive clinical and preclinical data, as well as extensive information regarding chemistry, manufacturing and controls, or CMC, to demonstrate the safety and effectiveness of the applicable product candidate. The number and types of preclinical studies and clinical trials that will be required varies depending on the product candidate, the disease or condition that the product candidate is designed to target and the regulations applicable to any particular product candidate. Despite the time and expense associated with preclinical and clinical studies, failure can occur at any stage, and the Company could encounter problems that cause it to repeat or perform additional preclinical studies, CMC studies or clinical trials. The FDA and similar foreign authorities could delay, limit or deny approval of a product candidate for many reasons, including because they:

may not deem a product candidate to be adequately safe and effective;

may not find the data from preclinical studies, CMC studies and clinical trials to be sufficient to support a claim of safety and efficacy;

may interpret data from preclinical studies, CMC studies and clinical trials significantly differently than the Company;

may not approve the manufacturing processes or facilities associated with our product candidates;

may change approval policies (including with respect to our product candidates class of drugs) or adopt new regulations; or

may not accept a submission due to, among other reasons, the content or formatting of the submission. Undesirable side effects caused by any product candidate that Delcath develops could result in the denial of regulatory approval by the FDA or other regulatory authorities for any or all targeted indications or cause us to evaluate the future of our development programs. The regulatory review and approval process is lengthy, expensive and inherently uncertain. As part of the U.S. Prescription Drug User Fee Act, the FDA has a goal to review and act on a percentage of all submissions in a given time frame. In August 2012, the Company submitted the Melphalan/HDS NDA seeking an indication for ocular melanoma liver metastases. In September 2013, the FDA declined to approve the NDA and

issued a CRL. The FDA comments in the CRL included, but were not limited to, a statement that the Company must perform additional well-controlled randomized trial(s) to establish the safety and efficacy of Melphalan/HDS using overall survival as the primary efficacy outcome measure and which demonstrates that the clinical benefits of Melphalan/HDS outweigh its risks. The FDA also requires that the additional clinical trial(s) be conducted using the product the Company intends to market. Prior to conducting additional clinical trials, Delcath must satisfy certain other requirements of the CRL, including, but not limited to, product quality testing and human factors. However, even if the Company completes its clinical trials and satisfies all the requirements of the CRL, it may not obtain regulatory approval from the FDA. Continued failure to obtain, or additional delays in obtaining, regulatory approvals may:

adversely affect the commercialization of the current version of CHEMOSAT and Melphalan/HDS or any products that the Company develops in the future;

impose additional costs on Delcath;

diminish any competitive advantages that may be attained; and

adversely affect the Company s ability to generate revenues.

Delcath has obtained the right to affix the CE Mark for the Delcath Hepatic CHEMOSAT Delivery System as a medical device for the delivery of melphalan. Since the Company may only promote the device within this specific indication, if physicians are unwilling to obtain melphalan separately for use with CHEMOSAT, Delcath s ability to commercialize CHEMOSAT in the EEA will be significantly limited.

In the EEA, CHEMOSAT is regulated as a Class IIb medical device indicated for the intra-arterial administration of a chemotherapeutic agent, melphalan hydrochloride, to the liver with additional extracorporeal filtration of the venous blood return. Delcath s ability to market and promote CHEMOSAT is limited to this approved indication. To the extent that the Company s promotion of CHEMOSAT is found to be outside the scope of its approved indication, Delcath may be subject to fines or other regulatory action, limiting its ability to commercialize CHEMOSAT in the EEA.

The Company is limited to marketing CHEMOSAT in the EEA as a medical device for the delivery of melphalan. If physicians are unwilling to obtain melphalan separately for use with CHEMOSAT, Delcath s ability to commercialize CHEMOSAT in the EEA will be significantly limited. Delcath s product instructions and indication reference the chemotherapeutic agent melphalan. However, no melphalan labels in the EEA reference Delcath s product, and the labels vary from country to country with respect to the approved indication of the drug and its mode of administration. As a result, the delivery of melphalan with Delcath s device may not be within the applicable label with respect to some indications in some Member States of the EEA where the drugs are authorized for marketing. Physicians intending to use CHEMOSAT must obtain melphalan separately for use with CHEMOSAT and must use melphalan independently at their discretion. If physicians are unwilling to obtain melphalan separately from CHEMOSAT and/or to prescribe the use of melphalan independently, the Company s sales opportunities in the EEA will be significantly impaired.

While the Company has obtained the right to affix the CE Mark, it will be subject to significant ongoing regulatory obligations and oversight in the EEA and in any other country where it receives marketing authorization or approval.

In April 2012, the Company obtained the required certification from its European Notified Body, enabling Delcath to complete an EC Declaration of Conformity with the essential requirements of the EU Medical Devices Directive and affix the CE Mark to the Generation Two CHEMOSAT system. In order to maintain the right to affix the CE Mark in the EEA, the Company is subject to compliance obligations, and any material changes to the approved product, such as manufacturing changes, product improvements or revised labeling, may require further regulatory review. Additionally, the Company is subject to ongoing audits by its European Notified Body, and the right to affix the CE Mark to the Generation Two CHEMOSAT system may be withdrawn for a number of reasons, including the later discovery of previously unknown problems with the product.

To the extent that CHEMOSAT or Melphalan/HDS is approved by the FDA or any other regulatory agency, Delcath will be subject to similar ongoing regulatory obligations and oversight in those countries where approval is obtained. For example, the Company may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or requirements for potentially costly post-marketing testing, including Phase IV clinical trials, and surveillance to monitor the safety and efficacy of the product candidate. In addition, if the FDA approves a product candidate, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs, good clinical practices (GCPs), and good laboratory practices, which are regulations

and guidelines enforced by the FDA for all products in clinical development, for any clinical trials that the Company conducts post-approval. In addition, post-marketing requirements for CHEMOSAT and Melphalan/HDS may include implementation of a risk evaluation and mitigation strategies (REMS) program to ensure that the benefits of the product outweigh its risks. A REMS may include a Medication Guide, a patient package insert, a communication plan to healthcare professionals and/or other elements to assure safe use of the product.

Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

refusals or delays in the approval of applications or supplements to approved applications;

refusal of a regulatory authority to review pending market approval applications or supplements to approved applications;

restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market or voluntary or mandatory product recalls or seizures;

fines, Warning Letters or holds on clinical trials;

import or export restrictions;

injunctions or the imposition of civil or criminal penalties;

restrictions on product administration, requirements for additional clinical trials or changes to product labeling or REMS programs; or

recommendations by regulatory authorities against entering into governmental contracts with us. If the Company is not able to maintain regulatory compliance, it may lose any marketing approval that it may have obtained and may not achieve or sustain profitability, which would have a material adverse effect on the business, results of operations, financial condition and prospects.

The development and approval process in the United States will take many years, require substantial resources and may never lead to the approval of Melphalan/HDS by the FDA for use in the United States.

The Company cannot sell or market Melphalan/HDS with melphalan or other chemotherapeutic agents in the United States without prior FDA approval of an NDA for Melphalan/HDS. Although melphalan and other drugs have been approved by the FDA for use as chemotherapeutic agents, regulatory approval is required in the United States for the combined medical device component and drug component and the specific indication, dose and route of

administration of melphalan or other chemotherapeutic agent used in our system. The Company is seeking approval of Melphalan/HDS for a substantially higher dose of melphalan than prior approved doses of melphalan and such other drugs. Delcath must obtain separate regulatory approvals for Melphalan/HDS with melphalan and every other chemotherapeutic agent or other compound used with the system that Delcath intends to market, and all the manufacturing facilities used to manufacture components or assemble our system must be inspected and meet legal requirements. Securing regulatory approval requires the submission of extensive pre-clinical and clinical data and other supporting information for each proposed therapeutic indication in order to establish to the FDA s satisfaction the product s safety, efficacy, potency and purity for each intended use. The pre-clinical testing and clinical trials of Melphalan/HDS with melphalan or any other chemotherapeutic agent or compound the Company uses in its system must comply with the regulations of the FDA and other federal, state and local government authorities in the United States. Clinical development is a long, expensive and uncertain process and is subject to delays. Delcath may encounter delays or rejections for various reasons, including its inability to enroll enough patients to complete the clinical trials. Moreover, approval policies or regulations may change. If the Company does not obtain and maintain regulatory approval for its system and the use of melphalan or other chemotherapeutic agents, the value of the Company, results of operations and its ability to raise additional capital will be harmed. In August 2012, Delcath submitted an NDA seeking an indication for ocular

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melanoma liver metastases for our Melphalan/HDS. In September 2013, the FDA issued a CRL. The FDA comments in the CRL included a statement that the Company must perform additional well-controlled randomized trial(s) to establish the safety and efficacy of Melphalan/HDS using overall survival as the primary efficacy outcome measure and which demonstrates that the clinical benefits of Melphalan/HDS outweigh its risks. Failure to obtain FDA approval will have a material adverse effect on Delcath s business, financial condition and results of operations.

Even if the Company obtains regulatory approval for the Melphalan/HDS system in the United States, its ability to market the Melphalan/HDS system would be limited to those uses that are approved.

The FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, dissemination of off-label information, industry-sponsored scientific and educational activities and promotional activities involving the Internet. Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved label. If the FDA approves an application for the Melphalan/HDS, our ability to market and promote the Melphalan/HDS would be limited to the approved indication, so even with FDA approval, the Melphalan/HDS system may only be promoted in this limited market. Physicians may prescribe legally available drugs for uses that are not described in the product s labeling and that differ from those tested by us and approved by the FDA. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, impose stringent restrictions on manufacturers communications regarding off-label use, and FDA approval may otherwise limit our sales practices and our ability to promote, sell and distribute the product. Thus, the Company may only market the Melphalan/HDS, if approved by the FDA, for its approved indication and could be subject to enforcement action for off-label marketing. Further, if there are any modifications to the product, including changes in indications, labeling or manufacturing processes or facilities, Delcath may be required to submit and obtain FDA approval of a new or supplemental NDA, which may require the development of additional data or conduct additional preclinical studies and clinical trials. Failure to comply with these requirements can result in adverse publicity, Warning Letters, corrective advertising and potential civil and criminal penalties.

If future clinical trials are unsuccessful, significantly delayed or not completed, the Company may not be able to market Melphalan/HDS for other indications.

The clinical trial data on our product is limited to specific types of liver cancer. In 2010, the Company concluded a Phase 3 clinical trial of Melphalan/HDS in patients with metastatic ocular and cutaneous melanoma to the liver and also completed a multi-arm Phase 2 clinical trial of Melphalan/HDS in patients with primary and metastatic melanoma stratified into four arms.

In January 2016 the Company received agreement on a SPA from the FDA and has initiated a pivotal Phase 3 overall survival clinical trial in ocular melanoma liver metastases. In March 2017, Delcath received agreement on a SPA from the FDA for a registration trial to treat patients with intrahepatic cholangiocarcinoma (ICC), a trial the Company expects to initiate when financial resources permit.

It may take several years to complete the testing of Melphalan/HDS for use in the treatment of these indications, and failure can occur at any stage of development, for many reasons, including:

any pre-clinical or clinical test may fail to produce results satisfactory to the FDA or foreign regulatory authorities;

pre-clinical or clinical data can be interpreted in different ways, which could delay, limit or prevent regulatory approval;

negative or inconclusive results from a pre-clinical study or clinical trial or adverse medical events during a clinical trial could cause pare-clinical study or clinical trial to be repeated or a program to be terminated, even if other studies or trials relating to the program are successful;

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the FDA or foreign regulatory authorities can place a clinical hold on a trial if, among other reasons, it finds that patients enrolled in the trial are or would be exposed to an unreasonable and significant risk of illness or injury;

Delcath may encounter delays or rejections based on changes in regulatory agency policies during the period in which it is developing a system or the period required for review of any application for regulatory agency approval;

the Company s clinical trials may not demonstrate the safety and efficacy of any system or result in marketable products;

the FDA or foreign regulatory authorities may request additional clinical trials, including an additional Phase 3 trial, relating to the Company s NDA submissions;

the FDA or foreign regulatory authorities may change its approval policies or adopt new regulations that may negatively affect or delay Delcath s ability to bring a system to market or require additional clinical trials; and

a system may not be approved for all the requested indications.

The failure or delay of clinical trials could cause an increase in the cost of product development, delay filing of an application for marketing approval or cause the Company to cease the development of Melphalan/HDS for other indications. If Delcath is unable to develop Melphalan/HDS for other indications the future growth of our business could be negatively impacted. In addition, Delcath has limited clinical data relating to the effectiveness of Melphalan/HDS in certain types of cancer. Such limited data could slow the adoption of CHEMOSAT/ Melphalan/HDS and significantly reduce Delcath s ability to commercialize CHEMOSAT/ Melphalan/HDS.

The Company relies on third parties to conduct certain elements of the clinical trials for CHEMOSAT and Melphalan/HDS, and if they do not perform their obligations to Delcath, the Company may not be able to obtain regulatory approvals for its system.

The Company designs the clinical trials for Melphalan/HDS, but relies on academic institutions, corporate partners, contract research organizations and other third parties to assist in managing, monitoring and otherwise carrying out these trials. Delcath relies heavily on these parties for the execution of its clinical studies and control only certain aspects of their activities. Accordingly, the Company may have less control over the timing and other aspects of these clinical trials than if Delcath conducted them entirely on their own. The Company relies upon third parties to conduct monitoring and data collection of its ongoing and future clinical trials, including its Phase 3 ocular melanoma trial and pivotal ICC trial. Although Delcath relies on these third parties to manage the data from these clinical trials and are responsible for confirming that each of its clinical trials is conducted in accordance with its general investigational plan and protocol. Moreover, the FDA and foreign regulatory agencies require Delcath to comply with GCPs for conducting, recording and reporting the results of clinical trials to assure that the data and results are credible and accurate and that the trial participants are adequately protected. The FDA enforces these GCP regulations through periodic inspections of trial sponsors, principal investigators and trial sites. The Company s reliance on third parties does not relieve it of these responsibilities and requirements, and if Delcath or the third parties upon whom the

Company relies for its clinical trials fail to comply with the applicable GCPs, the data generated in its clinical trials may be deemed unreliable and the FDA or other foreign regulatory agencies may require Delcath to perform additional trials before approving our marketing application. The Company cannot assure you that, upon inspection, the FDA will determine that any of its clinical trials comply or complied with GCPs. In addition, Delcath s clinical trials must be conducted with product that complies with the FDA s cGMP requirements. The Company s failure to comply with these regulations may require it to repeat clinical trials, which would delay the regulatory approval process, and may result in a failure to obtain regulatory approval for Melphalan/HDS if these requirements are not met.

Purchasers of CHEMOSAT in the EEA may not receive third-party reimbursement or such reimbursement may be inadequate. Without adequate reimbursement, Delcath may not be able to successfully commercialize CHEMOSAT in the EEA.

The Company has obtained the right to affix the CE Mark for CHEMOSAT, and Delcath intends to seek third-party or government reimbursement within those countries in the EEA where it expects to market and sell CHEMOSAT. In Germany, the Company has received a ZE diagnostic-related group code, which permits hospitals in Germany to obtain reimbursement for CHEMOSAT procedures beginning in 2016. Negotiations on the amount of reimbursement to be received under the code were concluded in 2016 and the procedure is reimbursed under this system in 2017. The ZE system is an annual process and negotiations are underway to set reimbursement levels for 2018. Consequently, reimbursement obtained may not be for the full amount sought. In countries where Delcath is able to obtain reimbursement, local policy could limit the Company s ability to obtain adequate and consistent reimbursement and limit other sales opportunities in those countries.

In other countries, until Delcath obtains government reimbursement, it will rely on private payors or local pre-approved funds where available. New technology payment programs may provide interim funding, but there are no assurances that Delcath will qualify for such funding. Even if the Company does qualify, the amount and the duration of this funding may be limited. There are also no assurances that third-party payors or government health agencies of Member States of the EEA will reimburse the product s use in the long term or at all. Further, each country has its own protocols regarding reimbursement, so successfully obtaining third party or government health agency reimbursement in one country does not necessarily translate to similar reimbursement in other EEA countries. Physicians, hospitals and other health care providers may be reluctant to purchase CHEMOSAT if they do not receive substantial reimbursement for the cost of using the product from third-party payors or government entities. The lack of adequate reimbursement may significantly limit sales opportunities in the EEA.

The success of our products may be harmed if the government, private health insurers and other third-party payers do not provide sufficient coverage or reimbursement.

The Company s ability to commercialize its system successfully will depend in part on the extent to which reimbursement for the costs of such products and related treatments will be available from government health administration authorities, private health insurers and other third-party payors. Melphalan/HDS is currently not approved by the FDA. Medicare, Medicaid, private health insurance plans and their foreign equivalents will not reimburse the use of Melphalan/HDS since the product is currently not approved outside the EEA. Delcath will seek reimbursement by third-party payors of the cost of Melphalan/HDS after its use is approved, but there are no assurances that adequate third-party coverage will be available for Delcath to establish and maintain price levels sufficient for the Company to realize an appropriate return on its investment in developing new therapies. Government, private health insurers and other third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement for new therapeutic products approved for marketing. Accordingly, even if coverage and reimbursement are provided by government, private health insurers and third-party payors for uses of our products, market acceptance of these products would be adversely affected if the reimbursement available proves to be unprofitable for healthcare providers.

Implementation of healthcare reforms in the United States and in significant overseas markets may limit the ability to commercialize CHEMOSAT/ Melphalan/HDS and the demand for CHEMOSAT/ Melphalan/HDS. Healthcare providers may respond to such cost-containment pressures by choosing lower cost products or other therapies. In March 2010, the Patient Protection and Affordable Care Act and Health Care and Education Reconciliation Act of 2010 (ACA) were enacted into law in the United States, which included a number of provisions aimed at improving quality and decreasing costs. The President and members of Congress have recently introduced legislative proposals

to significantly alter the ACA. It is uncertain if such proposals will be enacted or what consequences these proposals or the implementation of existing provisions will have on our efforts to commercialize CHEMOSAT and Melphalan/HDS.

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CHEMOSAT/ Melphalan/HDS may not achieve sufficient acceptance by the medical community to sustain our business.

The commercial success of CHEMOSAT and Melphalan/HDS will depend upon its acceptance by the medical community and third-party payers as clinically useful, cost effective and safe. Acceptance by the medical community may depend on the extent to which leaders in the scientific and medical communities publish scientific papers in reputable academic journals. If testing and clinical practice do not confirm the safety and efficacy of CHEMOSAT and Melphalan/HDS or even if further testing and clinical practice produce positive results but the medical community does not view these favorably, and CHEMOSAT and Mel