

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

FORM 8-K

**CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(D) OF THE
SECURITIES EXCHANGE ACT OF 1934**

Date of report (Date of earliest event reported): **January 31, 2012 (January 28, 2012)**

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

Delaware
(State or Other Jurisdiction
of Incorporation)

001-16133
(Commission File Number)

06-1245881
(IRS Employer
Identification Number)

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

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

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

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

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 Entry into a Material Definitive Agreement.

On January 28, 2012, Delcath Systems, Inc. (the “Company”) entered into an amendment (“Amendment No. 4”) to the Cooperative Research and Development Agreement (“CRADA”) with the National Cancer Institute (“NCI”). The existing CRADA expired on December 14, 2011, and Amendment No. 4 extends the CRADA for an additional year to December 14, 2012. Under the one year extension, the Company will provide \$1,000,000 of additional funding to the NCI for clinical support.

The foregoing description of Amendment No. 4 is not complete and is qualified in its entirety by reference to the full text of such agreement, a copy of which is filed herewith as Exhibit 10.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

The following exhibit is filed herewith:

(d) Exhibits.

| Exhibit No. | Description |
|--------------------|--|
| 10.1 | Amendment No. 4 to the Cooperative Research and Development Agreement, dated as of January 28, 2012, between Delcath Systems, Inc. and the National Cancer Institute |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

DELCATH SYSTEMS, INC.

Dated: January 31, 2012

By: /s/ Peter J. Graham
Name: Peter J. Graham
Title: Executive Vice President,
General Counsel

EXHIBIT INDEX

| Exhibit No. | Description |
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Amendment #4

Cooperative Research and Development Agreement # 01303

Delcath Systems, Inc. and the National Cancer Institute

“Amendment No. 4 to Extend the Cooperative Research and Development Agreement for the Development of the “Delcath System” for the Delivery of Chemotherapeutics in the Treatment of Cancer”

The purpose of this amendment is to change certain terms of the above-referenced Cooperative Research and Development Agreement (CRADA). These changes are reflected below, and except for these changes, all other provisions of the original CRADA remain in full force and effect. Two originals of this amendment are provided for execution; one is to remain with the National Cancer Institute and the other is to remain with the Collaborator.

- 1) The term of the CRADA is extended to an additional one (1) year term (December 14, 2011 – December 14, 2012). This additional term is for completion of all ongoing studies and activities under the CRADA. During this term, Collaborator (Delcath Systems, Inc.) will provide complete access to the data in the eCaseLink database for all intramural and extramural studies under the CRADA. This is inclusive of all updates and improvements to the eCaseLink database. Once the database is complete, either the database or a copy of the completed database will be transferred to the NCI Surgery Branch. In addition, all correspondence, requests and notices related to activities performed under the CRADA will be directed to Drs. Steven A. Rosenberg or Marybeth Hughes, Ms. MaryAnn Toomey, or their designees, in the NCI Surgery Branch only; all other notices relating to the CRADA agreement will be directed to the Technology Transfer Center, NCI.
- 2) The Collaborator Principal Investigator is revised and is now Krishna Kandarpa, M.D., Chief Medical Officer, Delcath Systems, Inc.
- 3) To date, Collaborator has provided \$5,918,750.00 of funding and the Parties agree that Collaborator’s responsibilities under the Agreement due to expire December 14, 2011 have been met. For the extension term of one (1) year, Collaborator shall provide \$1,000,000.00 of additional funding to support the remainder of the activities related to and required for the building, improvements and sharing of the eCaseLink database with the NCI Surgery Branch. The payment schedule as set out in Appendix B shall be maintained.
- 4) Article 13.7 is amended to read as follows:
 - 13.7 **Assignment.** Neither this CRADA nor any rights or obligations of any Party hereunder shall be assigned or otherwise transferred by either Party without the prior written consent of the other Party. The Collaborator acknowledges the applicability of 41 U.S.C. § 15, the Anti Assignment Act, to this Agreement. The Parties agree that the identity of the Collaborator is material to the performance of this CRADA and that the duties under this CRADA are nondelegable.
- 5) This Amendment is made effective retroactive to December 14, 2011, the expiration date of this CRADA.

SIGNATURES BEGIN ON THE NEXT PAGE

ACCEPTED AND AGREED TO:

For the National Cancer Institute

/s/ James H. Doroshow
James H. Doroshow, M.D.,
Deputy Director for Clinical and Translational Research, NCI

1/19/12
Date

For Delcath Systems, Inc.:

/s/ Eamonn P. Hobbs
Eamonn Hobbs
Preident and CEO

1/28/12
Date