

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C.

FORM 10-SB

GENERAL FORM FOR REGISTRATION OF SECURITIES OF SMALL BUSINESS ISSUERS

Under Section 12(b) or (g) of The Securities Exchange Act of 1934

Delcath Systems, Inc.

(Name of Small Business Issuer in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

06-1245881

(I.R.S. Employer Identification No.)

06905

(ZipCode)

Issuer's telephone number: (203) 323-8668

Securities to be registered pursuant to Section 12(b) of the Act.

Title of each class

None

Name of each exchange on which registered

Securities to be registered pursuant to Section 12(g) of the Act.

2005 Redeemable Common Stock Purchase Warrants - Series A

(Title of Class)

PART I

Item 1. Description of Business

The information required by Item 101 of Regulation S-B is incorporated herein by reference to Part I, Item 1 of the Annual Report on Form 10-KSB of Delcath Systems, Inc. (the "Company") for the year ended December 31, 2004 (File No. 001-16133) (the "2004 10-KSB").

Item 2. Management's Discussion and Analysis or Plan of Operations

The information required by Item 103 of Regulation S-B is incorporated herein by reference to Part II, Item 6 of the 2004 10-KSB.

Item 3. Description of Property

The information required by Item 102 of Regulation S-B is incorporated herein by reference to Part I, Item 2 of the 2004 10-KSB.

Item 4. Security Ownership of Certain Beneficial Owners and Management

The information required by Item 403 of Regulation S-B is incorporated herein by reference to the information appearing under the caption "Security Ownership by Management and Principal Stockholders" in the Company's definitive

Proxy Statement dated April 29, 2005 distributed in connection with its 2005 Annual Meeting of Stockholders (Commission File No. 001-16133) (the "2005 Proxy Statement").

Item 5. Directors and Executive Officers, Promoters and Control Persons

The information required by Item 401 of Regulation S-B is incorporated herein by reference to the information appearing under the caption "Election of Directors - Background of Nominees for the Board of Directors" in the 2005 Proxy Statement.

Item. 6. Executive Compensation

The information required by Item 402 of Regulation S-B is incorporated herein by reference to the information appearing under the caption "Compensation and Other Information Concerning Directors and Officers" in the 2005 Proxy Statement.

Item 7. Certain Relationships and Related Transactions

The information required by Item 404 of Regulation S-B is incorporated herein by reference to the information appearing in note (1) to the table under the caption

"Compensation and Other Information Concerning Directors and Officers - Summary Compensation Table" in the 2005 Proxy Statement.

Item 8. Description of Securities

(a) Not applicable.

(b) Not applicable

(c) The information required by Item 202(c) with respect to the Company's 2005 Redeemable Common Stock Purchase Warrants - Series A is incorporated herein by reference to the information contained under the caption "Description of the Company's Capital Stock and Other Securities - Description of the Exchange Warrants" in the Company's Offer to Exchange dated July 13, 2005 filed as Exhibit (a)(1)(i) to the Company's Schedule TO-I (Commission File No. 5-60851)).

PART II

Item 1. Market Price of and Dividends on the Registrant's Common Equity and Related Stockholder Matters

The information required by Item 201 of Regulation S-B is incorporated herein by reference to Part II, Item 5 of the 2004 10-KSB.

Item 2. Legal Proceedings

The information required by Item 103 of Regulation S-B is incorporated herein by reference to Part I, Item 3 of the 2004 10-KSB.

Item 3. Changes in and Disagreements with Accountants

The information required by Item 102 of Regulation S-B is incorporated herein by reference to the Company's Current Report on Form 8-K dated April 25, 2005, as amended by an amendment thereto filed on May 2, 2005 (Commission File No. 001-16133).

Item 4. Recent Sales of Unregistered Securities

The information required by Item 701 of Regulation S-B is incorporated herein by reference to the following:

1. Item 3.02 of the Company's Current Report on Form 8-K dated September 9, 2005 (Commission File No. 001-16133);
2. Part II, Item 2 of the Company's Quarterly Report on Form 10-QSB for the quarter ended June 30, 2005 (Commission File No. 001-16133);

3. Items 1.01 and 3.02 of the Company's Current Report on Form 8-K dated November 24, 2004 (Commission File No. 001-16133);
4. Part II, Item 2 of the Company's Quarterly Report on Form 10-QSB for the quarter ended September 30, 2004 (Commission File No. 001-16133);
5. Part II, Item 2 of the Company's Quarterly Report on Form 10-QSB for the quarter ended June 30, 2004 (Commission File No. 001-16133); and
6. Part II, Item 2 of the Company's Quarterly Report on Form 10-QSB for the quarter ended March 31, 2004 (Commission File No. 001-16133).

Item 5. Indemnification of Directors and Officers

The information required by Item 702 of Regulation S-B is incorporated herein by reference to Item 15 of the Company's Registration Statement on Form S-3 (No. 333-127629) filed on August 17, 2005.

PART F/S

The information required by Item 301 of Regulation S-B is incorporated herein by reference to Part II, Item 7 of the Company's Annual Report on Form 10-KSB for the year ended December 31, 2005 (Commission File No. 001-16133) and to Part I, Item 1 of the Company's Quarterly Report on Form 10-QSB for the quarter ended June 30, 2005 (Commission File No. 001-16133).

PART III

Item 1. Index to Exhibits

Exhibit No.	Description
3.1	Amended and Restated Certificate of Incorporation of Delcath Systems, Inc., as amended to June 30, 2005. (incorporated by reference to Exhibit 3(i) to Registrant's Quarterly Report on Form 10-QSB for the quarter ended June 30, 2005 (Commission File No. 001-16133)).
3.2	Amended and Restated By-Laws of Delcath Systems, Inc. (incorporated by reference to Exhibit 3.2 to Amendment No. 1 to Registrant's Registration Statement on Form SB-2 (Registration No. 333-39470)).

Exhibit No.	Description
4.1	Rights Agreement, dated October 30, 2001, by and between Delcath Systems, Inc. and American Stock Transfer & Trust Company, as Rights Agent (incorporated by reference to Exhibit 4.7 to Registrant's Form 8-A dated November 12, 2001 (Commission File No. 001-16133)).
4.2	Form of Warrant Agreement by and between Delcath Systems, Inc. and Whale Securities Co., L.P. (incorporated by reference to Exhibit 4.2 to Amendment No. 5 to Registrant's Registration Statement on Form SB-2 (Registration No. 333-39470)).
4.3	Form of Warrant Agent Agreement by and among Delcath Systems, Inc., Whale Securities Co., L.P., and American Stock Transfer & Trust Company, as warrant agent (incorporated by reference to Exhibit 4.3 to Amendment No. 5 to Registrant's Registration Statement on Form SB-2 (Registration No. 333-39470)).
4.4	Form of Warrant to Purchase Shares of Common Stock issued pursuant to the Common Stock Purchase Agreement dated as of March 19, 2004 (incorporated by reference to Exhibit 4 to Registrant's Current Report on Form 8-K dated March 19, 2004 (Commission File No., 001-16133)).
4.5	Form of Series A Warrant to Purchase Shares of Common Stock dated as of November 24, 2004 (incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated November 24, 2004 (Commission File No. 001-16133)).
4.6	Form of Series B Warrant to Purchase Shares of Common Stock dated as of November 24, 2004 (incorporated by reference to Exhibit 4.2 to Registrant's Current Report on Form 8-K dated November 24, 2004 (Commission File No. 001-16133)).
4.7	Form of Series C Warrant to Purchase Shares of Common Stock dated as of November 24, 2004 (incorporated by reference to Exhibit 4.3 to Registrant's Current Report on Form 8-K dated November 24, 2004 (Commission File No. 001-16133)).
4.8	Form of Series D Warrant to Purchase Shares of Common Stock dated as of December 7, 2004 (incorporated by reference to Exhibit 4.10 to Registrant's Registration Statement on Form S-3 (Registration No. 333-121681)).

Exhibit No.	Description
4.9	Warrant Agreement dated as of July 22, 2005 between the Registrant and American Stock Transfer & Trust Company, as warrant agent, together with the form of 2005 Redeemable Common Stock Purchase Warrants - Series A (incorporated by reference to Exhibit 4 to Registrant's Quarterly Report on Form 10-QSB for the quarter ended June 30, 2005 (Commission File No. 001-16133)).
10.1	1992 Incentive Stock Option Plan (incorporated by reference to Exhibit 10.1 to Registrant's Registration Statement on Form SB-2 (Registration Number 333-39470)).
10.2	2000 Stock Option Plan (incorporated by reference to Exhibit 10.3 to Registrant's Registration Statement on Form SB-2 (Registration No. 333-39470)).
10.3	2001 Stock Option Plan (incorporated by reference to Exhibit 10.12 to Amendment No. 1 to Registrant's Annual Report on Form 10-KSB for the year ended December 31, 2001 (Commission File No. 001-16133)).
10.4	2004 Stock Incentive Plan (incorporated by reference to Appendix B to Registrant's definitive Proxy Statement dated April 29, 2004 (Commission File No. 001-16133)).
10.5	Employment Agreement, as amended by Amendment No. 1 thereto, between the Registrant and M. S. Koly (incorporated by reference to Exhibit 10.1 to Registrant's Quarterly Report on Form 10-QSB for the quarter ended June 30, 2005 (Commission File No. 001-16133)).
10.6	Employment Agreement, effective as of October 1, 2003, by and among Delcath Systems, Inc. and Samuel Herschkowitz (incorporated by reference to Exhibit 10.6 to Registrant's Annual Report on Form 10-KSB for the year ended December 31, 2003 (Commission File No. 001-16133)).
10.7	Common Stock Purchase Agreement dated as of March 19, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Exhibit A thereto (incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated March 19, 2004 (Commission File No. 001-16133)).

Exhibit No.	Description
10.8	Registration Rights Agreement dated as of March 19, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Schedule I thereto (incorporated by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K dated March 19, 2004 (Commission File No. 001-16133)).
10.9	Common Stock Purchase Agreement dated as of November 24, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Exhibit A thereto (incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated November 24, 2004 (Commission File No. 001-16133)).
10.10	Registration Rights Agreement dated as of November 24, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Schedule I thereto (incorporated by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K dated November 24, 2004 (Commission File No. 001-16133)).
10.11	Common Stock Purchase Agreement dated as of December 7, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Exhibit A thereto (incorporated by reference to Exhibit 10.5 to Registrant's Registration Statement on Form S-3 (Registration No. 333-121681)).
10.12	Registration Rights Agreement dated as of December 7, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Schedule I thereto (incorporated by reference to Exhibit 10.6 to Registrant's Registration Statement on Form S-3 (Registration No. 333-121681)).
10.13	Form of Incentive Stock Option Agreement under the Registrant's 2004 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to Registrant's Quarterly Report on Form 10-QSB for the quarter ended June 30, 2005 (Commission File No. 001-16133)).
10.14	Form of Nonqualified Stock Option Agreement under the Registrant's 2004 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to Registrant's Quarterly Report on Form 10-QSB for the quarter ended June 30, 2005 (Commission File No. 001-16133)).

Exhibit No.	Description
10.15	Form of Stock Grant Agreement under the Registrant's 2004 Stock Incentive Plan (incorporated by reference to Exhibit 10.4 to Registrant's Quarterly Report on Form 10-QSB for the quarter ended June 30, 2005 (Commission File No. 001-16133)).
14	Code of Business Conduct (incorporated by reference to Exhibit 14 to Registrant's Annual Report on Form 10-KSB for the year ended December 31, 2003 (Commission File No. 001-16133)).
16	Letter of Eisner LLP (incorporated by reference to Exhibit 16 to Amendment No. 1 to Registrant's Current Report on Form 8-K dated April 25, 2005 (Commission File No. 001-16133)).

Item 2. Description of Exhibits

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

DELCATH SYSTEMS, INC.

By: /s/ M. S. KOLY

M. S. Koly
President and Chief Executive
Officer

October 4, 2005

EXHIBIT INDEX

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3.1	Amended and Restated Certificate of Incorporation of Delcath Systems, Inc., as amended to June 30, 2005. (incorporated by reference to Exhibit 3(i) to Registrant's Quarterly Report on Form 10-QSB for the quarter ended June 30, 2005 (Commission File No. 001-16133)).
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4.2	Form of Warrant Agreement by and between Delcath Systems, Inc. and Whale Securities Co., L.P. (incorporated by reference to Exhibit 4.2 to Amendment No. 5 to Registrant's Registration Statement on Form SB-2 (Registration No. 333-39470)).
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4.4	Form of Warrant to Purchase Shares of Common Stock issued pursuant to the Common Stock Purchase Agreement dated as of March 19, 2004 (incorporated by reference to Exhibit 4 to Registrant's Current Report on Form 8-K dated March 19, 2004 (Commission File No., 001-16133)).
4.5	Form of Series A Warrant to Purchase Shares of Common Stock dated as of November 24, 2004 (incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated November 24, 2004 (Commission File No. 001-16133)).

Exhibit No.	Description
4.6	Form of Series B Warrant to Purchase Shares of Common Stock dated as of November 24, 2004 (incorporated by reference to Exhibit 4.2 to Registrant's Current Report on Form 8-K dated November 24, 2004 (Commission File No. 001-16133)).
4.7	Form of Series C Warrant to Purchase Shares of Common Stock dated as of November 24, 2004 (incorporated by reference to Exhibit 4.3 to Registrant's Current Report on Form 8-K dated November 24, 2004 (Commission File No. 001-16133)).
4.8	Form of Series D Warrant to Purchase Shares of Common Stock dated as of December 7, 2004 (incorporated by reference to Exhibit 4.10 to Registrant's Registration Statement on Form S-3 (Registration No. 333-121681)).
4.9	Warrant Agreement dated as of July 22, 2005 between the Registrant and American Stock Transfer & Trust Company, as warrant agent, together with the form of 2005 Redeemable Common Stock Purchase Warrants - Series A (incorporated by reference to Exhibit 4 to Registrant's Quarterly Report on Form 10-QSB for the quarter ended June 30, 2005 (Commission File No. 001-16133)).
10.1	1992 Incentive Stock Option Plan (incorporated by reference to Exhibit 10.1 to Registrant's Registration Statement on Form SB-2 (Registration No. 333-39470)).
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10.7	Common Stock Purchase Agreement dated as of March 19, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Exhibit A thereto (incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated March 19, 2004 (Commission File No. 001-16133)).
10.8	Registration Rights Agreement dated as of March 19, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Schedule I thereto (incorporated by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K dated March 19, 2004 (Commission File No. 001-16133)).
10.9	Common Stock Purchase Agreement dated as of November 24, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Exhibit A thereto (incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated November 24, 2004 (Commission File No. 001-16133)).
10.10	Registration Rights Agreement dated as of November 24, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Schedule I thereto (incorporated by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K dated November 24, 2004 (Commission File No. 001-16133)).
10.11	Common Stock Purchase Agreement dated as of December 7, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Exhibit A thereto (incorporated by reference to Exhibit 10.5 to Registrant's Registration Statement on Form S-3 (Registration No. 333-121681)).
10.12	Registration Rights Agreement dated as of December 7, 2004 by and among Delcath Systems, Inc. and the Purchasers Listed on Schedule I thereto (incorporated by reference to Exhibit 10.6 to Registrant's Registration Statement on Form S-3 (Registration No. 333-121681)).

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