UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q/A (Amendment No. 1)

☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2010.

□ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ______ to _____

Commission File Number: 001-16133

DELCATH SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 06-1245881 (I.R.S. Employer Identification No.)

Accelerated filer

Smaller reporting company

 \checkmark

810 Seventh Avenue, Suite 3505, New York, New York 10019 (Address of principal executive offices and Zip Code)

(212) 489-2100

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 🛛 No 🗆

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes \Box No \Box

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

Large accelerated filer \Box

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes 🗆 No 🗵

As of October 29, 2010, 42,890,063 shares of the Company's common stock, \$0.01 par value, were outstanding.

EXPLANATORY NOTE

Delcath Systems, Inc. (the "Company") is filing this Amendment No. 1 on Form 10-Q/A ("Amendment") to its Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2010 (the "Original Form 10-Q"), originally filed with the Securities and Exchange Commission (the "Commission") on November 2, 2010, solely to include the number of shares of common stock of the Company outstanding as of a latest practicable date, which information was inadvertently omitted from the cover page of the Original Form 10-Q. The Company hereby amends the cover page of the Original Form 10-Q to state that the number of shares of the Company's common stock, \$0.01 par value, outstanding as of October 29, 2010, was 42,890,063. In connection with the filing of this Amendment and pursuant to the rules of the Company has included with this Amendment certain currently dated certifications.

Except as described above, no other changes have been made to the Original Form 10-Q. This Amendment speaks as of the original filing date of the Original Form 10-Q and does not reflect any events that occurred at a date subsequent to the filing of the Original Form 10-Q or modify or update those disclosures therein in any way.

PART II: OTHER INFORMATION

Item 6.	Exhibits
Exhibit No.	Description
31.1*	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act
31.2*	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act
31.3	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act
31.4	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act
32.1*	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* Previously filed or furnished, as applicable, with Delcath Systems, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2010.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Amendment No. 1 on Form 10-Q/A to be signed on its behalf by the undersigned thereunto duly authorized.

November 2, 2010

DELCATH SYSTEMS, INC.

By:

/S/ DAVID A. MCDONALD David A. McDonald Chief Financial Officer (Principal Financial Officer)

Exhibit Index

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Certification of Principal Executive Officer Pursuant to Rule 13a-14(a) or 15d-14(a) of the Exchange Act

I, Eamonn P. Hobbs, certify that:

1. I have reviewed this Amendment No. 1 on Form 10-Q/A of Delcath Systems, Inc.; and

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

November 2, 2010

/s/ Eamonn P. Hobbs

Eamonn P. Hobbs President and Chief Executive Officer (Principal Executive Officer)

Certification of Principal Financial Officer Pursuant to Rule 13a-14(a) or 15d-14(a) of the Exchange Act

I, David A. McDonald, certify that:

1. I have reviewed this Amendment No. 1 on Form 10-Q/A of Delcath Systems, Inc.; and

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

November 2, 2010

/s/ David A. McDonald

David A. McDonald Chief Financial Officer (Principal Financial Officer)