
**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): June 16, 2014

ACELRX PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

DELAWARE
(State of incorporation)

001-35068
(Commission File No.)

41-2193603
(IRS Employer Identification No.)

351 Galveston Drive
Redwood City, CA 94063
(Address of principal executive offices and zip code)

Registrant's telephone number, including area code: (650) 216-3500

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 2.03 CREATION OF A DIRECT FINANCIAL OBLIGATION OR AN OBLIGATION UNDER AN OFF-BALANCE SHEET ARRANGEMENT OF A REGISTRANT.

On June 16, 2014, AcelRx Pharmaceuticals, Inc. (the "Company") borrowed the second tranche of \$10.0 million under the Amended and Restated Loan and Security Agreement (the "Loan Agreement"), dated as of December 16, 2013 with Hercules Technology II, L.P. and Hercules Technology Growth Capital, Inc. (together, the "Lenders"). For a summary of the material terms of the Loan Agreement, including payment and acceleration provisions and covenants, which are incorporated into this Item 2.03 by reference, see Item 1.01 of the Company's Current Report on Form 8-K filed on December 19, 2013.

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.

Date: June 16, 2014

ACELRX PHARMACEUTICALS, INC.

By: /s/ Timothy E. Morris
Timothy E. Morris
Chief Financial Officer