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): March 2, 2016

ACELRX PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

DELAWARE

001-35068

41-2193603

(State of incorporation)

(Commission File No.)

(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))

D 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 March 2, 2016, AcelRx Pharmaceuticals, Inc. (the "Company") entered into an amendment to the award contract dated May 11, 2015, supported by the United States Army Medical Research and Materiel Command within the U.S. Department of Defense (the "DoD"), in which the DoD agreed to approve enrollment of additional patients in the SAP302 study, approve the addition of the SAP303 study, and extend the contract period of performance by four (4) months from November 10, 2016 to March 9, 2017, to accommodate the increased SAP302 patient enrollment and the SAP303 study. The costs for these changes, will be absorbed within the current contract value. All other terms and conditions remain unchanged.

The foregoing summary of the amendment is not complete and is qualified in its entirety by reference to the amendment to the award contract, a copy of which will be filed as an exhibit to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.

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: March 4, 2016

ACELRX PHARMACEUTICALS, INC.

By: /s/ Jane Wright-Mitchell Jane Wright-Mitchell Chief Legal Officer