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): July 22, 2015

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))

□ 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 July 22, 2015, AcelRx Pharmaceuticals ("AcelRx") entered into the first amendment (the "License Amendment") effective as of July 17, 2015, to the Collaboration and License Agreement between AcelRx and Grünenthal GmbH ("Grünenthal"), effective as of December 16, 2013 (the "License Agreement"), and the first amendment (the "MSA Amendment") effective as of July 17, 2015, to the related Manufacture and Supply Agreement, between AcelRx and Grünenthal, effective as of December 16, 2013 (the "MSA", and together with the License Agreement, the License Amendment, and the MSA Amendment, the "Agreements"). The License Agreement grants Grünenthal rights to commercialize ZalvisoTM (formerly known as ARX-01), AcelRx's novel sublingual patient-controlled analgesia (PCA) system (the "Product"), in the countries of the European Union, Switzerland, Licehtenstein, Iceland, Norway and Australia (the "Territory"), for human use in pain treatment within or dispensed by hospitals, hospices, nursing homes and other medically-supervised settings (the "Field"). AcelRx retains rights with respect to the Product outside of the Field as well as in countries outside the Territory, including the U.S., Asia and Latin America. The MSA provides for AcelRx to manufacture and supply the Product for use in the Field for the Territory exclusively for Grünenthal.

In the MSA Amendment and License Amendment, the parties amended the Product supply configurations and packaging of Product components and accessories, and associated pricing therefor, which AcelRx will manufacture and supply to Grünenthal for the Territory. As consideration for an increase in the pricing of the Product components and accessories as part of the agreed packaging configurations, the total milestone payments from Grünenthal contingent upon achieving specified net sales target milestones were reduced from a total of \$171.5 million to \$166.0 million. The parties also amended the development plan for the Product in the Territory, providing for additional near-term development costs to be paid by Grünenthal.

The foregoing descriptions of the License Amendment and the MSA Amendment are not complete and are qualified in their entirety by reference to the full text of such amendments, copies of which will be filed with the Form 10-Q for the period ending September 30, 2015.

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: July 29, 2015

ACELRX PHARMACEUTICALS, INC.

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