### 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):

February 12, 2007

# ADVENTRX Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware

001-32157

(Commission

File Number)

(State or other jurisdiction of incorporation)

6725 Mesa Ridge Road, Suite 100, San Diego, California

(Address of principal executive offices)

Registrant's telephone number, including area code:

Not Applicable

Former name or former address, if changed since last report

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:

[] 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))

84-1318182

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

92121

(Zip Code)

858-552-0866

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### Item 1.01 Entry into a Material Definitive Agreement.

On February 12, 2007, Adventrx Pharmaceuticals, Inc. (the "Company") entered into a Second Amendment to Option and License Agreement (the "Amendment"), which is effective as of January 25, 2007, with the University of Southern California ("USC"). The Amendment amended an Option and License Agreement, dated August 17, 2000 and amended on April 21, 2003 (the "Original Agreement"), pursuant to which the Company acquired certain of its rights to its product candidate ANX-201. The Amendment expands the field of use under the Original Agreement, imposes on the Company certain development milestone obligations that, if not achieved, provide USC a 30-day right to terminate the underlying license, reduces the Company's obligations in the event of certain terminations and clarifies certain other matters between the parties.

### 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.

February 15, 2007

ADVENTRX Pharmaceuticals, Inc.

By: Evan M. Levine

Name: Evan M. Levine Title: Chief Executive Officer