UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 2)

ADVENTRX Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock (Title of Class of Securities)

09060R108

(CUSIP Number)

Evan M. Levine 5173 Seagrove Place San Diego, CA 92130 (650) 305-0553

(Name, Address, and Telephone Number of Person Authorized to Receive Notices and Communications)

December 31, 2008

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. o

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934, as amended (the "Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

| CUSIP No. | 09060R108 |
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| 1 | NAMES OF REPORTING PERSONS. I.R.S. Identification Nos. of above persons (entities only). Evan M. Levine | | | | |
|-------|---|--|--|--|--|
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) o (b) o | | | | |
| 3 | SEC USE ONLY | | | | |
| 4 | SOURCE OF FUNDS (SEE INSTRUCTIONS): PF | | | | |
| 5 | CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): | | | | |
| 6 | CITIZENSHIP OR PLACE OF ORGANIZATION: USA | | | | |
| NUM | NUMBER OF SOLE VOTING POWER 60,000 | | | | |
| BENEF | SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH | | SHARED VOTING POWER 4,335,000 | | |
| REPC | | | SOLE DISPOSITIVE POWER: 60,000 | | |
| W | | | SHARED DISPOSITIVE POWER: 4,335,000 | | |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 4,395,000 | | | | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): | | | | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 4.9% | | | | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): | | | | |

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| 1 | NAMES OF REPORTING PERSONS. I.R.S. Identification Nos. of above persons (entities only). Mark Capital, LLC | | | | |
|---|--|--|----------------------------------|--|--|
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) o (b) o | | | | |
| 3 | SEC USE ONLY | | | | |
| 4 | SOURCE OF FUNDS (SEE INSTRUCTIONS): WC, OO | | | | |
| 5 | CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): | | | | |
| 6 | CITIZENSHIP OR PLACE OF ORGANIZATION: Delaware | | | | |
| NUMBER OF O SOLE VOTING POWER | | | | | |
| BENEF | SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON | | SHARED VOTING POWER 4,320,000 | | |
| REPO | | | SOLE DISPOSITIVE POWER: 0 | | |
| WITH SHARED DISPOSITIVE POWER: 4.320.000 | | SHARED DISPOSITIVE POWER: 4,320,000 | | | |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 4,320,000 | | | | |
| 12 | CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): | | | | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 4.8% | | | | |
| 14 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): | | | | |

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Explanatory Note

This Amendment No. 2 to Schedule 13D (this "Amendment") is being filed solely for the purpose of reporting a change in beneficial ownership such that the reporting persons' have ceased to beneficially own more than five percent of the common stock of the issuer.

Item 1. Security and Issuer

Common Stock, par value \$0.001 per share; ADVENTRX Pharmaceuticals, Inc., a Delaware corporation, 6725 Mesa Ridge Road, Suite 100, San Diego, California 92121.

Item 2. Identity and Background

(a) The names of the reporting persons are Evan M. Levine, an individual, and Mark Capital, LLC, a Delaware limited liability company ("Mark Capital," and, together with Mr. Levine, the "Reporting Persons").

(b) The business address of the Reporting Persons is 5173 Seagrove Place, San Diego, CA 92130.

(c) Mr. Levine's principal occupation is acquiring, holding and disposing of investments in various companies, though Mr. Levine is not employed by any corporation or other organization.

The principal business of Mark Capital is acquiring, holding and disposing of investments in various companies. Mr. Levine is the managing member of Mark Capital.

(d) During the last five years, neither Mr. Levine nor Mark Capital has been convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors).

(e) During the last five years, neither Mr. Levine nor Mark Capital has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Mr. Levine is a citizen of the United States.

Item 3. Source and Amount of Funds or Other Consideration

Not applicable.

Item 4. Purpose of Transaction

Not applicable.

Item 5. Interest in Securities of the Issuer

(a) Mark Capital beneficially owns 4,320,000 shares of Common Stock, which constitutes 4.8% of the outstanding shares of Common Stock.

Mr. Levine beneficially owns 4,395,000 shares of Common Stock (which includes (i) 4,320,000 shares of Common Stock owned by Mark Capital, (ii) 60,000 shares of Common Stock held in Mr. Levine's Individual Retirement Account, and (iii) 15,000 shares of Common Stock held in a brokerage account by Mr. Levine and Mr. Levine's father, as joint tenants with right of survivorship), which constitutes 4.9% of the outstanding shares of Common Stock.

(b) As to the shares of Common Stock beneficially owned by Mark Capital, the number of shares as to which Mark Capital has:

(i) Sole power to vote or to direct the vote: 0

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(ii) Shared power to vote or to direct the vote: 4,320,000

(iii) Sole power to dispose or to direct the disposition of: 0

(iv) Shared power to dispose or to direct the disposition of: 4,320,000

As to the shares of Common Stock beneficially owned by Mr. Levine, the number of shares as to which Mr. Levine has:

(i) Sole power to vote or to direct the vote: 60,000

(ii) Shared power to vote or to direct the vote: 4,335,000

(iii) Sole power to dispose or to direct the disposition of: 60,000

(iv) Shared power to dispose or to direct the disposition of: 4,335,000

(c) An option to purchase 250,000 shares of Common Stock previously held by Mr. Levine expired on December 30, 2008.

(d) Mr. Levine's father, as joint tenant, has the right to receive and the power to direct receipt of dividends from, or the proceeds from the sale of, 15,000 shares of Common Stock beneficially owned by Mr. Levine.

(e) Mr. Levine ceased to be a beneficial owner of more than 5% of the outstanding shares of Common Stock on December 31, 2008.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Not applicable.

Item 7. Material to be Filed as Exhibits

None.

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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 5, 2009

/s/ Evan M. Levine Evan M. Levine, Individually

MARK CAPITAL, LLC

By: /s/ Evan M. Levine Evan M. Levine, its managing member