

SCHRECK THOMAS A
 Form 4
 August 24, 2011

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

OMB APPROVAL

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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 SCHRECK THOMAS A

2. Issuer Name and Ticker or Trading Symbol
 ACELRX PHARMACEUTICALS INC [ACRX]

5. Relationship of Reporting Person(s) to Issuer
 (Check all applicable)

(Last) (First) (Middle)

3. Date of Earliest Transaction (Month/Day/Year)
 08/24/2011

Director 10% Owner
 Officer (give title below) Other (specify below)

C/O ACELRX
 PHARMACEUTICALS, INC., 575
 CHESAPEAKE DRIVE
 (Street)

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

REDWOOD CITY, CA 94063

(City) (State) (Zip)

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|
| | | | | (A) or (D) | Price | | |
| | | | | Code | V | Amount | |
| Common Stock | 08/24/2011 | | P | A | 1,000 | \$ 3.01 | 300,451 D |
| Common Stock | 08/24/2011 | | P | A | 1,000 | \$ 3.01 | 17,482 I |

See Footnote (1)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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