

OMB APPROVAL	
OMB Number:	3235-0287
Expires:	December 31, 2014
Estimated average burden hours per response	0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

1. Name and Address of Reporting Person * SCHRECK THOMAS A <hr/> (Last) (First) (Middle) C/O ACELRX PHARMACEUTICALS INC, 575 CHESAPEAKE DRIVE <hr/> (Street) REDWOOD CITY CA 94063 <hr/> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol ACELRX PHARMACEUTICALS INC [ACRX]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) 02/16/2011	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	

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 Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	02/16/2011		C		41,800	A	(1)	41,800	D	
Common Stock	02/16/2011		C		13,932	A	(2)	13,932	I	See Footnote (3)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Series A Convertible Preferred Stock	(1)	02/16/2011		C		30,605		(4)	(5)	Common Stock	41,800	(1)	0	D	
Series A Convertible Preferred Stock	(2)	02/16/2011		C		10,201		(4)	(5)	Common Stock	13,932	(2)	0	I	See Footnote (3)

Explanation of Responses:

- The shares reflect the automatic conversion of 30,605 shares of the Issuer's Series A Preferred Stock for 41,800 shares of the Issuer's Common Stock immediately prior to the closing of the Issuer's initial public offering.
- The shares reflect the automatic conversion of 10,201 shares of the Issuer's Series A Preferred Stock for 13,932 shares of the Issuer's Common Stock immediately prior to the closing of the Issuer's initial public offering.
- The shares are held in trust for Mr. Schreck's children. Mr. Schreck disclaims beneficial ownership of the shares.
- Immediately convertible into shares of the Issuer's common stock.
- These shares have no expiration date.

/s/ Carter King, Attorney-in-fact 02/18/2011

** Signature of Reporting Person Date

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

* If the form is filed by more than one reporting person, see Instruction 4(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.