## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

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

1. Name and Address of Reporting Person* Rosen Howard B			2. Issuer Name <b>and</b> Ticker or Trading Symbol ACELRX PHARMACEUTICALS INC [ACRX]					
	nst) (First) (Middle) 0 EAST EVELYN AVENUE, 3RD FLOOR		3. Date of Earliest Transaction (Month/Day/Year) 03/02/2011	(Check all applicable)  X Director  Officer (give title below)	10% Owner Other (specify below)			
(Street) MOUNTAIN VIEW	CA	94041	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person				
(City)	(State)	(Zip)		Form filed by More than One Reporting Person				

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. Transac Code (Instr. 8)		4. Secur Acquired Dispose (Instr. 3,	d (A) d of	or (D)	5. Amount of Securities Beneficially Owned	6. Ownership Form: Direct (D)	7. Nature of Indirect Beneficial Ownership	
			Code	V	Amount	(A) or (D)	Price	Following Reported Transaction(s) (Instr. 3 and 4)	or Indirect (I) (Instr. 4)	(Instr. 4)	
Common Stock (1)	03/02/2011		Α		4,394	A	\$ 0	4,394	D		

	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)	Code	4. 5. Number of		6. Date Exercisable and		7. Title and Amount of		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				

## **Explanation of Responses:**

1. Issued pursuant to the 2011 Equity Incentive Plan.

/s/ James Welch, Attorneyin-fact

\*\* 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.