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 APF	PROVAL
OMB Number:	3235-0287
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1. Name and Address of Reporting Person* ACP IV, L.P.			2. Issuer Name and Ticker or Trading Symbol ACELRX PHARMACEUTICALS INC [ACRX]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)			
(Last) ONE EMBARO 3700,	(First)	(Middle) ITER, SUITE	3. Date of Earliest Transaction (Month/Day/Year) 02/16/2011	Director X 10% Owner Officer (give title below)			
(Street) SAN FRANCISCO	CA	94111	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person X Form filed by More than One			
(City)	(State)	(Zip)		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. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		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	02/16/2011		С		682,904	A	(1)	682,904	D (2)		
Common Stock	02/16/2011		С		328,064	A	(3)	1,010,968	D (2)		
Common Stock	02/16/2011		С		810,129	A	(4)	1,821,097	D (2)		
Common Stock	02/16/2011		С		279,097	Α	(5)	2,100,194	D (2)		
Common Stock	02/16/2011		С		14,713	A	(4)	2,114,897	D (2)		
Common Stock	02/16/2011		Р		680,000	А	\$ 5	2,794,907	D (2)		

	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. Transac Code (Instr. 8)		Deriva Securi Acquir	ed (A) or sed of (D) 3, 4,	6. Date Exercisable and Expiration Date (Month/Day/Year) 7. Title and Amount of Underlying Securities (Instr. 3 and 4)		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)	10. Ownership Form of Derivative Security: Direct (D) or Indirect	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		(Instr. 4)	(I) (Instr. 4)	
Series A Convertible Prefered Stock	(1)	02/16/2011		С			500,000	(6)	(7)	Common Stock	682,904	(1)	0	D (2)	
Series B Convertible Preferred Stock	(3)	02/16/2011		С			218,750	(6)	(7)	Common Stock	328,064	(3)	0	D ⁽²⁾	
Series C Convertible Preferred Stock	(4)	02/16/2011		С			810,129	(6)	(7)	Common Stock	810,129	(4)	0	D (2)	
Convertible Promissory Notes	(8)	02/16/2011		J			\$ 644,556	(9)	(9)	Common Stock	163,914	(9)	\$ 1,097,487	D (2)	
Warrant to Purchase Series C Convertible Preferred Stock	(8)	02/16/2011		J			40,865	(10)	(11)	Series C Preferred	40,865	(10)	69,588	D ⁽²⁾	
Convertible Promissory Notes	(5)	02/16/2011		С			\$ 1,097,487	(5)	(5)	Common Stock	279,097	(5)	0	D (2)	
Warrant to Purchase Series C Convertible Preferred Stock	(10)	02/16/2011		x			69,588	(10)	(12)	Series C Preferred	69,588	(10)	0	D ⁽²⁾	
Series C Convertible Preferred Stock	(4)	02/16/2011		х		69,588 (13)		(6)	(7)	Common Stock	69,588	(4)	0	D (2)	
Series C Convertible Preferred Stock	(4)	02/16/2011		S			54,875 (13)	(6)	(7)	Common Stock	54,875	\$ 5	14,713	D ⁽²⁾	
Series C Convertible Preferred Stock	(4)	02/16/2011		С			14,713	(6)	(7)	Common Stock	14,713	(4)	0	D (2)	

(Last)	(First)	(Middle)
ONE EMBARCADE	RO CENTER, S	SUITE 3700
(Street)		
SAN FRANCISCO	CA	94111
(City)	(State)	(Zip)
1. Name and Addre	ss of Reporting	Person*
1. Name and Addres NOHRA GUY P (Last)	ss of Reporting	g Person* (Middle)
NOHRA GUY P	(First)	(Middle)
NOHRA GUY P (Last)	(First) RO CENTER, S	(Middle)

JANNEY DANIEL

(Last) ONE EMBARCADE	(First) RO CENTER, SUITE	(Middle) 3700					
(Street) SAN FRANCISCO	CA	94111					
(City)	(State)	(Zip)					
1. Name and Address DELEAGE JEAN	ss of Reporting Perso	on [*]					
(Last) ONE EMBARCADE	(First) RO CENTER, 37TH F	(Middle) FLOOR					
(Street) SAN FRANCISCO	CA	94111					
(City)	(State)	(Zip)					
1. Name and Addres Mack David Henry	1. Name and Address of Reporting Person* Mack David Henry						
(Last) ONE EMBARCADE	(First) RO CENTER, SUITE	(Middle) 3700					
(Street) SAN FRANCISCO	CA	94111					
(City)	(State)	(Zip)					
1. Name and Addres	ss of Reporting Perso	on [*]					
(Last) ONE EMBARCADE	(First) RO CENTER, SUITE	(Middle) 3700					
(Street) SAN FRANCISCO	CA	94111					
(City)	(State)	(Zip)					

Explanation of Responses:

- 1. The shares reflect the automatic conversion of 500,000 shares of the Issuer's Series A Preferred Stock for 682,904 shares of the Issuer's Common Stock immediately prior to the closing of the Issuer's initial public offering.
- 2. ACMP IV, LLC ("ACMPIV") is the general partner of ACP IV, L.P. ("ACPIV") Jean Deleage, Daniel Janney, David Mack, and Guy Nohra are directors of ACMPIV and may be deemed to share voting and dispositive power with respect to all securities of the Issuer held by ACPIV. Guy Nohra is also a director of the Issuer. Mr. Deleage, Mr. Janney, Mr. Mack, and Mr. Nohra disclaim beneficial ownership of such securities except to the extent of his proportionate pecuniary interest therein.
- 3. The shares reflect the automatic conversion of 218,750 shares of Series B Preferred Stock for 328,064 shares of Common Stock immediately prior to the closing of the Issuer's initial public offering.
- 4. The shares reflect the automatic conversion of shares of the Issuer's Series C Preferred Stock into Common Stock on a one-to-one basis upon the closing of the Issuer's initial public offering.
- 5. Notes and accrued interest in the aggregate of \$1,116,388.59 converted automatically upon the closing of the Issuer's initial public offering into shares of Common Stock at a conversion price of \$4.00, which is 80% of the per share price of the Common Stock sold in the Issuer's initial public offering.
- 6. Immediately convertible into shares of the Issuer's Common Stock.
- 7. These shares have no expiration date.
- 8. Pursuant to Note and Warrant Transfer Agreement dated February 16, 2011, ACP IV, L.P. transferred (i)a convertible promissory note in

the amount of \$655,656.79 including accrued interest and (ii)an associated warrant to purchase preferred stock on the Issuer, exercisable into 40.865 shares of Series C Preferred Stock.

- 9. Principal amount plus interest converts automatically upon the closing of the Issuer's initial public offering into shares of Common Stock at a conversion price of \$4.00, which is 80% of the per share price of the Common Stock sold in the Issuer's initial public offering.
- 10. The exercise price is \$3.9428 per share and immediately exercisable prior to and contingent upon the closing of the Issuer's initial public offering.
- 11. Pursuant to its terms, warrant would terminate at the closing of the Issuer's intial public offering. In the event the Issuer's public offering did not occur, the warrant would have terminated on September 14, 2017, unless earlier terminated in accordance with its terms, in a liquidation or change of control transaction.
- 12. Pursuant to its terms, warrant shall terminate at the closing of the Issuer's initial public offering. Holder has elected to net exercise the warrants contingent upon and effective immediately prior to the closing of the Issuer's initial public offering of common stock.
- 13. These shares reflect the net exercise of the Series C warrant pursuant to the terms fo the warrant into 14,713 shares of the Issuer's Series C Preferred Stock.

/s/ by ACMP IV, LLC, by Guy Nohra, Director	02/18/2011
/s/ Guy Nohra	02/18/2011
/s/ Daniel Janney	02/18/2011
/s/ Jean Deleage	02/18/2011
/s/ David Mack	02/18/2011
/s/ by Guy Nohra, Director	02/18/2011
** Signature of Reporting	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.