

OMB APPROVAL	
OMB Number:	3235-0104
Expires:	December 31, 2014
Estimated average burden hours per response	0.5

INITIAL STATEMENT OF 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

1. Name and Address of Reporting Person* Skyline Venture Management IV, LLC <hr/> (Last) (First) (Middle) C/O SKYLINE PARTNERS, 525 UNIVERSITY AVENUE, SUITE 520 <hr/> (Street) PALO ALTO CA 94301 <hr/> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 02/10/2011	3. Issuer Name and Ticker or Trading Symbol ACELRX PHARMACEUTICALS INC [ACRX]	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) <input type="checkbox"/> Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input type="checkbox"/> Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned			
1. Title of Security (Instr. 4)	2. Amount of Securities Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)

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

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares ^M			
Series A Convertible Preferred Stock	(1)	(2)	Common Stock	500,000 ^{(3) (4)}	\$ ^{(1) (4)}	I	See Footnote ⁽⁵⁾
Series B Convertible Preferred Stock	(1)	(2)	Common Stock	312,500 ^{(3) (6)}	\$ ^{(1) (6)}	I	See Footnote ⁽⁵⁾
Series C Convertible Preferred Stock	(1)	(2)	Common Stock	915,798 ^{(3) (7)}	\$ ^{(1) (7)}	I	See Footnote ⁽⁵⁾
Warrant to Purchase Series C Convertible Preferred Stock	(8)	(9)	Series C Preferred Stock	125,386 ⁽³⁾	\$ ^{(3) (10)}	I	See Footnote ⁽⁵⁾
Convertible Promissory Note	(11)	(11)	Common Stock	\$ 1,977,503.11 ⁽¹¹⁾	\$ ⁽¹¹⁾	I	See Footnote ⁽⁵⁾

Explanation of Responses:

1. Immediately convertible into shares of the Issuer's common stock.
2. These shares have no expiration date.
3. Reflects a 1-for-4 reverse stock split of the Company's issued an outstanding securities effective January 28, 2011.
4. The shares will automatically convert into 682,904 shares of the Issuer's common stock immediately prior to the closing of the Issuer's initial public offering.
5. The shares are held by Skyline Venture Partners Qualified Purchaser Fund IV, L.P. John G. Freund and Yasunori Kaneko are the Managing Members of Skyline Venture Management IV, LLC, which is the general partner of Skyline Venture Partners Qualified Purchaser Fund IV, L.P., and as such Drs. Freund and Kaneko may be deemed to share voting and dispositive power with respect to all shares of common stock held by Skyline Venture Partners Qualified Purchaser Fund IV, L.P. Stephen Hoffman, one of the Company's directors, is a Managing Director of Skyline Ventures and as such may be deemed to share voting and dispositive power with respect to all shares of common stock held by Skyline Venture Partners Qualified Purchasers Fund IV, L.P. Each of Drs. Freund, Kaneko and Hoffman disclaims beneficial ownership of such shares.
6. The shares will automatically convert into 468,664 shares of the Issuer's common stock immediately prior to the closing of the Issuer's initial public offering.
7. Automatically converts into common stock on a one-for-one basis upon the closing of the Issuer's initial public offering.
8. Exercisable contingent upon and effective immediately prior to the closing of the Issuer's initial public offering.
9. Pursuant to its terms, the 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. In the event the Issuer's public offering does no occur, the warrant shall terminate on September 14, 2017, unless earlier terminated in accordance with its terms, in a liquidation or change of control transaction.
10. The exercise price per share is \$3.9428.
11. Principal amount of \$1,977,503.11, plus interest accrued at the rate of 4.0% per annum shall convert automatically upon the closing of the Issuer's initial public offering into shares of common stock at a conversion price of 80.0% of the per share price of the common stock sold in the Issuer's initial public offering.

/s/ Kerensa Kenny,
Attorney-in-fact.

02/10/2011

** 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 5(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.

POWER OF ATTORNEY

Know all by these presents, that the undersigned hereby constitutes and appoints Kerensa Kenny with full power of substitution, the undersigned's true and lawful attorney-in-fact to:

- (1) prepare, execute in the undersigned's name and on the undersigned's behalf, and submit to the U.S. Securities and Exchange Commission (the "SEC") a Form ID, including amendments thereto, and any other documents necessary or appropriate to obtain codes and passwords enabling the undersigned to make electronic filings with the SEC of reports required by Section 16(a) of the Securities Exchange Act of 1934 or any rule or regulation of the SEC;
- (2) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer, director and/or more than 10% stockholder of any Skyline Affiliated Public Portfolio Company (the "Company"), Forms 3, 4, and 5 as well as 13(g) and 13(d) filings, in accordance with Section 16 of the Securities Exchange Act of 1934 and the rules thereunder;
- (3) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4, or 5, and 13(g) and 13(d), complete and execute any amendment or amendments thereto, and timely file such form with the SEC and any stock exchange or similar authority; and
- (4) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted.

The undersigned acknowledges that the foregoing attorney-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorney-in-fact.

This Power of Attorney supersedes any prior power of attorney granted by the undersigned with respect to Forms 3, 4, and 5, and 13(g) and 13(d).

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 2ND day of February, 2011.

Skyline Venture Partners III, L.P.
By Skyline Venture Management III, L.L.C.,
Its General Partner

By: /s/ John G. Freund
John G. Freund, Managing Director

Skyline Venture Partners Qualified Purchaser Fund III, L.P.
By Skyline Venture Management III, L.L.C.,
Its General Partner

By: /s/ John G. Freund
John G. Freund, Managing Director

Skyline Venture Partners Qualified Purchaser Fund IV, L.P.
By Skyline Venture Management IV, L.L.C.,
Its General Partner

By: /s/ John G. Freund
John G. Freund, Managing Director

Skyline Venture Partners V, L.P.
By Skyline Venture Management III, L.L.C.,
Its General Partner

By: /s/ John G. Freund
John G. Freund, Managing Director

Skyline Expansion Fund, L.P.

By Skyline Expansion Fund Management, L.L.C.,
Its General Partner
By Skyline Venture Management III, L.L.C.
Its Managing Member

By: /s/ John G. Freund
John G. Freund, Managing Director

John G. Freund

By: /s/ John G. Freund

Yasunori Kaneko

By: /s/ Yasunori Kaneko

Stephen J. Hoffman

By: /s/ Stephen J. Hoffman

\\DC - 57385/2 - #1301253 v1

911944 v2/HN

\\DC - 57385/2 - #1301253 v1