

OMB APPROVAL	
OMB Number:	3235-0287
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 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>George Jean</u>  (Last) (First) (Middle) <u>C/O ADVANCED TECHNOLOGY VENTURE</u> <u>500 BOYLSTON STREET, SUITE 1380</u>  (Street) <u>BOSTON MA 02116</u>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>ACCELERON PHARMA INC [ XLRN ]</u>	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) <u>12/15/2017</u>	
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	12/15/2017		S		105,122 <sup>(1)</sup>	D	\$35.73 <sup>(2)</sup>	0	I	See footnote <sup>(3)</sup>		
Common Stock								1,250	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)	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 Securities Underlying Derivative Security (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: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date					

**Explanation of Responses:**

- Includes 98,674 shares, 3,959 shares, 1,902 shares and 587 shares of common stock sold by Advanced Technology Ventures VII, L.P. ("ATV VII"), Advanced Technology Ventures VII (B), L.P. ("ATV VII B"), Advanced Technology Ventures VII (C), L.P. ("ATV VII C") and ATV Entrepreneurs VII, L.P. ("ATV VII E"), respectively.
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$35.99 - \$36.10, inclusive. The Reporting Person undertakes to provide to the Issuer, any security holder of the Issuer, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth in footnote (2) to this Form 4.
- ATV Associates VII, L.L.C. ("ATV A VII") is the general partner of ATV VII, ATV VII B, ATV VII C and ATV VII E and exercises voting and dispositive authority over the shares held by ATV VII, ATV VII B, ATV VII C and ATV VII E. Jean George is a managing director of ATV A VII and exercises voting and dispositive decisions of ATV A VII collectively with each of four other managing directors. Ms. George disclaims beneficial ownership of these securities and this report shall not be deemed an admission that she is the beneficial owner of such securities for purposes of Section 16 or for any other purpose, except to the extent of her pecuniary interest therein.

**Remarks:**

/s/ Jean George 12/18/2017

\*\* 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.