

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

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

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

1. Name and Address of Reporting Person* <u>Kearney Terrence C</u>			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)		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <u>10/12/2020</u>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person		
<u>128 SIDNEY STREET</u>			4. If Amendment, Date of Original Filed (Month/Day/Year)					
(Street)	<u>CAMBRIDGE MA</u>	<u>02139</u>						
(City)	(State)	(Zip)						

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	10/12/2020		M ⁽¹⁾		20,000	A	\$28.37	25,127	D	
Common Stock	10/12/2020		M ⁽¹⁾		10,000	A	\$27.97	35,127	D	
Common Stock	10/12/2020		M ⁽¹⁾		7,500	A	\$30.17	42,627	D	
Common Stock	10/12/2020		S ⁽¹⁾		2,200	D	\$117.82 ⁽²⁾	40,427	D	
Common Stock	10/12/2020		S ⁽¹⁾		18,177	D	\$119.11 ⁽³⁾	22,250	D	
Common Stock	10/12/2020		S ⁽¹⁾		16,210	D	\$119.78 ⁽⁴⁾	6,040	D	
Common Stock	10/12/2020		S ⁽¹⁾		913	D	\$120.57 ⁽⁵⁾	5,127	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						Title
Option to Purchase Common Stock	\$28.37	10/12/2020		M ⁽¹⁾			20,000	(6)	07/14/2024	Common Stock	20,000	\$0	0	D	
Option to Purchase Common Stock	\$27.97	10/12/2020		M ⁽¹⁾			10,000	(7)	03/03/2026	Common Stock	10,000	\$0	0	D	
Option to Purchase Common Stock	\$30.17	10/12/2020		M ⁽¹⁾			7,500	(7)	03/02/2027	Common Stock	7,500	\$0	0	D	

Explanation of Responses:

- The reported transactions were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person.
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$117.29 to \$118.08 inclusive. The reporting person undertakes to provide Acceleron Pharma Inc., any security holder of Acceleron Pharma Inc., 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 this footnote (2) to this Form 4.
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$118.50 to \$119.49 inclusive. The reporting person undertakes to provide Acceleron Pharma Inc., any security holder of Acceleron Pharma Inc., 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 this footnote (3) to this Form 4.
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$119.50 to \$120.48 inclusive. The reporting person undertakes to provide Acceleron Pharma Inc., any security holder of Acceleron Pharma Inc., 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 this footnote (4) to this Form 4.
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$120.50 to \$120.70 inclusive. The reporting person undertakes to provide Acceleron Pharma Inc., any security holder of Acceleron Pharma Inc., 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 this footnote (5) to this Form 4.
- The shares of common stock underlying this stock option award vested in equal quarterly installments over the first three years after the grant date.
- The shares of common stock underlying this stock option award vested in full on the one year anniversary of the grant date.

Remarks:

Exhibit List: Exhibit 24 - Power of Attorney

/s/ Adam M. Veness, as attorney-in-fact for Terrence C. 10/13/2020 Kearney

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.

POWER OF ATTORNEY

Know all by these presents, that the undersigned hereby constitutes and appoints each of Kevin F. McLaughlin and Adam M. Veness, Esq., signing singly, as the undersigned's true and lawful attorney-in-fact to:

- (1) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of Acceleron Pharma Inc. (the "Company"), Forms 3, 4 and 5 in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Act"), and the rules thereunder;
- (2) 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 timely file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority; and
- (3) 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 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 the acts such attorney-in-fact 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 each of the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, is not assuming any of the undersigned's responsibilities to comply with Section 16 of the Act.

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 each of the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of February 24, 2020.

By: /s/ Terrence C. Kearney

Print Name: Terrence C. Kearney
