ACCELERON PHARMA INC Form SC 13D/A May 26, 2015

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 4)*

ACCELERON PHARMA INC.

(Name of Issuer)

Common Stock, \$0.001 par value

(Title of Class of Securities)

00434H108

(CUSIP Number)

Polaris Partners Gunderson Dettmer Stough Villeneuve

1000 Winter Street, Suite 3350 Franklin & Hachigian, LLP

Waltham, MA 02451 One Marina Park Drive, Suite 900

Boston, MA 02210

Attn: Jay K. Hachigian, Esq.

1

(617) 648-9100

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

May 13, 2015

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this
Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the
following box: "

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

The information required on the remainder of this cover page shall not be deemed to be filed for the purpose of Section 18 of the Securities Exchange Act of 1934 (Act) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

^{*} The remainder of this cover page shall be filled out for a reporting person s initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

CUSIP No. 00434H108 Page 2 of 11

 Names of Reporting Persons 	1.	l.	Names	of Re	porting	Persons
--	----	----	-------	-------	---------	---------

- Polaris Venture Partners IV, L.P. (PVP IV)
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- 4. Source of Funds (See Instructions)

WC

- 5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)
- 6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power

Number of

1,853,693 shares, of which (a) 1,673,175 shares are Common Stock and (b) 180,518 shares

Shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days, except that

(i) Polaris Venture Management Co. IV, L.L.C. (PVM IV), the general partner of PVP IV, may be

Beneficially deemed to have sole power to vote these shares, and (ii) Jonathan A. Flint (Flint), a managing

member of PVM IV, may be deemed to have shared power to vote these shares, Terrance G.

McGuire (McGuire), a managing member of PVM IV, may be deemed to have shared power to vote these shares and Alan Spoon (Spoon), a managing member of PVM IV, may be deemed to have

these shares and Alan Spoon (Spoon), a managing member of PVM IV, may be deemed to have

shared power to vote these shares.

8. Shared Voting Power

Reporting

Owned by

Each

Person

See response to row 7.

With 9. Sole Dispositive Power

1,853,693 shares, of which (a) 1,673,175 shares are Common Stock and (b) 180,518 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days, except that (i) PVM IV, the general partner of PVP IV, may be deemed to have sole power to dispose of these shares, and (ii) Flint, a managing member of PVM IV, may be deemed to have shared power to dispose of these shares, McGuire, a managing member of PVM IV, may be deemed to have shared power to dispose of these shares and Spoon, a managing member of PVM IV, maybe be deemed to have shared power to dispose of these shares.

11.	See response to row 9. Aggregate Amount Beneficially Owned by Each Reporting Person
12.	1,853,693 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)
13.	Percent of Class Represented by Amount in Row (11)
14.	5.6% Type of Reporting Person (See Instructions)
	PN

CUSIP No. 00434H108 Page 3 of 11

1.	Names	of Re	norting	Persons.
1.	ranics	or icc	porung	i cisons.

- Polaris Venture Partners Entrepreneurs Fund IV, L.P. (PVPE IV)
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- 4. Source of Funds (See Instructions)

WC

- 5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)
- 6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power

Number of

Shares

33,626 shares, of which (a) 30,242 shares are Common Stock and (b) 3,384 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days, except that (i) PVM IV, the general partner of PVPE IV, may be deemed to have sole power to vote these shares, and (ii)

Beneficially

Owned by

Flint, a managing member of PVM IV, may be deemed to have shared power to vote these shares, McGuire, a managing member of PVM IV, may be deemed to have shared power to vote these shares and Spoon, a managing member of PVM IV, may be deemed to have shared power to vote

these shares.

Each 8. Shared Voting Power

Reporting

Person

See response to row 7.

With 9. Sole Dispositive Power

5

33,626 shares, of which (a) 30,242 shares are Common Stock and (b) 3,384 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days, except that (i) PVM IV, the general partner of PVPE IV, may be deemed to have sole power to dispose of these shares, and (ii) Flint, a managing member of PVM IV, may be deemed to have shared power to dispose of these shares, McGuire, a managing member of PVM IV, may be deemed to have shared power to dispose of these shares, and Spoon, a managing member of PVM IV, may be deemed to have shared power to dispose of these shares.

11.	See response to Row 9. Aggregate Amount Beneficially Owned by Each Reporting Person
12.	33,626 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)
13.	Percent of Class Represented by Amount in Row (11)
14.	0.1% Type of Reporting Person (See Instructions)
	PN

CUSIP No. 00434H108 Page 4 of 11

	1.	Names	of Repo	rting Persons
--	----	-------	---------	---------------

- Polaris Venture Management Co. IV, L.L.C. (PVM IV)
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- 4. Source of Funds (See Instructions)

WC

- 5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)
- 6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power

Number of

Shares

1,889,314 shares, of which (a) 1,995 shares of Common Stock are owned directly by PVM IV, (b) 1,673,175 shares of Common Stock are directly owned by PVP IV, (c) 180,518 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVP IV, (d) 30,242 shares of Common Stock directly owned by PVPE IV and (e) 3,384 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVPE IV, except that Flint, a managing member of PVM IV (which is general partner of PVP IV and PVPE IV), may be deemed to have shared power to vote these shares, McGuire, a managing member of

PVM IV, may be deemed to have shared power to vote these shares, and Spoon, a managing

member of PVM IV, may be deemed to have shared power to vote these shares.

Beneficially

Owned by

Each

8. Shared Voting Power

Reporting

Person

With See response to row 7.

9. Sole Dispositive Power

1,889,314 shares, of which (a) 1,995 shares of Common Stock are owned directly by PVM IV, (b) 1,673,175 shares of Common Stock are directly owned by PVP IV, (c) 180,518 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVP IV, (d) 30,242 shares of Common Stock directly owned by PVPE IV and (e) 3,384 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVPE IV, except that Flint, a managing member of PVM IV (which is general partner of PVP IV and PVPE IV), may be deemed to have shared power to dispose of these shares, McGuire, a managing member of PVM IV, may be deemed to have shared power to dispose of these shares, and Spoon, a managing member of PVM IV, may be deemed to have shared power to dispose of these shares.

11.	See response to row 9. Aggregate Amount Beneficially Owned by Each Reporting Person
12.	1,889,314 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)
13.	Percent of Class Represented by Amount in Row (11)
14.	5.8% Type of Reporting Person (See Instructions)
	00

CUSIP No. 00434H108 Page 5 of 11

1.	Names	of Re	porting	Persons.
----	-------	-------	---------	----------

Jonathan A. Flint

- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- 4. Source of Funds (See Instructions)

AF

- 5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)
- 6. Citizenship or Place of Organization

U.S.A.

7. Sole Voting Power

1,889,314 shares, of which (a) 1,995 shares of Common Stock are owned directly by PVM IV, (b) 1,673,175 shares of Common Stock are directly owned by PVP IV, (c) 180,518 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVP IV, (d) 30,242 shares of Common Stock directly owned by PVPE IV and (e) 3,384 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVPE IV, except that PVM IV, as the general partner of PVP IV and PVPE IV, may be deemed to have sole power to vote PVP IV s and PVPE IV s shares (collectively, the Fund IV Shares), McGuire, as a managing member of PVM IV, may be deemed to have shared power to vote the Fund IV Shares, and Spoon, as a managing member of PVM IV, may be deemed to have shared power to vote the Fund IV Shares.

Number of

Shares

Beneficially 8. Shared Voting Power

Owned by

Each See response to row 7.

Reporting 9

Person

9. Sole Dispositive Power

1,889,314 shares, of which (a) 1,995 shares of Common Stock are owned directly by PVM IV, (b) 1,673,175 shares of Common Stock are directly owned by PVP IV, (c) 180,518 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVP IV, (d) 30,242 shares of Common Stock directly owned by PVPE IV and (e) 3,384 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVPE IV, except that PVM IV, as general partner of PVP IV and PVPE IV, may be deemed to have sole power to dispose of the Fund IV Shares, McGuire, as a managing member of PVM IV, may be deemed to have shared power to dispose of the Fund IV Shares, and Spoon, as a managing member of PVM IV, may be deemed to have shared power to dispose of the Fund IV Shares.

10. Shared Dispositive Power

See response to row 9.

11. Aggregate Amount Beneficially Owned by Each Reporting Person

1,889,314

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

..

13. Percent of Class Represented by Amount in Row (11)

5.8%

14. Type of Reporting Person (See Instructions)

IN

CUSIP No. 00434H108 Page 6 of 11

1.	Names	of R	eporting	Persons.
----	-------	------	----------	----------

Terrance G. McGuire

- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- Source of Funds (See Instructions)

AF

- 5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)
- 6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power

1,899,314 shares, of which (a) McGuire owns 10,000 shares directly (all of which are options to purchase shares of Common Stock) (b) 1,995 shares of Common Stock are directly owned by PVM IV, (c) 1,673,175 shares of Common Stock are directly owned by PVP IV, (d) 180,518 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVP IV, (e) 30,242 shares of Common Stock are directly owned by PVPE IV and (f) 3,384 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVPE IV, except that PVM IV, as the general partner of PVP IV and PVPE IV, may be deemed to have sole power to vote the Fund IV Shares, Flint, as a managing member of PVM IV, may be deemed to have shared power to vote the Fund IV Shares, and Spoon, as a managing member of PVM IV, may be deemed to have shared power to vote the Fund IV Shares.

Number of

Shares

8. Shared Voting Power

Beneficially

Owned by

Each

See response to row 7.

Reporting

11

Person

9. Sole Dispositive Power

1,899,314 shares, of which (a) McGuire owns 10,000 shares directly (all of which are options to purchase shares of Common Stock) (b) 1,995 shares of Common Stock are directly owned by PVM IV, (c) 1,673,175 shares of Common Stock are directly owned by PVP IV, (d) 180,518 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVP IV, (e) 30,242 shares of Common Stock are directly owned by PVPE IV and (f) 3,384 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVPE IV, except that PVM IV, as general partner of PVP IV and PVPE IV, maybe deemed to have sole power to dispose of the Fund IV Shares, Flint, as a managing member of PVM IV, may be deemed to have shared power to dispose of the Fund IV Shares, and Spoon, as a managing member of PVM IV, may be deemed to have shared power to dispose of the Fund VI Shares.

10. Shared Dispositive Power

See response to row 9.

11. Aggregate Amount Beneficially Owned by Each Reporting Person

1,899,314

- 12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)
- 13. Percent of Class Represented by Amount in Row (11)

5.8%

14. Type of Reporting Person (See Instructions)

IN

CUSIP No. 00434H108 Page 7 of 11

 Names of Reporting Persons 	1.	l.	Names	of Re	porting	Persons
--	----	----	-------	-------	---------	---------

Alan G. Spoon

- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- 4. Source of Funds (See Instructions)

AF

- 5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)
- 6. Citizenship or Place of Organization

U.S.A.

7. Sole Voting Power

Number of

Shares

1,889,314 shares, of which (a) 1,995 shares of Common Stock are owned directly by PVM IV, (b) 1,673,175 shares of Common Stock are directly owned by PVP IV, (c) 180,518 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVP IV, (d) 30,242 shares of Common Stock directly owned by PVPE IV and (e) 3,384 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVPE IV, except that PVM IV, as the general partner of PVP IV and PVPE IV, may be deemed to have sole power to vote the Fund IV Shares, Flint, as a managing member of PVM IV, may be deemed to

have shared power to vote the Fund IV Shares, and McGuire, a managing member of PVM IV, may

Beneficially

Owned by

Each

be deemed to have shared power to vote the Fund IV Shares.8. Shared Voting Power

Reporting

Person

With See response to row 7.

9. Sole Dispositive Power

1,889,314 shares, of which (a) 1,995 shares of Common Stock are owned directly by PVM IV, (b) 1,673,175 shares of Common Stock are directly owned by PVP IV, (c) 180,518 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVP IV, (d) 30,242 shares of Common Stock directly owned by PVPE IV and (e) 3,384 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days issued to PVPE IV, except that PVM IV, as general partner of PVP IV and PVPE IV, may be deemed to have sole power to dispose of the Fund IV Shares, Flint, as a managing member of PVM IV, may be deemed to have shared power to dispose of the Fund IV Shares, and McGuire, a member of PVM IV, may be deemed to have shared power to dispose of the Fund IV Shares.

11.	See response to row 9. Aggregate Amount Beneficially Owned by Each Reporting Person
12.	1,889,314 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)
13.	Percent of Class Represented by Amount in Row (11)
14.	5.8% Type of Reporting Person (See Instructions)
	IN

CUSIP No. 00434H108 Page 8 of 11

SCHEDULE 13D

This Amendment No. 4 (this Amendment No. 4) amends and supplements the Schedule 13D originally filed with the Securities and Exchange Commission (the SEC) on February 14, 2014, by the Reporting Persons, as amended by Amendment No. 1 (Amendment No. 1) filed with the SEC on April 7, 2014, Amendment No. 2 (Amendment No. 2) filed with the SEC on May 13, 2014 and Amendment No. 3 (Amendment No. 3) filed with the SEC on February 17, 2015 (collectively, the Schedule 13D), with respect to shares of common stock, par value \$0.001 per share of the Issuer (Common Stock) beneficially owned by the Reporting Persons. Except as amended or supplemented in this Amendment No. 4, all other information in the Schedule 13D is as set forth therein. Capitalized terms used herein but not defined shall have the meanings ascribed thereto in the Schedule 13D.

Item 4. Purpose of Transaction.

On May 20, 2015, 5,079 shares of Common Stock owned directly by PVM IV were distributed to its members, pro rata, in accordance with its operating agreement. The number of shares reported as owned directly by PVM IV in this Amendment No. 4 reflects such distribution.

Item 5. Interest in Securities of the Issuer.

The information below is based on a total of 32,811,971 shares of Common Stock outstanding as of April 30, 2015, as reported on the Issuer s Form 10-Q Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 filed with the Securities and Exchange Commission on May 7, 2015.

- (a) PVP IV directly beneficially owns 1,853,693 shares, of which (a) 1,673,175 shares are Common Stock and (b) 180,518 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days, or approximately 5.6% of the Common Stock outstanding. PVPE IV directly beneficially owns 33,626 shares, of which (a) 30,242 shares are Common Stock and (b) 3,384 shares represent underlying Common Stock pursuant to a warrant exercisable within 60 days, or approximately 0.1% of the Common Stock outstanding. PVM IV owns 1,995 shares of Common Stock directly and, as the general partner of PVP IV and PVPE IV, may be deemed to indirectly beneficially own the securities owned by PVP IV and PVPE IV. In addition, McGuire, in connection with his role as member of the Board of Directors of the Issuer, owns 10,000 shares directly which are options to purchase shares of Common Stock.
- (b) Each of McGuire, Flint and Spoon, the managing members of PVM IV may be deemed to share the power to vote or direct the voting of and to dispose or direct the disposition of the securities of the Issuer that are beneficially owned by PVP IV and PVPE IV. Each such person disclaims beneficial ownership of all securities other than those he or she owns directly, if any, or by virtue of his or her indirect pro rata interest, as a member of PVM IV, in the securities owned by PVP IV and PVPE IV.

Item 7. Material to be Filed as Exhibits.

Exhibit A - Joint Filing Agreement

CUSIP No. 00434H108 Page 9 of 11

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: May 26, 2015

POLARIS VENTURE PARTNERS IV, L.P.

By: Polaris Venture Management Co. IV, L.L.C.

By: *
Managing Member

POLARIS VENTURE PARTNERS ENTREPRENEURS FUND IV, L.P.

By: Polaris Venture Management Co. IV, L.L.C.

By: *
Managing Member

POLARIS VENTURE MANAGEMENT CO. IV, L.L.C.

By: *
Managing Member

JONATHAN A. FLINT

By: /s/ Jonathan A. Flint Jonathan A. Flint

TERRANCE G. MCGUIRE

By: /s/ Terrance G. McGuire Terrance G. McGuire

ALAN G. SPOON

By: /s/ Alan G. Spoon Alan G. Spoon

*By: /s/ John Gannon Name: John Gannon Attorney-in-Fact

[This Schedule 13D was executed pursuant to a Power of Attorney. Note that copies of the applicable Powers of

Attorney are already on file with the appropriate agencies.]