

ACCELERON PHARMA INC
Form SC 13G/A
February 10, 2015

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G/A

Under the Securities Exchange Act of 1934
(Amendment No. 1)*

ACCELERON PHARMA INC.
(Name of Issuer)

COMMON STOCK
(Title of Class of Securities)

00434H108
(CUSIP Number)

December 31, 2014
(Date of Event Which Requires Filing of This Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

Rule 13d-1(b)

Rule 13d-1(c)

Rule 13d-1(d)

* 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 the disclosures provided in a prior cover page.

The information required in 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).

CUSIP No. 00434H108

Page 2 of 17 Pages

1. Name of Reporting Persons

Advanced Technology Ventures VI, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) 1

3. SEC USE ONLY

4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of Shares 0

6. Shared Voting Power

Beneficially Owned by Each

7. Sole Dispositive Power

Reporting Person 0

With: 8. Shared Dispositive Power

1,677,3992

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,677,3992

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

5.2%3

12. Type of Reporting Person (See Instructions)

PN

1 This Schedule 13G/A is filed by Advanced Technology Ventures VI, L.P. (“ATV VI”), 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”), ATV Entrepreneurs VI, L.P. (“ATVE VI”), ATV Entrepreneurs VII, L.P. (“ATVE VII”), ATV Alliance 2003, L.P. (“ATV Alliance”), ATV Associates VI, L.L.C. (the general partner of ATV VI and ATVE VI) (“ATVA VI”), ATV Associates VII, L.L.C. (the general partner of ATV VII, ATV VII-B, ATV VII-C and ATVE VII) (“ATVA VII”), and ATV Alliance Associates, L.L.C. (the general partner of ATV Alliance) (“ATVAA” and, together with ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII, ATV Alliance, ATVA VI and ATVA VII, the “ATV Entities”). The ATV Entities expressly disclaim status as a “group” for purposes of this Schedule 13G/A.

- 2 Consists of (i) 205,334 shares of common stock and warrants to purchase 19,916 shares of common stock owned by ATV VI, (ii) 1,227,853 shares of common stock and warrants to purchase 119,323 shares of common stock owned by ATV VII, (iii) 49,271 shares of common stock and warrants to purchase 4,788 shares of common stock owned by ATV VII-B, (iv) 23,684 shares of common stock and warrants to purchase 2,302 shares of common stock owned by ATV VII-C, (v) 7,314 shares of common stock and warrants to purchase 711 shares of common stock owned by AVTE VII, (vi) 13,104 shares of common stock and warrants to purchase 1,271 shares of common stock owned by AVTE VI and (vii) 2,528 shares of common stock owned by ATV Alliance.
- 3 This percentage is calculated based the number of the Issuer's outstanding shares equal to the sum of (i) 32,253,193 shares of the Issuer's common stock outstanding as of October 31, 2014, as set forth in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2014 and (ii) 148,311 shares of common stock underlying warrants owned by the Reporting Persons.

CUSIP No. 00434H108

Page 3 of 17 Pages

1. Name of Reporting Persons

Advanced Technology Ventures VII, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) 1

3. SEC USE ONLY

4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of Shares 0

6. Shared Voting Power

Beneficially Owned by Each Reporting Person 1,677,3992

7. Sole Dispositive Power

Reporting Person With: 0

8. Shared Dispositive Power

1,677,3992

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,677,3992

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

5.2%3

12. Type of Reporting Person (See Instructions)

PN

1 This Schedule 13G/A is filed by ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII, ATV Alliance, ATVA VI (the general partner of ATV VI and ATVE VI), ATVA VII (the general partner of ATV VII, ATV VII-B, ATV VII-C and ATVE VII), and ATVAA (the general partner of ATV Alliance). The ATV Entities expressly disclaim status as a "group" for purposes of this Schedule 13G/A.

2 Consists of (i) 205,334 shares of common stock and warrants to purchase 19,916 shares of common stock owned by ATV VI, (ii) 1,227,853 shares of common stock and warrants to purchase 119,323 shares of common stock owned by ATV VII, (iii) 49,271 shares of common stock and warrants to purchase 4,788 shares of common stock owned by ATV VII-B, (iv) 23,684 shares of common stock and warrants to purchase 2,302 shares of common stock owned by ATV VII-C, (v) 7,314 shares of common

stock and warrants to purchase 711 shares of common stock owned by AVTE VII, (vi) 13,104 shares of common stock and warrants to purchase 1,271 shares of common stock owned by AVTE VI and (vii) 2,528 shares of common stock owned by ATV Alliance.

- 3 This percentage is calculated based the number of the Issuer's outstanding shares equal to the sum of (i) 32,253,193 shares of the Issuer's common stock outstanding as of October 31, 2014, as set forth in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2014 and (ii) 148,311 shares of common stock underlying warrants owned by the Reporting Persons.

CUSIP No. 00434H108

Page 4 of 17
Pages

1. Name of Reporting Persons

Advanced Technology Ventures VII (B), L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) 1

3. SEC USE ONLY

4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of Shares 0

6. Shared Voting Power

Beneficially

Owned by 1,677,3992

7. Sole Dispositive Power

Each

Reporting Person 0

With: 8. Shared Dispositive Power

1,677,3992

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,677,3992

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

5.2%3

12. Type of Reporting Person (See Instructions)

PN

1 This Schedule 13G/A is filed by ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII, ATV Alliance, ATVA VI (the general partner of ATV VI and ATVE VI), ATVA VII (the general partner of ATV VII, ATV VII-B, ATV VII-C and ATVE VII), and ATVAA (the general partner of ATV Alliance). The ATV Entities expressly disclaim status as a "group" for purposes of this Schedule 13G/A.

2 Consists of (i) 205,334 shares of common stock and warrants to purchase 19,916 shares of common stock owned by ATV VI, (ii) 1,227,853 shares of common stock and warrants to purchase 119,323 shares of common stock owned by ATV VII, (iii) 49,271 shares of common stock and warrants to purchase 4,788 shares of common stock owned by ATV VII-B, (iv) 23,684 shares of common stock and

warrants to purchase 2,302 shares of common stock owned by ATV VII-C, (v) 7,314 shares of common stock and warrants to purchase 711 shares of common stock owned by AVTE VII, (vi) 13,104 shares of common stock and warrants to purchase 1,271 shares of common stock owned by AVTE VI and (vii) 2,528 shares of common stock owned by ATV Alliance.

- 3 This percentage is calculated based the number of the Issuer's outstanding shares equal to the sum of (i) 32,253,193 shares of the Issuer's common stock outstanding as of October 31, 2014, as set forth in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2014 and (ii) 148,311 shares of common stock underlying warrants owned by the Reporting Persons.

CUSIP No. 00434H108

Page 5 of 17
Pages

1. Name of Reporting Persons

Advanced Technology Ventures VII(C), L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) 1

3. SEC USE ONLY

4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of
Shares

0

6. Shared Voting Power

Beneficially

Owned by

1,677,3992

Each

7. Sole Dispositive Power

Reporting

Person

0

With:

8. Shared Dispositive Power

1,677,3992

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,677,3992

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

5.2%3

12. Type of Reporting Person (See Instructions)

PN

1 This Schedule 13G/A is filed by ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII, ATV Alliance, ATVA VI (the general partner of ATV VI and ATVE VI), ATVA VII (the general partner of ATV VII, ATV VII-B, ATV VII-C and ATVE VII), and ATVAA (the general partner of ATV Alliance). The ATV Entities expressly disclaim status as a "group" for purposes of this Schedule 13G/A.

2 Consists of (i) 205,334 shares of common stock and warrants to purchase 19,916 shares of common stock owned by ATV VI, (ii) 1,227,853 shares of common stock and warrants to purchase 119,323 shares of common stock owned by ATV VII, (iii) 49,271 shares of common stock and warrants to purchase 4,788 shares of common stock owned by ATV VII-B, (iv) 23,684 shares of common stock and

warrants to purchase 2,302 shares of common stock owned by ATV VII-C, (v) 7,314 shares of common stock and warrants to purchase 711 shares of common stock owned by AVTE VII, (vi) 13,104 shares of common stock and warrants to purchase 1,271 shares of common stock owned by AVTE VI and (vii) 2,528 shares of common stock owned by ATV Alliance.

- 3 This percentage is calculated based the number of the Issuer's outstanding shares equal to the sum of (i) 32,253,193 shares of the Issuer's common stock outstanding as of October 31, 2014, as set forth in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2014 and (ii) 148,311 shares of common stock underlying warrants owned by the Reporting Persons.

CUSIP No. 00434H108

Page 6 of 17
Pages

1. Name of Reporting Persons

ATV Entrepreneurs VI, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) 1

3. SEC USE ONLY

4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of Shares 0

6. Shared Voting Power

Beneficially Owned by Each Reporting Person 1,677,3992

7. Sole Dispositive Power

Reporting Person With: 0

8. Shared Dispositive Power

1,677,3992

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,677,3992

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

5.2%3

12. Type of Reporting Person (See Instructions)

PN

1 This Schedule 13G/A is filed by ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII, ATV Alliance, ATVA VI (the general partner of ATV VI and ATVE VI), ATVA VII (the general partner of ATV VII, ATV VII-B, ATV VII-C and ATVE VII), and ATVAA (the general partner of ATV Alliance). The ATV Entities expressly disclaim status as a "group" for purposes of this Schedule 13G/A.

2 Consists of (i) 205,334 shares of common stock and warrants to purchase 19,916 shares of common stock owned by ATV VI, (ii) 1,227,853 shares of common stock and warrants to purchase 119,323 shares of common stock owned by ATV VII, (iii) 49,271 shares of common stock and warrants to purchase 4,788 shares of common stock owned by ATV VII-B, (iv) 23,684 shares of common stock and

warrants to purchase 2,302 shares of common stock owned by ATV VII-C, (v) 7,314 shares of common stock and warrants to purchase 711 shares of common stock owned by AVTE VII, (vi) 13,104 shares of common stock and warrants to purchase 1,271 shares of common stock owned by AVTE VI and (vii) 2,528 shares of common stock owned by ATV Alliance.

- 3 This percentage is calculated based the number of the Issuer's outstanding shares equal to the sum of (i) 32,253,193 shares of the Issuer's common stock outstanding as of October 31, 2014, as set forth in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2014 and (ii) 148,311 shares of common stock underlying warrants owned by the Reporting Persons.

CUSIP No. 00434H108

Page 7 of 17
Pages

1. Name of Reporting Persons

ATV Entrepreneurs VII, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) 1

3. SEC USE ONLY

4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of Shares 0

6. Shared Voting Power

Beneficially Owned by Each Reporting Person 1,677,3992

7. Sole Dispositive Power

Reporting Person With: 0

8. Shared Dispositive Power

1,677,3992

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,677,3992

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

5.2%3

12. Type of Reporting Person (See Instructions)

PN

1 This Schedule 13G/A is filed by ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII, ATV Alliance, ATVA VI (the general partner of ATV VI and ATVE VI), ATVA VII (the general partner of ATV VII, ATV VII-B, ATV VII-C and ATVE VII), and ATVAA (the general partner of ATV Alliance). The ATV Entities expressly disclaim status as a "group" for purposes of this Schedule 13G/A.

2 Consists of (i) 205,334 shares of common stock and warrants to purchase 19,916 shares of common stock owned by ATV VI, (ii) 1,227,853 shares of common stock and warrants to purchase 119,323 shares of common stock owned by ATV VII, (iii) 49,271 shares of common stock and warrants to purchase 4,788 shares of common stock owned by ATV VII-B, (iv) 23,684 shares of common stock and

warrants to purchase 2,302 shares of common stock owned by ATV VII-C, (v) 7,314 shares of common stock and warrants to purchase 711 shares of common stock owned by AVTE VII, (vi) 13,104 shares of common stock and warrants to purchase 1,271 shares of common stock owned by AVTE VI and (vii) 2,528 shares of common stock owned by ATV Alliance.

- 3 This percentage is calculated based the number of the Issuer's outstanding shares equal to the sum of (i) 32,253,193 shares of the Issuer's common stock outstanding as of October 31, 2014, as set forth in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2014 and (ii) 148,311 shares of common stock underlying warrants owned by the Reporting Persons.

CUSIP No. 00434H108

Page 8 of 17
Pages

1. Name of Reporting Persons

ATV Alliance 2003, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) 1

3. SEC USE ONLY

4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of
Shares

0

6. Shared Voting Power

Beneficially

Owned by

1,677,3992

Each

7. Sole Dispositive Power

Reporting

Person

0

With:

8. Shared Dispositive Power

1,677,3992

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,677,3992

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

5.2%3

12. Type of Reporting Person (See Instructions)

PN

1 This Schedule 13G/A is filed by ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII, ATV Alliance, ATVA VI (the general partner of ATV VI and ATVE VI), ATVA VII (the general partner of ATV VII, ATV VII-B, ATV VII-C and ATVE VII), and ATVAA (the general partner of ATV Alliance). The ATV Entities expressly disclaim status as a "group" for purposes of this Schedule 13G/A.

2 Consists of (i) 205,334 shares of common stock and warrants to purchase 19,916 shares of common stock owned by ATV VI, (ii) 1,227,853 shares of common stock and warrants to purchase 119,323 shares of common stock owned by ATV VII, (iii) 49,271 shares of common stock and warrants to purchase 4,788 shares of common stock owned by ATV VII-B, (iv) 23,684 shares of common stock and

warrants to purchase 2,302 shares of common stock owned by ATV VII-C, (v) 7,314 shares of common stock and warrants to purchase 711 shares of common stock owned by AVTE VII, (vi) 13,104 shares of common stock and warrants to purchase 1,271 shares of common stock owned by AVTE VI and (vii) 2,528 shares of common stock owned by ATV Alliance.

- 3 This percentage is calculated based the number of the Issuer's outstanding shares equal to the sum of (i) 32,253,193 shares of the Issuer's common stock outstanding as of October 31, 2014, as set forth in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2014 and (ii) 148,311 shares of common stock underlying warrants owned by the Reporting Persons.

CUSIP No. 00434H108

Page 9 of 17
Pages

1. Name of Reporting Persons

ATV Associates VI, L.L.C.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) 1

3. SEC USE ONLY

4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of Shares 0

6. Shared Voting Power

Beneficially Owned by Each Reporting Person 1,677,3992

7. Sole Dispositive Power

Reporting Person 0

With: 8. Shared Dispositive Power

1,677,3992

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,677,3992

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

5.2%3

12. Type of Reporting Person (See Instructions)

OO

1 This Schedule 13G/A is filed by ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII, ATV Alliance, ATVA VI (the general partner of ATV VI and ATVE VI), ATVA VII (the general partner of ATV VII, ATV VII-B, ATV VII-C and ATVE VII), and ATVAA (the general partner of ATV Alliance). The ATV Entities expressly disclaim status as a "group" for purposes of this Schedule 13G/A.

2 Consists of (i) 205,334 shares of common stock and warrants to purchase 19,916 shares of common stock owned by ATV VI, (ii) 1,227,853 shares of common stock and warrants to purchase 119,323 shares of common stock owned by ATV VII, (iii) 49,271 shares of common stock and warrants to purchase 4,788 shares of common stock owned by ATV VII-B, (iv) 23,684 shares of common stock and

warrants to purchase 2,302 shares of common stock owned by ATV VII-C, (v) 7,314 shares of common stock and warrants to purchase 711 shares of common stock owned by AVTE VII, (vi) 13,104 shares of common stock and warrants to purchase 1,271 shares of common stock owned by AVTE VI and (vii) 2,528 shares of common stock owned by ATV Alliance.

- 3 This percentage is calculated based the number of the Issuer's outstanding shares equal to the sum of (i) 32,253,193 shares of the Issuer's common stock outstanding as of October 31, 2014, as set forth in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2014 and (ii) 148,311 shares of common stock underlying warrants owned by the Reporting Persons.

CUSIP No. 00434H108

Page 10 of 17
Pages

1. Name of Reporting Persons

ATV Associates VII, L.L.C.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) 1

3. SEC USE ONLY

4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of Shares 0

6. Shared Voting Power

Beneficially Owned by Each Reporting Person 1,677,3992

7. Sole Dispositive Power

With: 0

8. Shared Dispositive Power

1,677,3992

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,677,3992

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

5.2%3

12. Type of Reporting Person (See Instructions)

OO

1 This Schedule 13G/A is filed by ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII, ATV Alliance, ATVA VI (the general partner of ATV VI and ATVE VI), ATVA VII (the general partner of ATV VII, ATV VII-B, ATV VII-C and ATVE VII), and ATVAA (the general partner of ATV Alliance). The ATV Entities expressly disclaim status as a "group" for purposes of this Schedule 13G/A.

2 Consists of (i) 205,334 shares of common stock and warrants to purchase 19,916 shares of common stock owned by ATV VI, (ii) 1,227,853 shares of common stock and warrants to purchase 119,323 shares of common stock owned by ATV VII, (iii) 49,271 shares of common stock and warrants to purchase 4,788 shares of common stock owned by ATV VII-B, (iv) 23,684 shares of common stock and

warrants to purchase 2,302 shares of common stock owned by ATV VII-C, (v) 7,314 shares of common stock and warrants to purchase 711 shares of common stock owned by AVTE VII, (vi) 13,104 shares of common stock and warrants to purchase 1,271 shares of common stock owned by AVTE VI and (vii) 2,528 shares of common stock owned by ATV Alliance.

- 3 This percentage is calculated based the number of the Issuer's outstanding shares equal to the sum of (i) 32,253,193 shares of the Issuer's common stock outstanding as of October 31, 2014, as set forth in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2014 and (ii) 148,311 shares of common stock underlying warrants owned by the Reporting Persons.

CUSIP No. 00434H108

Page 11 of 17
Pages

1. Name of Reporting Persons

ATV Alliance Associates, L.L.C.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) 1

3. SEC USE ONLY

4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of Shares 0

6. Shared Voting Power

Beneficially Owned by Each Reporting Person 1,677,3992

7. Sole Dispositive Power

Reporting Person With: 0

8. Shared Dispositive Power

1,677,3992

9. Aggregate Amount Beneficially Owned by Each Reporting Person

1,677,3992

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

5.2%3

12. Type of Reporting Person (See Instructions)

OO

1 This Schedule 13G/A is filed by ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII, ATV Alliance, ATVA VI (the general partner of ATV VI and ATVE VI), ATVA VII (the general partner of ATV VII, ATV VII-B, ATV VII-C and ATVE VII), and ATVAA (the general partner of ATV Alliance). The ATV Entities expressly disclaim status as a "group" for purposes of this Schedule 13G/A.

2 Consists of (i) 205,334 shares of common stock and warrants to purchase 19,916 shares of common stock owned by ATV VI, (ii) 1,227,853 shares of common stock and warrants to purchase 119,323 shares of common stock owned by ATV VII, (iii) 49,271 shares of common stock and warrants to purchase 4,788 shares of common stock owned by ATV VII-B, (iv) 23,684 shares of common stock and

warrants to purchase 2,302 shares of common stock owned by ATV VII-C, (v) 7,314 shares of common stock and warrants to purchase 711 shares of common stock owned by AVTE VII, (vi) 13,104 shares of common stock and warrants to purchase 1,271 shares of common stock owned by AVTE VI and (vii) 2,528 shares of common stock owned by ATV Alliance.

- 3 This percentage is calculated based the number of the Issuer's outstanding shares equal to the sum of (i) 32,253,193 shares of the Issuer's common stock outstanding as of October 31, 2014, as set forth in the Issuer's quarterly report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2014 and (ii) 148,311 shares of common stock underlying warrants owned by the Reporting Persons.

CUSIP No. 00434H108

Page 12 of 17
Pages

Introductory Note: This Statement on Schedule 13G/A is filed on behalf of Advanced Technology Ventures VI, L.P., a limited partnership organized under the laws of the State of Delaware (“ATV VI”), Advanced Technology Ventures VII, L.P., a limited partnership organized under the laws of the State of Delaware (“ATV VII”), Advanced Technology Ventures VII (B), L.P., a limited partnership organized under the laws of the State of Delaware (“ATV VII-B”), Advanced Technology Ventures VII(C), L.P., a limited partnership organized under the laws of the State of Delaware (“ATV VII-C”), ATV Entrepreneurs VI, L.P, a limited partnership organized under the laws of the State of Delaware (“ATVE VI”), ATV Entrepreneurs VII, L.P, a limited partnership organized under the laws of the State of Delaware (“ATVE VII”), ATV Alliance 2003, L.P., a limited partnership organized under the laws of the State of Delaware (“ATV Alliance”), ATV Associates VI, L.L.C., a limited liability company organized under the laws of the State of Delaware (“ATVA VI”), ATV Associates VII, L.L.C., a limited liability company organized under the laws of the State of Delaware (“ATVA VII”) and ATV Alliance Associates, L.L.C., a limited liability company organized under the laws of the State of Delaware (“ATVAA” and collectively with ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII, ATV Alliance, ATVA VI and ATVA VII, the “ATV Entities”) in respect of shares of common stock of Acceleron Pharma Inc. The ATV Entities expressly disclaim status as a “group” for purposes of this Schedule 13G/A.

Item 1.

(a) Name of Issuer

Acceleron Pharma Inc.

(b) Address of Issuer’s Principal Executive Offices

128 Sydney Street
Cambridge, MA 02139

Item 2.

(a) Name of Person Filing

Advanced Technology Ventures VI, L.P.
Advanced Technology Ventures VII, L.P.
Advanced Technology Ventures VII (B), L.P.
Advanced Technology Ventures VII(C), L.P.
ATV Entrepreneurs VI, L.P.
ATV Entrepreneurs VII, L.P.
ATV Alliance 2003, L.P.
ATV Associates VI, L.L.C.
ATV Associates VII, L.L.C.
ATV Alliance Associates, L.L.C.

(b) Address of Principal Business Office or, if none, Residence

500 Boylston Street, Suite 1380, Boston, Massachusetts 02116

CUSIP No. 00434H108

Page 13 of 17
Pages

(c) Citizenship

Each of ATV VI, ATV VII, ATV VII-B, ATV VII-C, ATVE VI, ATVE VII and ATV Alliance are limited partnerships organized in the State of Delaware. Each of ATVA VI, ATVA VII and ATVAA are limited liability companies organized in the State of Delaware.

(d) Title of Class of Securities

Common Stock

(e) CUSIP Number

00434H108

Item 3. If this statement is filed pursuant to §§240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a:

Not applicable

Item 4. Ownership

(a) Amount Beneficially Owned as of December 31, 2014:

Advanced Technology Ventures VI, L.P.	1,677,399(1)
Advanced Technology Ventures VII, L.P.	1,677,399(1)
Advanced Technology Ventures VII (B), L.P.	1,677,399(1)
Advanced Technology Ventures VII(C), L.P.	1,677,399(1)
ATV Entrepreneurs VII, L.P.	1,677,399(1)
ATV Entrepreneurs VI, L.P.	1,677,399(1)
ATV Alliance 2003, L.P.	1,677,399(1)
ATV Associates VI, L.L.C.	1,677,399(1)
ATV Associates VII, L.L.C.	1,677,399(1)
ATV Alliance Associates, L.L.C.	1,677,399(1)

(b) Percent of Class as of December 31, 2014:

Advanced Technology Ventures VI, L.P.	5.2%
Advanced Technology Ventures VII, L.P.	5.2%

Edgar Filing: ACCELERON PHARMA INC - Form SC 13G/A

Advanced Technology Ventures VII (B), L.P.	5.2%
Advanced Technology Ventures VII(C), L.P.	5.2%
ATV Entrepreneurs VII, L.P.	5.2%
ATV Entrepreneurs VI, L.P.	5.2%
ATV Alliance 2003, L.P.	5.2%
ATV Associates VI, L.L.C.	5.2%
ATV Associates VII, L.L.C.	5.2%
ATV Alliance Associates, L.L.C.	5.2%

CUSIP No. 00434H108

Page 14 of 17
Pages

(c) Number of shares as to which the person has, as of December 31, 2014:

(i) Sole power to vote or to direct the vote

Advanced Technology Ventures VI, L.P.	0
Advanced Technology Ventures VII, L.P.	0
Advanced Technology Ventures VII (B), L.P.	0
Advanced Technology Ventures VII(C), L.P.	0
ATV Entrepreneurs VII, L.P.	0
ATV Entrepreneurs VI, L.P.	0
ATV Alliance 2003, L.P.	0
ATV Associates VI, L.L.C.	0
ATV Associates VII, L.L.C.	0
ATV Alliance Associates, L.L.C.	0

(ii) Shared power to vote or to direct the vote

Advanced Technology Ventures VI, L.P.	1,677,399(1)
Advanced Technology Ventures VII, L.P.	1,677,399(1)
Advanced Technology Ventures VII (B), L.P.	1,677,399(1)
Advanced Technology Ventures VII(C), L.P.	1,677,399(1)
ATV Entrepreneurs VII, L.P.	1,677,399(1)
ATV Entrepreneurs VI, L.P.	1,677,399(1)
ATV Alliance 2003, L.P.	1,677,399(1)
ATV Associates VI, L.L.C.	1,677,399(1)
ATV Associates VII, L.L.C.	1,677,399(1)
ATV Alliance Associates, L.L.C.	1,677,399(1)

(IV) Sole power to dispose or to direct the disposition of

Advanced Technology Ventures VI, L.P.	0
Advanced Technology Ventures VII, L.P.	0
	0

Advanced Technology Ventures VII (B), L.P.	
Advanced Technology Ventures VII(C), L.P.	0
ATV Entrepreneurs VII, L.P.	0
ATV Entrepreneurs VI, L.P.	0
ATV Alliance 2003, L.P.	0
ATV Associates VI, L.L.C.	0
ATV Associates VII, L.L.C.	0
ATV Alliance Associates, L.L.C.	0

CUSIP No. 00434H108

Page 15 of 17
Pages

(iv) Shared power to dispose or to direct the disposition of

Advanced Technology Ventures VI, L.P.	1,677,399(1)
Advanced Technology Ventures VII, L.P.	1,677,399(1)
Advanced Technology Ventures VII (B), L.P.	1,677,399(1)
Advanced Technology Ventures VII(C), L.P.	1,677,399(1)
ATV Entrepreneurs VII, L.P.	1,677,399(1)
ATV Entrepreneurs VI, L.P.	1,677,399(1)
ATV Alliance 2003, L.P.	1,677,399(1)
ATV Associates VI, L.L.C.	1,677,399(1)
ATV Associates VII, L.L.C.	1,677,399(1)
ATV Alliance Associates, L.L.C.	1,677,399(1)

- (1) These shares are owned directly as follows: (i) 205,334 shares of common stock and warrants to purchase 19,916 shares of common stock owned by ATV VI, (ii) 1,227,853 shares of common stock and warrants to purchase 119,323 shares of common stock owned by ATV VII, (iii) 49,271 shares of common stock and warrants to purchase 4,788 shares of common stock owned by ATV VII-B, (iv) 23,684 shares of common stock and warrants to purchase 2,302 shares of common stock owned by ATV VII-C, (v) 7,314 shares of common stock and warrants to purchase 711 shares of common stock owned by AVTE VII, (vi) 13,104 shares of common stock and warrants to purchase 1,271 shares of common stock owned by AVTE VI and (vii) 2,528 shares of common stock owned by ATV Alliance.

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following .

Item 6. Ownership of More than Five Percent on Behalf of Another Person

Not Applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person.

Not Applicable

Item 8. Identification and Classification of Members of the Group

Not Applicable

Item 9. Notice of Dissolution of a Group

Not Applicable

Item 10. Certification

Not Applicable

CUSIP No. 00434H108

Page 16 of 17
Pages

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.

Dated: February 10, 2015

Advanced Technology Ventures VI, L.P.

By: ATV Associates VI, L.L.C., its
General Partner

By: /s/ William Wiberg
Authorized Signatory

ATV Entrepreneurs VII, L.P.

By: ATV Associates VII, L.L.C., its
General Partner

By: /s/ Jean George
Authorized Signatory

Advanced Technology Ventures VII, L.P.

By: ATV Associates VII, L.L.C., its
General Partner

By: /s/ Jean George
Authorized Signatory

ATV Alliance 2003, L.P.

By: ATV Alliance Associates, L.L.C.,
its General Partner

By: /s/ Jean George
Authorized Signatory

Advanced Technology Ventures VII (B), L.P.

By: ATV Associates VII, L.L.C., its
General Partner

By: /s/ Jean George
Authorized Signatory

ATV Associates VI, L.L.C.

By: /s/ William Wiberg

Authorized Signatory

ATV Associates VII, L.L.C.

Advanced Technology Ventures VII(C), L.P.

By: ATV Associates VII, L.L.C., its
General Partner

By: /s/ Jean George

By: /s/ Jean George

Authorized Signatory

ATV Alliance Associates, L.L.C.

Authorized Signatory

By: /s/ Jean George

ATV Entrepreneurs VI, L.P.

Authorized Signatory

By: ATV Associates VI, L.L.C., its
General Partner

By: /s/ William Wiberg

Authorized Signatory

CUSIP No. 00434H108

Page 17 of 17
Pages

EXHIBITS

A: Joint Filing Agreement (Incorporated by reference from Exhibit A to Schedule 13G filed on February 13, 2014).