ACCELERON PHARMA INC Form SC 13G/A February 12, 2015

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES

13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED

PURSUANT TO RULE 13d-2

(Amendment No. 1)

Acceleron Pharma Inc.

(Name of Issuer)

Common Stock, \$0.01 par value per share

(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)
- x 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).

- 1. Names of Reporting Persons.
 - I.R.S. Identification Nos. of above persons (entities only).
 - Applied Genomic Technology Capital Fund, L.P.
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- 4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of

See Item 5.

Shares
6. Shared Voting Power

Beneficially

Owned by

See Item 5.

Each

7. Sole Dispositive Power

Reporting

See Item 5.

Person

8. Shared Dispositive Power

With:

See Item 5.

9. Aggregate Amount Beneficially Owned by Each Reporting Person

See Item 5.

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

11.	Percent of Class Represented by Amount in Row (9)
12.	See Item 5. Type of Reporting Person (See Instructions)
	PN

- 1. Names of Reporting Persons.
 - I.R.S. Identification Nos. of above persons (entities only).
 - AGTC Advisors Fund, L.P.
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- 4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of

See Item 5.

Shares
6. Shared Voting Power

Beneficially

Owned by

See Item 5.

Each

7. Sole Dispositive Power

Reporting

See Item 5.

Person

8. Shared Dispositive Power

With:

See Item 5.

9. Aggregate Amount Beneficially Owned by Each Reporting Person

See Item 5.

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

11.	Percent of Class Represented by Amount in Row (9)
12.	See Item 5. Type of Reporting Person (See Instructions)
	PN
	Page 3 of 15 pages

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 Names of Reporting Persons 	1.	Names	of Re	porting	Persons
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AGTC Partners, L.P.

- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- SEC Use Only 3.
- Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of

See Item 5. Shares

6. Shared Voting Power

Beneficially

Owned by

See Item 5.

Each

7. Sole Dispositive Power

Reporting

Person

See Item 5.

8. Shared Dispositive Power

With:

See Item 5.

Aggregate Amount Beneficially Owned by Each Reporting Person

See Item 5.

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

11.	Percent of Class Represented by Amount in Row (9)
12.	See Item 5. Type of Reporting Person (See Instructions)
	PN
	Page 4 of 15 pages

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1.	Names	of F	Reporting	Persons.
----	-------	------	-----------	----------

NewcoGen Group, Inc.

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

(a) " (b) x

- SEC Use Only 3.
- Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of

See Item 5. Shares

6. Shared Voting Power

Beneficially

Owned by

See Item 5.

Each

7. Sole Dispositive Power

Reporting

Person

See Item 5.

8. Shared Dispositive Power

With:

See Item 5.

Aggregate Amount Beneficially Owned by Each Reporting Person 9.

See Item 5.

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

11.	Percent of Class Represented by Amount in Row (9)
12.	See Item 5. Type of Reporting Person (See Instructions)
	CO
	Page 5 of 15 pages

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- Names of Reporting Persons.
 - Flagship Ventures Management, Inc.
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of

See Item 5. Shares

6. Shared Voting Power

Beneficially

Owned by

See Item 5.

Each

7. Sole Dispositive Power

Reporting

Person

See Item 5.

8. Shared Dispositive Power

With:

See Item 5.

Aggregate Amount Beneficially Owned by Each Reporting Person 9.

See Item 5.

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

11.	Percent of Class Represented by Amount in Row (9)
	See Item 5.
12.	Type of Reporting Person (See Instructions)
	CO
	Page 6 of 15 pages

- 1. Names of Reporting Persons.
 - I.R.S. Identification Nos. of above persons (entities only).
 - Noubar B. Afeyan Ph.D.
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- 4. Citizenship or Place of Organization

United States

5. Sole Voting Power

Number of

Shares See Item 5.

6. Shared Voting Power

Beneficially

Owned by

See Item 5.

Each

7. Sole Dispositive Power

Reporting

See Item 5.

Person

8. Shared Dispositive Power

With:

See Item 5.

9. Aggregate Amount Beneficially Owned by Each Reporting Person

See Item 5.

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

11.	Percent of Class Represented by Amount in Row (9)
12.	See Item 5. Type of Reporting Person (See Instructions)
	IN
	Page 7 of 15 pages

- 1. Names of Reporting Persons.
 - I.R.S. Identification Nos. of above persons (entities only).
 - Edwin M. Kania, Jr.
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- 4. Citizenship or Place of Organization

United States

5. Sole Voting Power

Number of

Shares See Item 5.

6. Shared Voting Power

Beneficially

Owned by See Item 5.

Each 7. Sole Dispositive Power

Reporting

See Item 5.

Person 8. Shared Dispositive Power

With:

See Item 5.

9. Aggregate Amount Beneficially Owned by Each Reporting Person

See Item 5.

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

11.	Percent of Class Represented by Amount in Row (9)
12.	See Item 5. Type of Reporting Person (See Instructions)
	IN
	Page 8 of 15 pages

Item 1(a) Name of Issuer:

Acceleron Pharma, Inc.

<u>Item 1(b)</u> <u>Address of Issuer s Principal Executive Offices:</u>

128 Sidney Street

Cambridge, Massachusetts 02139 USA

<u>Item 2(a)</u> Name of Person Filing:

The reporting persons are:

Applied Genomic Technology Capital Fund, L.P. (AGTC Fund)

AGTC Advisors Fund, L.P. (Advisors Fund)

AGTC Partners, L.P. (AGTC GP)

NewcoGen Group, Inc. (NewcoGen)

Flagship Ventures Management, Inc. (Flagship Management)

Noubar B. Afeyan, Ph.D. (Mr. Afeyan)

Edwin M. Kania, Jr. (Mr. Kania)

<u>Item 2(b)</u> <u>Address of Principal Business Office or, if None, Residence:</u>

The address of each of the reporting persons is:

c/o Flagship Ventures

One Memorial Drive, 7th Floor

Cambridge, Massachusetts 02142

<u>Item 2(c)</u> <u>Citizenship:</u>

AGTC Fund Delaware limited partnership

Advisors Fund Delaware limited partnership

AGTC GP Delaware limited partnership

NewcoGenDelaware corporationFlagship ManagementDelaware corporation

Mr. Afeyan U.S. citizen Mr. Kania U.S. citizen

Page 9 of 15 pages

CLISIP No.	00434H108
COSH NO.	0042411100

<u>Item 2(d)</u> <u>Title of Class of Securities:</u>

This Schedule 13G report relates to the Common Stock, par value \$0.01 per share (Common Stock), of Acceleron Pharma, Inc.

<u>Item 2(e)</u> <u>CUSIP Number:</u>

00434H108

<u>Item 3</u> <u>Description of Person Filing:</u>

Not applicable.

<u>Item 4</u> <u>Ownership:</u>

(a) Amount Beneficially Owned:

See Item 5.

(b) Percent of Class:

See Item 5.

(c) Number of Shares as to which the Person has:

See Item 5.

<u>Item 5</u> 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 [X].

<u>Item 6</u> <u>Ownership of More than Five Percent on Behalf of Another Person:</u>

Not applicable.

<u>Item 7</u> <u>Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person:</u>

Not applicable.

<u>Item 8</u> <u>Identification and Classification of Members of the Group:</u>

Each of the Reporting Persons expressly disclaims membership in a Group as defined in Rule 13d-1(b)(ii)(K).

<u>Item 9</u> <u>Notice of Dissolution of Group:</u>

Not applicable.

Page 10 of 15 pages

<u>Item 10</u> <u>Certification:</u>

Not applicable.

This Schedule 13G is not filed pursuant to Rule 13d-1(b) or Rule 13d-1(c).

Page 11 of 15 pages

SIGNATURES

After reasonable inquiry and to the best of the knowledge and belief of each of the undersigned, each of the undersigned hereby certifies that the information set forth in this statement is true, complete and correct.

DATED: February 10, 2015

APPLIED GENOMIC TECHNOLOGY

CAPITAL FUND, L.P.

By: AGTC Partners, L.P., its general

partner

By: NewcoGen Group, Inc., its general

partner

By: /s/ Noubar B. Afeyan, Ph. D.

Name: Noubar B. Afeyan, Ph. D.

Title: President

AGTC ADVISORS FUND, L.P.

By: AGTC Partners, L.P., its general

partner

By: NewcoGen Group, Inc., its general

partner

By: /s/ Noubar B. Afeyan, Ph. D.

Name: Noubar B. Afeyan, Ph. D.

Title: President

AGTC PARTNERS, L.P.

By: NewcoGen Group, Inc., its general

partner

By: /s/ Noubar B. Afeyan, Ph. D.

Name: Noubar B. Afeyan, Ph. D.

Title: President

NEWCOGEN GROUP, INC.

By: /s/ Noubar B. Afeyan, Ph. D. Name: Noubar B. Afeyan, Ph. D.

Title: President

FLAGSHIP VENTURES MANAGEMENT, INC.

By: /s/ Noubar B. Afeyan, Ph. D. Name: Noubar B. Afeyan, Ph. D.

Title: President

Page 12 of 15 pages

/s/ Noubar B. Afeyan, Ph. D. **NOUBAR B. AFEYAN, PH.D.**

/s/ Edwin M. Kania, Jr. EDWIN M. KANIA, JR.

Page 13 of 15 pages

Exhibit I

Joint Filing Agreement

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree that only one statement containing the information required by Schedule 13G need be filed with respect to the ownership by each of the undersigned of the shares of Common Stock of BIND Therapeutics, Inc. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original.

EXECUTED as of this 10th day of February, 2015.

APPLIED GENOMIC TECHNOLOGY

CAPITAL FUND, L.P.

By: AGTC Partners, L.P., its general partner

By: NewcoGen Group, Inc., its general partner

By: /s/ Noubar B. Afeyan, Ph. D. Name: Noubar B. Afeyan, Ph. D. Title: President

AGTC ADVISORS FUND, L.P.

By: AGTC Partners, L.P., its general partner

By: NewcoGen Group, Inc., its general partner

By: /s/ Noubar B. Afeyan, Ph. D. Name: Noubar B. Afeyan, Ph. D. Title: President

AGTC PARTNERS, L.P.

By: NewcoGen Group, Inc., its general partner

By: /s/ Noubar B. Afeyan, Ph. D. Name: Noubar B. Afeyan, Ph. D.

Title: President

NEWCOGEN GROUP, INC.

By: /s/ Noubar B. Afeyan, Ph. D. Name: Noubar B. Afeyan, Ph. D.

Title: President

Page 14 of 15 pages

FLAGSHIP VENTURES MANAGEMENT, INC.

By: /s/ Noubar B. Afeyan, Ph. D. Name: Noubar B. Afeyan, Ph. D.

Title: President

/s/ Noubar B. Afeyan, Ph. D. **NOUBAR B. AFEYAN, PH.D.**

/s/ Edwin M. Kania, Jr. EDWIN M. KANIA, JR.

Page 15 of 15 pages