ACCELERON PHARMA INC Form SC 13G/A February 17, 2015
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549
SCHEDULE 13G/A
Under the Securities Exchange Act of 1934
(Amendment No. 1)*
Acceleron Pharma Inc. (Name of Issuer)
Common Stock, par value \$0.001 per share (Title of Class of Securities)
00434H108 (CUSIP Number)

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

(Date of Event Which Requires Filing of this Statement)

December 31, 2014

x Rule 13d-1(b)

o Rule 13d-1(c)

o 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).

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SCHEDULE 13G/A

CUSIP No. 00434H108

0001	1100 00 10 111100	5 51122 61	32 10 6/11	1 480 2 01 9 1 4800			
	NAME OF REPORTING PERSONS						
1	OrbiMed Advisors LLC						
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) o (b) o						
3	SEC USE ONLY						
	CITIZENSHIP OR PLACE OF ORGANIZATION						
4	Delaware						
		5	SOLE VOTING POWER				
	NUMBER OF	3	0				
Bl	SHARES ENEFICIALLY	6	SHARED VOTING POWER				
	OWNED BY EACH REPORTING PERSON	O	0				
]		7	SOLE DISPOSITIVE POWER				
WITH			0				
		8	SHARED DISPOSITIVE POWE	ER			
			0				
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON						
,	0						
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN o SHARES						
	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)						
11	0%						
12	TYPE OF REPORTING PERSON						
12	IA						

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CUSIP No. 00434H108

	NAME OF REPORTING PERSONS					
1	OrbiMed Capital GP II LLC					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) o (b) o					
3	SEC USE ONLY					
4	CITIZENSHIP OR PLACE OF ORGANIZATION					
	Delaware					
		_	SOLE VOTING POWER			
BE	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON	567	0 SHARED VOTING POWER			
			0			
			SOLE DISPOSITIVE POWER			
WITH			0			
		8	SHARED DISPOSITIVE POWER			
			0			
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON					
	0					
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN o SHARES					
11	PERCENT OF CL	LASS REPRESENTE	ED BY AMOUNT IN ROW (9)			
11	0%					
	TYPE OF REPORTING PERSON					
12	00					

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CUSIP No. 00434H108

NAME OF REPORTING PERSONS 1 Samuel D. Isaly CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP 2 (a) o (b) o SEC USE ONLY 3 CITIZENSHIP OR PLACE OF ORGANIZATION 4 **United States SOLE VOTING POWER** 5 0 NUMBER OF **SHARES** SHARED VOTING POWER **BENEFICIALLY** 6 OWNED BY 0 **EACH** SOLE DISPOSITIVE POWER REPORTING 7 **PERSON** 0 WITH SHARED DISPOSITIVE POWER 8 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN o **SHARES** 10 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 11 0% TYPE OF REPORTING PERSON 12 IN

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Item 1. (a) Name of Issuer:				
Acceleron Pharma Inc.				
	(b) Address of Issuer's	Principal Executive Offices:		
128 Sidney Street				
Cambridge, MA 02139				
United States				
Item 2.	em 2. (a) Name of Person Filing:			
This Schedule 13G is being file "Reporting Persons"):	d by each of the following persons (each, a "Reporting Person" and together, the		
(i) OrbiMed Advisors LLC ("A	.dvisors")			
(ii) OrbiMed Capital GP II LLC	C("GP II")			
(iii) Samuel D. Isaly ("Isaly")				
See Exhibit A for the Reporting	Persons' agreement for a joint filing	g of a single statement on their behalf.		
	(b) Address of Pr	rincipal Business Office:		
The address of the principal bus New York, NY 10022.	iness office of each of Advisors, GF	PII and Isaly is 601 Lexington Avenue, 54th Floor		
		(c) Citizenship:		
Please refer to Item 4 on each co	over sheet for each filing person.			
	(d) Title o	of Class of Securities:		
Common Stock, par value \$0.00	01 per share (the "Common Stock")			
		(e) CUSIP No.:		
00434H108				

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Not Applicable.

Item 9. Notice of Dissolution of Group.

Not Applicable.

Item 10. Certification.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

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SIGNATURES

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 17, 2015

ORBIMED ADVISORS LLC

By: Samuel D. Isaly

Name: Samuel D. Isaly Title: Managing Member

ORBIMED CAPITAL GP II LLC

By: OrbiMed Advisors LLC, its Managing Member

By: Samuel D. Isaly

Name: Samuel D. Isaly Title: Managing Member

SAMUEL D. ISALY

Samuel D. Isaly

Name: Samuel D. Isaly

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EXHIBIT A

JOINT FILING AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby consent to the joint filing on behalf of a single Schedule 13G and any amendment thereto, with respect to the beneficial ownership by each of the undersigned of the common stock on Acceleron Pharma Inc. The undersigned hereby further agree that this Joint Filing Agreement be included as an exhibit to such statement and any such amendment. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning the others. The undersigned hereby further agree that this Joint Filing Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original, but all of which counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of February 17, 2015.

ORBIMED ADVISORS LLC

By: Samuel D. Isaly

Name: Samuel D. Isaly Title: Managing Member

ORBIMED CAPITAL GP II

LLC

By: OrbiMed Advisors LLC, its Managing Member

By: Samuel D. Isaly

Name: Samuel D. Isaly Title: Managing Member

SAMUEL D. ISALY

Samuel D. Isaly

Name: Samuel D. Isaly