ACHILLION PHARMACEUTICALS INC Form SC 13G/A February 17, 2015

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 2)*

ACHILLION PHARMACEUTICALS, INC.

(Name of Issuer)

Common Stock, \$0.001 par value per share

(Title of Class of Securities)

00448O201

(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)

x 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. **00448Q201** 13G

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).

RA Capital Management, LLC

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

Massachusetts

Sole Voting

5. Power

0 shares

Number Shared Voting

of 6. Power

Shares **9,200,000 shares**

Beneficially Owned by

Each ReportingSole Dispositive

Person 7. Power 0

With shares

Shared Dispositive

8. Power **9,200,000**

shares

Aggregate Amount Beneficially Owned by Each Reporting

9. Person

9,200,000 shares

Check if the Aggregate Amount in Row (9)

Excludes

"

Certain Shares (See Instructions)

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

9.2%

Type of Reporting Person (See 12.

IA

CUSIP No. **00448Q201** 13G

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).

Peter Kolchinsky

- Check the Appropriate Box if a
- 2. Member of a Group (See Instructions)
 - (a)
 - (b)
- 3. SEC Use Only
 - Citizenship or Place of
- 4. Organization **United States**
 - Sole Voting
 - 5. Power
 - 0 shares

Number Shared Voting

of 6. Power

Shares **9,200,000 shares**

Beneficially Owned by

Each ReportingSole Dispositive

Person 7. Power 0

With shares

Shared Dispositive

8. Power **9,200,000**

shares

Aggregate Amount Beneficially Owned by Each Reporting Person

9,200,000 shares

Check if the Aggregate Amount in Row (9)

Excludes

"

Certain Shares (See Instructions)

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

9.2%

Type of Reporting Person (See 12.

IN

CUSIP No. **00448Q201** 13G

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).

RA Capital Healthcare Fund, L.P.

Check the Appropriate Box if a

- 2. Member of a Group (See Instructions)
 - (a)
 - (b)
- 3. SEC Use Only

Citizenship or Place of

4. Organization

Delaware

Sole Voting

5. Power

0 shares

Number Shared Voting

of 6. Power **6,736,562**

Shares shares

Beneficially

Owned by

Each ReportingSole Dispositive

Person 7. Power

With shares

Shared Dispositive

8. Power **6,736,562**

shares

Aggregate Amount Beneficially Owned by Each Reporting

9. Person

6,736,562 shares

Check if the Aggregate Amount in Row (9)

10. Excludes

Certain Shares (See Instructions)

Percent of Class Represented by Amount in Row (9)

6.7%

Type of Reporting Person (See 12. Instructions)

PN (Limited Partnership)

CUSIP No. 00448Q201
Item 1.
(a) Name of Issuer: Achillion Pharmaceuticals, Inc. (the "Issuer").
(b) Address of the Issuer's Principal Executive Offices: 300 George Street, New Haven, CT 06511.
Item 2.
(a) Name of Person Filing: This joint statement on Schedule 13G is being filed by Peter Kolchinsky, RA Capital Management, LLC ("Capital"), and RA Capital Healthcare Fund, L.P. (the "Fund"). Mr. Kolchinsky, Capital and the Fund are collectively referred to herein as the "Reporting Persons."
(b) Address of Principal Business Office: The principal business office of the Reporting Persons is c/o RA Capital Management, LLC, 20 Park Plaza, Suite 1200, Boston, MA 02116.
(c) Citizenship: Capital is a Massachusetts limited liability company. The Fund is a Delaware limited partnership. Mr. Kolchinsky is a United States citizen.
(d) Title and Class of Securities: Common stock ("Common Stock").
(e) CUSIP Number: 00448Q201
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:

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Item 4. Ownership:

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount Beneficially Owned:**

RA Capital Management, LLC - 9,200,000 shares

Peter Kolchinsky – 9,200,000 shares

RA Capital Healthcare Fund, L.P. – 6,736,562 shares

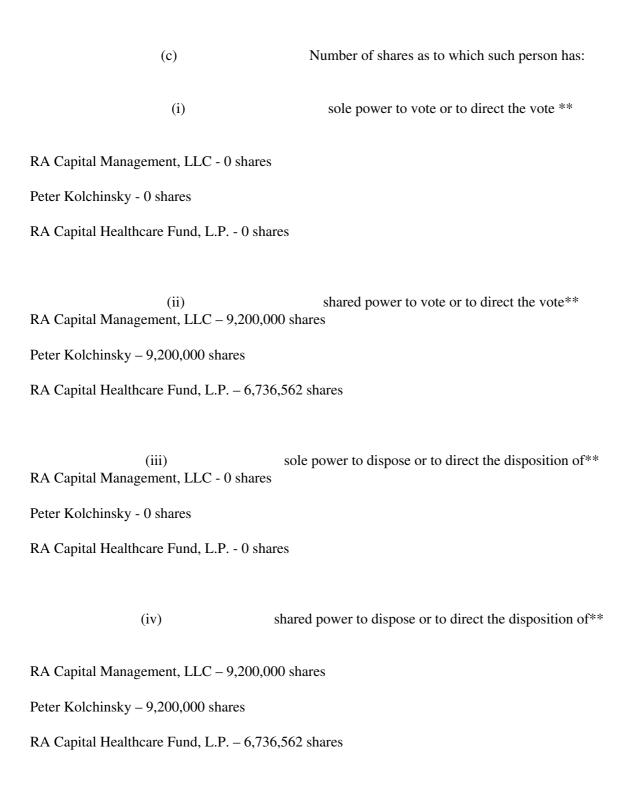
(b) Percent of Class:**

RA Capital Management, LLC – 9.2%

Peter Kolchinsky – 9.2%

RA Capital Healthcare Fund, L.P. – 6.7%

CUSIP No. 00448Q201



** Shares reported herein for the Fund represent shares of Common Stock (i) held of record by the Fund and (ii) issuable upon exercise of call options held of record by the Fund. Shares reported herein for RA Capital represent (a) the above-referenced shares of Common Stock reported for the Fund, for which RA Capital serves as the sole general partner, and (b) shares of Common Stock (I) held in a separately managed account for which RA Capital serves as investment adviser (the "Account") and (II) issuable upon exercise of call options held in the Account. Shares reported herein for Mr. Kolchinsky represent the above-referenced shares of Common Stock reported for RA Capital, for which Mr. Kolchinsky serves as the manager. Each of the Reporting Persons disclaims beneficial ownership of the shares reported herein except to the extent of its or his pecuniary interest therein.

	Item 5.	Ownership of Five Percent or Less of a Class:
Not applicable.		
Iter	n 6. Ownership o	f More than Five Percent on Behalf of Another Person:
Not applicable.		
	dentification and Classificat nt Holding Company or Cor	ion of the Subsidiary Which Acquired the Security Being Reported ntrol Person:
Not applicable.		

CUSIP No. 00448Q201
Item 8. Identification and Classification of Members of the Group:
Not applicable.
Item 9. Notice of Dissolution of Group:
Not applicable.
Item 10. Certification:
By signing below I hereby certify that, to the best of my knowledge and belief, the securities referred to above 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.
Exhibit 99.1 Joint Filing Agreement by and among the Reporting Persons.
The Joint Filing Agreement, executed by and among the Reporting Persons, dated October 4, 2013, which was filed as an exhibit to the Schedule 13G filed by the Reporting Persons with the Securities and Exchange Commission on

October 4, 2013, is hereby incorporated by reference.

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: February 17, 2015

RA CAPITAL MANAGEMENT, LLC

By: /s/ Peter Kolchinsky Peter Kolchinsky Manager

PETER KOLCHINSKY

/s/ Peter Kolchinsky

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Management, LLC General Partner

By: /s/ Peter Kolchinsky Peter Kolchinsky Manager