

ACHILLION PHARMACEUTICALS INC

Filed by
RA CAPITAL HEALTHCARE FUND LP

FORM SC 13G/A (Amended Statement of Ownership)

Filed 02/14/17

Address	300 GEORGE STREET NEW HAVEN, CT 06511
Telephone	203-624-7000
CIK	0001070336
Symbol	ACHN
SIC Code	2834 - Pharmaceutical Preparations
Industry	Biotechnology & Medical Research
Sector	Healthcare
Fiscal Year	12/31

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

SCHEDULE 13G
Under the Securities Exchange Act of 1934

(Amendment No. 4)*

ACHILLION PHARMACEUTICALS, INC.

(Name of Issuer)

Common Stock, \$0.001 par value per share

(Title of Class of Securities)

00448Q201

(CUSIP Number)

December 31, 2016

(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).

1.	Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only). RA Capital Healthcare Fund, L.P.
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2.	Check the Appropriate Box if a Member of a Group (See Instructions)
(a)	<input type="checkbox"/>
(b)	<input type="checkbox"/>

3.	SEC Use Only
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4.	Citizenship or Place of Organization	Delaware
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Number of Shares Beneficially Owned by Each Reporting Person With	5.	Sole Voting Power	0 shares
	6.	Shared Voting Power	0 shares
	7.	Sole Dispositive Power	0 shares
	8.	Shared Dispositive Power	0 shares

9.	Aggregate Amount Beneficially Owned by Each Reporting Person 0 shares
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10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)	<input type="checkbox"/>
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11.	Percent of Class Represented by Amount in Row (9) 0.0%
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12.	Type of Reporting Person (See Instructions) PN (Limited Partnership)
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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 statement on Schedule 13G is being filed by and RA Capital Healthcare Fund, L.P. (the “Fund”). The Fund is referred to herein as the “Reporting Person.”
- (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:** The Fund is a Delaware limited partnership.
- (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:

Not applicable.

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:**
See the response(s) to Item 9 on the attached cover page(s).
- (b) **Percent of Class:**
See the response(s) to Item 11 on the attached cover page(s).
- (c) **Number of shares as to which such person has:**
- (i) **sole power to vote or to direct the vote:**
See the response(s) to Item 5 on the attached cover page(s).
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- (ii) shared power to vote or to direct the vote
See the response(s) to Item 6 on the attached cover page(s).
- (iii) sole power to dispose or to direct the disposition of
See the response(s) to Item 7 on the attached cover page(s).
- (iv) shared power to dispose or to direct the disposition of
See the response(s) to Item 8 on the attached cover page(s).

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 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.

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 14 , 2017

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Management, LLC

Its: General Partner

By: /s/ Rajeev Shah

Rajeev Shah

Authorized Signatory
