Radius Health, Inc. Form SC 13D/A September 20, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 9)*

Radius Health, Inc.

(Name of Issuer)

Common Stock, \$0.0001 par value

(Title of Class of Securities)

750469108

(CUSIP Number)

BB Biotech AG

Ivo Betschart

Schwertstrasse 6

CH-8200 Schaffhausen, Switzerland

+41 44 267 67 00

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

September 14, 2017

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the
following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

The information required on 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).

^{*} 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 disclosures provided in a prior cover page.

1. Names of Reporting Persons

I.R.S. Identification Nos. of Above Persons (Entities Only)

BB Biotech AG

- 2. Check the Appropriate Box if a Member of a Group
 - (a) (b)
- 3. SEC Use Only
- 4. Source of Funds

WC

- 5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)
- 6. Citizenship or Place of Organization

Switzerland

NUMBER OF 7. Sole Voting Power

SHARES

BENEFICIALLY 0 shares

8. Shared Voting Power

OWNED BY

EACH

5,677,322(1)

REPORTING 9. Sole Dispositive Power

PERSON

WITH 0 shares

10. Shared Dispositive Power

	5,6//,322 (1)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person
12.	5,677,322 ⁽¹⁾ Check if the Aggregate Amount in Row (11) Excludes Certain Shares
13.	Percent of Class Represented by Amount in Row (11)
14.	13.0% Type of Reporting Person
	HC, CO
(1)	Includes 178,523 shares of Common Stock that may be issued upon exercise of the Biotech Growth Warrant and the Biotech Growth New Warrant.

1. Names of Reporting Persons I.R.S. Identification Nos. of Above Persons (Entities Only) Biotech Growth N.V. 2. Check the Appropriate Box if a Member of a Group (a) (b) 3. SEC Use Only 4. Source of Funds AF 5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) Citizenship or Place of Organization 6. Curacao **NUMBER OF** 7. Sole Voting Power **SHARES BENEFICIALLY** 0 shares **Shared Voting Power OWNED BY EACH** 5,677,322 (1) 9. Sole Dispositive Power **REPORTING PERSON**

WITH

0 shares

10. Shared Dispositive Power

5.677.322 (1)

	3,077,322 (**)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person
	5,677,322 (1)
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares
13.	Percent of Class Represented by Amount in Row (11)
14.	13.0% Type of Reporting Person
	CO
(1)	Includes 178,523 shares of Common Stock that may be issued upon exercise of the Biotech Growth Warrant and the Biotech Growth New Warrant.

Page 4 of 6

Schedule 13D (Amendment No. 9)

EXPLANATORY NOTE: This Amendment No. 9 to Schedule 13D amends the statement on Schedule 13D relating to shares of common stock, \$0.0001 par value (the Common Stock) of Radius Health, Inc. (the Issuer), initially filed by BB Biotech AG and Biotech Growth, NV (collectively, the Reporting Persons) with the Securities and Exchange Commission on June 3, 2011 (together with all amendments thereto, this Schedule 13D).

Each capitalized term used and not defined herein shall have the meaning assigned to such term in prior amendments to this Schedule 13D. Except as otherwise provided herein, each Item of this Schedule 13D remains unchanged.

Item 3. Source and Amount of Funds or Other Consideration

Item 3 is hereby supplemented to add the following:

Between May 31, 2017 and September 14, 2017, the Reporting Persons acquired an additional 460,000 shares of the Issuer's Common Stock (the Third Additional Shares) on the open market. The increase of 460,000 shares held by the Reporting Persons resulted in an approximate 1.0% increase in percentage ownership of the outstanding shares of the Issuer's Common Stock held by the Reporting Persons since the filing of Amendment No. 8 to this Schedule 13D with the Securities and Exchange Commission on June 1, 2017. The purchases of the Third Additional Shares were made with the working capital of BB Biotech and the aggregate amount of funds expended, excluding commissions, to acquire the Third Additional Shares was US \$16,029,983.50.

Item 4. Purpose of Transaction

Item 4 is hereby supplemented to add the following:

The Reporting Persons acquired the Third Additional Shares for investment purposes.

Item 5. Interest in Securities of the Issuer

Item 5 is hereby amended and restated in its entirety as follows:

- (a) Assuming the exercise of the Biotech Growth Warrant and the exercise of the Biotech Growth New Warrant, Biotech Growth is the record owner of 5,677,322 shares of Common Stock. To the best knowledge of BB Biotech and Biotech Growth, no director or executive officer of BB Biotech or Biotech Growth owns any shares of the Common Stock.
- (b) Regarding the number of shares as to which such person has:

See Line	(i) sole power to vote or to direct the vote: 7 of cover sheets.
See Line	(ii) shared power to vote or to direct the vote: 8 of cover sheets.
See Line	(iii) sole power to dispose or to direct the disposition: 9 of cover sheets.
See Line	(iv) shared power to dispose or to direct the disposition: 10 of cover sheets.
(c)	Except as set forth in Item 3 above, none of the Reporting Persons has effected any transaction in the Common Stock of the Issuer during the last 60 days. To the best knowledge of the Reporting Persons, no director or executive officer of BB Biotech and Biotech Growth has effected any transaction in the Common Stock during the last 60 days.
(d)	No other person is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, shares beneficially owned by any of the Reporting Persons.
(e)	Not Applicable.

Page 5 of 6

Item 7. Material to Be Filed as Exhibits

Item 7 of the Schedule 13D is amended and supplemented as follows:

Exhibit 1 Agreement regarding joint filing of Schedule 13D*

^{*} Previously filed as an exhibit to BB Biotech and Biotech Growth s Schedule 13D filed with the SEC on June 3, 2011.

Page 6 of 6

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.

BB Biotech AG

Date: September 20, 2017 By: /s/ Michael Hutter

Signatory Authority

Name: Michael Hutter
Title: Signatory Authority

Date: September 20, 2017 By: /s/ Ivo Betschart

Signatory Authority

Name: Ivo Betschart

Title: Signatory Authority

Biotech Growth N.V.

Date: September 20, 2017 By: /s/ Michael Hutter

Signatory Authority

Name: Michael Hutter
Title: Signatory Authority