

Radius Health, Inc.
Form SC 13G
February 18, 2015

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

**INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT
TO RULE 13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO
RULE 13d-2**

(Amendment No.)*

Radius Health, Inc.

(Name of Issuer)

Common Stock, \$0.0001 par value per share

(Title of Class of Securities)

750469207

(CUSIP Number)

31 December 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)

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).

13G

CUSIP No. 750469207

Page 2 of 5 Pages

1 NAMES OF REPORTING PERSONS

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

The Wellcome Trust Limited as trustee of the Wellcome Trust
2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a) " (b) "

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United Kingdom

NUMBER OF **5** SOLE VOTING POWER

SHARES

BENEFICIALLY **6** 1,729,091 SHARED VOTING POWER

OWNED BY

EACH **7** SOLE DISPOSITIVE POWER

REPORTING

PERSON **8** 1,729,091 SHARED DISPOSITIVE POWER

WITH

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,729,091

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

..

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

5.3%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

OO

13G

CUSIP No. 750469207
Schedule 13G

Page 3 of 5 Pages

Item 1(a). Name of Issuer: Radius Health, Inc.

Item 1(b). Address of Issuer's Principal Executive Offices: 201 Broadway, 6th Floor, Cambridge, Massachusetts 02139

Item 2(a). Name of Persons Filing: The Wellcome Trust Limited as trustee of the Wellcome Trust

Item 2(b). Address of Principal Business Office or, if None, Residence: 215 Euston Road, London NW1 2BE, United Kingdom

Item 2(c). Citizenship: United Kingdom

Item 2(d). Title of Class of Securities: Common Stock, \$0.0001 par value per share

Item 2(e). CUSIP Number: 750469207

Item 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:

- (a) " Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
- (b) " Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) " Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) " Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8).
- (e) " An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) " An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) " A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
- (h) " A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) " A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) " Group, in accordance with §240.13d-1(b)(1)(ii)(J).

13G

CUSIP No. 750469207

Page 4 of 5 Pages

Item 4. Ownership.

The information in items 1 and 5 through 11 on the cover page (p. 2) of this Schedule 13G is hereby incorporated by reference.

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 5 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.

Not applicable.

13G

CUSIP No. 750469207

Page 5 of 5 Pages

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: 17 February 2015

The Wellcome Trust Limited

as trustee of the Wellcome Trust

/s/ Nick Moakes

Name: Nick Moakes

Title: Managing Director (Public Markets)