RESPONSE GENETICS INC Form SC 13G September 21, 2012

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

SCHEDULE 13G

(Rule 13d-102)
Information to be Included in Statements Filed Pursuant to § 240.13d-1(b), (c) and (d) and Amendments Thereto Filed Pursuant to § 240.13d-2

Under the Securities Exchange Act of 1934 (Amendment No. _____)*

Response Genetics, Inc. (Name of Issuer)

Common Stock, Par Value \$0.01 (Title of Class of Securities)

76123U105 (CUSIP Number)

September 13, 2012 (Date of Event which Requires Filing of this Statement)

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

- o Rule 13d-1(b)
- x 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).

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

13G

CUSIP No. 76123U105

1. Names of Reporting Persons.

GlaxoSmithKline plc

- 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

England and Wales

5. Sole Voting Power

5,000,000

Number of Shares

Beneficially

Owned by

Each Reporting

Person With:

6. Shared Voting Power

0

7. Sole Dispositive Power

5,000,000

8. Shared Dispositive Power

0

- 9. Aggregate Amount Beneficially Owned by Each Reporting Person 5,000,000
- 10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares o
- 11. Percent of Class Represented by Amount in Row (9)

15.2%

12. Type of Reporting Person

CO

13G CUSIP No. 76123U105
ITEM 1. (a) Name of Issuer:
Response Genetics, Inc.
(b) Address of Issuer's Principal Executive Offices:
1640 Marengo St., 6th Floor Los Angeles, California 90033
ITEM 2. (a) Name of Person Filing:
GlaxoSmithKline plc
(b) Address of Principal Business Office, or if None, Residence:
980 Great West Road Brentford Middlesex TW8 9GS ENGLAND
(c) Citizenship:
England and Wales
(d) Title of Class of Securities:
Common Stock, par value \$0.01 per share
(e) CUSIP Number:
76123U105
ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO SS.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.

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

Pursuant to the terms of the purchase agreement, dated September 13, 2012 (the "Purchase Agreement"), among the Reporting Person, the Issuer and two investors unrelated to the Reporting Person, for so long as the Reporting Person or its affiliates own at least 50% of the shares of the Common Stock reported herein, the Reporting Person will have the right to designate one non-voting board observer (an "Observer"). The Observer, if appointed, would have the right to attend all meetings of the Issuer's board of directors and to receive all of the board of director meeting materials, subject to certain restrictions set forth in the Purchase Agreement. As of the date of this Schedule 13G, the Reporting Person has not exercised the right to designate an Observer.

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.

Glaxo Group Limited*

5,000,000

15.2%

*Shares held directly by Glaxo Group Limited, an indirect wholly-owned subsidiary of Reporting Person.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY.

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. CERTIFICATIONS.

By signing below I 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 such 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.

	September 21, 2012
	(Date)
/s/ Simon Dingemans	
	(Signature)
	Simon Dingemans, Chief Financial Officer
	(Name/Title)

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.