GENOCEA BIOSCIENCES, INC.

Victoria A. Whyte

Form SC 13D/A March 17, 2015
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
SCHEDULE 13D
Under the Securities Exchange Act of 1934
(Amendment No. 1)*
GENOCEA BIOSCIENCES, INC. (Name of Issuer)
Common Stock, Par Value \$0.001
(Title of Class of Securities)
372427 10 4
(CUSIP Number)

Edgal Filling. GENOCEA BIOSCIENCES, INC FOITH SC 13D/A
GlaxoSmithKline plc
980 Great West Road
Brentford, Middlesex TW8 9GS
England
Telephone: +44 (0)208 047 5000
(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)
March 12, 2015
(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 Rule.13d-7 for other parties to whom copies are to be sent.
* 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.

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*).

	NAMES OF PERSONS	REP(ORTING
	GlaxoSmithI CHECK THI APPROPRIA IF A MEMB GROUP	E ATE E	BOX
2	(see instruction	ons)	
	(a) o		
3	(b) o SEC USE C SOURCE OF		
4	instructions)		
5	WC CHECK IF DISCLOSUF LEGAL PROCEEDIN REQUIRED PURSUANT ITEM 2(d) or 2(e) CITIZENSH ORGANIZA	NGS I TO	IS o R PLACE OF
	England and	Wale	
		7	SOLE VOTING POWER
NUMBI SHARE		8	1,971,668 SHARED VOTING POWER
BENEFICIALLY OWNED BY		9	-0-

EACH REPORTING SOLE DISPOSITIVE PERSON WITH **POWER** 1,971,668 10 SHARED **DISPOSITIVE POWER** -0-AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING 11 **PERSON** 1,971,668 (1) CHECK BOX IF THE **AGGREGATE** AMOUNT IN 12 o ROW (11) **EXCLUDES CERTAIN SHARES** PERCENT OF CLASS REPRESENTED BY 13 **AMOUNT IN ROW 11**

8.5% (2)

TYPE OF REPORTING

PERSON 14

CO

Footnotes:

Shares of common stock are held of record by S.R. One, Limited (<u>"S.R. One"</u>), an indirect, wholly-owned subsidiary of the Reporting Person.

⁽²⁾ The calculation is based on a total of 23,313,250 shares of common stock outstanding as of March 12, 2015.

CUSIP No. 372427 10 4 SCHEDULE 13D/A1 Page 3 of 7

ITEM 1. SECURITY AND ISSUER

This Amendment No. 1 (the "Amendment") amends and supplements the Schedule 13D originally filed on February 14, 2014 (the "Original Schedule 13D") with respect to the shares of common stock, par value \$0.001 per share ("Shares"), of Genocea Biosciences, Inc., a Delaware corporation (the "Issuer"). The Issuer's principal executive offices are located at 100 Acorn Park Drive, Cambridge, Massachusetts 02140. This Amendment No. 1 is being filed to disclose changes to beneficial ownership as a result of the allocation of Shares to the Reporting Persons. Unless otherwise indicated, each capitalized term used but not defined herein shall have the meaning assigned to such term in the Original Schedule 13D.

ITEM 2. IDENTITY AND BACKGROUND

This Amendment amends and restates Item 2 of the Original Schedule 13D by deleting Schedule 1 in its entirety, and replacing it with Schedule 1 attached hereto.

ITEM 4. PURPOSE OF TRANSACTION

The response set forth in Item 4 (A) of the Original Schedule 13D is hereby amended by deleting the previous response in its entirety and replacing it with the following:

Effective December 12, 2014, Dr. Simeon J. George voluntarily retired from the Board of Directors of the Issuer (the "Board"). Dr. George has served on the Board since 2009 and has also served as a member of the Audit Committee and Compensation Committee. Dr. George's retirement was in accordance with the investment policies of S.R. One.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER

The response set forth in Items 5 (A) and (B) of the Original Schedule 13D is hereby amended by deleting the previous response in its entirety and replacing it with the following:

On March 12, 2015, S.R. One was allocated 300,000 Shares at a price of \$8.25 per Share. As a result, a. GlaxoSmithKline plc beneficially owns 1,971,668 Shares which represents 8.5% of the 23,313,250 Shares outstanding as of March 12, 2015.

b. GlaxoSmithKline plc has the sole power to vote or direct the vote, and the sole power to dispose or to direct the disposition of, all 1,971,668 Shares described in Item 5a above.

CUSIP No. 372427 10 4 SCHEDULE 13D/A1 Page 4 of 7

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.

Dated: March 16, 2015

GLAXOSMITHKLINE PLC

By: /s/ Victoria A. Whyte

Name: Victoria A. Whyte Title: Company Secretary

CUSIP No. 372427 10 4 SCHEDULE 13D/A1 Page 5 of 7

Schedule I

Name Board of Directors	Business Address	Principal Occupation or Employment	Citizenship	
Sir Andrew Witty	980 Great West Road Brentford Middlesex, England TW8 9GS	Executive Director and Chief Executive Officer British		
Simon Dingemans	980 Great West Road Brentford Middlesex, England TW8 9GS 709 Swedeland Road	Executive Director and Chief Financial Officer	British	
Dr. Moncef Slaoui	King of Prussia Pennsylvania	Executive Director and Chairman Global Vaccines	Moroccan, Belgian & US	
Sir Christopher Gent	19406 980 Great West Road Brentford Middlesex, England TW8 9GS 980 Great West Road	Chairman and Company Director	British	
Sir Philip Hampton	Brentford Middlesex, England TW8 9GS	Company Director	British	
Professor Sir Roy Anderson	980 Great West Road Brentford Middlesex, England TW8 9GS 980 Great West Road	Company Director	British	
Dr. Stephanie Burns	Brentford Middlesex, England TW8 9GS	Company Director	US	
Stacey Cartwright	980 Great West Road Brentford Middlesex, England TW8 9GS	Company Director	British	
Judy Lewent	980 Great West Road Brentford Middlesex, England TW8 9GS	Company Director	US	
Sir Deryck Maughan	1,10,000	Company Director	British	

980 Great West Road Brentford Middlesex, England TW8 9GS

CUSIP No. 372427 10 4 SCHEDULE 13D/A1 Page 6 of 7

980 Great West Road

Brentford Dr. Daniel Podolsky

Company Director US Middlesex, England

TW8 9GS

980 Great West Road

Brentford

Tom de Swaan Company Director Dutch Middlesex, England

TW8 9GS

980 Great West Road

Brentford Lynn Elsenhans Company Director US Middlesex, England

TW8 9GS

980 Great West Road

Brentford Jing Ulrich Company Director US Middlesex, England

TW8 9GS

980 Great West Road

Brentford

Hans Wijers Middlesex, England

TW8 9GS

Company Director Dutch

980 Great West Road

Brentford

Middlesex, England Urs Rohner

TW8 9GS

Company Director Swiss

Corporate Executive Team

980 Great West Road

Executive Director and Chief Executive Brentford Sir Andrew Witty **British** Middlesex, England Officer

TW8 9GS

980 Great West Road

Brentford **Simon Dingemans** Executive Director and Chief Financial Officer British

Middlesex, England

TW8 9GS

709 Swedeland Road

King of Prussia Dr. Moncef Slaoui

Executive Director Moroccan,

Chairman Global Vaccines Belgian & US Pennsylvania

19406

CUSIP No. 372427 10 4 SCHEDULE 13D/A1 Page 7 of 7

Nick Hirons	980 Great West Road		British
	Brentford	Senior Vice President, Global Ethics and Compliance	
	Middlesex		
	TW8 9GS		
		President, Global Pharmaceuticals	
Abbas Hussain	150 Beach Road 22-00 Gateway West 189720		British
William Louv	Singapore Five Moore Drive PO Box 13398 Research Triangle Park North Carolina 27709	Senior Vice President, Core Business Services	US
David Redfern	980 Great West Road Brentford Middlesex, England TW8 9GS	Chief Strategy Officer	British
Claire Thomas	980 Great West Road Brentford Middlesex, England TW8 9GS	Senior Vice President, Human Resources	British
Philip Thomson	980 Great West Road Brentford Middlesex, England TW8 9GS	Senior Vice President, Communications and Government Affair	s British
Daniel Troy	5 Crescent Drive Philadelphia, PA 19112	Senior Vice President & General Counsel	US
Dr. Patrick Vallanc	980 Great West Road Brentford Middlesex, England TW8 9GS 980 Great West Road	President, Pharmaceuticals R&D	British
Emma Walmsley	Brentford Middlesex, England TW8 9GS	President, Consumer Healthcare	British
Roger Connor	980 Great West Road Brentford Middlesex, England TW8 9GS	President, Global Manufacturing & Supply	Irish