

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL	
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Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>GLAXOSMITHKLINE PLC</u> (Last) (First) (Middle) <u>980 GREAT WEST ROAD</u> (Street) <u>BRENTFORD X0 TW8 9GS</u> MIDDLESEX (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>02/14/2019</u>	3. Issuer Name and Ticker or Trading Symbol <u>GENOCEA BIOSCIENCES, INC. [GNCA]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Shares	12,069,937	I	See Footnote ⁽²⁾

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Warrant	02/14/2019	02/14/2024 ⁽¹⁾	Common Stock	2,487,067	0.5656	I	See Footnote ⁽²⁾

Explanation of Responses:

1. Acquired from Genoccea Biosciences, Inc (the "Issuer") pursuant to a Subscription Agreement dated February 11, 2019, with a closing date of February 14, 2019 (the "Subscription Agreement"). Upon the satisfaction of certain conditions, the Issuer may call for a second closing under the Subscription Agreement (the "Second Closing"). The expiration date of the warrant will be accelerated if S.R. One Limited does not purchase a number of common shares of the Issuer specified in the Subscription Agreement in the Second Closing. (2) The shares reported herein are held of record by S.R. One Limited, an indirect, wholly-owned subsidiary of GlaxoSmithKline plc (the "Reporting Person").

2. The shares reported herein are held of record by S.R. One Limited, an indirect, wholly-owned subsidiary of GlaxoSmithKline plc (the "Reporting Person").

/s/ Victoria A. Whyte, SVP & Company Secretary, 02/25/2019
GlaxoSmithKline plc

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 5 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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