

GENOCEA BIOSCIENCES, INC.
 Form 4
 December 15, 2015

FORM 4 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

OMB APPROVAL
 OMB Number: 3235-0287
 Expires: January 31, 2015
 Estimated average burden hours per response... 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 Flechtner Jessica Baker

2. Issuer Name and Ticker or Trading Symbol
 GENOCEA BIOSCIENCES, INC.
 [GNCA]

5. Relationship of Reporting Person(s) to Issuer
 (Check all applicable)

(Last) (First) (Middle)

3. Date of Earliest Transaction
 (Month/Day/Year)
 12/14/2015

____ Director
 Officer (give title below)
 ____ 10% Owner
 ____ Other (specify below)
 VP of Research

CAMBRIDGE DISCOVERY
 PARK, 100 ACORN PARK DRIVE,
 5TH FLOOR

(Street)

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

CAMBRIDGE, MA 02140

(City) (State) (Zip)

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Ownership (Instr. 4) | | |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|--------|---|
| | | | | (A) or (D) | Price | | | | |
| | | | | Code | V | Amount | | | |
| Common Stock | 12/14/2015 | | M | | 5,462 | A | \$ 2.02 | 7,343 | D |
| Common Stock | 12/14/2015 | | M | | 3,444 | A | \$ 2.02 | 10,787 | D |

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

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.

SEC 1474
 (9-02)

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

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) | 8. Amount or Number of Shares |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|-------------------------------|
| Option to purchase Common Stock | \$ 2.02 | 12/14/2015 | | M | 5,462 | ⁽¹⁾ 02/17/2021 | Common Stock | 5,462 |
| Option to purchase Common Stock | \$ 2.02 | 12/14/2015 | | M | 3,444 | ⁽¹⁾ 02/17/2021 | Common Stock | 3,444 |

Reporting Owners

Reporting Owner Name / Address

Relationships

Director 10% Owner Officer Other

Flechtner Jessica Baker
CAMBRIDGE DISCOVERY PARK
100 ACORN PARK DRIVE, 5TH FLOOR
CAMBRIDGE, MA 02140

VP of Research

Signatures

/s/ Jonathan Poole,
Attorney-in-Fact

12/15/2015

__Signature of Reporting Person

Date

Explanation of Responses:

* If the form is filed by more than one reporting person, see Instruction 4(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).

(1) The option was granted on 2/17/2011 and the vesting schedule was completed in February 2015.

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

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