

FORM 4

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

OMB APPROVAL
OMB Number: 3235-0287
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 or
Section 30(h) of the Investment Company Act of 1940

| | | |
|---|---|--|
| 1. Name and Address of Reporting Person * AGUIAR ERIC (Last) (First) (Middle) C/O INVITAE CORPORATION, 458 BRANNAN STREET (Street) SAN FRANCISCO, CA 94107 (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol Invitae Corp [NVT A] | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director _____ 10% Owner <input type="checkbox"/> Officer (give title below) _____ Other (specify below) |
| 3. Date of Earliest Transaction (MM/DD/YYYY) <p align="center">5/5/2016</p> | | 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person |
| 4. If Amendment, Date Original Filed (MM/DD/YYYY) | | |

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

| 1. Title of Security (Instr. 3) | 2. Trans. Date | 2A. Deemed Execution Date, if any | 3. Trans. 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 Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|----------------|-----------------------------------|---------------------------|---|---|------------|-------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |

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

| 1. Title of Derivate Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Trans. Date | 3A. Deemed Execution Date, if any | 4. Trans. 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 | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|--|--|----------------|-----------------------------------|---------------------------|---|--|---|-----|---|-----------------|--|--|--|--|-------|
| | | | | Code | V | | (A) | (D) | Date Exercisable | Expiration Date | | | | | Title |
| Stock Option (right to buy) | \$9.18 | 5/5/2016 | | A | | 10000 | | | Ⓛ | 5/5/2026 | Common Stock | 10000 | \$0 | 10000 | D |

Explanation of Responses:

(1) The option vests in equal monthly installments over one year starting from May 5, 2016.

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|---|---------------|-----------|---------|-------|
| | Director | 10% Owner | Officer | Other |
| AGUIAR ERIC C/O INVITAE CORPORATION 458 BRANNAN STREET SAN FRANCISCO, CA 94107 | X | | | |

Signatures

/s/ **Patty Dumond, Attorney-in-Fact**

5/9/2016

**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 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).

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

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.