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

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 1)*

Invitae Corporation

(Name of Issuer)

Common Stock, \$.0001 par value common share

(Title of Class of Securities)

46185L103

(CUSIP Number)

December 31, 2017

(Date of Event which Requires Filing of this Statement)

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

- Rule 13d-1(b)
- Rule 13d-1(c)
- 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 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).

Item 1(a). Name of Issuer:

Invitae Corporation (the "Issuer").

Item 1(b). Address of Issuer's Principal Executive Offices:

458 Brannan Street, San Francisco, California 94107.

Item 2(a). Names of Persons Filing:

Thomas, McNerney & Partners II, L.P. ("TMP II"), TMP Associates II, L.P. ("TMPA II"), TMP Nominee II, LLC ("TMPN II"), Thomas, McNerney & Partners II, LLC ("TMP II LLC"), James E. Thomas, and Peter McNerney.

TMP II LLC, the general partner of TMP II and TMPA II, has voting and dispositive power over the shares held by TMP II and TMPA II. In addition, TMPN II has entered into an agreement with TMP II LLC that directs TMPN II to vote and dispose of securities in the same manner as directed by TMP II LLC with respect to the shares held by TMP II and TMPA II. James E. Thomas and Peter McNerney are the managers of TMPN II and have shared voting and dispositive power over such securities, provided that they are obligated to exercise such power in the same manner as TMP II LLC votes and disposes of the securities of the Issuer over which TMP II LLC exercises voting and dispositive power.

The persons named in this Item 2(a) are referred to individually herein as a "Reporting Person" and collectively as the "Reporting Persons."

Item 2(b). Address of Principal Business Office or, if None, Residence:

The address of the principal office and principal business address of each of the Reporting Persons is One Stamford Plaza, 263 Tresser Blvd., 9th Floor, Stamford, Connecticut 06901.

Item 2(c). Citizenship:

TMP II and TMPA II are each a limited partnership organized under the laws of the State of Delaware. TMPN II and TMP II LLC are each a limited liability company organized under the laws of the State of Delaware. Each of James E. Thomas and Peter McNerney are U.S. citizens.

Item 2(d). Title of Class of Securities:

Common Stock, \$.0001 par value ("Common Stock").

Item 2(e). CUSIP Number:

46185L103 .

Item 3. If this statement is filed pursuant to §§ 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

Not applicable.

Item 4. Ownership.

Not applicable.

Item 5. Ownership of Five Percent or Less of a Class.

Each Reporting Person has ceased to beneficially own five percent (5%) or more of the Issuer's outstanding Common Stock.

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Not applicable.

Item 8. Identification and Classification of Members of the Group.

Not applicable. The Reporting Persons expressly disclaim membership in a "group" as used in Rule 13d-5(b).

Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Certification.

Not applicable. This Schedule 13G is not filed pursuant to Rule 13d-1(b) or Rule 13d-1(c).

Material to be Filed as Exhibits.

Exhibit 1 – Agreement regarding filing of joint Schedule 13G.

SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Date: March 15, 2018

/s/ James E. Thomas March 15, 2018
Manager of Thomas, McNerney & Partners II, LLC, the general partner of Thomas, McNerney & Partners II, L.P.

/s/ James E. Thomas March 15, 2018
Manager of TMP Nominee II, LLC

/s/ James E. Thomas March 15, 2018
Manager of Thomas, McNerney & Partners II, LLC, the general partner of TMP Associates II, L.P.

/s/ James E. Thomas March 15, 2018
Manager of Thomas, McNerney & Partners II, LLC

/s/ James E. Thomas March 15, 2018
James E. Thomas

/s/ Peter McNerney March 15, 2018
Peter McNerney

AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, the undersigned hereby agree that only one statement containing the information required by Schedule 13G need be filed with respect to the ownership by each of the undersigned of shares of stock of Invitae Corporation.

EXECUTED this 15th day of March, 2018.

<u>/s/ James E. Thomas</u> Manager of Thomas, McNerney & Partners II, LLC, the general partner of Thomas, McNerney & Partners II, L.P.	March 15, 2018
<u>/s/ James E. Thomas</u> Manager of TMP Nominee II, LLC	March 15, 2018
<u>/s/ James E. Thomas</u> Manager of Thomas, McNerney & Partners II, LLC, the general partner of TMP Associates II, L.P.	March 15, 2018
<u>/s/ James E. Thomas</u> Manager of Thomas, McNerney & Partners II, LLC	March 15, 2018
<u>/s/ James E. Thomas</u> James E. Thomas	March 15, 2018
<u>/s/ Peter McNerney</u> Peter McNerney	March 15, 2018