

FORM 4

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

OMB APPROVAL
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[] 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 -* BAKER BROS. ADVISORS LP (Last) (First) (Middle) 667 MADISON AVENUE, 21ST FLOOR (Street) NEW YORK, NY 10065 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol Invitae Corp [NVT A] 3. Date of Earliest Transaction (MM/DD/YYYY) <p align="center">11/17/2016</p>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)
4. If Amendment, Date Original Filed (MM/DD/YYYY)		6. Individual or Joint/Group Filing (Check Applicable Line) <input type="checkbox"/> Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person

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

1. Title of Security (Instr. 3)	2. Trans. Date (Instr. 3)	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			
Common Stock								73371	I	See Footnotes (1)(5)(6)
Common Stock	11/17/2016		P		69074	A	\$6.0000	734261	I	See Footnotes (2)(3)(5)(6)
Common Stock	11/17/2016		P		664259	A	\$6.0000	6480668	I	See Footnotes (2)(4)(5)(6)

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		Date Exercisable	Expiration Date	Title	Amount or Number of Shares				

Explanation of Responses:

- (As a result of Felix J. Baker's and Julian C. Baker's ownership interest in 14159 Capital (GP), LLC, Felix J. Baker and Julian C. Baker may be deemed to have
- 1)** an indirect pecuniary interest in 73,371 shares of common stock of Invitae Corporation (the "Issuer") beneficially owned by 14159, L.P. ("14159"), a limited partnership of which the sole general partner is 14159 Capital, L.P., a limited partnership of which the sole general partner is 14159 Capital (GP), LLC, due to 14159 Capital, L.P.'s right to receive an allocation of a portion of the profits from 14159.
- (On November 17, 2016, 667, L.P. ("667") and Baker Brothers Life Sciences, L.P. ("Life Sciences", and together with 667 and 14159 the "Funds") purchased
- 2)** 69,074 and 664,259 shares of the Common Stock, respectively of the Issuer, pursuant to an underwritten public offering.
- (After giving effect to the transactions reported herein and as a result of Felix J. Baker's and Julian C. Baker's ownership interest in Baker Biotech Capital
- 3)** (GP), LLC, Felix J. Baker and Julian C. Baker may be deemed to have an indirect pecuniary interest in 734,261 shares of common stock of the Issuer beneficially owned by 667, a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital (GP),LLC, due to Baker Biotech Capital, L.P.'s right to receive an allocation of a portion of the profits from 667.
- (After giving effect to the transactions reported herein and as a result of Felix J. Baker's and Julian C. Baker's ownership interest in Baker Brothers Life
- 4)** Sciences Capital (GP), LLC, Felix J. Baker and Julian C. Baker may be deemed to have an indirect pecuniary interest 6,480,668 shares of common stock of the Issuer beneficially owned by Life Sciences, a limited partnership of which the sole general partner is Baker Brothers Life Sciences Capital, L.P., a limited partnership of which the sole general partner is Baker Brothers Life Sciences Capital (GP), LLC, due to Baker Brothers Life Sciences Capital, L.P.'s right to receive an allocation of a portion of the profits from Life Sciences.
- (Baker Bros. Advisors LP (the "Adviser") serves as the Investment Adviser to the Funds. In connection with the services provided by the Adviser, the Adviser
- 5)** receives an asset-based management fee that does not confer any pecuniary interest in the securities held by the Funds. Baker Bros. Advisors (GP) LLC (the "Adviser GP") is the Adviser's sole general partner. Julian C. Baker and Felix J. Baker are principals of the Adviser GP. The Adviser has complete and unlimited discretion and authority with respect to the investment and voting power of the securities held by the Funds. The general partners of the Funds

relinquished to the Adviser all discretion and authority with respect to the investment and voting power of the securities held by the Funds.

- (Julian C. Baker, Felix J. Baker, the Adviser GP and the Adviser disclaim beneficial ownership of the securities held directly by the Funds except to the extent
 6) of their pecuniary interest therein, and this report shall not be deemed an admission that any of Julian C. Baker, Felix J. Baker, the Adviser GP or the Adviser is a beneficial owner of such securities for purposes of Section 16 or any other purpose.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
BAKER BROS. ADVISORS LP 667 MADISON AVENUE, 21ST FLOOR NEW YORK, NY 10065		X		
BAKER FELIX 667 MADISON AVENUE, 21ST FLOOR NEW YORK, NY 10065		X		
BAKER JULIAN 667 MADISON AVENUE, 21ST FLOOR NEW YORK, NY 10065		X		
Baker Bros. Advisors (GP) LLC 667 MADISON AVENUE, 21ST FLOOR NEW YORK, NY New York		X		

Signatures

BAKER BROS. ADVISORS LP Name Scott L. Lessing Title: President /s/Scott L. Lessing	11/18/2016
_____ **Signature of Reporting Person	Date
 /s/ Felix J. Baker	11/18/2016
_____ **Signature of Reporting Person	Date
 /s/ Julian C. Baker	11/18/2016
_____ **Signature of Reporting Person	Date
 BAKER BROS. ADVISORS (GP) LLC Name Scott L. Lessing Title: President /s/Scott L. Lessing	11/18/2016
_____ **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.

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