MIRAGEN THERAPEUTICS, INC.

Form 3

February 13, 2017

FORM 3

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

OMB

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OMB APPROVAL

INITIAL STATEMENT OF 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 2. Date of Event Requiring 3. Issuer Name and Ticker or Trading Symbol Person * Statement MIRAGEN THERAPEUTICS, INC. [MGEN] Atlas Venture Fund VII L P (Month/Day/Year) 02/13/2017 (Last) (First) (Middle) 4. Relationship of Reporting 5. If Amendment, Date Original Person(s) to Issuer Filed(Month/Day/Year) 25 FIRST STREET, STE 303 (Check all applicable) (Street) 6. Individual or Joint/Group Filing(Check Applicable Line) _X__ 10% Owner Director _X_ Form filed by One Reporting Officer Other Person (give title below) (specify below) CAMBRIDGE, Â MAÂ 02141 Form filed by More than One Reporting Person (City) (State) (Zip) Table I - Non-Derivative Securities Beneficially Owned 2. Amount of Securities 4. Nature of Indirect Beneficial 1. Title of Security Beneficially Owned Ownership Ownership (Instr. 4) (Instr. 4) Form: (Instr. 5) Direct (D) or Indirect (I) (Instr. 5) $D^{(2)(3)}$ Â Common Stock $3,142,580 \stackrel{(1)}{=}$ Reminder: Report on a separate line for each class of securities beneficially SEC 1473 (7-02) 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.

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		4. Conversion or Exercise	5. 6. Nature of Indirect Ownership Form of (Instr. 5)	
			(Instr. 4)		Price of	Derivative	
	Date Exercisable	Expiration Date	Title	Amount or Number of	Derivative Security	Security: Direct (D) or Indirect	

Shares

(I) (Instr. 5)

Reporting Owners

CAMBRIDGE, MAÂ 02141

Signatures

Atlas Venture Fund VII, L.P. By: Atlas Venture Associates VII, L.P., its general partner By: Atlas Venture Associates VII, Inc., its general partner By: /s/Frank Castellucci, Secretary

02/13/2017

**Signature of Reporting Person

Date

Explanation of Responses:

- * 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).
- Shares of common stock of the corporation then known as Miragen Therapeutics, Inc. ("Old Miragen") were converted into shares of the Issuer pursuant to that certain Agreement and Plan of Merger and Reorganization, dated as of October 31, 2016, by and among the Issuer, Signal Merger Sub, Inc. and Old Miragen (the "Merger Agreement"). Pursuant to the terms of the Merger Agreement, each share of common stock was converted into 0.7031 shares of the Issuer's common stock.
 - Represents 4,469,607 shares of common stock of Old Miragen prior to conversion pursuant to the Merger Agreement including: 83,250 shares of common stock of Old Miragen; and shares of common stock of Old Miragen issued upon the conversion of 2,661,454 shares of
- (2) Series A preferred stock of Old Miragen, 479,401 shares of Series B preferred stock of Old Miragen and 1,245,502 shares of Series C preferred stock of Old Miragen. Immediately prior to the effective time of the merger, each share of Old Miragen preferred stock converted into one share of Old Miragen's common stock.
 - The shares are held by Atlas Venture Fund VII, L.P. ("Atlas Venture VII"). Atlas Venture Associates VII, L.P. ("AVA VII LP") is the general partner of Atlas Venture VII, and Atlas Venture Associates VII, Inc. ("AVA VII Inc.") is the general partner of AVA VII LP.
- Each of AVA VII LP and AVA VII Inc. disclaims Section 16 beneficial ownership of the securities held by Atlas Venture VII, except to the extent of its pecuniary interest therein, if any.

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.

Reporting Owners 2