

MIRAGEN THERAPEUTICS, INC.  
 Form 3  
 February 13, 2017

**FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

OMB APPROVAL

OMB Number: 3235-0104  
 Expires: January 31, 2005  
 Estimated average burden hours per response... 0.5

**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)

<p>1. Name and Address of Reporting Person *</p> <p>Â Hughes Thomas E.</p> <p>(Last) (First) (Middle)</p> <p>C/O MIRAGEN THERAPEUTICS, INC.,Â 6200 LOOKOUT ROAD</p> <p>(Street)</p> <p>BOULDER,Â COÂ 80301</p> <p>(City) (State) (Zip)</p>	<p>2. Date of Event Requiring Statement</p> <p>(Month/Day/Year)</p> <p>02/13/2017</p>	<p>3. Issuer Name and Ticker or Trading Symbol</p> <p>MIRAGEN THERAPEUTICS, INC. [MGEN]</p>	<p>4. Relationship of Reporting Person(s) to Issuer</p> <p>(Check all applicable)</p> <p><input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner  <input type="checkbox"/> Officer <input type="checkbox"/> Other                  (give title below) (specify below)</p>	<p>5. If Amendment, Date Original Filed(Month/Day/Year)</p>	<p>6. Individual or Joint/Group Filing(Check Applicable Line)</p> <p><input checked="" type="checkbox"/> Form filed by One Reporting Person  <input type="checkbox"/> Form filed by More than One Reporting Person</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Table I - Non-Derivative Securities Beneficially Owned**

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Stock	14,062 <sup>(1)</sup> <sup>(2)</sup>	D	Â

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

SEC 1473 (7-02)

**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 (Instr. 4)	4. Conversion or Exercise Price of Derivative	5. Ownership Form of Derivative Security:	6. Nature of Indirect Beneficial Ownership (Instr. 5)
-----------------------------------------------	-------------------------------------------------------------	--------------------------------------------------------------------------------	-----------------------------------------------	-------------------------------------------	----------------------------------------------------------

Edgar Filing: MIRAGEN THERAPEUTICS, INC. - Form 3

	Date Exercisable	Expiration Date	Title	Amount or Number of Shares	Security	Direct (D) or Indirect (I) (Instr. 5)	
Stock Option (right to buy) <sup>(1)</sup>	Â <sup>(3)</sup>	06/14/2022	Common Stock	11,249	\$ 1.22	D	Â
Stock Option (right to buy) <sup>(1)</sup>	Â <sup>(4)</sup>	02/21/2026	Common Stock	13,710	\$ 1.05	D	Â

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Hughes Thomas E. C/O MIRAGEN THERAPEUTICS, INC. 6200 LOOKOUT ROAD BOULDER, CO 80301	Â X	Â	Â	Â

## Signatures

/s/ Brent D. Fassett, as Attorney-in-Fact for Thomas E. Hughes 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.

(2) Reporting Person held 20,000 shares of common stock of Old Miragen prior to the conversion pursuant to the Merger Agreement.

(3) On June 15, 2012, Reporting Person was granted an option to purchase 16,000 shares of the common stock of Old Miragen under Old Miragen's Equity Incentive Plan (the "Plan") at an exercise price of \$0.86 per share. Pursuant to the Merger Agreement, this option was converted into an option to purchase 11,249 shares of the Issuer's common stock at a per share exercise price of \$1.22. The option is fully vested and exercisable. The option expires ten years after the date of grant.

(4) On February 22, 2016, Reporting Person was granted an option to purchase 19,500 shares of common stock of Old Miragen under the Plan at an exercise price of \$0.74 per share. Pursuant to the Merger Agreement, this option was converted into an option to purchase 13,710 shares of the Issuer's common stock at a per share exercise price of \$1.05. The shares subject to the option vest over three years in equal quarterly installments beginning on May 22, 2016, provided that at the relevant vesting dates the Reporting Person's continuous service to the Issuer has not been terminated as defined in and as determined under the Plan. The shares underlying the option are subject to accelerated vesting upon the occurrence of specified events including a change of control of the Issuer and the Reporting Person's termination. The option expires ten years after the date of grant.

Â

### Remarks:

Exhibit List: Exhibit 24 - Power of Attorney

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.