

MYRIAD GENETICS INC  
Form SC 13G/A  
February 14, 2018

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**SCHEDULE 13G**

**(Amendment No. 1)**

Under the Securities Exchange Act of 1934

Myriad Genetics, Inc.

(Name of Issuer)

Common Stock, \$0.01 par value

(Title of Class of Securities)

62855J104

(CUSIP Number)

December 31, 2017

(Date of Event Which Requires Filing of this Statement)

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

<input type="checkbox"/>	Rule 13d-1(b)
<input checked="" type="checkbox"/>	Rule 13d-1(c)
<input type="checkbox"/>	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 the 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).

CUSIP No. 62855J104

**Names of  
Reporting  
Persons  
I.R.S.  
Identification**

**1. Nos. of above  
persons  
(entities only)**  
D. E. Shaw &  
Co., L.P.  
13-3695715

**Check the  
Appropriate  
Box if a**

**2. Member of a  
Group (See  
Instructions)**  
(a) ..  
(b) ..

**3. SEC Use Only**

**Citizenship or  
Place of**

**4. Organization**  
Delaware

**5. Sole Voting Power**  
-0-

**Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person With**

**6. Shared Voting Power**  
4,467,917

**7. Sole Dispositive Power**  
-0-

**8. Shared Dispositive Power**  
4,763,936

**9. Aggregate Amount Beneficially Owned by Each Reporting Person**  
4,763,936

**10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) "**

**11. Percent of Class Represented by Amount in Row (9)**  
6.9%

**12. Type of Reporting Person (See Instructions)**  
IA, PN

CUSIP No. 62855J104

**Names of  
Reporting  
Persons  
I.R.S.**

**1. Identification**

**Nos. of above  
persons  
(entities only)**  
David E. Shaw

**Check the  
Appropriate  
Box if a**

**2. Member of a  
Group (See  
Instructions)**

**(a)** ..  
**(b)** ..

**3. SEC Use Only**

**Citizenship or  
Place of**

**4. Organization**

United States

**5. Sole Voting Power**  
-0-

**Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person With**

**6. Shared Voting Power**  
4,467,917

**7. Sole Dispositive Power**  
-0-

**8. Shared Dispositive Power**  
4,763,936

**9. Aggregate Amount Beneficially Owned by Each Reporting Person**  
4,763,936

**10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) "**

**11. Percent of Class Represented by Amount in Row (9)**  
6.9%

**12. Type of Reporting Person (See Instructions)**  
IN

**Item 1.**

	<b>(a)</b>	<b>Name of Issuer</b>
Myriad Genetics, Inc.		
	<b>(b)</b>	<b>Address of Issuer's Principal Executive Offices</b>
320 Wakara Way		
Salt Lake City, UT 84108		

**Item 2.**

	<b>(a)</b>	<b>Name of Person Filing</b>
D. E. Shaw & Co., L.P.		
David E. Shaw		
	<b>(b)</b>	<b>Address of Principal Business Office or, if none, Residence</b>
The business address for each reporting person is:		
1166 Avenue of the Americas, 9 <sup>th</sup> Floor		
New York, NY 10036		

	<b>(c)</b>	<b>Citizenship</b>
D. E. Shaw & Co., L.P. is a limited partnership organized under the laws of the state of Delaware.		
David E. Shaw is a citizen of the United States of America.		

	<b>(d)</b>	<b>Title of Class of Securities</b>
Common Stock, \$0.01 par value		

	<b>(e)</b>	<b>CUSIP Number</b>
62855J104		

**Item 3.** If this statement is filed pursuant to Rule 13d-1(b) or 13d-2(b) or (c), check whether the person filing is  
**a:**

Not Applicable

**Item 4. Ownership**

As of December 31, 2017:

(a) Amount beneficially owned:

4,763,936 shares

D. E. Shaw & Co., L.P.: This is composed of (i) 1,893,851 shares in the name of D. E. Shaw Valence Portfolios, L.L.C., (ii) 7,300 shares that D. E. Shaw Valence Portfolios, L.L.C. has the right to acquire through the exercise of call options, (iii) 1,759,955 shares in the name of D. E. Shaw Oculus Portfolios, L.L.C., (iv) 47 shares in the name of D. E. Shaw Asymptote Portfolios, L.L.C., and (v) 1,102,783 shares under the management of D. E. Shaw Investment Management, L.L.C.

4,763,936 shares

David E. Shaw: This is composed of (i) 1,893,851 shares in the name of D. E. Shaw Valence Portfolios, L.L.C., (ii) 7,300 shares that D. E. Shaw Valence Portfolios, L.L.C. has the right to acquire through the exercise of call options, (iii) 1,759,955 shares in the name of D. E. Shaw Oculus Portfolios, L.L.C., (iv) 47 shares in the name of D. E. Shaw Asymptote Portfolios, L.L.C., and (v) 1,102,783 shares under the management of D. E. Shaw Investment Management, L.L.C.



(b) Percent of class:

D. E. Shaw & Co., L.P.: 6.9%

David E. Shaw: 6.9%

(c)

Number of shares to which the person has:

(i)

Sole power to vote or to direct the vote:

D. E. Shaw & Co., L.P.: -0- shares

David E. Shaw: -0- shares

(ii)

Shared power to vote or to direct the vote:

D. E. Shaw & Co., L.P.: 4,467,917 shares

David E. Shaw: 4,467,917 shares

(iii)

Sole power to dispose or to direct the disposition of:

D. E. Shaw & Co., L.P.: -0- shares

David E. Shaw: -0- shares

(iv)

Shared power to dispose or to direct the disposition of:

D. E. Shaw & Co., L.P.: 4,763,936 shares

David E. Shaw: 4,763,936 shares

David E. Shaw does not own any shares directly. By virtue of David E. Shaw's position as President and sole shareholder of D. E. Shaw & Co., Inc., which is the general partner of D. E. Shaw & Co., L.P., which in turn is the manager and investment adviser of D. E. Shaw Valence Portfolios, L.L.C., the investment adviser of D. E. Shaw Oculus Portfolios, L.L.C., and the managing member of (i) D. E. Shaw Investment Management, L.L.C. and (ii) D. E. Shaw Adviser, L.L.C., which in turn is the investment adviser of D. E. Shaw Asymptote Portfolios, L.L.C., and by virtue of David E. Shaw's position as President and sole shareholder of D. E. Shaw & Co. II, Inc., which is the managing member of D. E. Shaw & Co., L.L.C., which in turn is the manager of D. E. Shaw Oculus Portfolios, L.L.C. and the managing member of D. E. Shaw Manager, L.L.C., which in turn is the manager of D. E. Shaw Asymptote Portfolios, L.L.C., David E. Shaw may be deemed to have the shared power to vote or direct the vote of 4,467,917 shares, and the shared power to dispose or direct the disposition of 4,763,936 shares, the 4,763,936 shares as described above constituting 6.9% of the outstanding shares and, therefore, David E. Shaw may be deemed to be the beneficial owner of such shares. David E. Shaw disclaims beneficial ownership of such 4,763,936 shares.

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

Not Applicable

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

Not Applicable

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

Not Applicable

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

Not Applicable

**Item 9. Notice of Dissolution of Group**

Not Applicable

**Item 10. Certification**

By signing below, each of D. E. Shaw & Co., L.P. and David E. Shaw certify that, to the best of such reporting person's knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having such purposes or effect.

**SIGNATURE**

After reasonable inquiry and to the best of their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct. A Power of Attorney, dated March 1, 2017, granted by David E. Shaw in favor of Nathan Thomas, is attached hereto.

Dated: February 14, 2018

D. E. Shaw & Co., L.P.

By: /s/ Nathan Thomas  
Nathan Thomas  
Chief Compliance Officer

David E. Shaw

By: /s/ Nathan Thomas  
Nathan Thomas  
Attorney-in-Fact for David E. Shaw