

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL	
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1. Name and Address of Reporting Person* <b>FMR LLC</b>			2. Issuer Name and Ticker or Trading Symbol <b>REGENXBIO Inc. [ RGNX ]</b>		5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) <input checked="" type="checkbox"/> Other (specify below) <b>See Remark 1</b>	
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <b>05/12/2016</b>			
245 SUMMER STREET			4. If Amendment, Date of Original Filed (Month/Day/Year)		6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person	
(Street)						
<b>BOSTON</b>	<b>MA</b>	<b>02210</b>				
(City)	(State)	(Zip)				

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

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction 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	05/12/2016		S		3,500	D	\$10.83 <sup>(2)</sup>	656,917	I	See footnote <sup>(1)</sup>
Common Stock	05/12/2016		S		1,711	D	\$10.86 <sup>(3)</sup>	655,206	I	See footnote <sup>(1)</sup>
Common Stock	05/12/2016		S		500	D	\$10.85 <sup>(4)</sup>	654,706	I	See footnote <sup>(1)</sup>
Common Stock	05/12/2016		S		400	D	\$10.93 <sup>(5)</sup>	654,306	I	See footnote <sup>(1)</sup>
Common Stock	05/12/2016		S		200	D	\$10.89	654,106	I	See footnote <sup>(1)</sup>
Common Stock	05/12/2016		S		200	D	\$10.85	653,906	I	See footnote <sup>(1)</sup>
Common Stock	05/12/2016		S		100	D	\$10.88 <sup>(6)</sup>	653,806	I	See footnote <sup>(1)</sup>
Common Stock	05/12/2016		S		100	D	\$11.14	653,706	I	See footnote <sup>(1)</sup>

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction 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 (Month/Day/Year)		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: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
						Date Exercisable	Expiration Date					
				Code	V	(A)	(D)	Title	Amount or Number of Shares			

Explanation of Responses:

- By F-Prime Capital Partners Healthcare Fund III LP, Impresa Fund III Limited Partnership and F-Prime Inc. The general partner of F-Prime Capital Partners Healthcare Fund III LP is F-Prime Capital Partners Healthcare Advisors Fund III LP (FPCPHA). FPCPHA and Impresa Fund III Limited Partnership are each solely managed by Impresa Management LLC, their general partner and investment manager. Impresa Management LLC is owned, directly or indirectly, by various shareholders and employees of FMR LLC, including certain members of the Johnson family. F-Prime Inc. is a wholly-owned subsidiary of FMR LLC.
- The price reported for this transaction is the weighted average price of multiple trades at prices ranging from \$10.75 to \$10.93. FMR LLC hereby undertakes to provide upon request by the Commission staff, the issuer, or a security holder of the issuer full information regarding the number of shares and prices at which the transaction was effected.
- The price reported for this transaction is the weighted average price of multiple trades at prices ranging from \$10.55 to \$11.00. FMR LLC hereby undertakes to provide upon request by the Commission staff, the issuer, or a security holder of the issuer full information regarding the number of shares and prices at which the transaction was effected.
- The price reported for this transaction is the weighted average price of multiple trades at prices ranging from \$10.85 to \$10.86. FMR LLC hereby undertakes to provide upon request by the Commission staff, the issuer, or a security holder of the issuer full information regarding the number of shares and prices at which the transaction was effected.
- The price reported for this transaction is the weighted average price of multiple trades at prices ranging from \$10.89 to \$10.95. FMR LLC hereby undertakes to provide upon request by the Commission staff, the issuer, or a security holder of the issuer full information regarding the number of shares and prices at which the transaction was effected.
- The price reported for this transaction is the weighted average price of multiple trades at prices ranging from \$10.87 to \$10.89. FMR LLC hereby undertakes to provide upon request by the Commission staff, the issuer, or a security holder of the issuer full information regarding the number of shares and prices at which the transaction was effected.

Remarks:

Remark 1: Abigail P. Johnson is a Director, the Vice Chairman, the Chief Executive Officer and the President of FMR LLC. Members of the Johnson family, including Abigail P. Johnson, are the predominant

owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. The address of Abigail P. Johnson is c/o FMR LLC, 245 Summer Street, Boston, MA 02110. Remark 2: FMR Co., Inc. (FMRC), an indirect wholly-owned subsidiary of FMR LLC and an investment adviser registered under the Investment Advisers Act of 1940, and Fidelity Institutional Asset Management Trust Company (FIAMTC), an indirect wholly-owned subsidiary of FMR LLC and a bank as defined in Section 3(a)(6) of the Securities Exchange Act of 1934, are the beneficial owners of Common Stock of REGENXBIO Inc. as a result of acting as investment adviser to various client funds and accounts. FMR LLC and Abigail P. Johnson have no pecuniary interest in the Common Stock beneficially owned by FMRC and FIAMTC. Remark 3: The filing of this statement shall not be deemed to be an admission that, for purposes of Section 16 of the Securities Exchange Act of 1934 or otherwise, the undersigned are the beneficial owners of any securities reported herein.

Marc R. Bryant, Duly  
authorized under Powers of  
Attorney, by and on behalf of 05/13/2016  
FMR LLC and its direct and  
indirect subsidiaries, and  
Abigail P. Johnson

\*\* 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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