Common Stock

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

OMB Number: 3235-0287 Estimated average burden hours per response: 0.5

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 Inve	stmen	t Company A	ct of 194	0				
1. Name and Address of Reporting Person* HIGH SUSANNA GATTI				. Issuer Name and bluebird bio, I					5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner				
								x	Officer (give title		(specify		
(Last) (First) (Middle) C/O BLUEBIRD BIO, INC. 60 BINNEY STREET				8. Date of Earliest Tr 01/30/2018	ansactio	on (Mo	onth/Day/Year		Chief Operating Officer				
				. If Amendment, Da	te of Or	iginal	Filed (Month/I		6. Individual or Joint/Group Filing (Check Applicable				
(Street) CAMBRIDGE	MA	0214	2					Line)	Form filed by One Reporting Person Form filed by More than One Reporting Person				
(City)	(State)	(Zip)											
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned													
Date			2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)				d (A) or Disposed 5)	5. Amount of Securities Beneficially Owned Following Reported	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	Transaction(s) (Instr. 3 and 4)			
Common Stock			01/30/2018	M 14,794 A \$6		\$68.65	28,512	D					
Common Stock			01/30/2018		S ⁽¹⁾		800	D	\$192.4927 ⁽²⁾	27,712	D		
Common Stock			01/30/2018		S ⁽¹⁾		3,703	D	\$193.7439 ⁽³⁾	24,009	D		

S⁽¹⁾

S⁽¹⁾

S⁽¹⁾

S⁽¹⁾

S⁽¹⁾

S⁽¹⁾

S⁽¹⁾

S⁽¹⁾

 $S^{(1)}$

S⁽¹⁾

4,657

2,039

1,702

1,385

490

697

733

770

204

82

D

D

D

D

D

D

D

D

D

D

\$194.6525(4)

\$195.5667(5)

\$196.6339(6)

\$197.6065(7)

\$198.4634(8)

\$199.4324(9)

\$200.8812(10)

\$201.5739(11)

\$202.6801(12)

\$203.6(13)

19,352

17,313

15,611

14,226

13,736

13,039

12,306

11,536

11,332

11,250

D

D

D

D

D

D

D

D

D

D

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)			Execution Date,		Transaction Code (Instr.		ve les ed ed nstr.								11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Stock Option (right to buy)	\$68.65	01/30/2018		M		14,794		(14)	12/01/2026	Common Stock	14,794	\$0.00	45,206	D	

Explanation of Responses:

1. This sales reported in the Form 4 were effectd pursuant to a 10b5-1 trading plan adopted by the reporting person on December 18, 2017.

01/30/2018

01/30/2018

01/30/2018

01/30/2018

01/30/2018

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01/30/2018

- 2. The range in prices for the transaction reported on this line was \$192.00 to \$192.95. The average weighted price was \$192.4927. The reporting person will provide, upon request by the SEC, the issuer or security holder of the issuer, full information regarding the number of shares sold at each separate price.
- 3. The range in prices for the transaction reported on this line was \$193.10 to \$194.05. The average weighted price was \$193.7439. The reporting person will provide, upon request by the SEC, the issuer or security holder of the issuer, full information regarding the number of shares sold at each separate price.
- 4. The range in prices for the transaction reported on this line was \$194.10 to \$195.05. The average weighted price was \$194.6525. The reporting person will provide, upon request by the SEC, the issuer or
- security holder of the issuer, full information regarding the number of shares sold at each separate price. 5. The range in prices for the transaction reported on this line was \$195.10 to \$196.05. The average weighted price was \$195.5667. The reporting person will provide, upon request by the SEC, the issuer or security holder of the issuer, full information regarding the number of shares sold at each separate price.
- 6. The range in prices for the transaction reported on this line was \$196.10 to \$197.05. The average weighted price was \$196.6339. The reporting person will provide, upon request by the SEC, the issuer or security holder of the issuer, full information regarding the number of shares sold at each separate price.
- 7. The range in prices for the transaction reported on this line was \$197.10 to \$198.00. The average weighted price was \$197.6065. The reporting person will provide, upon request by the SEC, the issuer or

security holder of the issuer, full information regarding the number of shares sold at each separate price.

- 8. The range in prices for the transaction reported on this line was \$198.10 to \$199.00. The average weighted price was \$198.4634. The reporting person will provide, upon request by the SEC, the issuer or security holder of the issuer, full information regarding the number of shares sold at each separate price.
- 9. The range in prices for the transaction reported on this line was \$199.10 to \$200.05. The average weighted price was \$199.4324. The reporting person will provide, upon request by the SEC, the issuer or security holder of the issuer, full information regarding the number of shares sold at each separate price.
- 10. The range in prices for the transaction reported on this line was \$200.20 to \$201.10. The average weighted price was \$200.8812. The reporting person will provide, upon request by the SEC, the issuer or security holder of the issuer, full information regarding the number of shares sold at each separate price.

 11. The range in prices for the transaction reported on this line was \$201.30 to \$202.05. The average weighted price was \$201.5739. The reporting person will provide, upon request by the SEC, the issuer or
- security holder of the issuer, full information regarding the number of shares sold at each separate price.

 12. The range in prices for the transaction reported on this line was \$202.40 to \$203.00. The average weighted price was \$202.6801. The reporting person will provide, upon request by the SEC, the issuer or
- security holder of the issuer, full information regarding the number of shares sold at each separate price.

 13. The range in prices for the transaction reported on this line was \$203.50 to \$203.70. The average weighted price was \$203.60. The reporting person will provide, upon request by the SEC, the issuer or security holder of the issuer, full information regarding the number of shares sold at each separate price.
- 14. This option vests over a four-year period at a rate of twenty-five percent (25%) on November 30, 2017, and in 36 equal monthly installments thereafter.

Remarks:

/s/ Jason F. Cole, Attorney-infact 02/01/2018

** 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.

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 Number.