FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

l	OMB APPROVAL									
l	OMB Number:	3235-028								

87 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).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

1. Name ar		2. Issuer Name and Ticker or Trading Symbol bluebird bio, Inc. [BLUE]									ationship c all appli Directo	•		son(s) to Iss 10% O						
	(F JEBIRD BI OND STRI	03/	3. Date of Earliest Transaction (Month/Day/Year) 03/01/2017									Officer (give title Other (sp below) below)								
(Street) CAMBRIDGE MA 02141 (City) (State) (Zip)							4. If Amendment, Date of Original Filed (Month/Day/Year)									lividual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person Form filed by More than One Reporting Person				
		Tab	le I - I	Non-Deriv	vative	Sec	urit	ies A	cquire	d, D	oisposed o	of, or E	enefic	cially	Owned	t l				
1. Title of Security (Instr. 3) 2. Transaction Date (Month/Day/Ye					ion	2A. Deemed Execution Da		d Date,	3. Transac Code (II 8)	ction	4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 an			5. Amo Securit Benefic Owned		unt of es ially Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership	
					Code	v	Amount	(A) or (D)	Price			ted action(s) 3 and 4)			(Instr. 4)					
Common Stock 03/01/201						17		M		2,000	A	\$2.0)864	3,	3,400		D			
Common Stock 03/01/201					017	17			S ⁽¹⁾		2,000	D	\$90.3	179 ⁽²⁾	1,	1,400		D		
		Т	able								sposed of , converti				wned			•	•	
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	e (Month/Day/Year)	if any	eemed tion Date, n/Day/Year)	4. Transa Code (8)				6. Date Exer Expiration D (Month/Day/		ate	7. Title and Amount of Securities Underlying Derivative Secur (Instr. 3 and 4)		D Sc (li	Price of erivative ecurity istr. 5)	9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	y C	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)	
					Code	V (A)		(D)	Date Exercis	isable	Expiration Date	Title	Amo or Num of Shar	ber						
Stock Option (right to buy)	\$2.0864	03/01/2017			M			2,000	(3))	07/13/2021	Commo Stock	n 2,0	00	\$0.00	18,508	3	D		

Explanation of Responses:

- 1. The sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on December 14, 2016.
- 2. The range of prices for the transaction reported on this line was \$90.00 to \$90.65. The average weighted price was \$90.3179. The reporting person will provide, upon request by the SEC, the issuer or a security holder of the issuer, full information regarding the number of shares sold at each separate price.
- 3. This option vests over a four-year period in 48 equal monthly installments beginning on April 15, 2011

Remarks:

/s/ Jason F. Cole, Attorney-in-**Fact**

03/03/2017

** 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.