FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

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

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

Name and Address of Reporting Person* Smith-Farrell Joanne						2. Issuer Name and Ticker or Trading Symbol bluebird bio, Inc. [BLUE]								Check	all app Direc	ionship of Reportir all applicable) Director Officer (give title		rson(s) to Is 10% O Other (wner
(Last) (First) (Middle) C/O BLUEBIRD BIO, INC. 60 BINNEY STREET						3. Date of Earliest Transaction (Month/Day/Year) 07/02/2020									X Officer (give title Officer Speeds below) below) Chief Business Officer				
(Street) CAMBRIDGE MA 0214 (City) (State) (Zip)				2	4. If	4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing Line) X Form filed by One Report Form filed by More that Person									orting Pers	on			
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																			
1. Title of Security (Instr. 3) 2. Transaction Date (Month/Day/Ye					ar) E	2A. Deemed Execution Dat if any (Month/Day/Ye		, T	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 ar			nd 5) Secur Benet		icially d Following	Forr (D) (Indi	wnership m: Direct or rect (I) tr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
								С	ode	v .	Amount	(A) or (D)	Price		Trans	action(s) . 3 and 4)		,	(
Common Stock 07/02/2020					0)			S		38(1)		\$61.57	7 28 ⁽²⁾ 2		2,349		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)	Derivative Conversion Date Execusive Or Exercise (Month/Day/Year) if any		Deemed cution Date, ny nth/Day/Year)	Code 8)	Transaction Code (Instr. 8)		sed . 3, 4	Expiratio (Month/D expiration) dd 4 Date		(Year)	Amo Secu Undo Derir Secu 3 an	Amount or Number of	ı		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)	

Explanation of Responses:

- 1. Shares were sold to cover tax withholding obligations incurred in connection with the vesting of Restricted Stock Units.
- 2. The range in prices for the transaction reported on this line was \$61.27 to \$61.88. The average weighted price was \$61.5728. 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.

Remarks:

/s/ Helen C. Fu, Attorney-in-

Fact

** Signature of Reporting Person Date

07/07/2020

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.