FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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* Colvin Richard A	2. Date of Requiring (Month/Da 08/22/20	Statement y/Year)	3. Issuer Name and Ticker or Trading Symbol bluebird bio, Inc. [BLUE]							
(Last) (First) (Middle) C/O BLUEBIRD BIO, INC			Relationship of Reporting Issuer (Check all applicable)	5. If Amendment, Date of Original Filed (Month/Day/Year)						
455 GRAND UNION BOULEVARD	_		Director 10% Owner X Officer (give Other (specify below) Chief Medical Officer				6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting			
(Street) SOMERVILLE MA 02145	_						Person Form filed by More than One Reporting Person			
(City) (State) (Zip)										
Table I - Non-Derivative Securities Beneficially Owned										
1. Title of Security (Instr. 4)			2. Amount of Securities Beneficially Owned (Instr. 4)	3. Owner Form: D (D) or Ir (I) (Instr	Direct Owner		Nature of Indirect Beneficial mership (Instr. 5)			
Common Stock			693(1)	Г)					
Common Stock			1,108(2)	Г)					
Common Stock			3,012(3)	Г)					
Common Stock			15,058(4)							
Common Stock			13,300 ⁽⁵⁾							
Common Stock			11,835		D					
Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)										
1. Title of Derivative Security (Instr. 4)	2. Date Exerc Expiration Day/\ (Month/Day/\	ate	3. Title and Amount of Se Underlying Derivative Sec (Instr. 4)		or Exerc	Conversion Own or Exercise For		6. Nature of Indirect Beneficial Ownership (Instr.		
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares	Price of Derivativ Security	ve o	Direct (D) or Indirect (I) (Instr. 5)	5)		
Stock Options (Right to buy)	(6)	11/01/2028	Common Stock	11,134	64.83	3	D			
Stock Options (Right to buy)	(7)	03/02/2030	Common Stock	4,429	36.78	8	D			
Stock Options (Right to buy)	(8)	02/16/2031	Common Stock	8,030	14.17	7	D			
Stock Options (Right to buy)	(9)	03/01/2031	Common Stock	40,153	14.99	9	D			
Stock Options (Right to buy)	(10)	02/01/2032	Common Stock	26,400	7.8		D			
Explanation of Responses:										

- 1. Restricted stock units for common stock vest over a four-year period at a rate of 25% on November 1, 2019, 25% on November 1, 2020, 25% on November 1, 2021, and 25% on November 1, 2022.
- 2. Restricted stock units for common stock vest over a four-year period at a rate of 25% on January 4, 2021, 25% on January 4, 2022, 25% on January 4, 2023, and 25% on January 4, 2024.
- 3. Restricted stock units for common stock vest over a four-year period at a rate of 25% on January 4, 2022, 25% on January 4, 2023, 25% on January 4, 2024, and 25% on January 4, 2025.
- 4. Restricted stock units for common stock vest over a four-year period at a rate of 25% on March 1, 2022, 25% on March 1, 2023, 25% on March 1, 2024, and 25% on March 1, 2025.
- 5. Restricted stock units for common stock vest over a four-year period at a rate of 25% on February 1, 2023, 25% on February 1, 2024, 25% on February 1, 2025, and 25% on February 1, 2026.
- 6. This option vests over a four-year period, at a rate of 25% on November 1, 2019, and in 36 equal monthly installments.
- 7. This option vests over a four-year period, at a rate of 25% on January 4, 2021, and in 36 equal monthly installments.
- 8. This option vests over a four-year period, at a rate of 25% on January 4, 2022 and in 36 equal monthly installments.

- 9. This option vests over a four-year period, at a rate of 25% on March 1, 2022, and in 36 equal monthly installments.
- 10. This option vests over a four-year period, at a rate of 25% on February 1, 2023, and in 36 equal monthly installments.

Remarks:

/s/ Helen C. Fu, Attorneyin-Fact 08/25/2022

** 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 5 (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.

The undersigned hereby constitutes and appoints each of Jason F. Cole and Helen Fu, and each of them individually, and with full power of substitution, the undersigned's true and lawful attorney-in-fact to:

- (1) Complete and execute for and on behalf of the undersigned, in the undersigned's capacity as an officer, director and/or ten percent (10%) shareholder of bluebird bio, Inc., a Delaware corporation (the "Company") any and all instruments, certificates and documents required to be executed on behalf of the undersigned as an individual or on behalf of the undersigned's company or partnership, as the case may be, pursuant to Section 13 and Section 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or the rules and regulations thereunder;
- (2) Do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such instruments, certificates or documents required to be filed pursuant to Sections 13 and 16 of the Exchange Act or the rules or regulations thereunder and timely file such forms with the United States Securities and Exchange Commission and any stock exchange or similar authority; and
- (3) Take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by any such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact, acting singly, full power and authority to do and perform any and every act which is necessary, proper or desirable to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that any such attorney-in-fact, or any such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted.

The undersigned acknowledges that each of the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 13 or Section 16 of the Exchange Act or the rules or regulations thereunder. The undersigned hereby agrees to indemnify each attorney-in-fact and the Company from and against any demand, damage, loss, cost or expense arising from any false or misleading information provided by the undersigned to such attorney-in fact.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file any instruments, certificates and documents pursuant to Section 13 and 16 of the Exchange Act or the rules or regulations thereunder with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of August 22, 2022.

/s/ Richard A. Colvin Richard A. Colvin