FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

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

Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan for the purchase or sale of equity securities of the issuer that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.

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 Obensh	2. Issuer Name and Ticker or Trading Symbol bluebird bio, Inc. [BLUE]								(Ched	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)									
(Last) C/O BLU 455 GRA		3. Date of Earliest Transaction (Month/Day/Year) 01/06/2025									Officer (give title below) President and CEO								
(Street) SOMERVILLE MA 02145 (City) (State) (Zip)					4. If <i>i</i>	4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Apline) In Form filed by One Reporting Person Form filed by More than One Reporting Person										on			
	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1. Title of Security (Instr. 3) 2. Transact Date (Month/Day						Execution Date,			3. Transaction Code (Instr. 8) 4. Securities Acquire Disposed Of (D) (Ins						ties cially Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership	
									Code	v	Amount	(A) (D)	or F	rice	Report Transa (Instr. 3	ted action(s) 3 and 4)			(Instr. 4)
Common	2025	2025			S ⁽¹⁾		140	1)	\$9.24	18,571(2)			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)	tive Conversion Date Execution Dat ty or Exercise (Month/Day/Year) if any			on Date,	Date, Transaction Code (Instr.		of		6. Date Exercisable and Expiration Date (Month/Day/Year)			7. Title and Amount of Securities Underlying Derivative Security (Inst 3 and 4)		Se (Ir	Price of erivative ecurity estr. 5)	9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	y G	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
					Code	v	(A)	(D)	Date Exercis	able	Expiration Date	Title	Amor or Numl of Share	ber					

Explanation of Responses:

- 1. Shares were sold to cover tax withholding obligations incurred in connection with the vesting of Restricted Stock Units.
- 2. The number of securities reported herein have been adjusted to reflect a 1-for-20 reverse stock split effected by the Issuer on December 12, 2024.

Remarks:

/s/ Sydney Gaylin, Attorney-

01/08/2025

** 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.

With respect to holdings of and transactions in securities issued by bluebird bio, Inc. (the "Company"), the undersigned hereby constitutes and appoints the individuals named on Schedule A attached hereto and as may be amended from time to time, or any of them signing singly, with full power of substitution and resubstitution, to act as the undersigned's true and lawful attorney-in-fact to:

- 1. execute for and on behalf of the undersigned, Schedules 13D and 13G in accordance with Section 13 of the Securities
 Exchange Act of 1934, as amended (the "Exchange Act"), and the rules thereunder, and Forms 3, 4, and 5 in accordance with Section 16 of the Exchange Act and the rules thereunder, and Notices of Proposed Sale of Securities Pursuant to Rule 144 ("Form 144"), in accordance with the requirements of Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"); and
- 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 Schedule 13D, Schedule 13G, Form 3, Form 4, Form 5, and Form 144, complete and execute any amendment or amendments thereto, and to timely file such Schedule 13D, Schedule 13G, Form 3, Form 4, Form 5, and Form 144, as applicable, and any amendment thereto, with the United States Securities and Exchange Commission and any stock exchange or similar authority.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper 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 and resubstitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorneys-in-fact 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 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 and Section 16 of the Exchange Act, or Rule 144 under the Securities Act.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file any Schedule 13D, Schedule 13G, Form 3, Form 4, Form 5, and Form 144 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 this $23 \, \mathrm{rd}$ day of September, 2024.

/s/ Andrew Obenshain Andrew Obenshain

Schedule A

INDIVIDUALS APPOINTED AS ATTORNEY-IN-FACT, WITH FULL POWER OF SUBSTITUTION AND RESUBSTITUTION

- 1. Joseph Vittiglio
- 2. Sydney Gaylin