(City)

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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OMB APPROVAL 3235-0287 OMB Number: STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP 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). |

(State)

(Zip)

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* | | | 2. Issuer Name and Ticker or Trading Symbol bluebird bio, Inc. [BLUE] | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | | | |
| <u>DIXON WENDY L</u> | | | [] | X | Director | 10% Owner | | |
| (Last) | (First) | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 06/18/2020 | \dashv | Officer (give title below) | Other (specify below) | | |
| C/O BLUEBI | RD BIO, INC. | | 00/10/2020 | | | | | |
| 60 BINNEY STREET | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | |
| (Street) | E MA | 02142 | | Line) | Form filed by One Re Form filed by More th Person | | | |
| | | | | | | | | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 2. Transaction Date 2A. Deemed Execution Date, 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5. Amount of Securities 6. Ownership Form: Direct 7. Nature 1. Title of Security (Instr. 3) 3. Transaction of Indirect Beneficial Ownership Beneficially Owned Following if any (Month/Day/Year) Code (Instr. 8) (D) or Indirect (I) (Instr. 4) (Month/Day/Year) Reported (Instr. 4) (A) or (D) Transaction(s) Code ν Amount Price (Instr. 3 and 4) Common Stock(1) 06/18/2020 \$0.00 4,153 D Α 153 Α Common Stock(1) 06/18/2020 Α 1.500 Α \$0.00 5.653 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) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transa Code (8) | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 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) | |
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |
| Stock Option (right to buy) | \$64.09 | 06/18/2020 | | A | | 3,000 | | (2) | 06/18/2030 | Common Stock | 3,000 | \$0.00 | 3,000 | D | |

Explanation of Responses:

- 1. These restricted stock units for common stock vest 100% on the earlier of June 18, 2021 or the date of the next annual meeting of stockholders.
- 2. This option vests 100% on the earlier of June 18, 2021 or the date of the next annual meeting of stockholders.

Remarks:

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

06/22/2020

** 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.