UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM 12b-25

NOTIFICATION OF LATE FILING

Commission File Number: 001-35966

CUSIP Number: 09609G100				
(Check One):				
 ✓ Form 10-K ☐ Form 20-F ☐ Form 11-K ☐ Form 10-Q ☐ Form 10-D ☐ Form N-CEN ☐ Form N-CSR 				
For Period Ended: December 31, 2023				
☐ Transition Report on Form 10-K ☐ Transition Report on Form 20-F ☐ Transition Report on Form 11-K ☐ Transition Report on Form 10-Q				
For the Transition Period Ended:				
Read Instruction (on back page) Before Preparing Form. Please Print or Type.				
Nothing in this form shall be construed to imply that the Commission has verified any information contained herein.				
If the notification relates to a portion of the filing checked above, identify the item(s) to which the notification relates:				
PART I-REGISTRANT INFORMATION				
bluebird bio, Inc.				
Full Name of Registrant				
N/A				
Former Name if Applicable				
455 Grand Union Boulevard				
Address of Principal Executive Office (Street and number)				
Somerville, Massachusetts 02145				

City, State and Zip Code

PART II-RULE 12b-25 (b) AND (c)

If the subject report could not be filed without unreasonable effort or expense and the registrant seeks relief pursuant to Rule 12b-25(b), the following should be completed. (Check box if appropriate.)

- (a) The reasons described in reasonable detail in Part III of this form could not be eliminated without unreasonable effort or expense;
- (b) The subject annual report, semi-annual report, transition report on Form 10-K, Form 20-F, Form 11-K, FORM N-CEN or Form N-CSR, or portion thereof will be filed on or before the fifteenth calendar day following the prescribed due date; or the subject quarterly report or transition report on Form 10-Q, or subject distribution report on Form 10-D, or portion thereof, will be filed on or before the fifth calendar day following the prescribed due date; and
 - (c) The accountant's statement or other exhibit required by Rule 12b-25(c) has been attached if applicable.

PART III - NARRATIVE

State below in reasonable detail why Forms 10-K, 20-F, 11-K, 10-Q, 10-D, N-CEN, N-CSR, or the transition report or portion thereof, could not be filed within the prescribed time period.

bluebird bio, Inc. (the "Company") has determined that it is unable, without unreasonable effort or expense, to file with the Securities and Exchange Commission its Annual Report on Form 10-K for the year ended December 31, 2023 (the "2023 Form 10-K") by the prescribed due date for the reasons described below.

In connection with the preparation of the financial statements of the Company for the year ended December 31, 2023, the Company identified certain accounting errors relating to the application of U.S. GAAP to certain arrangements with contract manufacturing organizations that are deemed to contain one or more leases for accounting purposes. As a result, the Company intends to restate its financial statements for the year ended December 31, 2022 and for each of the first three quarters of 2022 and 2023 in the 2023 Form 10-K, the review and preparation of which is currently ongoing. Given the scope of the process to prepare the restatements and related disclosures, the Company requires additional time to prepare and review its financial statements and other disclosures in its 2023 Form 10-K. Therefore, the Company is unable to complete and file the 2023 Form 10-K by the required due date of April 1, 2024.

In addition, the Company has identified a material weakness in its internal control over financial reporting and, as a result, ineffective disclosure controls and procedures. The Company is continuing to evaluate its internal control over financial reporting and expects to report its remediation plan and further information regarding the material weakness in the 2023 Form 10-K.

PART IV - OTHER INFORMATION

(1) Name and telephone number of person to contact in regard to this notification.

Christopher Krawtschuk	339	499-9300
(Name)	(Area Code)	(Telephone Number)

(2) Have all other periodic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act of 1940 during the preceding 12 months or for such shorter period that the registrant was required to file such report(s) been filed? If the answer is no, identify report(s).

x	Yes	П	No

(3) Is it anticipated that any significant change in results of operations from the corresponding period for the last fiscal year will be reflected by the earnings statements to be included in the subject report or portion thereof?

X	Ves	l Νο

If so, attach an explanation of the anticipated change, both narratively and quantitatively, and, if appropriate, state the reasons why a reasonable estimate of the results cannot be made.

The information set forth in Part III above is incorporated herein by reference.

Specifically, the identified errors in the periods to be restated resulted from the Company's identification of embedded leases and the application of its accounting policy for the treatment of non-lease components contained in lease agreements. The Company's accounting policy required that lease and non-lease components in agreements with contract manufacturing organizations that are accounted for as leases be combined. The Company determined that it did not consistently combine such components, resulting in an estimated understatement of lease assets and lease liabilities between \$100 million and \$200 million in the year ended December 31, 2022 and an estimated understatement of lease assets and lease liabilities between \$30 million and \$125 million in each of the first three quarters of 2022 and 2023. As a result of the errors, the Company also expects to record an increase in non-cash interest expense in each restated period. The Company does not expect the errors to result in any impact on its cash position or revenue.

Cautionary Note Regarding Forward-Looking Statements

This Notification of Late Filing on Form 12b-25 (the "Form 12b-25") contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this Form 12b-25 that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements regarding the estimated impact of errors in the Company's previously-issued financial statements, including on its cash position and revenue, the timing of the filing of the Company's 2023 10-K, and the results of the Company's evaluation of its internal control over financial reporting and disclosure controls. Statements using words such as "expect", "anticipate", "believe", "may", "will" and similar terms are also forward-looking statements. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, the important factors discussed under the caption "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2022, as updated by its subsequent Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other filings with the Securities and Exchange Commission. Except as required by law, the Company undertakes no obligations to make any revisions to the forward-looking statements contained in this Form 12b-25 or to update them to reflect events or circumstances occurring after the date of this Form 12b-25, whether as a result of new information, future developments or otherwise.

bluebird bio, Inc.

(Name of Registrant as Specified in Charter)

has caused this notification to be signed on its behalf by the undersigned thereunto duly authorized.

Date: March 26, 2024 bluebird bio, Inc.

By: /s/ Christopher Krawtschuk

Christopher Krawtschuk
Chief Financial Officer, Principal Financial Officer and Principal
Accounting Officer