UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): November 29, 2017

bluebird bio, Inc.
(Exact name of Registrant as Specified in Its Charter)

DELAWARE	**001-35966**	**13-3680878**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**
60 Binney Street, Cambridge, MA (Address of Principal Executive Offices)		**02142 (Zip Code)**

Registrant's Telephone Number, Including Area Code: (339) 499-9300

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01 Regulation FD Disclosure.

On November 29, 2017, bluebird bio, Inc. (the "Company") issued a press release announcing its purchase of a manufacturing facility in Durham, North Carolina. A copy of this press release is furnished as Exhibit 99.1 to this report on Form 8-K.

The information in this Item 7.01 and Exhibit 99.1 attached hereto is intended to be furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 8.01 Other Events.

On November 21, 2017, the Company purchased a manufacturing facility located in Durham, North Carolina for $11.5 million. The Company acquired this 125,000 square foot facility to provide manufacturing capacity for lentiviral vector in support of the Company's gene and cell therapies.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press release issued by bluebird bio, Inc. on November 29, 2017.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: November 29, 2017

bluebird bio, Inc.

By: /s/ Jason F. Cole
Jason F. Cole
Chief Legal Officer

Exhibit 99.1

bluebird bio Acquires Manufacturing Facility in North Carolina and Executes Multiple Global Supply Agreements to Enhance Ability to Deliver Gene Therapies to Patients

- *Company executing long-term strategy to develop broad manufacturing capabilities for both vector supply and drug product supply to support clinical development and commercialization across pipeline –*
- *bluebird to receive Economic Development Award from NCBiotech upon meeting job creation targets in North Carolina –*

Cambridge, MA, November 29, 2017 - bluebird bio, Inc. (Nasdaq: BLUE), a clinical-stage company committed to developing potentially transformative gene and cell therapies for severe genetic diseases and T cell-based immunotherapies for cancer, today announced it has acquired a 125,000-square foot manufacturing facility in Durham, North Carolina. Once construction and validation is complete, the site will produce lentiviral vector for the company's gene and cell therapies, including: Lenti-D™ for the treatment of cerebral adrenoleukodystrophy; LentiGlobin™ for the treatment of transfusion-dependent β-thalassemia and severe sickle cell disease; and bb2121 and bb21217 for the treatment of multiple myeloma.

"Our goal is to bring multiple therapies to market over the next four years that can transform the lives of people suffering from severe genetic diseases and cancer. Investing in a world-class manufacturing infrastructure is a crucial step in accomplishing that mission on behalf of the people who need these novel treatments," said Derek Adams, bluebird bio chief manufacturing and technology officer. "The North Carolina manufacturing site will complement our important external manufacturing partnerships. By simultaneously establishing multiple lentiviral vector manufacturing partnerships and pursuing in-house manufacturing, bluebird is uniquely positioned to adeptly, robustly, and reliably provide our current gene and cell therapy products in development, as well as future pipeline therapies to patients in need."

The company is making a significant investment in its manufacturing infrastructure as it advances multiple products into late-stage development and potential commercial launch. Expanding in-house expertise, creating an extensive manufacturing network, and increasing manufacturing capacity ensures that bluebird can deliver on the promise of these product candidates.

In addition to the internal manufacturing capacity that this site will provide, bluebird bio also has now entered into multi-year agreements with three manufacturing partners in the United States and Europe: Brammer Bio (Cambridge, MA), Novasep (Gosselies, Belgium) and MilliporeSigma, the Life Science business of Merck KGaA (Carlsbad, CA). Each of these partners are collaborating with bluebird bio on production of lentiviral vector across all programs. bluebird bio also partners with Lonza (Houston, TX) and apceth Biopharma (Munich, Germany) to produce drug product for Lenti-D and LentiGlobin.

The initial North Carolina site build-out will allow for production of clinical and commercial supply of lentiviral vector, which is a critical component of the company's gene and cell therapies. The facility is large enough to accommodate significant potential future expansion, including the possibility of commercial drug product production.

North Carolina is among the leaders in the U.S. in the number of biologics manufacturing jobs, providing access to a highly-skilled workforce. It also is home to top university researchers at Duke University, University of North Carolina, North Carolina State University and other universities required for such specialized operations. The North Carolina Community College System's custom training program will assist bluebird in recruiting, screening and training employees for this facility. The state's gene therapy, rare disease and manufacturing assets also include initiatives to develop precision health capabilities and to provide academic fellowships to help advance North Carolina's fast-growing expertise in gene therapy.

NCBiotech created the Economic Development Award to assist companies to expand and grow their operations in North Carolina. NCBiotech has committed financial resources to this expansion, when bluebird bio meets specific job creation targets.

About bluebird bio, Inc.
With its lentiviral-based gene therapies, T cell immunotherapy expertise and gene editing capabilities, bluebird bio has built an integrated product platform with broad potential application to severe genetic diseases and cancer. bluebird bio's gene therapy clinical programs include its Lenti-D™ product candidate, currently in a Phase 2/3 study, called the Starbeam Study, for the treatment of cerebral adrenoleukodystrophy, and its LentiGlobin® BB305 product candidate, currently in three clinical studies for the treatment of transfusion-dependent β-thalassemia, also known as β-thalassemia major, and severe sickle cell disease. bluebird bio's oncology pipeline is built upon the company's leadership in lentiviral gene delivery and T cell engineering, with a focus on developing novel T cell-based immunotherapies, including chimeric antigen receptor (CAR T) and T cell receptor (TCR) therapies. bluebird bio's lead oncology programs, bb2121 and bb21217, are anti-BCMA CAR T programs partnered with Celgene. bb2121 and bb21217 are each currently being studied in Phase 1 trials for the treatment of relapsed/refractory multiple myeloma. bluebird bio also has discovery research programs utilizing megaTALs/homing endonuclease gene editing technologies with the potential for use across the company's pipeline.

bluebird bio has operations in Cambridge, Massachusetts, Seattle, Washington, Durham, North Carolina and Europe.

LentiGlobin and Lenti-D are trademarks of bluebird bio, Inc.

About North Carolina Biotech
NCBiotech works to transform North Carolina into a global leader in life science. We invest in new ideas, connect resources and partners, and develop the community ecosystem to grow and attract life science jobs. NCBiotech is a state-funded, non-profit with offices in Research Triangle Park, Asheville, Charlotte, Greenville, Wilmington and Winston-Salem.

Forward-Looking Statements
This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the Company's plans to internalize and expand its manufacturing operations and the Company's research, development, manufacturing and regulatory approval plans for its LentiGlobin product candidate to treat transfusion-dependent ß-thalassemia and severe sickle cell disease, its Lenti-D product candidate to treat cerebral adrenoleukodystrophy and its bb2121 product candidate to treat relapsed/refractory multiple myeloma. Any forward-looking statements are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to the risk that the Company may be unable to complete the design, construction and regulatory approval of its North Carolina manufacturing facility in a timely manner, the risk that any one of the Company's third party manufacturing partners may fail to perform their obligations under their agreements with the Company or that such agreements may be terminated, the risk that any one or more of our product candidates may not be successfully developed, approved or commercialized. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in our most recent Form 10-Q, as well as discussions of potential risks, uncertainties, and other important factors in our subsequent filings with the Securities and Exchange Commission. All information in this press release is as of the date of the release, and bluebird bio undertakes no duty to update this information unless required by law.

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