bluebird bio, Inc. Form S-1/A May 21, 2013

As filed with the Securities and Exchange Commission on May 21, 2013

Registration No. 333-188605

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1

to

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

bluebird bio, Inc.

(Exact name of registrant as specified in its charter)

Delaware 2836 13-3680878

(State or other jurisdiction of (Primary Standard Industrial (I.R.S. Empl

(I.R.S. Employer Identification Number)

incorporation or organization)

Classification Code Number)

840 Memorial Drive, 4th Floor

Cambridge, MA 02139

(617) 491-5601

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

Nick Leschly

President and Chief Executive Officer

bluebird bio, Inc.

840 Memorial Drive, 4th Floor

Cambridge, MA 02139

(617) 491-5601

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Michael H. Bison, Esq.

Goodwin Procter LLP

Exchange Place

Frudential Tower

53 State Street

Boston, MA 02109

Boston, MA 02199

(617) 570-1000

Patrick O Brien, Esq.

Ropes & Gray LLP

Prudential Tower

800 Boylston Street

Approximate date of commencement of proposed sale to public: As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer "

Accelerated filer "

Non-accelerated filer x (Do not check if a

Smaller reporting company "

smaller reporting company)

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Explanatory Note

This Amendment No. 1 is being filed for the purpose of filing Exhibits 10.6 through 10.11. No changes or additions are being made hereby to the Prospectus constituting Part I of the Registration Statement (not included herein) or to Part II of the Registration Statement other than Items 13 and 15.

Part II

Information not required in prospectus

Item 13. Other expenses of issuance and distribution

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by the registrant in connection with the sale of common stock being registered. All amounts are estimates except for the Securities and Exchange Commission, or SEC, registration fee, the FINRA filing fee and The Nasdaq Global Market listing fee.

Item	Amount to be paid	
SEC registration fee	\$	11,765
FINRA filing fee		13,438
Nasdaq Global Market listing fee		*
Printing and engraving expenses		*
Legal fees and expenses		*
Accounting fees and expenses		*
Transfer Agent fees and expenses		*
Miscellaneous expenses		*
Total	\$	*

* To be provided by amendment

Item 14. Indemnification of directors and officers

Section 145(a) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), because he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue or matter as to which he or she shall have been adjudged to be liable to the

corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or other adjudicating court shall deem proper.

Section 145(g) of the Delaware General Corporation Law provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the Delaware General Corporation Law.

Article VII of our amended and restated certificate of incorporation (the Charter), provides that no director of our company shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (1) for any breach of the director s duty of loyalty to us or our stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) in respect of unlawful dividend payments or stock redemptions or repurchases, or (4) for any transaction from which the director derived an improper personal benefit. In addition, our Charter provides that if the Delaware General Corporation Law is amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of our company shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

Article VII of the Charter further provides that any repeal or modification of such article by our stockholders or amendment to the Delaware General Corporation Law will not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or modification of a director serving at the time of such repeal or modification.

Article V of our amended and restated by-laws (the By-Laws), provides that we will indemnify each of our directors and officers and, in the discretion of our board of directors, certain employees, to the fullest extent permitted by the Delaware General Corporation Law as the same may be amended (except that in the case of amendment, only to the extent that the amendment permits us to provide broader indemnification rights than the Delaware General Corporation Law permitted us to provide prior to such the amendment) against any and all expenses, judgments, penalties, fines and amounts reasonably paid in settlement that are incurred by the director, officer or such employee or on the director s, officer s or employee s behalf in connection with any threatened, pending or completed proceeding or any claim, issue or matter therein, to which he or she is or is threatened to be made a party because he or she is or was serving as a director, officer or employee of our company, or at our request as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of our company and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. Article V of the By-Laws further provides for the advancement of expenses to each of our directors and, in the discretion of the board of directors, to certain officers and employees.

In addition, Article V of the By-Laws provides that the right of each of our directors and officers to indemnification and advancement of expenses shall be a contract right and shall not be exclusive of any other right now possessed or hereafter acquired under any statute, provision of the Charter or By-Laws, agreement, vote of stockholders or otherwise. Furthermore, Article V of the By-Laws authorizes us to provide insurance for our directors, officers and employees, against any liability, whether or not we would have the power to indemnify such person against such liability under the Delaware General Corporation Law or the provisions of Article V of the By-Laws.

In connection with the sale of common stock being registered hereby, we have entered into indemnification agreements with each of our directors and our executive officers. These agreements will provide that we will indemnify each of our directors and such officers to the fullest extent permitted by law and the Charter and By-Laws.

We also maintain a general liability insurance policy which covers certain liabilities of directors and officers of our company arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act of 1933, as amended, against certain liabilities.

Item 15. Recent sales of unregistered securities

In the three years preceding the filing of this registration statement, we have issued the following securities that were not registered under the Securities Act:

Grants and modifications of warrants

In May 2007, December 2007, May 2008, August 2008, December 2008, April 2009, July 2009, October 2009 and December 2009, we issued warrants to purchase 1,133,100, 472,124, 472,124, 472,124, 472,124, 321,044, 321,044, 283,274, and 574,800 shares, respectively, of either (i) our Series A-1 Preferred Stock or (ii) such preferred stock that we may issue in a subsequent qualified financing. In March 2010, in connection with the Series B Preferred Stock financing, the 2007, 2008 and the April, July and October 2009 warrants were amended to provide that such warrants would be exercisable only for shares of our Series A-1 Preferred Stock at a per share price of \$0.6619 and the December 2009 warrants were amended to provide that such warrants would be exercisable only for shares of our Series B Preferred Stock at a per share price of \$0.3262. The warrant issuances were exempt pursuant to Section 4(2), as transactions by an issuer not involving a public offering. The shares of preferred stock issued upon exercise of warrants and the shares of common stock issued upon conversion of the preferred stock are deemed restricted securities for the purposes of the Securities Act.

Grants and exercises of stock options

Since January 1, 2010, we have granted stock options to purchase an aggregate of 74,066,242 shares of our common stock at exercise prices ranging from \$0.05 to \$0.43. Since January 1, 2010, we have issued an aggregate of 568,246 shares of our common stock upon exercise of stock options granted pursuant to our 2002 Employee, Director and Consultant Plan and our 2010 Stock Option and Grant Plan for aggregate consideration of \$61,394.

The option grants and the issuances of common stock upon exercise of the options were exempt either pursuant to Rule 701, as a transaction pursuant to a compensatory benefit plan, or pursuant to Section 4(2), as a transaction by an issuer not involving a public offering. The shares of common stock issued upon exercise of options are deemed restricted securities for the purposes of the Securities Act.

Issuances of capital stock

Since January 1, 2010, we have granted and issued an aggregate of 7,327,566 shares of our common stock pursuant to our 2010 Stock Option and Grant Plan. The issuances of common stock were exempt either pursuant to Rule 701, as a transaction pursuant to a compensatory benefit plan, or pursuant to Section 4(2), as a transaction by an issuer not involving a public offering. The shares of common stock issued pursuant to our 2010 Stock Option and Grant Plan are deemed restricted securities for the purposes of the Securities Act.

In March 2010, we issued an aggregate of 61,555,660 shares of our Series B Preferred Stock for aggregate consideration of \$16.8 million in cash and \$3.3 million in converted bridge notes to five investors. In April 2011, we issued an aggregate of 53,648,066 shares of our Series B Preferred Stock at a price per share of \$0.3262 for aggregate consideration of \$17.5 million to the same five investors. In April 2011, we issued an aggregate of 39,942,483 shares of our Series C Preferred Stock at a price per share of \$0.37554 to five investors for aggregate consideration of \$15.0 million to the same five investors. In July 2012, we issued an aggregate of 120,409,385 shares of our Series D Preferred Stock at a price per share of \$0.4983 for aggregate consideration of \$60.0 million to 17 investors. These preferred stock issuances were exempt under the Securities Act pursuant to Section 4(2) and/or Regulation D promulgated thereunder as transactions not involving a public offering.

Item 16. Exhibits and financial statement schedules

(a) Exhibits

See the Exhibit Index attached to this Registration Statement, which is incorporated by reference herein.

(b) Financial statement schedules

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the

Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

- 1. For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
- 2. For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

II-5

Signatures

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Amendment No. 1 to Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Cambridge, Commonwealth of Massachusetts, on the 21st day of May, 2013.

bluebird bio, Inc.

By: /s/ Nick Leschly Nick Leschly

President and Chief Executive Officer

Pursuant to the requirements of the Securities Act, this Amendment No. 1 to Registration Statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Nick Leschly	President, Chief Executive Officer and Director	May 21, 2013
Nick Leschly	(Principal Executive Officer)	
/s/ Jeffrey T. Walsh	Chief Operating Officer and Secretary	May 21, 2013
Jeffrey T. Walsh	(Principal Financial Officer)	
*	Vice President, Finance and Business Operations and Treasurer	May 21, 2013
Linda C. Bain	(Principal Accounting Officer)	
*	Chairman of the Board	May 21, 2013
Daniel S. Lynch		
*	Director	May 21, 2013
M I I D' DI D		•
Wendy L. Dixon, Ph.D.	Director	May 21, 2013
	Director	Way 21, 2013
Steven Gillis, Ph.D.		M 21 2012
*	Director	May 21, 2013
John M. Maraganore, Ph.D.		
*	Director	May 21, 2013
Geert-Jan Mulder, M.D.		
*	Director	May 21, 2013
Dr. Axel Polack		
*	Director	May 21, 2013
David P. Schenkein, M.D.		

* Director May 21, 2013

Robert I. Tepper, M.D.

*By: /s/ Jeffrey T. Walsh

Jeffrey T. Walsh Attorney-in-fact

II-6

Exhibit index

Exhibit	
number	Description of exhibit
1.1*	Form of Underwriting Agreement.
3.1*	Form of Amended and Restated Certificate of Incorporation (to be effective upon pricing of this offering).
3.2*	Form of Amended and Restated Certificate of Incorporation (to be effective upon completion of this offering).
3.3**	Form of Amended and Restated By-laws.
4.1*	Specimen Common Stock Certificate.
4.2**	Form of Common Stock Warrant.
4.3**	Form of Series A-1 Preferred Stock Warrant.
4.4**	Form of Series B Preferred Stock Warrant.
4.5**	Amended and Restated Investors Rights Agreement, dated as of July 23, 2012, by and among the Registrant and the Investors listed therein.
5.1*	Opinion of Goodwin Procter LLP.
10.1**	Second Amended and Restated 2002 Employee, Director and Consultant Plan, as amended, and forms of award agreement thereunder.
10.2**	2010 Stock Option and Grant Plan, as amended, and forms of award agreement thereunder.
10.3*	2013 Stock Option and Incentive Plan and forms of award agreement thereunder.
10.4**	Form of Indemnification Agreement between the Registrant and each of its Executive Officers and Directors.
10.5**	Amended and Restated Lease Agreement, dated May 18, 2007, by and between the Registrant and Rivertech Associates II, LLC, as amended.
10.6	Patent License Agreement, dated December 11, 1996, by and between the Registrant (formerly known as Genetix Pharmaceuticals Inc., successor-in-interest to Innogene Pharmaceuticals Inc.) and Massachusetts Institute of Technology, as amended.
10.7	Patent and Know-How License Agreement No. 07554F30, dated May 14, 2009, by and between the Registrant (formerly known as Genetix Pharmaceuticals Inc.) and INSERM-TRANSFERT, as amended.
10.8	License Agreement, dated September 13, 2011, by and between the Registrant and Institut Pasteur, as amended.
10.9	License Agreement, dated December 7, 2011, by and between the Registrant and Research Development Foundation.
10.10	Novation Agreement, dated April 2, 2012, by and between the Registrant and The Board of Trustees of the Leland Stanford Junior University.
10.11	Master Collaboration Agreement by and between the Registrant and Celgene Corporation, dated March 19, 2013.
10.12*	Form of Amended and Restated Employment Agreement by and between the Registrant and Nick Leschly.
10.13*	Form of Amended and Restated Employment Agreement by and between the Registrant and Jeffrey T. Walsh.

Exhibit number	Description of exhibit
10.14*	Form of Amended and Restated Employment Agreement by and between the Registrant and Mitch Finer.
10.15*	Form of Amended and Restated Employment Agreement by and between the Registrant and David M. Davidson, M.D.
10.16*	Offer Letter, dated September 27, 2011 by and between the Registrant and Linda Bain.
10.17*	2013 Employee Stock Purchase Plan.
10.18**	Executive Cash Incentive Bonus Plan.
21.1**	Subsidiaries of Registrant.
23.1**	Consent of Ernst & Young LLP.
23.2**	Consent of McGladrey LLP.
23.3*	Consent of Goodwin Procter LLP (included in Exhibit 5.1).
24.1**	Power of Attorney (included on signature page).

^{*} To be filed by amendment.

Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment and this exhibit has been submitted separately to the SEC.

^{**} Previously filed.