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

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL								
OMB Number:	3235-0287							
Expires:	December 31, 2014							
Estimated average burden								
hours per response	0.5							

1. Name and Address of Reporting Person* Walsh Jeffrey T.			2. Issuer Name and Ticker or Trading Symbol bluebird bio, Inc. [BLUE]	5. Relationship of Reporting Person(s) to Issuer				
(Last) C/O BLUEB STREET	(First)	(Middle) , 150 SECOND	3. Date of Earliest Transaction (Month/Day/Year) 03/03/2014	X	(Check all applicable) Director X Officer (give title below) Chief Operating Officer			
(Street) CAMBRIDGE MA 02141 (City) (State) (Zip)			4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person				

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned											
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	Execution Date,	3. Transact Code (Instr. 8)		Acquired (A) or Disposed of (D)			5. Amount of Securities Beneficially Owned	Form: Direct (D)	7. Nature of Indirect Beneficial Ownership	
			Code	V	Amount (A) or (D)		Price	Following Reported Transaction(s) (Instr. 3 and 4)	or Indirect (I) (Instr. 4)	(Instr. 4)	

	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. Transac Code (Instr. 8	Derivative		6. Date Exercisable and Expiration Date (Month/Day/Year)		Amount of Underlying		8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: 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)	\$ 24.47	03/03/2014		А		50,000		(1)	03/03/2024	Common Stock	50,000	\$0	50,000	D	

Explanation of Responses:

1. This option vests over a four-year period, at a rate of twenty-five percent (25%) on January 1, 2015 and in 36 equal monthly installments thereafter.

/s/ Linda C. Bain, Attorney-03/05/2014

** 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.