

bluebird bio, Inc.
Form 3
June 18, 2013

FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0104
Expires: January 31, 2005
Estimated average burden hours per response... 0.5

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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

(Print or Type Responses)

| | | | | | | |
|---|---------|----------|--------------------------------------|--|---|--|
| 1. Name and Address of Reporting Person * | | | 2. Date of Event Requiring Statement | | 3. Issuer Name and Ticker or Trading Symbol | |
| Arch Venture Fund VII LP | | | (Month/Day/Year) | | bluebird bio, Inc. [BLUE] | |
| (Last) | (First) | (Middle) | 06/18/2013 | | 4. Relationship of Reporting Person(s) to Issuer | |
| 8725 WEST HIGGINS ROAD, SUITE 290 | | | | | 5. If Amendment, Date Original Filed(Month/Day/Year) | |
| (Street) | | | | | (Check all applicable) | |
| CHICAGO, IL 60631 | | | | | <input type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner <input type="checkbox"/> Officer <input type="checkbox"/> Other (give title below) (specify below) | |
| (City) | (State) | (Zip) | | | 6. Individual or Joint/Group Filing(Check Applicable Line) | |
| | | | | | <input type="checkbox"/> Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person | |

Table I - Non-Derivative Securities Beneficially Owned

| | | | |
|------------------------------------|--|---|--|
| 1. Title of Security (Instr. 4) | 2. Amount of Securities Beneficially Owned (Instr. 4) | 3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 4. Nature of Indirect Beneficial Ownership (Instr. 5) |
|------------------------------------|--|---|--|

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

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 control number.

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| | | | | | |
|---|---|--|--|--|--|
| 1. Title of Derivative Security (Instr. 4) | 2. Date Exercisable and Expiration Date (Month/Day/Year) | 3. Title and Amount of Securities Underlying Derivative Security (Instr. 4) | 4. Conversion or Exercise Price of Derivative Security | 5. Ownership Form of Derivative Security: Direct (D) or Indirect (I) | 6. Nature of Indirect Beneficial Ownership (Instr. 5) |
| | Date Exercisable Expiration Date | Title Amount or Number of Shares | | | |

(Instr. 5)

| | | | | | | | |
|--------------------------------------|-------|-------|--------------|-----------|--------|-----------|---|
| Series C Convertible Preferred Stock | Â (1) | Â (1) | Common Stock | 1,052,946 | \$ (1) | D (2) (3) | Â |
| Series D Convertible Preferred Stock | Â (4) | Â (4) | Common Stock | 740,642 | \$ (4) | D (2) (3) | Â |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|---|---------------|-----------|---------|-------|
| | Director | 10% Owner | Officer | Other |
| Arch Venture Fund VII LP 8725 WEST HIGGINS ROAD SUITE 290 CHICAGO, IL 60631 | Â | Â X | Â | Â |
| ARCH Venture Partners VII, L.P. 8725 WEST HIGGINS ROAD SUITE 290 CHICAGO, IL 60631 | Â | Â X | Â | Â |
| ARCH Venture Partners VII, LLC 8725 WEST HIGGINS ROAD SUITE 290 CHICAGO, IL 60631 | Â | Â X | Â | Â |
| CRANDELL KEITH 8725 WEST HIGGINS ROAD SUITE 290 CHICAGO, IL 60631 | Â | Â X | Â | Â |
| BYBEE CLINTON 8725 WEST HIGGINS ROAD SUITE 290 CHICAGO, IL 60631 | Â | Â X | Â | Â |
| NELSEN ROBERT 8725 WEST HIGGINS ROAD SUITE 290 CHICAGO, IL 60631 | Â | Â X | Â | Â |

Signatures

| | |
|--|------------|
| By: /s/ Mark McDonnell, as Attorney-in-Fact for Keith Crandell, Managing Director of the general partner of the general partner of ARCH Fund VII | 06/18/2013 |
| **Signature of Reporting Person | Date |
| By: /s/ Mark McDonnell, as Attorney-in-Fact for Keith Crandell, Managing Director of the general partner of ARCH Partners VII | 06/18/2013 |
| **Signature of Reporting Person | Date |
| By: /s/ Mark McDonnell, as Attorney-in-Fact for Keith Crandell, Managing Director of ARCH VII LLC | 06/18/2013 |

