

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

<p>1. Name and Address of Reporting Person*</p> <p><u>Lydon Nicholas</u></p> <p>(Last) (First) (Middle)</p> <p><u>C/O BLUEPRINT MEDICINES CORPORATION</u></p> <p><u>45 SIDNEY STREET</u></p> <p>(Street)</p> <p><u>CAMBRIDGE MA 02139</u></p> <p>(City) (State) (Zip)</p>	<p>2. Issuer Name and Ticker or Trading Symbol</p> <p><u>Blueprint Medicines Corp [ BPMC ]</u></p> <p>3. Date of Earliest Transaction (Month/Day/Year)</p> <p><u>02/28/2018</u></p> <p>4. If Amendment, Date of Original Filed (Month/Day/Year)</p>	<p>5. Relationship of Reporting Person(s) to Issuer (Check all applicable)</p> <p><input checked="" type="checkbox"/> Director 10% Owner</p> <p>Officer (give title below) Other (specify below)</p> <p>6. Individual or Joint/Group Filing (Check Applicable Line)</p> <p><input checked="" type="checkbox"/> Form filed by One Reporting Person</p> <p>Form filed by More than One Reporting Person</p>
---	---	---

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	02/28/2018		s <sup>(1)</sup>		9,596	D	\$89.03 <sup>(2)</sup>	193,131	D	
Common Stock	02/28/2018		s <sup>(1)</sup>		5,264	D	\$88.2 <sup>(3)</sup>	187,867	D	
Common Stock	02/28/2018		s <sup>(1)</sup>		5,527	D	\$86.92 <sup>(4)</sup>	182,340	D	
Common Stock	02/28/2018		s <sup>(1)</sup>		4,613	D	\$86.35 <sup>(5)</sup>	177,727	D	

**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. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V		Date Exercisable	Expiration Date					

**Explanation of Responses:**

- The sales reported on this Form 4 were effected pursuant to a trading plan adopted on December 19, 2017 pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934, as amended.
- The price reported is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$88.62 to \$89.61 per share. The Reporting Person undertakes to provide to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in footnotes (2) through(5) to this Form 4.
- The price reported is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$87.72 to \$88.60 per share.
- The price reported is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$86.56 to \$87.55 per share.
- The price reported is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$86.16 to \$86.54 per share.

/s/ Christopher Frankfield, 03/02/2018  
Attorney-in-Fact

\*\* 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.