

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 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>Albers Jeffrey W.</u> (Last) (First) (Middle) C/O BLUEPRINT MEDICINES CORPORATION 45 SIDNEY STREET (Street) CAMBRIDGE MA 02139 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>Blueprint Medicines Corp [BPMC]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) CEO and President
	3. Date of Earliest Transaction (Month/Day/Year) 08/06/2018	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

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	08/06/2018		M ⁽¹⁾		20,000	A	\$1.87	20,000	D	
Common Stock	08/06/2018		S ⁽²⁾		6,179	D	\$71.22 ⁽³⁾	13,821	D	
Common Stock	08/06/2018		S ⁽²⁾		12,219	D	\$70.48 ⁽⁴⁾	1,602	D	
Common Stock	08/06/2018		S ⁽²⁾		800	D	\$69.64 ⁽⁵⁾	802	D	
Common Stock	08/06/2018		S ⁽²⁾		802	D	\$68.48 ⁽⁶⁾	0	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	(A)	(D)	Date Exercisable	Expiration Date						Title
Stock Option (Right to Buy)	\$1.87	08/06/2018		M ⁽¹⁾			20,000	(7)	07/30/2024	Common Stock	20,000	\$0	935,034	D	

Explanation of Responses:

- The exercise reported on this Form 4 was effected pursuant to a trading plan adopted on December 20, 2017 pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934, as amended (the "Exchange Act").
- The sales reported on this Form 4 were effected pursuant to a trading plan adopted on December 20, 2017 pursuant to Rule 10b5-1 under the Exchange Act.
- The price reported is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$70.84 to \$71.82 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 (3) through (6) to this Form 4.
- The price reported is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$69.84 to \$70.82 per share.
- The price reported is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$69.55 to \$69.79 per share.
- The price reported is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$68.36 to \$68.69 per share.
- This option was granted on July 30, 2014. This option vests as follows: (i) 42,845 shares vested in four installments at a rate of 6,974 shares on September 21, 2016, and 11,957 shares on each of October 21, 2016 and November 21, 2016, and 11,957 on December 21, 2016; (ii) 90,010 shares vested in eight installments at a rate of 6,311 shares on May 21, 2017 and 11,957 shares on each of June 21, 2017, July 21, 2017, August 21, 2017, September 21, 2017, October 21, 2017, November 21, 2017 and December 21, 2017; and (iii) 30,225 shares vest in three installments at a rate of 6,311 shares on May 21, 2018, 11,957 shares on June 21, 2018 and 11,957 shares on July 21, 2018.

/s/ Christopher Frankfield, 08/08/2018
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.