

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

☒ Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan for the purchase or sale of equity securities of the issuer that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.

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

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden	
hours per response:	0.5

1. Name and Address of Reporting Person* <u>Hurley Ariel</u> (Last) (First) (Middle) <u>C/O BLUEPRINT MEDICINES CORPORATION</u> <u>45 SIDNEY STREET</u> (Street) <u>CAMBRIDGE</u> <u>MA</u> <u>02139</u> (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) Director 10% Owner ☒ Officer (give title below) Other (specify below) <u>PRINCIPAL ACCOUNTING OFFICER</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>03/01/2025</u>	
	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	03/01/2025		A ⁽¹⁾		6,506 ⁽¹⁾	A	\$0	21,473	D	
Common Stock	03/03/2025		s ⁽²⁾		775	D	\$89.63 ⁽³⁾	20,698	D	
Common Stock	03/03/2025		s ⁽²⁾		238	D	\$90.92 ⁽⁴⁾	20,460	D	
Common Stock	03/03/2025		s ⁽²⁾		631	D	\$92 ⁽⁵⁾	19,829	D	
Common Stock	03/03/2025		s ⁽²⁾		484	D	\$93.42 ⁽⁶⁾	19,345	D	
Common Stock	03/03/2025		s ⁽²⁾		1,075	D	\$95.16 ⁽⁷⁾	18,270	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					
Stock Option (Right to Buy)	\$96.57	03/01/2025		A		7,007	(8)	02/28/2035	Common Stock	7,007 ⁽¹⁾	\$95.67	7,007	D

Explanation of Responses:

1. The reported transaction involved the Reporting Person's receipt of a grant of 6,506 restricted stock units under the Issuer's 2024 Stock Incentive Plan.
2. Effected pursuant to a trading plan adopted on September 12, 2024 pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934, as amended.
3. The price reported is an average sale price. The shares were sold in multiple transactions ranging from \$89.34 to \$90.14. 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 range set forth in this footnote.
4. The price reported is an average sale price. The shares were sold in multiple transactions ranging from \$90.36 to \$91.21. 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 range set forth in this footnote.
5. The price reported is an average sale price. The shares were sold in multiple transactions ranging from \$91.45 to \$92.42. 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 range set forth in this footnote.
6. The price reported is an average sale price. The shares were sold in multiple transactions ranging from \$93.03 to \$93.95. 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 range set forth in this footnote.
7. The price reported is an average sale price. The shares were sold in multiple transactions ranging from \$95.15 to \$95.36. 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 range set forth in this footnote.
8. This option vests with respect to 1/48th of the shares underlying the option on April 1, 2025 and as to an additional 1/48th of the shares underlying the option each month thereafter.

/s/ Melissa Masse, Attorney-in-Fact 03/04/2025

** 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.

