## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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

1. Name and Address of Reporting Person*  Borisy Alexis							2. Issuer Name <b>and</b> Ticker or Trading Symbol Blueprint Medicines Corp [ BPMC ]								elationshi ck all app Direc	•		. ,	ssuer Owner
		VENTURES, L				3. Date of Earliest Transaction (Month/Day/Year) 05/10/2018									Offic below	er (give title w)	e Othe belov		(specify )
29 NEWBURY STREET, 3RD FLOOR  (Street)  BOSTON MA 02116  (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					
		Tabl	e I - No	on-Deriv	ative	Sec	uritie	s Ac	quirec	l, Dis	sposed o	f, or E	Benefic	cially	/ Own	ed			
Date				2. Transac Date (Month/Da		Exe ) if a	2A. Deemed Execution Date, if any (Month/Day/Year)		3. Transaction Code (Instr. 8)		4. Securities Acquired (A) of Disposed Of (D) (Instr. 3, 4 a 5)			and Securit Benefic Owned		es ially Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership
									Code	v	Amount	(A) o	Price	e	Reporte Transac (Instr. 3	tion(s)			(Instr. 4)
Common Stock 05.					/2018				S		0(1)	D	\$0.	00(1)	0(2)			T I	See Footnote <sup>(3)</sup>
Common Stock 05/11/2					2018	018			S		0(4)	D	\$0.	00 <sup>(4)</sup>	0(2)				See Footnote <sup>(3)</sup>
Common Stock														53,249		3,249		D	
		Та	ıble II -								osed of, convertib				Owned				
Derivative   Conversion   Da		3. Transaction Date (Month/Day/Year)	if any	emed fon Date, Transa Code (			Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exerc Expiration Da (Month/Day/Y		ite	Amour Securi Underl Deriva Securi and 4)	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)  Amount or Number of		Price of rivative curity str. 5)	9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	ly	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)

## **Explanation of Responses:**

- 1. On May 10, 2018, Third Rock Ventures II, L.P. ("TRV II") sold (i) 210,000 shares of Common Stock of the Issuer in multiple transactions at prices ranging from \$80.05 to \$80.25, inclusive, at a weighted average price per share of \$80.0503 and (ii) 200 shares of Common Stock of the Issuer at a price of \$81.11 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 this footnote (1).
- 2. After the above transaction, TRV II owned 950,653 shares of Common Stock of the Issuer.
- 3. The reporting person is a partner of Third Rock Ventures GP II, L.P., which is the general partner of the TRV II. The reporting person disclaims beneficial ownership over such shares, except to the extent of his pecuniary interest therein, if any, and this report shall not be deemed an admission that he is the beneficial owner of such shares
- 4. On May 11, 2018, TRV II sold (i) 71,778 shares of Common Stock of the Issuer in multiple transactions at prices ranging from \$78.03 to \$78.73, inclusive, at a weighted average price per share of \$78.0398. 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 this footnote (4).
- 5. After the above transaction, TRV II owned 878,875 shares of Common Stock of the Issuer.

## Remarks:

/s/ Alexis Borisy

05/14/2018

\*\* 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.