FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPRO	DVAL							
OMB Number:	3235-0287							
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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* <u>Borisy Alexis</u>						2. Issuer Name <b>and</b> Ticker or Trading Symbol Blueprint Medicines Corp [ BPMC ]								(Che	elationshi eck all app	olicable) ctor		Person(s) to Issuer		
(Last) (First) (Middle) C/O THIRD ROCK VENTURES, LLC,						3. Date of Earliest Transaction (Month/Day/Year) 02/07/2017									Offic belov	er (give title w)		Other (specify below)		
29 NEWBURY STREET, 3RD FLOOR						4. If Amendment, Date of Original Filed (Month/Day/Year)									6. Individual or Joint/Group Filing (Check Applicable Line)					
(Street) BOSTON MA 02116					_										X Form filed by One Reporting Person  Form filed by More than One Reporting Person					
(City)	(St	ate) (	Zip)																	
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																				
1. Title of Security (Instr. 3)  2. Transacti Date (Month/Day)						Execution Date,		Date,	3. Transaction Code (Instr. b) 8)					and Securit		es ially Following	Form (D) or	: Direct r Indirect str. 4)	7. Nature of Indirect Beneficial Ownership	
						Code	v	Amount	(A) c (D)	Pri	се	Transac (Instr. 3	tion(s)			(Instr. 4)				
Common Stock 02/07/20						017		S		0(1)	D \$0		.00(1)	0 <sup>(2)</sup>				See Footnote <sup>(2)</sup>		
Common Stock														40,842			D			
		Та	ble II -								osed of, convertib				Owned					
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (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 Expirati (Month)	ion Da		7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)		Di Si (II	Price of erivative ecurity 1str. 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)	
					Code	v	(A)	(D)	Date Exercisable		Expiration Date	Title	Amou or Numb of Share	er						

## Explanation of Responses:

- 1. On February 7, 2017, Third Rock Ventures II, L.P. ("TRV II") sold 1,000,000 shares of Common Stock of the Issuer in multiple transactions at prices ranging from \$35.25 to \$35.45, inclusive. 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 4,453,753 shares of Common Stock of the Issuer. 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.

## Remarks:

<u>/s/ Alexis Borisy</u> <u>02/09/2017</u>

\*\* 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.