

OMB APPROVAL	
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**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

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

1. Name and Address of Reporting Person* <u>Resnick Joshua</u>  (Last) (First) (Middle) <u>C/O VOR BIOPHARMA INC.</u> <u>100 CAMBRIDGEPARK DRIVE, SUITE 400</u>  (Street) <u>CAMBRIDGE MA 02140</u>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>Vor Biopharma Inc. [ VOR ]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  <input checked="" type="checkbox"/> Director 10% Owner  Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) <u>02/05/2021</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			

**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 Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Stock Option (right to buy)	\$18	02/05/2021		A		16,900		(I)	02/04/2031	Common Stock	16,900	\$0.00	16,900	D <sup>(2)</sup>	

**Explanation of Responses:**

- 1/36th of the shares underlying the option vest in equal monthly installments commencing on March 5, 2021, provided that the Reporting Person remains continuously engaged by the Issuer on each such vesting date.
- Under the Reporting Person's arrangement with RA Capital Management, L.P. (the "Adviser"), the Reporting Person holds the option for the benefit of the RA Capital Healthcare Fund, L.P. (the "Fund"), RA Capital Nexus Fund, L.P. (the "Nexus Fund") and a separately managed account (the "Account"). The Reporting Person is obligated to turn over to the Adviser any net cash or stock received from the option, which will offset advisory fees owed by the Fund, the Nexus Fund and the Account to the Adviser. The Reporting Person therefore disclaims beneficial ownership of the option and underlying common stock.

**Remarks:**

/s/ Jason Minio, Attorney-in-Fact 02/09/2021

\*\* 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.