
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Vor Biopharma Inc.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
Incorporation or organization)

100 Cambridgepark Drive
Suite 101
Cambridge, Massachusetts
(Address of principal executive offices)

81-1591163
(I.R.S. Employer
Identification No.)

02140
(Zip code)

2021 Equity Incentive Plan
2021 Employee Stock Purchase Plan
(Full titles of the plans)

Robert Ang, M.B.B.S.
President and Chief Executive Officer
Vor Biopharma Inc.
100 Cambridgepark Drive
Suite 101
Cambridge, Massachusetts 02140
(617) 655-6580

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Divakar Gupta
Katie Kazem
Charles S. Kim
Cooley LLP
55 Hudson Yards
New York, New York 10001-2157
(212) 479-6000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

Pursuant to General Instruction E of Form S-8, this Registration Statement on Form S-8 (the “**Registration Statement**”) is being filed for the purpose of registering an additional 3,395,080 shares of common stock, \$0.0001 par value per share (the “**Common Stock**”), of Vor Biopharma Inc. (the “**Registrant**”), consisting of:

- 2,716,064 shares of Common Stock issuable pursuant to the Registrant’s 2021 Equity Incentive Plan (the “**2021 EIP**”), pursuant to the provisions of the 2021 EIP providing for an automatic increase in the number of shares reserved and available for issuance under the 2021 EIP on January 1, 2024; and
- 679,016 shares of Common Stock issuable pursuant to the Registrant’s 2021 Employee Stock Purchase Plan (the “**2021 ESPP**”), pursuant to the provisions of the 2021 ESPP providing for an automatic increase in the number of shares reserved and available for issuance under the 2021 ESPP on January 1, 2024.

In accordance with the instructional note to Part I of Form S-8 as promulgated by the Commission, the information specified by Part I of the Form S-8 has been omitted from this Registration Statement.

PART II

ITEM 3. INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents filed by the Registrant with the Commission are incorporated by reference into this Registration Statement:

(a) The contents of the Registrant’s Registration Statements on Form S-8, filed with the Commission on [February 9, 2021](#) (File No. 333-252908), [March 14, 2022](#) (File No. 333-263540) and [March 23, 2023](#) (File No. 270789);

(b) The Registrant’s Annual Report on Form 10-K (File No. 001-39979) for the fiscal year ended December 31, 2023, filed with the Commission on March 20, 2024;

(c) The Registrant’s Current Report on [Form 8-K](#) (File No. 001-39979) filed with the Commission on January 5, 2024; and

(d) The description of the Registrant’s Common Stock which is contained in a registration statement on [Form 8-A](#) filed on February 1, 2021 (File No. 001-39979) under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), as updated by the description of the Registrant’s capital stock contained in the Registrant’s Annual Report on Form 10-K, for the fiscal year ended December 31, 2021, including any amendment or report filed for the purpose of updating such description.

All other reports and documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (other than Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that relate to such items) on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part of this Registration Statement from the date of the filing of such reports and documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document that also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL

As of the date of the date hereof, GC&H Investments, LLC and GC&H Investments, a California partnership, which are entities beneficially owned by current and former partners and associates of Cooley LLP, counsel to the Registrant, beneficially hold an aggregate of 35,350 shares of the Registrant's common stock.

ITEM 8. EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>	<u>Schedule Form</u>	<u>File Number</u>	<u>Exhibit</u>	<u>Filing Date</u>
4.1	Amended and Restated Certificate of Incorporation of the Registrant.	8-K	001-39979	3.1	February 9, 2021
4.2	Amended and Restated Bylaws of the Registrant.	8-K	001-39979	3.2	February 9, 2021
4.3	Form of Common Stock Certificate of the Registrant.	S-1/A	333-252175	4.1	February 1, 2021
5.1*	Opinion of Cooley LLP.				
23.1*	Consent of Cooley LLP (included in Exhibit 5.1).				
23.2*	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.				
24.1*	Power of Attorney (included on the signature page of this registration statement).				
99.1	2021 Equity Incentive Plan and Forms of Stock Option Grant Notice, Stock Option Agreement, Restricted Stock Unit Grant Notice and Restricted Stock Unit Award Agreement.	S-1/A	333-252175	10.6	February 1, 2021
99.2	2021 Employee Stock Purchase Plan.	S-1/A	333-252175	10.7	February 1, 2021
107*	Filing Fee Table				

* Filed herewith

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on March 20, 2024.

VOR BIOPHARMA INC.

By: /s/ Robert Ang

Robert Ang, M.B.B.S.

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Robert Ang and Nathan Jorgensen, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him or her and in their name, place or stead, in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his, her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Robert Ang</u> Robert Ang, M.B.B.S., M.B.A.	President, Chief Executive Officer and Director (Principal Executive Officer)	March 20, 2024
<u>/s/ Nathan Jorgensen</u> Nathan Jorgensen, Ph.D., M.B.A.	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 20, 2024
<u>/s/ Matthew Patterson</u> Matthew Patterson	Chairman of the Board	March 20, 2024
<u>/s/ Daniella Beckman</u> Daniella Beckman	Director	March 20, 2024
<u>/s/ David C. Lubner</u> David C. Lubner	Director	March 20, 2024
<u>/s/ Sven (Bill) Ante Lundberg</u> Sven (Bill) Ante Lundberg, M.D.	Director	March 20, 2024
<u>/s/ Joshua Resnick</u> Joshua Resnick, M.D.	Director	March 20, 2024



Divakar Gupta
+1 212 479 6474
dgupta@cooley.com

March 20, 2024

Vor Biopharma Inc.
100 Cambridgepark Drive, Suite 101
Cambridge, MA 02140

Ladies and Gentlemen:

We have acted as counsel to Vor Biopharma Inc., a Delaware corporation (the "**Company**"), in connection with the filing by the Company of a registration statement on Form S-8 (the "**Registration Statement**") with the Securities and Exchange Commission (the "**Commission**") covering the offering of up to 3,395,080 shares (the "**Shares**") of the Company's common stock, par value \$0.0001 per share (the "**Common Stock**"), consisting of (i) 2,716,064 shares of Common Stock issuable pursuant to the Company's 2021 Equity Incentive Plan (the "**2021 Plan**") and (ii) 679,016 shares of Common Stock issuable pursuant to the Company's 2021 Employee Stock Purchase Plan (together with the 2021 Plan, the "**Plans**").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and related prospectuses, (b) the Company's certificate of incorporation and bylaws, each as currently in effect, (c) the Plans and (d) such records, documents, opinions, certificates, memoranda, and instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the Plans, the Registration Statement and the related prospectuses, will be validly issued, fully paid, and nonassessable (except as to shares issued pursuant to certain deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

Our opinion is limited to the matters expressly set forth in this letter, and no opinion should be implied, or may be inferred, beyond the matters expressly stated. Our opinion speaks only as to law and facts in effect or existing as of the date hereof, and we have no obligation or responsibility to update or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

Cooley LLP 55 Hudson Yards New York, New York 10001-2157
t: (212) 479-6000 f: (212) 479-6275 cooley.com



Vor Biopharma Inc.
March 20, 2024
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We consent to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Commission thereunder.

Sincerely,

Cooley LLP

By: /s/ Divakar Gupta
Divakar Gupta

Cooley LLP 55 Hudson Yards New York, New York 10001-2157
t: (212) 479-6000 f: (212) 479-6275 cooley.com

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2021 Equity Incentive Plan and 2021 Employee Stock Purchase Plan of Vor Biopharma Inc. of our report dated March 20, 2024, with respect to the consolidated financial statements of Vor Biopharma Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2023, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts
March 20, 2024

Calculation of Filing Fee Tables
Form S-8
VOR BIOPHARMA INC.
(Exact Name of Registrant as Specified in its Charter)

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, par value \$0.0001 per share, reserved for issuance pursuant to the 2021 Equity Incentive Plan	Other	2,716,064 ⁽²⁾	\$1.88 ⁽³⁾	\$5,106,200.32	0.0001476	\$753.68
Equity	Common Stock, par value \$0.0001 per share, reserved for issuance pursuant to the 2021 Employee Stock Purchase Plan	Other	679,016 ⁽⁴⁾	\$1.60 ⁽⁵⁾	\$1,086,425.60	0.0001476	\$160.36
Total Offering Amounts							\$6,192,625.92
Total Fee Offsets							—
Net Fee Due							\$914.04

(1) Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended (the “*Securities Act*”), this Registration Statement shall also cover any additional shares of Registrant’s common stock that become issuable under the Registrant’s 2021 Equity Incentive Plan (the “*2021 EIP*”) and the Registrant’s 2021 Employee Stock Purchase Plan (the “*2021 ESPP*”), as well as outstanding stock options granted outside of any plan, by reason of any stock dividend, stock split, recapitalization, or other similar transaction effected that results in an increase to the number of outstanding shares of Registrant’s common stock, as applicable.

(2) Represents an automatic annual increase equal to 4% of the total number of shares of the Registrant’s common stock outstanding on December 31st of the immediately preceding calendar year to the aggregate number of shares of the Registrant’s common stock reserved for issuance under, and which annual increase is provided by, the 2021 EIP.

(3) Estimated solely for the purpose of calculating the proposed maximum aggregate offering price and the registration fee in accordance with Rules 457(c) and (h) under the Securities Act, based on the average of the high and low prices of the Registrant’s common stock as reported in the consolidated reporting system of The Nasdaq Global Select Market on March 14, 2024, which was \$1.88.

(4) Represents an automatic increase equal to 1% of the total number of shares of the Registrant’s capital stock outstanding on December 31 of the preceding calendar year to the aggregate number of shares of the Registrant’s common stock reserved for issuance under, and which annual increase is provided by, the 2021 ESPP.

(5) Estimated solely for the purpose of calculating the proposed maximum aggregate offering price and the registration fee in accordance with Rules 457(c) and (h) under the Securities Act, based on the average of the high and low prices of the Registrant’s common stock as reported in the consolidated reporting system of The Nasdaq Global Select Market on March 14, 2024, which was \$1.88, multiplied by 85%, which is the percentage of the price per share applicable to purchases under the 2021 ESPP.