Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

AEROVATE THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 83-1377888 (I.R.S. Employer Identification No.)

930 Winter Street, Suite M-500 Waltham, MA (Address of Principal Executive Offices)

02451 (Zip Code)

Aerovate Therapeutics, Inc. 2021 Stock Option and Incentive Plan (Full title of the plan)

Timothy P. Noyes
Chief Executive Officer
Aerovate Therapeutics, Inc.
930 Winter Street, Suite M-500
Waltham, MA 02451
(Name and address of agent for service)

(617) 443-2400 (Telephone number, including area code, of agent for service)

Copies to:

Edwin M. O'Connor, Esq. Alicia M. Tschirhart, Esq. Goodwin Procter LLP 100 Northern Avenue Boston, Massachusetts 02210 (617) 570-1000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth 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		Accelerated filer	
Non-accelerated filer	\times	Smaller reporting company	X
		Emerging growth company	\times

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. \boxtimes

EXPLANATORY NOTE

Pursuant to General Instruction E of Form S-8, Aerovate Therapeutics, Inc. (the "Registrant") is filing this registration statement with the Commission to register 1,110,508 additional shares of the Registrant's common stock, \$0.0001 par value per share ("Common Stock") available for issuance under the Registrant's 2021 Stock Option and Grant Plan (the "Plan"), pursuant to the evergreen provision of the Plan. This Registration Statement incorporates by reference the contents of the Registrant's Registration Statements on Form S-8 (SEC File No. 333-257579, SEC File No. 333-263990 and SEC File No. 333-270950), filed with the Securities and Exchange Commission on June 30, 2021, March 30, 2022 and March 29, 2023, respectively, pursuant to General Instruction E, except for "Item 8. Exhibits."

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

The exhibits to this Registration Statement are listed in the Exhibit Index attached hereto and incorporated by reference herein.

EXHIBIT INDEX

EXHIBIT INDEX

Exhibit No.	Description
4.1	Second Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-40544) filed on July 2, 2021).
4.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the Registrant's Registration Current Report on Form 8-K (File No. 001-40544) filed on July 2, 2021).
4.3	Investors' Rights Agreement among the Registrant and certain of its stockholders, dated August 5, 2020 (incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-256949) filed on June 9, 2021).
4.4	Form of Specimen Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1/A (File No. 333-256949) filed on June 17, 2021).
5.1*	Opinion of Goodwin Procter LLP.
23.1*	Consent of KPMG LLP, independent registered public accounting firm.
23.2*	Consent of Goodwin Procter LLP (included in Exhibit 5.1).
24.1*	Power of Attorney (included on signature page).
99.1	2021 Stock Option and Incentive Plan and forms of award agreements thereunder (incorporated by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form S-1/A (File No. 333-256949) filed on June 17, 2021).
107*	Filing Fee Table
*	Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 Waltham, Commonwealth of Massachusetts, on this 8th day of January, 2023.

AEROVATE THERAPEUTICS, INC.

/s/ Timothy P. Noves By: Name: Timothy P. Noyes

Title: Chief Executive Officer and Director

POWER OF ATTORNEY AND SIGNATURES

KNOW ALL BY THESE PRESENT, that each individual whose signature appears below hereby constitutes and appoints each of Timothy P. Noyes and George A. Eldridge as such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following person in the capacities and on the date indicated.

NAME	TITLE	DATE
/s/ Timothy P. Noyes Timothy P. Noyes	Chief Executive Officer and Director Principal Executive Officer	January 8, 2024
<u>/s/ George A. Eldridge</u> George A. Eldridge	Chief Financial Officer Principal Financial Officer and Principal Accounting Officer	January 8, 2024
<u>/s/ Habib Dable</u> Habib Dable	Director	January 8, 2024
<u>/s/ Allison Dorval</u> Allison Dorval	Director	January 8, 2024
/s/ David Grayzel, M.D. David Grayzel, M.D.	Director	January 8, 2024
<u>/s/ Mark Iwicki</u> Mark Iwicki	Director	January 8, 2024
/s/ Maha Katabi, Ph.D. Maha Katabi, Ph.D.	Director	January 8, 2024
/s/ Joshua Resnick, M.D. Joshua Resnick, M.D.	Director	January 8, 2024
/s/ Donald J. Santel Donald J. Santel	Director	January 8, 2024

Aerovate Therapeutics, Inc. 930 Winter Street, Suite M-500 Waltham, MA 02451

Re: <u>Securities Being Registered under Registration Statement on Form S-8</u>

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-8 (the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on or about the date hereof relating to 1,110,508 shares (the "Shares") of Common Stock, \$0.0001 par value per share ("Common Stock"), of Aerovate Therapeutics, Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Company's 2021 Stock Option and Incentive Plan (the "Plan").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law.

For purposes of the opinion set forth below, we have assumed that no event occurs that causes the number of authorized shares of Common Stock available for issuance by the Company to be less than the number of then unissued Shares.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon issuance and delivery against payment therefor in accordance with the terms of the Plan, will be validly issued, fully paid and nonassessable.

This opinion letter and the opinion it contains shall be interpreted in accordance with the Core Opinion Principles as published in 74 Business Lawyer 815 (Summer 2019).

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ GOODWIN PROCTER LLP

GOODWIN PROCTER LLP

Consent of Independent Registered Public Accounting Firm

We consent to the use of our report dated March 29, 2023, with respect to the consolidated financial statements of Aerovate Therapeutics, Inc., incorporated herein by reference.

/s/ KPMG LLP

San Diego, California January 8, 2024

Calculation of Filing Fee Tables

Form S-8

(Form Type)

Aerovate Therapeutics, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

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	457(h)	1,110,508 (2)	\$20.29(3)	\$22,532,207.32	\$0.0001476	\$3,325.76
Total Offering Amounts			\$22,532,207.32		\$3,325.76		
Total Fee Offsets						\$0	
Net Fee Due						\$3,325.76	

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the registrant's common stock, \$0.0001 par value per share ("Common Stock") which become issuable under the above-named plans by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without the receipt of consideration which results in an increase in the number of our outstanding shares of Common Stock.
- (2) Consists of 1,110,508 additional shares issuable under the 2021 Stock Option and Incentive Plan (the "2021 Plan"), which represents an automatic annual increase to the number of shares available for issuance under the 2021 Plan effective as of January 1, 2024. Shares available for issuance under the 2021 Plan were previously registered on a registration statement on Form S-8 filed with the Securities and Exchange Commission on June 30, 2021 (File No. 333-257579) a registration statement on Form S-8 filed with the Securities and Exchange Commission on March 30, 2022 (File No. 333-263990), and a registration statement on Form S-8 filed with the Securities and Exchange Commission on March 29, 2023 (File No. 333-270950).
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended. The price per share and aggregate offering price are calculated on the basis of \$20.29 the average of the high and low price of the registrant's Common Stock as reported on the Nasdaq Global Market on January 4, 2024.