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

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

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**Decibel Therapeutics, Inc.**  
(Exact Name of Registrant as Specified in Its Charter)

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Delaware	46-4198709
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
1325 Boylston Street, Suite 500 Boston, Massachusetts	02215
(Address of Principal Executive Offices)	(Zip Code)

2021 Stock Incentive Plan  
Amended and Restated 2021 Employee Stock Purchase Plan  
(Full Title of the Plan)

Laurence Reid, Ph.D.  
President and Chief Executive Officer  
Decibel Therapeutics, Inc.  
1325 Boylston Street, Suite 500  
Boston, Massachusetts 02215  
(Name and Address of Agent for Service)

(617) 370-8701  
(Telephone Number, Including Area Code, of Agent for Service)

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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	<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.

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## Statement of Incorporation by Reference

This Registration Statement on Form S-8, relating to the 2021 Stock Incentive Plan (the “2021 Plan”) and the Amended and Restated 2021 Employee Stock Purchase Plan (the “2021 ESPP”) of Decibel Therapeutics, Inc. (the “Registrant”), is being filed for the purpose of registering additional securities of the same class as other securities for which a Registration Statement on Form S-8 relating to the 2021 Plan and the 2021 ESPP has previously been filed and is effective. Pursuant to General Instruction E to Form S-8, except as otherwise set forth below, this Registration Statement incorporates by reference the contents of (i) the Registration Statement on Form S-8, File No. 333-253318, relating to the 2021 Plan and the 2021 ESPP filed by the Registrant with the Securities and Exchange Commission on [February 19, 2021](#) and (ii) the Registration Statement on Form S-8, File No. 333-263672, relating to the 2021 Plan and the 2021 ESPP filed by the Registrant with the Securities and Exchange Commission on [March 18, 2022](#), in each case, except to the extent amended or superseded by the contents hereof.

### Item 8. Exhibits.

The following exhibits are incorporated herein by reference:

<u>Number</u>	<u>Description</u>
4.1	<a href="#">Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant’s Current Report on Form 8-K (File No. 001-40030) filed with the Securities and Exchange Commission on February 17, 2021).</a>
4.2	<a href="#">Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant’s Current Report on Form 8-K (File No. 001-40030) filed with the Securities and Exchange Commission on February 17, 2021).</a>
5.1*	<a href="#">Opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Registrant.</a>
23.1*	<a href="#">Consent of Ernst &amp; Young LLP, independent registered public accounting firm.</a>
23.2*	<a href="#">Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1).</a>
24.1*	<a href="#">Power of attorney (included on the signature pages of this registration statement).</a>
99.1	<a href="#">2021 Stock Incentive Plan (incorporated by reference to Exhibit 10.6 to the Registrant’s Registration Statement on Form S-1 (File No. 333-252347) filed with the Securities and Exchange Commission on February 8, 2021.</a>
99.2	<a href="#">Amended and Restated 2021 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.2 to the Registrant’s Quarterly Report on Form 10-Q (File No. 001-40030) filed with the Securities and Exchange Commission on November 9, 2022.</a>
107*	<a href="#">Filing Fee Table</a>

\* Filed herewith

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## 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 Boston, Commonwealth of Massachusetts on this 14th day of March, 2023.

DECIBEL THERAPEUTICS, INC.

By: /s/ Laurence Reid

Laurence Reid, Ph.D.

*President and Chief Executive Officer*

## POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Decibel Therapeutics, Inc., hereby severally constitute and appoint Laurence Reid and James Murphy, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Decibel Therapeutics, Inc., to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Laurence Reid</u> Laurence Reid, Ph.D.	President, Chief Executive Officer, Director (Principal Executive Officer)	March 14, 2023
<u>/s/ James Murphy</u> James Murphy	Interim Chief Financial Officer (Principal Financial and Accounting Officer)	March 14, 2023
<u>/s/ William H. Carson</u> William H. Carson, M.D.	Director and Chairman of the Board	March 14, 2023
<u>/s/ Neil Exter</u> Neil Exter	Director	March 14, 2023
<u>/s/ Alison Finger</u> Alison Finger, MBA	Director	March 14, 2023
<u>/s/ Kevin McLaughlin</u> Kevin McLaughlin, MBA	Director	March 14, 2023
<u>/s/ Saraswathy Nochur</u> Saraswathy Nochur, Ph.D.	Director	March 14, 2023
<u>/s/ Peter A. Thompson</u> Peter A. Thompson	Director	March 14, 2023

March 14, 2023

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wilmerhale.com

Decibel Therapeutics, Inc.  
1325 Boylston Street, Suite 500  
Boston, Massachusetts 02215

Re: Registration Statement on Form S-8  
2021 Stock Incentive Plan  
Amended and Restated 2021 Employee Stock Purchase Plan

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to an aggregate of 1,248,225 additional shares of common stock, \$0.001 par value per share (the "Shares"), of Decibel Therapeutics, Inc., a Delaware corporation (the "Company"), issuable under the Company's 2021 Stock Incentive Plan and Amended and Restated 2021 Employee Stock Purchase Plan (collectively, the "Plans").

We have examined the Certificate of Incorporation and Bylaws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the board of directors and stockholders of the Company, the Registration Statement, the Plans and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plans, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the General Corporation Law of the State of Delaware.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Plans, the Shares will be validly issued, fully paid and nonassessable.

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Palo Alto San Francisco Washington

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We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. In giving such consent, we do not hereby 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 of the Commission.

Very truly yours,

/s/ Wilmer Cutler Pickering Hale and Dorr LLP

Wilmer Cutler Pickering Hale and Dorr LLP

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**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 Stock Incentive Plan and the Amended and Restated 2021 Employee Stock Purchase Plan of Decibel Therapeutics, Inc. of our report dated March 14, 2023, with respect to the consolidated financial statements of Decibel Therapeutics, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2022, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts  
March 14, 2023

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## Calculation of Filing Fee Tables

**Form S-8**  
(Form Type)**Decibel 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 Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common stock, par value \$0.001 per share	Other	1,248,225 (2)	\$4.25 (3)	\$5,304,957 (3)	0.00011020	\$584.61
<b>Total Offering Amounts</b>					\$5,304,957		\$584.61
<b>Total Fee Offsets</b>							-
<b>Net Fee Due</b>							\$584.61

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Consists of (i) 998,580 additional shares issuable under the 2021 Stock Incentive Plan and (ii) 249,645 additional shares issuable under the Amended and Restated 2021 Employee Stock Purchase Plan.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act and based upon the average of the high and low sales price of the registrant's common stock on the Nasdaq Global Select Market on March 9, 2023.

