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

**POST-EFFECTIVE AMENDMENT NO. 1
TO
FORM S-4
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

Homology Medicines, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

47-3468154
(I.R.S. Employer
Identification No.)

**One Patriots Park
Bedford, MA 01730
(781) 327-2633**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Paul Alloway, Ph.D.
President and Chief Operating Officer
One Patriots Park
Bedford, MA 01730
(781) 327-2633**

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

Copies to:

**Peter N. Handrinos
Leah R. Sauter
Elisabeth M. Martin
Latham & Watkins LLP
200 Clarendon Street
Boston, MA 02116
(617) 948-6000**

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement and the satisfaction or waiver of all other conditions under the Merger Agreement described herein.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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

Non-accelerated filer

Accelerated filer

Smaller reporting company

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.

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer)

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer)

This Post-Effective Amendment No. 1 shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(d) under the Securities Act of 1933, as amended.

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 (this “Amendment”) to the Registration Statement on [Form S-4](#) of Homology Medicines, Inc. (File No. 333-276093), initially filed on December 18, 2023 and declared effective by the Securities and Exchange Commission on February 14, 2024 (the “Registration Statement”), is being filed as an exhibit-only filing solely to file the consent of Deloitte & Touche LLP with respect to its report dated March 12, 2024 relating to the financial statements of Homology Medicines, Inc. contained in its Annual Report on Form 10-K for the year ended December 31, 2023 and included in the Prospectus Supplement No. 1 dated March 13, 2024 filed pursuant to Rule 424(b)(3), filed herewith as Exhibit 23.1 (the “Consent”). Accordingly, this Amendment consists only of the facing page, this explanatory note, Item 16 of Part II of the Registration Statement, the signature pages to the Registration Statement, and the Consent. The prospectus and the balance of Part II of the Registration Statement are unchanged hereby and have been omitted.

Part II - INFORMATION NOT REQUIRED IN PROSPECTUS

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this Post-Effective Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Bedford, Commonwealth of Massachusetts, on this 13th day of March, 2024.

Homology Medicines, Inc.

By: /s/ Paul Alloway, Ph.D.
Paul Alloway, Ph.D.
President and Chief Operating Officer

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to the Registration Statement has been signed by the following persons in the capacities held on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Paul Alloway, Ph.D.</u> Paul Alloway, Ph.D.	President, Chief Operating Officer and Secretary (<i>Principal Executive Officer</i>)	March 13, 2024
<u>/s/ Charles Michaud, Jr.</u> Charles Michaud, Jr.	Vice President, Corporate Controller and Treasurer (<i>Principal Financial and Accounting Officer</i>)	March 13, 2024
<u>*</u> Arthur O. Tzianabos, Ph.D.	Chairman of the Board of Directors	March 13, 2024
<u>*</u> Jeffrey V. Poulton	Lead Independent Director	March 13, 2024
<u>*</u> Steven Gillis, Ph.D.	Director	March 13, 2024
<u>*</u> Matthew R. Patterson	Director	March 13, 2024
<u>*</u> Alise S. Reicin, M.D.	Director	March 13, 2024
<u>*</u> Mary Thistle	Director	March 13, 2024

*By: /s/ Paul Alloway, Ph.D.
Name: Paul Alloway, Ph.D.
Title: Attorney-in-Fact

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the use in Registration Statement No. 333-276093 on Form S-4 of our report dated March 12, 2024, relating to the financial statements of Homology Medicines, Inc., appearing in the Prospectus Supplement, which is part of this Registration Statement.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
March 13, 2024