As filed with the Securities and Exchange Commission on March 14, 2024

Registration No. 333-275443

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

Post-Effective Amendment No. 1 TO FORM S-1 caREGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

EVOKE PHARMA, 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) 20-8447886 (I.R.S. Employer Identification No.)

420 Stevens Avenue, Suite 230 Solana Beach, CA 92075 (858) 345-1494

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

David A. Gonyer, R.Ph. Chief Executive Officer and Director Evoke Pharma, Inc. 420 Stevens Avenue, Suite 230 Solana Beach, CA 92075 (858) 345-1494 (Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Matthew T. Bush Cheston J. Larson Anthony Gostanian Latham & Watkins LLP 12670 High Bluff Drive San Diego, California 92130 (858) 523-5400

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement. If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, 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, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(c) 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. \boxtimes (333-275443)

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," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer		Accelerated filer	
Non-accelerated filer	\mathbf{X}	Smaller reporting company	\mathbf{X}

Emerging growth 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. \Box

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-1 of Evoke Pharma, Inc. (File No. 333-275443), initially filed on November 9, 2023 and declared effective by the Securities and Exchange Commission on February 8, 2024 (the "Registration Statement"), is being filed as an exhibit-only filing solely to file the consent of BDO USA, P.C. with respect to its report dated March 14, 2024 relating to the financial statements of Evoke Pharma, 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 14, 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.

Exhibit No.Description23.1*Consent of

Consent of BDO USA, P.C.

* Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Solana Beach, State of California, on March 14, 2024.

EVOKE PHARMA, INC.

By:	/s/ David A. Gonyer
Name:	David A. Gonyer, R.Ph.
Title [.]	Chief Executive Officer and Director

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Name	Title	Date
/s/ David A. Gonyer David A. Gonyer, R.Ph.	Chief Executive Officer and Director (Principal Executive Officer)	March 14, 2024
/s/ Matthew J. D'Onofrio Matthew J. D'Onofrio	President, Chief Operating Officer, Secretary and Treasurer (Principal Financial and Accounting Officer)	March 14, 2024
* Cam L. Garner	Chairman of the Board of Directors	March 14, 2024
* Todd C. Brady, M.D., Ph.D.	— Director	March 14, 2024
* Malcolm R. Hill, Pharm.D.	— Director	March 14, 2024
* Vickie W. Reed	— Director	March 14, 2024
* Kenneth J. Widder, M.D.	— Director	March 14, 2024

* Pursuant to power of attorney.

By: <u>/s/ David A. Gonyer</u> Name: David A. Gonyer Title: Attorney-in-Fact

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Evoke Pharma, Inc. Solana Beach, California

We hereby consent to the use in the Prospectus constituting a part of this Registration Statement of our report dated March 14, 2024, relating to the financial statements of Evoke Pharma, Inc. (the "Company") appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2023, which is contained in that Prospectus. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO USA, P.C.

San Diego, California March 14, 2024