

Prospectus Supplement No. 2  
(To Prospectus dated February 8, 2024)



## Evoke Pharma, Inc.

This prospectus supplement updates, amends and supplements the prospectus dated February 8, 2024 (the “Prospectus”), which forms a part of our Registration Statement on Form S-1 (Registration No. 333-275443). Capitalized terms used in this prospectus supplement and not otherwise defined herein have the meanings specified in the Prospectus.

This prospectus supplement is being filed to update, amend and supplement the information included in the Prospectus with the information described below under “Amendments to Existing Warrants.”

This prospectus supplement is not complete without the Prospectus. This prospectus supplement should be read in conjunction with the Prospectus, which is to be delivered with this prospectus supplement, and is qualified by reference thereto, except to the extent that the information in this prospectus supplement updates or supersedes the information contained in the Prospectus. Please keep this prospectus supplement with your Prospectus for future reference.

Our common stock is listed on the Nasdaq Global Market under the symbol “EVOK.” On March 25, 2024, the closing price of our common stock was \$0.59.

**Our business and investment in our common stock involve significant risks. These risks are described in the section titled “Risk Factors” beginning on page 9 of the Prospectus.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of the Prospectus or this prospectus supplement. Any representation to the contrary is a criminal offense.**

### AMENDMENTS TO EXISTING WARRANTS

This prospectus supplement is being filed to disclose the following:

On March 25, 2024, Evoke Pharma, Inc. (the “Company”) entered into an amendment (the “Warrant Amendment”) with certain holders (each, a “Holder”) of its outstanding Series A Warrants to purchase shares of common stock (the “Series A Warrants”), Series B Warrants to purchase shares of common stock (the “Series B Warrants”), and Series C Warrants to purchase shares of common stock (the “Series C Warrants”).

Pursuant to the Warrant Amendment, to the extent a Holder exercises (a Holder so exercising, an “Exercising Holder”) its Series B Warrants before 5:00 p.m. Eastern time on March 27, 2024 (the “Amendment Exercise Deadline”), the Holder’s corresponding Series C Warrants shall be exercisable for a number of shares of the Company’s common stock (the “Warrant Shares”) equal to the lesser of (i) three times the number of Warrant Shares exercised by the Exercising Holder pursuant to its Series B Warrants and (ii) the total number of remaining Warrant Shares exercisable under the Series C Warrants (such Warrant Shares that become exercisable, “Vested Warrant Shares,” and any remaining unvested and unexercisable Warrant Shares, “Unvested Warrant Shares”). For any Exercising Holder, following the Amendment Exercise Deadline, if such Exercising Holder exercises any remaining Series B Warrants, the remaining Series C Warrants, if any, shall become vested and exercisable on a one-for-one basis as to the same number of Series B Warrants exercised following the Amendment Exercise Deadline.

The Warrant Amendment also allows a Holder to choose to receive pre-funded warrants upon exercise of Series A Warrants, Series B Warrants and Series C Warrants in lieu of shares of the Company’s common stock, at an exercise price for each Series A Warrant, Series B Warrants and Series C Warrant, as applicable, of \$0.6799 per Warrant Share, with a corresponding exercise price of \$0.0001 per Warrant Share for each pre-funded warrant. The Warrant Amendment does not change the number of Warrant Shares underlying each series of warrants. The form of pre-funded warrant was previously described and filed as Exhibit 4.1 to the Company’s Current Report on Form 8-K filed with the SEC on February 9, 2024, and the description of such warrant is hereby incorporated by reference herein.

The Company will allow all other holders of Series A Warrants, Series B Warrants or Series C Warrants to enter into an identical Warrant Amendment.

The foregoing description of the Warrant Amendment is not complete and is qualified in its entirety by reference to the full text of the form of Warrant Amendment, a copy of which was filed as Exhibit 4.1 to the Company’s Current Report on Form 8-K filed with the SEC on March 25, 2024.

**The date of this prospectus supplement is March 25, 2024.**

