

1,509,343 Shares of Common Stock

This prospectus supplement updates, supersedes and amends certain information contained in the prospectus dated August 6, 2021, as supplemented by the prospectus supplement dated June 14, 2023 (together, the "Original Prospectus") of Biora Therapeutics, Inc. (the "Company"), relating to the offering of an aggregate and sale of 1,509,343 shares of common stock, par value \$0.001 per share (the "Common Stock"), including shares of Common Stock issuable upon the exercise of warrants to purchase up to an aggregate of 3,018,868 shares of Common Stock at an original exercise price of \$5.05 per share (the "Existing Warrants"). The Existing Warrants have been amended as described below under "Amendments to Existing Warrants."

This prospectus supplement should be read in conjunction with the Original Prospectus, and is qualified by reference to the Original Prospectus, except to the extent that the information presented herein supersedes the information contained in the Original Prospectus. This prospectus supplement is not complete without, and may only be delivered or used in connection with, the Original Prospectus, including any amendments or supplements thereto. We may amend or supplement the Original Prospectus from time to time by filing amendments or supplements as required. You should read the entire Original Prospectus and any amendments or supplements carefully before you make an investment decision.

Our Common Stock is listed on the Nasdaq Global Market under the symbol "BIOR." On March 28, 2024, the last reported sale price of our Common Stock on the Nasdaq Global Market was \$1.10 per share.

Investing in our securities involves a high degree of risk. See "Risk Factors" in the Original Prospectus and documents incorporated therein by reference for a discussion of such risk factors, which factors should be read carefully in connection with an investment in our securities.

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 this prospectus supplement or the accompanying prospectus. 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 31, 2024, we entered a warrant amendment agreement (the "Warrant Amendment Agreement") with certain institutional investors under which the Company agreed to amend certain outstanding warrants, including warrants to purchase up to an aggregate of 3,018,868 shares of Common Stock that were previously issued in June 2023 with an exercise price of \$5.05 per share.

Under the Warrant Amendment Agreement, with respect to Existing Warrants to purchase up to an aggregate of 3,018,868 shares of Common Stock held by institutional investors, the Company agreed to (i) lower the exercise price of such Existing Warrants to \$1.10 per share, (ii) provide that such Existing Warrants, as amended, will not be exercisable until the Company receives approval from its stockholders with respect to the issuance of shares of Common Stock issuable upon exercise of the amended Existing Warrants (such date, the "Stockholder Approval Date") and (iii) extend the original expiration date of such Existing Warrants to be five (5) years following the Stockholder Approval Date. These amendments became effective on March 31, 2024.

Prospectus supplement dated April 2, 2024