AMENDMENT NO. 1 DATED MARCH 22, 2024 to Prospectus Supplement Dated November 22, 2023 (To Prospectus Dated November 22, 2023)

Hyperfine, Inc.

HYPERFINE

Up to \$22,816,801

Class A Common Stock

This Amendment No. 1 to Prospectus Supplement, or this Amendment, amends our prospectus supplement dated November 22, 2023, or the Prospectus Supplement. This Amendment should be read in conjunction with the Prospectus Supplement and the accompanying prospectus, or the Prospectus, included in the Registration Statement on Form S-3 filed with the Securities and Exchange Commission on November 9, 2023 (File No. 333-275449), and is qualified by reference thereto, except to the extent that the information herein amends or supersedes the information contained in the Prospectus Supplement or the Prospectus. This Amendment is not complete without, and may only be delivered or utilized in connection with, the Prospectus Supplement and the Prospectus, and any future amendments or supplements thereto.

We entered into our sales agreement with B. Riley Securities, Inc., or B. Riley Securities, dated November 9, 2023, or the Sales Agreement, relating to our Class A common stock, par value \$0.0001 per share, offered by the Prospectus Supplement and the Prospectus. Pursuant to the Prospectus Supplement and in accordance with the terms of the Sales Agreement, we may offer and sell our Class A common stock having an aggregate offering price of up to \$50,000,000 from time to time through or to B. Riley Securities, acting as sales agent or principal. As of March 22, 2024, we have not offered and sold any of our Class A common stock pursuant to the Sales Agreement. Consequently, up to \$50,000,000 remains available for sale under the Sales Agreement pursuant to the Prospectus Supplement.

Our Class A common stock is listed on The Nasdaq Global Market under the symbol "HYPR."

We are filing this Amendment to amend the Prospectus Supplement to update the amount of our Class A common stock we are eligible to sell under General Instruction I.B.6 of Form S-3 and pursuant to the Sales Agreement. As of March 22, 2024, the aggregate market value of our outstanding Class A common stock held by non-affiliates, or the public float, was \$68,450,405, which was calculated based on 54,760,324 shares of our outstanding Class A common stock held by non-affiliates as of March 5, 2024, and at a price of \$1.25 per share, the closing price of our Class A common stock on March 5, 2024. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell shares of our Class A common stock pursuant to the Prospectus Supplement and the Prospectus, as amended by this Amendment, with a value of more than one-third of the aggregate market value of our Class A common stock held by non-affiliates in any 12-month period, so long as the aggregate market value of our Class A common stock held by non-affiliates is less than \$75,000,000. As of the date of this Amendment, we have not offered and sold any shares of our Class A common stock pursuant to General Instruction I.B.6 to Form S-3 during the prior 12 calendar month period that ends on and includes the date hereof.

As a result of these limitations and the current public float of our Class A common stock, and in accordance with the terms of the Sales Agreement, we may offer and sell shares of our Class A common stock having an aggregate offering price of up to \$22,816,801 from time to time through or to B. Riley Securities. If our public float increases such that we may sell additional amounts under the Sales Agreement, the Prospectus Supplement and the Prospectus, we will file another amendment to the Prospectus Supplement prior to making additional sales.

Investing in our Class A common stock involves a high degree of risk. See the information contained under "Risk Factors" of the Prospectus Supplement, the Prospectus, and under similar headings in the documents incorporated by reference therein for a discussion of the factors you should carefully consider before deciding to purchase these securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this Amendment, the Prospectus Supplement or the Prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

B. Riley Securities

The date of this Amendment No. 1 to Prospectus Supplement is March 22, 2024.