PROSPECTUS SUPPLEMENT NO. 15 To Prospectus dated March 29, 2022



Up to 41,775,946 Shares of Class A Common Stock Up to 15,055,288 Shares of Class B Common Stock

This prospectus supplement no. 15 supplements the prospectus dated March 29, 2022, as supplemented from time to time (the "Prospectus"), relating to the resale from time to time by the Selling Securityholders named in the Prospectus (the "Selling Securityholders") of up to (i) 5,025,000 shares of Class A common stock, par value \$0.0001 per share ("Class A common stock"), held by the sponsor of our predecessor company, HealthCor Catalio Acquisition Corp., a Delaware corporation ("HealthCor"), HC Sponsor LLC (the "Sponsor"), and certain of its transferees (the "Founder Shares"), (ii) 12,122,000 shares of Class A common stock issued in the PIPE Investment (as defined in the Prospectus), (iii) 23,714,946 shares of Class A common stock issued to our directors, officers and affiliates and the directors, officers and affiliates of Legacy Hyperfine (as defined in the Prospectus) pursuant to the Business Combination Agreement (as defined in the Prospectus), including shares of Class A common stock that may be issued upon the exercise of stock options (the "Options") and the vesting of restricted stock units or upon the conversion of Class B common stock, par value \$0.0001 per share ("Class B common stock"), (iv) 614,000 shares of Class A common stock issued in the Private Placement (as defined in the Prospectus), (v) 300,000 shares issued following the closing of the Business Combination (as defined in the Prospectus) in lieu of \$3.0 million of deferred underwriting compensation payable to the sole bookrunning manager of HealthCor's initial public offering (the "Letter Agreement Shares"), and (vi) 15,055,288 shares of Class B common stock issued pursuant to the Business Combination Agreement.

The Prospectus provides you with a general description of such securities and the general manner in which we and the Selling Securityholders may offer or sell the securities. More specific terms of any securities that we and the Selling Securityholders may offer or sell may be provided in a prospectus supplement that describes, among other things, the specific amounts and prices of the securities being offered and the terms of the offering. The prospectus supplement may also add, update or change information contained in the Prospectus.

We will not receive any proceeds from the sale of shares of Class A common stock or shares of Class B common stock by the Selling Securityholders, except with respect to amounts received by us upon exercise of the Options.

However, we will pay the expenses, other than any underwriting discounts and commissions, associated with the sale of securities pursuant to the Prospectus.

We registered the securities for resale pursuant to the Selling Securityholders' registration rights under certain agreements between us and the Selling Securityholders. Our registration of the securities covered by the Prospectus does not mean that either we or the Selling Securityholders will issue, offer or sell, as applicable, any of the securities. The Selling Securityholders may offer and sell the securities covered by the Prospectus in a number of different ways and at varying prices. We provide more information about how the Selling Securityholders may sell the shares in the section entitled "Plan of Distribution" in the Prospectus.

You should read this prospectus supplement in conjunction with the Prospectus, including any supplements and amendments thereto. This prospectus supplement is qualified by reference to the Prospectus except to the extent that the information in the prospectus supplement supersedes the information contained in the Prospectus. This

prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the Prospectus, including any supplements and amendments thereto.

Our Class A common stock is listed on Nasdaq under the symbol "HYPR". On December 19, 2022, the closing price of our Class A common stock was \$0.7095.

Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page 13 of the Prospectus.

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

The date of this prospectus supplement is December 20, 2022.

SELLING SECURITYHOLDERS

The following information is provided to update the table appearing under the heading "Selling Securityholders" beginning on page 124 of the Prospectus in order to reflect the transfer of an aggregate of 5,534,000 shares of Class A common stock held by HC Sponsor LLC, a Selling Securityholder listed in the Prospectus, to its direct and indirect owners (together, the "Transferees"). To update the information contained in this section to reflect the transfers, the following table is revised to include the applicable information of the Transferees.

The shares of Class A common stock held by the Selling Securityholders listed in the table below were included in the 41,775,946 shares of our Class A common stock registered for resale under the registration statement of which the Prospectus forms a part. The percentages in the following table are based on 55,520,444 shares of Class A common stock outstanding, as of November 1, 2022.

Unless otherwise indicated, the business address of each of the Transferees is c/o HealthCor Management, L.P., 31 Hudson Yards, 10th Floor, Office #49, New York NY 10001.

Stockholder	Shares of Class A Common Stock Benefits Owned Prior to this Offering		Shares of Class B Common Stock Beneficially Owned Prior to this Offering		Number of Class A Common Stock Being Offered	Number of Class B Commo n Stock Being Offered	Shares of Class A Common Stock Beneficially Owned After the Offered Shares of Class A Common Stock		Shares of Class B Common Stock Beneficially Owned After the Offered Shares of Class A Common Stock	
	Shares	Percen t	Shares	Percen t			Shares	Percen t	Shares	Percen t
Catalio Special Opportunities Fund I, LLC (1)	635,500	1.1%	_	_	635,500	_		_		_
HealthCor Offshore Master Fund, L.P. (2)	583,348	1.1%	_	_	583,348	_	_	_	_	_
HealthCor Therapeutics Master Fund, L.P. (2)	848,020	1.5%	_	_	598,020	_	250,000	*	_	_
HealthCor Sanatate Offshore Master Fund, L.P. (2)	1,950,132	3.5%	_	_	1,950,13 2	_	_	_	_	_
Joseph Healey (3)	781,227	1.4%	_	_	781,227	_	_	_	_	_
Arthur Cohen (4)	781,226	1.4%	_	_	781,226	_	_	_	_	_
David C. Nettleton	488,936	*	_	_	488,936	_	_	_	_	_
Benjamin Snedeker (5)	204,703	*	_	_	204,703	_	_	_	_	_
Michael Weinstein (6)	127,198	*	_	_	127,198	_	_	_	_	_
Taylor Harris (7)	127,197	*	_	_	127,197	_	_	_	_	_
Christine Clarke (8)	135,215	*	_	_	135,215	_	_	_	_	_
Anabelle Perez Gray	23,050	*	_	_	23,050	_	_	_	_	_
Cynthia Yang	84,124	*	_	_	84,124	_	_	_	_	_
Greg Inguaggiato	84,124	*	_	_	84,124	_	_	_	_	_

^{*} Denotes less than 1%.

- ** Certain Selling Securityholders may be deemed to beneficially own other shares reported herein.
- (1) The managing member of Catalio Special Opportunities Fund I, LLC is Catalio Special Opportunities Manager I, LLC. R. Jacob Vogelstein and George Petrocheilos are the managing members of Catalio Special Opportunities Manager I, LLC and share voting and dispositive power over the shares held by Catalio Special Opportunities Fund I, LLC. Mr. Petrocheilos was President of HealthCor Catalio Acquisition Corp. ("HealthCor"), which became Hyperfine, Inc. in connection with the business combination that occurred in December 2021. The address of Catalio Special Opportunities Fund I, LLC is c/o Catalio Special Opportunities Manager I, LLC, 512 W. 22nd Street, 5th Floor, New York NY 10011.
- (2) HC Sponsor LLC is managed by its manager, HealthCor Sponsor Investments LLC, which is managed by its manager, HealthCor Group, LLC, which also indirectly manages HealthCor Sanatate Offshore Master Fund, L.P., HealthCor Therapeutics Master Fund, L.P. and HealthCor Offshore Master Fund, L.P. (collectively the "HC Affiliates"). Arthur Cohen and Joseph Healey are the controlling members of HealthCor Group, LLC. As such, Messrs. Cohen and Healey have voting and investment discretion with respect to the shares held by each of HC Sponsor LLC and the HC Affiliates and may be deemed to have shared beneficial ownership of these shares. HC Sponsor LLC was the sponsor of HealthCor, Mr. Cohen was Chief Executive Officer and a director of HealthCor and Mr. Healey was Chairman of HealthCor's board of directors.
- (3) Mr. Healey was Chairman of HealthCor's board of directors prior to the business combination that occurred in December 2021.
- (4) Mr. Cohen was Chief Executive Officer and a director of HealthCor prior to the business combination that occurred in December 2021.
- (5) Mr. Snedeker was a director of HealthCor prior to the business combination that occurred in December 2021.
- (6) Mr. Weinstein was a director of HealthCor prior to the business combination that occurred in December 2021.
- (7) Mr. Harris was a director of HealthCor prior to the business combination that occurred in December 2021.
- (8) Ms. Clarke was Chief Financial Officer of HealthCor prior to the business combination that occurred in December 2021.