PROSPECTUS SUPPLEMENT NO. 5 (to Prospectus dated February 9, 2021)



Vincerx Pharma, Inc.

Up to 6,112,884 Shares of Common Stock Up to 6,851,883 Shares of Common Stock Issuable Upon Exercise of Warrants Up to 3,570,000 Private Warrants

This prospectus supplement supplements the prospectus dated February 9, 2021 (the "Prospectus"), which forms a part of our registration statement on Form S-1 (No. 333-252589). This prospectus supplement is being filed to update and supplement the information in the Prospectus with the information contained in our current report on Form 8-K, filed with the Securities and Exchange Commission on May 6, 2021 (the "Current Report"). Accordingly, we have attached the Current Report to this prospectus supplement.

The Prospectus and this prospectus supplement relate to the issuance by us of up to an aggregate of 6,851,883 shares of our common stock, \$0.0001 par value per share, which consists of: (i) up to 3,570,000 shares of common stock that are issuable upon the exercise of 3,570,000 private warrants originally issued in a private placement in connection with the initial public offering of LifeSci Acquisition Corp., or LSAC; and (ii) up to 3,281,883 shares of common stock that are issuable upon the exercise of 6,563,767 public warrants originally issued in the initial public offering of LSAC.

The Prospectus and this prospectus supplement also relate to the offer and sale from time to time by the selling securityholders named in the Prospectus or their donees, pledgees, transferees or other successors in interest, of: (i) up to 9,682,884 shares of common stock (including up to 3,570,000 shares of common stock that may be issued upon exercise of the private warrants and 2,034,130 shares of common stock that may become issuable as Earnout Shares (as defined in the Prospectus)); and (ii) up to 3,570,000 private warrants.

Our common stock is listed on the Nasdaq Capital Market under the symbol "VINC." On May 5, 2021, the closing price of our common stock was \$14.81.

This prospectus supplement updates and supplements the information in the Prospectus and is not complete without, and may not be delivered or utilized except in combination with, the Prospectus, including any amendments or supplements thereto. This prospectus supplement should be read in conjunction with the Prospectus and if there is any inconsistency between the information in the Prospectus and this prospectus supplement, you should rely on the information in this prospectus supplement.

See the section entitled "Risk Factors" beginning on page 9 of the Prospectus to read about factors you should consider before buying our securities.

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

The date of this prospectus supplement is May 6, 2021.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| FORM 8 | 8-K |
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CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 5, 2021

Vincerx Pharma, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or Other Jurisdiction of Incorporation)

following provisions:

001-39244 (Commission File Number) 83-3197402 (I.R.S. Employer Identification No.)

260 Sheridan Avenue, Suite 400
Palo Alto, CA
(Address of principal executive offices)

94306 (Zip Code)

(650) 800-6676 (Registrant's telephone number, including area code)

N/A

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligations of the registrant under any of the

(Former name or former address, if changed since last report.)

| | Common Stock | VINC | The Nasdaq Stock Market LLC | | |
|------|--|----------------------|--|--|--|
| | Title of each class | Trading symbol(s) | Name of each exchange on which registered | | |
| Secu | urities registered pursuant to Section 12(b) of the Act: | | | | |
| | Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240-13e-4(c)) | | | | |
| | Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)) | | | | |
| | Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12) | | | | |
| | Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) | | | | |
| | | | | | |

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b–2 of the Securities Exchange Act of 1934 (§240.12b–2 of this chapter).

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 13(a) of the Exchange Act.

Item 8.01 Other Events.

In connection with the previously announced call for redemption by Vincerx Pharma, Inc. (the "Company") of its public warrants, the Company redeemed all public warrants that remained outstanding and unexercised as of close of business on May 5, 2021 for a redemption price of \$0.01 per public warrant.

As of the close of business on May 5, 2021, 6,491,604 public warrants were exercised, resulting in the receipt of approximately \$37.3 million in total cash proceeds, and 72,163 unexercised public warrants were redeemed at the redemption price of \$0.01 per public warrant.

As of the close of business on May 5, 2021, there were 17,505,239 shares of the Company's common stock outstanding.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: May 5, 2021

VINCERX PHARMA, INC.

By: /s/ Raquel E. Izumi

Raquel E. Izumi President and Chief Operations Officer