Prospectus Supplement No. 3 (To Prospectus dated March 30, 2023)

Comera Life Sciences Holdings, Inc.

1,946,846 Warrants to Purchase Common Stock

15,093,712 Shares of Common Stock Including
1,946,846 Shares of Common Stock issuable upon the
exercise of Warrants and 342,755 Shares of Common Stock
issuable upon conversion of the Series A Convertible Perpetual
Preferred Stock offered by Selling Securityholders

This prospectus supplement no. 3 (this "<u>Prospectus Supplement</u>") updates, amends and supplements the prospectus dated March 30, 2023 (as amended or supplemented from time to time, the "<u>Prospectus</u>") which forms a part of the Registration Statement on Form S-1 (Registration Statement No. 333-264686) filed by Comera Life Sciences Holdings, Inc. ("<u>Holdco</u>"). 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 or incorporated by reference in the Prospectus with the information contained in our Current Report on Form 8-K filed with the Securities and Exchange Commission (the "SEC") on May 19, 2023 (the "Current Report"). Accordingly, we have attached the Current Report to this Prospectus Supplement.

This Prospectus Supplement 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 any amendments or supplements thereto. 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.

The Holdco Common Stock is listed on The Nasdaq Capital Market ("Nasdaq") under the symbol "CMRA", and the Holdco Warrants are listed on Nasdaq under the symbol "CMRAW". On May 18, 2023, the closing sale price of the Holdco Common Stock as reported on Nasdaq was \$0.6421 per share, and the closing sale price of the Holdco Warrants as reported on Nasdaq was \$0.0321 per warrant.

Investing in our securities is highly speculative and involves a high degree of risk. Before buying any securities, you should review carefully the risks and uncertainties of investing in our securities described in the section titled "Risk Factors" beginning on page 17 of the Prospectus, and under similar headings in any amendments or supplements thereto.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities to be issued under the Prospectus or passed upon the accuracy or adequacy of the Prospectus. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement is May 19, 2023

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

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 18, 2023

Comera Life Sciences Holdings, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 1-41403 (Commission File Number) 87-4706968 (IRS Employer Identification No.)

12 Gill Street
Suite 4650
Woburn, Massachusetts
(Address of principal executive offices)

01801 (Zip Code)

Registrant's telephone number, including area code: (617) 871-2101

 $\label{eq:continuous} \textbf{Not Applicable} \\ \textbf{(Former name or former address, if changed since last report)} \\$

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:			
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)		
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)		
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))		

Securities registered pursuant to Section 12(b) of the A	.ct:		
Title of each class	Trading Symbol(s)	Name of each exchange on which registered	
Common Stock	CMRA	The Nasdaq Stock Market LLC	
Warrants	CMRAW	The Nasdaq Stock Market LLC	
Indicate by check mark whether the registrant is an emerging growth company 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. □			

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 3.01. Notice of Delisting or Failure to Satisfy Continued Listing Rule or Standard; Transfer of Listing.

On May 18, 2023, Comera Life Sciences Holdings, Inc. (the "Company") received a determination letter (the "Letter") from the staff (the "Staff") of The Nasdaq Stock Market LLC ("Nasdaq") stating that the Company has not regained compliance with the Market Value of Listed Securities ("MVLS") Standard, since the Company's common stock, par value \$0.0001 per share (the "Common Stock"), was below the \$35 million minimum MVLS requirement for continued listing on The Nasdaq Capital Market under Nasdaq Listing Rule 5550(b)(2) (the "MLVS Rule") and had not been at least \$35 million for a minimum of 10 consecutive business days at any time during the 180-day grace period granted to the Company. As previously disclosed, the Company was initially notified by the Staff on November 18, 2022 that the minimum MVLS for the Company's Common Stock was below the \$35 million minimum MVLS requirement for the previous 30 consecutive business days, and in accordance with the Nasdaq Listing Rules, the Company was provided 180 calendar days, or until May 17, 2023, to regain compliance with the MVLS Rule.

Pursuant to the Letter, unless the Company requests a hearing to appeal this determination by 4:00 p.m. Eastern Time on May 25, 2023, the Company's Common Stock will be delisted from The Nasdaq Capital Market, trading of the Company's Common Stock will be suspended at the opening of business on May 30, 2023, and a Form 25-NSE will be filed with the Securities and Exchange Commission, which will remove the Company's securities from listing and registration on Nasdaq.

The Company intends to request a hearing before the Nasdaq Hearings Panel (the "Panel") to appeal the Letter received on May 18, 2023. A hearing request will stay the suspension of trading of the Company's Common Stock, and the Company's Common Stock will continue to trade on The Nasdaq Capital Market until the hearing process concludes and the Panel issues a written decision.

There can be no assurance that the Panel will grant the Company's request for a suspension of delisting or continued listing on The Nasdaq Capital Market. If the Company's Common Stock ceases to be listed for trading on The Nasdaq Capital Market, the Company would expect that its Common Stock would be traded on one of the three tiered marketplaces of the OTC Markets Group.

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 19, 2023 COMERA LIFE SCIENCES HOLDINGS, INC.

By: /s/ Michael Campbell

Name: Michael Campbell Title: Chief Financial Officer