Prospectus Supplement No. 1 (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. 1 (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 5, 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 4, 2023, the closing sale price of the Holdco Common Stock as reported on Nasdaq was \$0.7499 per share, and the closing sale price of the Holdco Warrants as reported on Nasdaq was \$0.03 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 5, 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 2, 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

Not Applicable (Former name or former address, if changed since last report)

	ck the appropriate box below if the Form 8-K filing is bowing provisions:	ntended to simultaneously satisfy the f	iling obligation of the registrant under any of the	
	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))			
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))			
Sec	urities registered pursuant to Section 12(b) of the Act: 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	
chaj	cate by check mark whether the registrant is an emerginater) or Rule 12b-2 of the Securities Exchange Act of 1 erging growth company 🗵	1 7	405 of the Securities Act of 1933 (§230.405 of this	
if ar	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 3.01. Notice of Delisting or Failure to Satisfy Continued Listing Rule or Standard; Transfer of Listing.

On May 2, 2023, Comera Life Sciences Holdings, Inc. (the "Company") received written notice from The Nasdaq Stock Market LLC ("Nasdaq") indicating that the Company is not in compliance with the \$1.00 minimum bid price requirement for continued listing on The Nasdaq Capital Market, as set forth in Listing Rule 5550(a)(2). In accordance with Listing Rule 5810(c)(3)(A), the Company has a period of 180 calendar days, or until October 30, 2023, to regain compliance with the minimum bid price requirement. To regain compliance, the closing bid price of the Company's common stock must meet or exceed \$1.00 per share for a minimum of ten consecutive business days during this 180-day period.

If the Company is not in compliance by October 30, 2023, the Company may be eligible for additional time to regain compliance. To qualify, the Company would be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for The Nasdaq Capital Market, except for the minimum bid price requirement. In addition, the Company would be required to notify Nasdaq of its intent to cure the minimum bid price deficiency.

If the Company does not regain compliance within the allotted compliance periods, including any extensions that may be granted by Nasdaq, Nasdaq will provide notice that the Company's common stock will be subject to delisting. The Company would then be entitled to appeal Nasdaq's determination, but there can be no assurance that Nasdaq would grant the Company's request for continued listing.

The Company intends to monitor the closing bid price of its common stock and consider options to resolve the noncompliance with the minimum bid price requirement. There can be no assurance that the Company will be able to regain compliance with the minimum bid price requirement or will otherwise be in compliance with other Nasdaq listing criteria.

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, 2023 COMERA LIFE SCIENCES HOLDINGS, INC.

By: /s/ Michael Campbell
Name: Michael Campbell
Title: Chief Financial Officer