



Via Edgar

**April 6, 2022**

Alan Campbell  
Celeste Murphy  
Division of Corporation Finance  
Office of Life Sciences  
U.S. Securities and Exchange Commission  
100 F Street, N.E.  
Washington, D.C. 20549

**Re: Comera Life Sciences Holdings, Inc.  
Amendment No. 1 to Registration Statement on Form S-4 filed March 25, 2022  
File No. 333-263377**

Dear Mr. Campbell and Ms. Murphy:

On behalf of our client, Comera Life Sciences Holdings, Inc., a Delaware corporation (the "**Company**"), we submit to the staff (the "**Staff**") of the U.S. Securities and Exchange Commission (the "**SEC**") this letter setting forth the Company's response to the comments contained in the Staff's letter dated April 1, 2022 (the "**Comment Letter**") regarding the Company's Amendment No. 1 to registration statement on Form S-4 ("**Amendment No. 1**").

The Company has filed via EDGAR an amended Registration Statement on Form S-4 ("**Amendment No. 2**"), which reflects the Company's responses to the Comment Letter and certain updated information. Please note that our responses below, insofar as relevant information relates to OTR Acquisition Corp., a Delaware corporation ("**OTR**") or matters arising from OTR's participation in the preparation of the Amended Form S-4, are based on our discussions with and information received from OTR or its counsel, Greenberg Traurig, P.A., who have similarly participated in the preparation and review of this response letter.

For ease of reference, each comment contained in the Comment Letter is printed in bold below and is followed by the Company's response. All page references in the responses set forth below refer to the page numbers in Amendment No. 2. All capitalized terms used but not defined in this response letter have the meanings ascribed to such terms in Amendment No. 2.

1. *We note your response to prior comment four. With respect to the second exercise contingency, you state that it is based on a change in control event which results in consideration of at least \$12.50 per share. Please explain to us how the contractual terms of your agreement would determine how the price per share is calculated in a situation where a change in control event involves an offer being made for the total value of the Company's assets, rather than an offering price on a per-share basis. For example, please clarify whether the price per-share is calculated by dividing the transaction price by the number of outstanding shares that includes, or excludes, the shares issuable under the earn-out agreement. As part of your response, please specifically address how you determined the method, or each of the methods, if applicable, used to determine the price per share is consistent with your conclusion that the earn-out agreement is indexed to the Company's own stock under ASC 815-40-15.*

Response: The Company respectfully acknowledges the Staff's comment and advises the Staff that it has made additional disclosure in response to the Staff's comment on pages 29,120 and 149 of Amendment No. 2 to elaborate on the methodology for calculating whether the Earn-Out Trigger has been satisfied in a situation where a change in control event involves an offer being made for the total value of the Company's assets, rather than an offering price on a per-share basis. In particular, the parties to the Business Combination Agreement intend for the Earn-Out Trigger to be deemed satisfied if (i) the aggregate proceeds paid to, or in the event of an asset sale, available for distribution to, stockholders of the Company in such Change of Control divided by (ii) (a) the number of outstanding shares of the Company's common stock immediately prior to the consummation of such Change of Control plus (b) the number of shares of the Company's common stock issuable pursuant to the Earn-Out, is equal to or exceeds \$12.50.

The Company further advises the Staff that in determining that the earn-out agreement is indexed to its stock under ASC 815-40-15, the Company assessed the methodology for calculation of the consideration received in the Change of Control that involves an offer being made for the total value of the Company's assets, rather than an offering price on a per-share basis. As noted above, in a Change of Control, including a Change of Control that involves an offer being made for the total value of the Company's assets, rather than an offering price on a per-share basis, the consideration received is calculated by dividing the aggregate consideration payable or available for distribution to the Company's stockholders by a number of outstanding shares that includes the shares issuable under the Earn-Out. The Company determined that since the shares issuable under the Earn-Out are included in the calculation of the consideration received, the Earn-Out Shares are considered indexed to the Company's stock under ASC 815-40-15.

Please do not hesitate to contact Mitchell Nussbaum at (212) 407-4159 or Janeane Ferrari at (212) 407-4209 if you would like additional information with respect to any of the foregoing. Thank you.

Sincerely,

/s/ Loeb & Loeb LLP

Loeb & Loeb LLP

cc: Jeffrey Hackman  
Comera Life Sciences Holdings, Inc.

Janeane Ferrari, Esq.  
Loeb & Loeb LLP

Mitchell Nussbaum, Esq.  
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