Comera Life Sciences Holdings, Inc.

12 Gill Street Suite 4650 Woburn, Massachusetts 01801 Tel: (617) 871-2101

June 22, 2022

VIA EDGAR

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549 Attention: Alan Campbell

Re: Comera Life Sciences Holdings, Inc.

Registration Statement on Form S-1

File No. 333-264686

Dear Mr. Campbell:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, the registrant Comera Life Sciences Holdings, Inc. hereby requests acceleration of effectiveness of the above-referenced Registration Statement so that it will become effective at 4:00 p.m. ET on Friday, June 24, 2022, or as soon as practicable thereafter.

Very truly yours,

COMERA LIFE SCIENCES HOLDINGS, INC.

Jeffrey S. Hackman Chief Executive Officer

cc: Loeb & Loeb LLP

- Mitchell S. Nussbaum, Esq.
- Janeane R. Ferrari, Esq.