September 13, 2022 Jeffrey S. Hackman President and Chief Executive Officer Comera Life Sciences Holdings, Inc. 12 Gill Street Suite 4650 Woburn, MA 01801 Re: Comera Life Sciences Holdings, Inc. Registration Statement on Form S-1 Filed September 6, 2022 File No. 333-267283 Dear Mr. Hackman: This is to advise you that we have not reviewed and will not review your registration statement. Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff. Please contact Margaret Schwartz at 202-551-7153 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc:

Ryan Rourke Reed, Esq.