October 20, 2022

Alexander Nguyen, Esq. General Counsel and Corporate Secretary Unity Biotechnology, Inc. 285 East Grand Avenue South San Francisco, CA 94080

Re: Unity

Biotechnology, Inc.

Statement on Form S-3

2022

Registration

Filed October 14,

File No. 333-267886

Dear Alexander Nguyen:

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 Tim

Buchmiller at (202) 551-3635 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

Brian J. Cuneo, Esq. cc: