Keith Leonard, Jr. Chief Executive Officer Unity Biotechnology, Inc. 3280 Bayshore Blvd, Suite 100 Brisbane, CA 94005

> Re: Unity Biotechnology, Inc. Registration Statement on Form S-3 Filed June 3, 2019 File No. 333-231893

Dear Mr. Leonard:

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 Sonia Bednarowski at 202-551-3666 with any questions.

Sincerely,

Division of

Corporation Finance

Office of

Healthcare & Insurance