

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

DIVISION OF CORPORATION FINANCE

June 21, 2024

Spyridon Papapetropoulos, M.D. President and Chief Executive Officer Bionomics Limited 200 Greenhill Road Eastwood, SA 5063 Australia

Re: Bionomics Limited Registration Statement on Form F-1 Filed June 18, 2024 File No. 333-280288

Dear Spyridon Papapetropoulos:

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 Chris Edwards at 202-551-6761 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Theodore Ghorra