

Bionomics Limited
200 Greenhill Road
Eastwood SA 5063
Australia

December 15, 2021

VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
Office of Life Sciences
100 F Street N.E.
Washington, D.C. 20549

Attention: Christopher Edwards
Jordan Nimitz
Kevin Vaugh
Christine Wong

Re: Bionomics Limited
Registration Statement on Form F-1
File No. 333-261280

Ladies and Gentlemen:

Pursuant to Rule 461 of Regulation C of the General Rules and Regulations under the Securities Act of 1933, as amended, the undersigned, on behalf of Bionomics Limited (the "**Company**"), respectfully requests that the effective date of the Registration Statement on Form F-1 referred to above be accelerated so that it will become effective at 5:25 P.M. Eastern Time on December 15, 2021, or as soon as practicable thereafter.

Please contact Michael E. Sullivan of Latham & Watkins LLP, counsel to the Company, at (858) 523-3959, to provide notice of effectiveness, or if you have any questions or require additional information regarding this matter. Thank you for your assistance and cooperation in this matter.

Very truly yours,

BIONOMICS LIMITED

By: /s/ Errol De Souza

Errol De Souza, Ph.D.
Executive Chairman

cc: Nathaniel Ajiashvili, Latham & Watkins LLP
Michael E. Sullivan, Latham & Watkins LLP
Cheston J. Larson, Latham & Watkins LLP
Benjamin K. Marsh, Goodwin Procter LLP