

**Bionomics Limited**  
200 Greenhill Road  
Eastwood SA 5063  
Australia

December 13, 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 4:00 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