12670 High Bluff Drive
San Diego, California 92130
Tel: +1.858.523.5400 Fax: +1.858.523.5450
www.lw.com

LATHAM&WATKINS LLP

FIRM / AFFILIATE OFFICES

| | |
|---|---|
| Austin | Milan |
| Beijing | Moscow |
| Boston | Munich |
| Brussels | New York |
| Century City | Orange County |
| Chicago | Paris |
| Dubai | Riyadh |
| Düsseldorf | San Diego |
| Frankfurt | San Francisco |
| Hamburg | Seoul |
| Hong Kong | Shanghai |
| Houston | Silicon Valley |
| London | Singapore |
| Los Angeles | Tokyo |
| Madrid | Washington, D.C. |

November 22, 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: Christine Wong
Kevin Vaugh
Jordan Nimitz
Christopher Edwards

**Re: Bionomics Limited/ Form F-1**
**Amendment No. 1 to Draft Registration Statement on Form F-1**
**Submitted October 28, 2021**
**CIK No. 0001191070**

Ladies and Gentlemen:

We are in receipt of the Staff's letter dated November 12, 2021 with respect to the above-referenced Draft Registration Statement (the "***Registration Statement***") on Form F-1. We are responding to the Staff's comments on behalf of Bionomics Limited. ("Bionomics" or the "***Company***") as set forth below. Simultaneously with the submission of this letter, the Company is publicly filing via EDGAR a Registration Statement on Form F-1 (the "***Amended Registration Statement***") responding to the Staff's comment and updating the Registration Statement.

The Company's response sets forth in this letter are numbered to correspond to the numbered comments in the Staff's letter. All terms used but not defined herein have the meanings assigned to such terms in the Amended Registration Statement. For ease of reference, we have set forth the Staff's comment and the Company's response below.

*Amendment No. 1 to Draft Form F-1 filed October 28, 2021*

*BNC210, page 2*

1. *We note your revisions in response to our prior comment 2 and reissue in part. Please include in your summary risk factors on page 4 the risk related to federal and state regulation of your combination of BNC210 and EMP-01 as a controlled substance.*

**Bionomics Response:**

The Company has revised the disclosure on page 5 of the Amended Registration Statement in response to the Staff's comment.

*Our Portfolio, page 2*

2. *We note your response to prior comment 4. Please delete references to the undisclosed programs. Since these programs are in clinical development, they should be disclosed.*

**Bionomics Response:** The Company acknowledges the Staff's comment and respectfully advises the Staff that Merck does not generally disclose product candidates in Phase 1 clinical trials. Further, under the Merck collaboration, the Company has limited information rights and is contractually prohibited from disclosing additional information regarding these product candidates without Merck's consent. Due to the commercially competitive nature of drug development, Merck has requested that the Company maintain the confidentiality of the specific product candidates at this time. Although the Merck programs are in early stage clinical development, the Company believes that disclosure of the programs is material to an investor's understanding of the business and has filed the agreement as a material agreement. In response to the Staff's comment and the Company's view that the Merck collaboration is a material agreement, the Company has removed the Merck program from its pipeline chart that appears in the prospectus summary and has instead included it in a separate chart depicting the status of the Company's collaboration's appearing only in the business section of the Amended Registration Statement on page 106. Further, the Company has revised the disclosures on pages 3, 108 and 128 of the Amended Registration Statement to clarify its information rights and expectations for timely updates concerning the product candidates.

*a7 Receptor PAM Program with Merck, page 3*

3. *We note your response to our prior comment 7 and reissue in part. Please disclose that you will not receive any royalty payments from Merck as a result of the contingent value right to be issued for the sole benefit of your existing shareholders. Please also explain the extent to which you control the clinical development process, whether you have access to information related to clinical trial results, serious adverse events and ongoing communications with the FDA relating to these programs or the extent to which Merck is required to provide you with this information.*

**Bionomics Response:** The Company advises the Staff that it no longer intends to issue a contingent value right. The Company has revised the disclosure on pages 14, 15, 34, 95 and 128 of the Amended Registration Statement to reflect this.

*Potential Advantages of BNC210 for the Treatment of Anxiety and Stressor-Related Disorders,page 114*

4. *We note your response to our prior comment 16 and reissue. Dividing the previous table into two separate tables does not resolve the implied expectation of regulatory approval, which is still inappropriate given the early stage of BNC210's development. Please remove the tables on page 115.*

**Bionomics Response:** The Company has revised the disclosure on page 15 of the Amended Registration Statement to remove the table describing the potential attributes of BNC210 in response to the Staff's comment.

*Legacy Oncology Programs, page 125*

5. *We note your response to our prior comment 12 and reissue in part. Please revise the below statements to disclose your objective observations from the trials without concluding that the product candidate was effective or had an impact on the observed results. Any conclusions regarding efficacy are within the sole authority of the FDA. For example, we would not object to a statement such as "In preclinical studies, BNC101 was associated with a reduction in the frequency of cancer stem cells..."*

    a. *On page 125, "Representative molecules from each series have been observed to reverse pharmacologically induced cognitive deficits in mouse and rat models with equivalent activity to risperidone, an antipsychotic drug used to treat schizophrenia, used as the positive control."*

    b. *On page 125, "In preclinical studies, BNC101 targeted and reduced the frequency of cancer stem cells derived from primary patient colorectal tumors both in vitro and in vivo."*

**Bionomics Response:** The Company has revised the disclosure on pages 125 and 126 of the Amended Registration Statement in response to the Staff's comment.

6. *We note your response to our prior comment 13. To the extent the product candidate relating to your memorandum of understanding with EmpathBio is material, the memorandum supporting the development of this product candidate is material and should be fully described and filed as an exhibit pursuant to Item 601(b)(10) of Regulation S-K, or provide an analysis as to why you do not believe filing is required. If you do not consider the agreement material, please remove the collaboration from the table.*

**Bionomics Response:** The Company has revised the disclosure on page 123 of the Amended Registration Statement in response to the Staff's comment to describe all of the material terms of the memorandum of understanding between the Company and EmpathBio (the "MOU"). The Company does not believe, however, that the MOU is required to be filed as an Exhibit to the Amended Registration Statement. While this potential combination therapy is material to the Company and the Company believes that its inclusion in the Company's pipeline will be material to an investor's understanding of the Company's programs in development as it represents a potential further expansion of the market for BNC210 for the treatment of PTSD, the Company respectfully advises the Staff that it does not believe that this agreement meets the threshold for inclusion as a material agreement under Item 601(b)(10) of Regulation S-K. First, the company notes that as a development stage biotechnology company, entering into agreements of this nature with potential collaboration partners is an activity that it engages in in the ordinary course of business. Second, the Company notes that as this collaboration is currently at the non-binding memorandum of understanding stage, there are not enforceable rights or obligations (other than confidentiality obligations) under the MOU either for or against the Company or EmpathBio and as such the MOU does not itself contain any rights or obligations that are material to the Company. Third, the Company notes that the MOU is not an agreement upon which the business of the Company is substantially dependent. As noted above, the MOU does not contain any enforceable rights or obligations with respect to the Company's business upon which either the Company or EmpathBio are relying. While a definitive agreement entered into by the Company and EmpathBio containing enforceable rights and obligations with respect to the development and/or commercialization of a combination treatment of EMP-01 and BNC210 might be an agreement upon which the Company's business would be substantially dependent, the MOU is not such an agreement.

*********

LATHAM & WATKINS LLP

Any comments or questions regarding the foregoing should be directed to the undersigned at (858) 523-3959. Thank you in advance for your cooperation in connection with this matter.

Very truly yours,

/s/ Michael E. Sullivan
Michael E. Sullivan
of LATHAM & WATKINS LLP

cc: Errol De Souza, *Bionomics Limited*
Nathaniel Ajiashvili, *Latham & Watkins LLP*
Cheston J. Larson, *Latham & Watkins LLP*
Benjamin K. Marsh, *Goodwin Procter LLP*