

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

POST-EFFECTIVE AMENDMENT NO. 1 TO
FORM F-1 REGISTRATION STATEMENT NO. 333-280288
UNDER THE SECURITIES ACT OF 1933

Bionomics Limited

(Exact name of registrant as specified in its charter)

Not Applicable

(Translation of registrant's name into English)

Australia

(State or other jurisdiction of
incorporation or organization)

Not Applicable

(I.R.S. Employer
Identification Number)

200 Greenhill Road
Eastwood SA 5063
Australia
+618 8150 7400

(Address and telephone number of registrant's principal executive offices)

Spyridon "Spyros" Papapetropoulos
President, Chief Executive Officer and Director
c/o Cogency Global Inc.
850 New Burton Road, Suite 201
Dover, DE 19904

(Name, address and telephone number of agent for service)

Copies to:

Andrew Reilly
Rimón
Level 2, 50 Bridge Street
Sydney, NSW 2000, Australia
andrew.reilly@rimonlaw.com

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement as determined in light of market conditions.

If only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.C. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.C. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933.

Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

**EXPLANATORY NOTE
DEREGISTRATION OF SECURITIES**

This Post-Effective Amendment No. 1 relates to the Registration Statement on [Form F-1](#) (Registration No. 333-280288) filed by Bionomics Limited (the “Registrant”) with the Securities and Exchange Commission (“Commission”) on June 18, 2024 and as declared effective by the Commission on June 26, 2024 (the “Registration Statement”), registering up to 3,641,213,340 ordinary shares of the Registrant as represented by 20,228,963 American Depositary Shares (“ADSs”), all of which were initially issued by the Registrant pursuant to the Securities Purchase Agreement dated as of May 31, 2024 by and between the Registrant and the selling shareholder identified in the Registration Statement (the “Selling Shareholder”), as described therein.

On December 23, 2024 U.S. time (the “Effective Date”), the redomiciliation of the Registrant was completed pursuant to which Neuphoria Therapeutics Inc., a Delaware corporation (the “Company”), acquired all of the issued and outstanding ordinary shares of the Registrant in exchange for newly issued shares of common stock of the Company pursuant to a Scheme of Arrangement under Australian law (the “Scheme”), and became the ultimate parent company of the Bionomics group of companies. As a result of completion of the Scheme, the Company became the successor issuer to the Registrant pursuant to Rule 12g-3(a) under the Securities Exchange Act of 1934, as amended.

As a result of the Scheme, the Registrant has terminated all offerings of its securities pursuant to the Registration Statement. The Registrant, by filing this Post-Effective Amendment No. 1, hereby terminates the effectiveness of the Registration Statement and removes from registration any and all securities registered but unsold under the Registration Statement as of the date hereof. This filing is made in accordance with an undertaking in the Registration Statement to remove from registration by means of a post-effective amendment any of the securities that were registered but which remain unsold at the termination of the offering.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-1 and has duly caused this post-effective amendment to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Boston, Massachusetts, on December 23, 2024.

Bionomics Limited

By: /s/ Spyridon Papapetropoulos
Name: Spyridon Papapetropoulos
Title: President and Chief Executive Officer

No other person is required to sign this post-effective amendment in reliance upon Rule 478 under the Securities Act of 1933, as amended.