

21 September 2006

Securities and Exchange Commission
Judiciary Plaza,
450 Fifth Street,
Washington DC 20549



SUPL

Re: Bionomics Limited - File number 82-34682

Please see attached provided pursuant to Section 12g3-2(b) file number 82-34682.

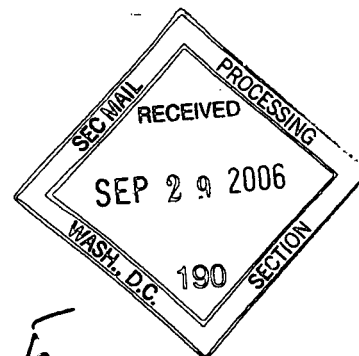
Yours sincerely

per Stephen Birrell
CFO & Company Secretary

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ASX ANNOUNCEMENT
21 September 2006

BIONOMICS RAISES \$5 MILLION THROUGH PRIVATE PLACEMENT

Bionomics Limited (ASX:BNO) announced today that it has raised just over \$5 million by way of a private placement of 36 million new ordinary shares to institutional and sophisticated investors including top twenty shareholders.

Dr Deborah Rathjen, CEO and Managing Director, stated that "the placement funds, will allow Bionomics to continue to deliver on its milestones for its anti-cancer drug BNC105 and to progress its epilepsy, anxiety and multiple sclerosis programs towards drug candidate selection. The Company was pleased with the strong support shown by existing shareholders participating in this placement and we also welcome new institutional shareholders to the register."

The issue price of 14 cents per share represents a 6% discount to market on the 7-day volume weighted average price (VWAP) of Bionomics shares prior to the day the terms were agreed with the issue managers.

The private placement was co-managed by Intersuisse Corporate Pty Ltd and LINWAR Securities Pty Ltd.

Bionomics intends to issue approximately 16,857,145 of the placement shares by 29 September 2006. The issue of the remaining shares is subject to shareholder approval, in order to comply with the ASX Listing Rules. The Company will seek shareholder approval for the issue of the remaining shares at its Annual General Meeting to be held on 9 November 2006.

Further information required by Listing Rule 3.10.3 in relation to the placement accompanies this announcement.

FOR FURTHER INFORMATION PLEASE CONTACT:

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Chairman
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About Bionomics Limited

Bionomics (ASX:BNO) discovers and develops innovative therapeutics for cancer and diseases of the central nervous system. Bionomics has small molecule product development programs in the areas of cancer, anxiety, epilepsy and multiple sclerosis. Bionomics' most advanced program, the Vascular Disruption Agent (VDA) program for cancer, is based upon the identification of a novel compound that potently and selectively restricts blood flow to tumours. Bionomics' discovery and development activities are driven by its three technology platforms: Angene®, the company's angiogenesis target and drug discovery platform, incorporates a variety of genomics tools to identify and validate novel angiogenesis targets. MultiCore® is Bionomics' proprietary, diversity orientated chemistry platform for the discovery of small molecule drugs. ionX® is a set of novel technologies for the identification of drugs targeting ion channels for diseases of the central nervous system.

For more information about Bionomics, visit www.bionomics.com.au

Factors Affecting Future Performance

This announcement contains "forward-looking" statements within the meaning of the United States' Private Securities Litigation Reform Act of 1995. Any statements contained in this press release that relate to prospective events or developments are deemed to be forward-looking statements. Words such as "believes," "anticipates," "plans," "expects," "projects," "forecasts," "will" and similar expressions are intended to identify forward-looking statements. There are a number of important factors that could cause actual results or events to differ materially from those indicated by these forward-looking statements, including risks related to our available funds or existing funding arrangements, a downturn in our customers' markets, our failure to introduce new products or technologies in a timely manner, regulatory changes, risks related to our international operations, our inability to integrate acquired businesses and technologies into our existing business and to our competitive advantages, as well as other factors. Subject to the requirements of any applicable legislation or the listing rules of any stock exchange on which our securities are quoted, we disclaim any intention or obligation to update any forward-looking statements as a result of developments occurring after the date of this press release.



LISTING RULE 3.10.3 INFORMATION

In accordance with Listing Rule 3.10.3, Bionomics provides the following details of the placement shares:

| | |
|--------------------------------------|--|
| Class of Securities | FULLY PAID ORDINARY SHARES |
| Number to be issued | 36,000,000 Shares |
| Principal terms of securities | The shares will carry standard rights applicable to ordinary shares in the Company and will, from the date of issue, rank equally with fully paid ordinary shares currently on issue. |
| Issue Price | \$0.14 per share |
| Purpose of Issue | To fund Bionomics' drug development programs, in particular the development of BNC105 |
| Shareholder Approval | <p>The Company will not seek shareholder approval prior to the issue of approximately 16,857,145 of the placement shares, as approval of this number of shares is not required by the Listing Rules. The Company intends to subsequently seek approval of this number of shares at its Annual General Meeting pursuant to Listing Rule 7.4 (subsequent approval of an issue of securities).</p> <p>The Company will seek shareholder approval prior to the issue of approximately 19,142,855 of the placement shares, in accordance with Listing Rule 7.1.5 at the Annual General Meeting.</p> |
| Issue to Class | The issue is not being made to a class of security holders. |