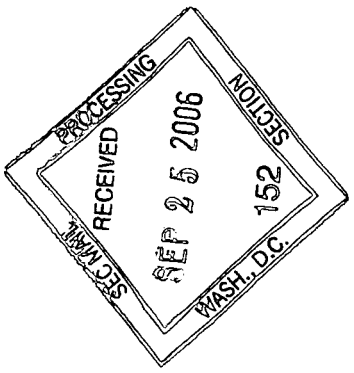
Bionomics Limited

SUPPL

14 September 2006

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



Re: Bionomics Limited - File number 82-34682

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

Yours sincerely

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OCT 18 2006
THOMSON
FINANCIAL

Stephen Birrell
CFO & Company Secretary

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ASX ANNOUNCEMENT
14 September 2006

BIONOMICS COLLABORATOR PRESENTS ADVANCES TOWARD NEW MULTIPLE SCLEROSIS TREATMENT

- **Kv1.3 blockers shown to be effective in animal model, paving the way for human trials in 2009**
- **High potency and selectivity against the cells that mediate the inflammation that occurs in MS with less likelihood of side effects**
- **Potential for oral administration vs. existing injectable drug treatments**

Compounds being developed by Australian company Bionomics are effective in an animal model of inflammation according to data presented today by a collaborator, Dr. Andrew Harvey of the Walter and Eliza Hall Institute of Medical Research (WEHI). The discovery was made public in a presentation at the American Chemical Society's annual meeting in San Francisco.

Dr. Andrew Harvey showed that blockers of a new drug target, the Kv1.3 ion channel, are effective in the "delayed-type hypersensitivity" model, a standard model for testing new drugs which may be used to treat inflammatory diseases such as Multiple Sclerosis.

The Kv1.3 ion channel is a protein that is specifically expressed on so-called "Effector Memory T cells." These cells have been implicated as key mediators in the cycle of inflammation that occurs in Multiple Sclerosis. The compounds being tested have high potency and 10-fold or greater selectivity for Kv1.3 over other ion channels.

"Current drugs for Multiple Sclerosis are hamstrung by their lack of generality and effectiveness," stated Dr. Harvey in introducing the Bionomics-WEHI program. "They bring relief to only a portion of patients, and they carry with them numerous, serious side-effects. These side-effects occur because the action of current drugs upon the disease is indirect. With this new strategy, we hope to be able to specifically block the activity of the cells that trigger the disease."

"In addition, existing treatments for MS are usually injectable drugs. This is extremely burdensome for a chronic condition. The compounds we have identified have the potential for oral administration. This would be a great advance in patient care and ease of use."

"We are very pleased with the rapid progress that has been achieved in this program in collaboration with WEHI," stated Dr. Deborah Rathjen, Managing Director and

CEO of Bionomics. "The market potential for an effective oral MS treatment is in the order of $2 billion. We believe that our program is among the most advanced in the world against this target, if not the most advanced. In addition to Multiple Sclerosis, Kv1.3 blockers may also be useful as treatments for rheumatoid arthritis and diabetes. So this program has the potential to provide relief to a great many sufferers of serious disease."

Bionomics and WEHI are collaborating with the objective of conducting the first human trials of a drug in 2009.

Under the terms of collaborative agreement, Bionomics owns all commercial rights to the compounds.

FOR FURTHER INFORMATION PLEASE CONTACT:

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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 the clinical evaluation of BNC105, 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.