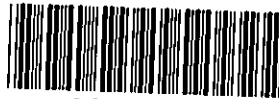


4 December 2006



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



06019427

SUPL

**Re: Bionomics Limited - File number 82-34682**

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

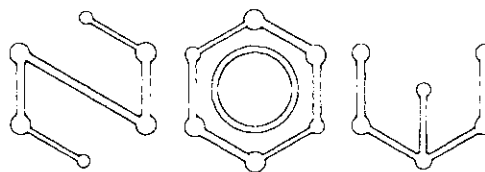
Yours sincerely

Stephen Birrell  
CFO & Company Secretary

PROCESSED

DEC 22 2006  
THOMSON  
FINANCIAL

# BIONOMICS



## Bionomics CEO Report

Dear shareholders,  
The first quarter of financial year 2006-07 has come and gone, providing a timely opportunity to report on a number of 'good news' developments for the company.

We successfully raised \$5 million in September this year and it is pleasing to report that we are meeting milestones in a number of our drug discovery programs including cancer, anxiety and Multiple Sclerosis.

We are continuing to direct considerable effort toward arrangements for our lead anti-cancer drug, BNC105, to enter clinical trials.

Importantly, we have achieved the critical step of setting in place manufacturing agreements with SAFC Pharma, a custom manufacturing arm of Sigma-Aldrich Corporation (NASDAQ:SIAL), to provide the BNC105 needed for the completion of preclinical testing and for phase I clinical trials.

As reported at the AGM, new preclinical results have added to the body of evidence that BNC105 has novel anti-tumour activity. The most recent data showed that our lead, which acts by shutting down the blood flow to solid tumours, increased the anti-vascular effect of Genentech's anti-cancer blockbuster Avastin®, a therapeutic antibody with sales of more than US\$2 billion\* since 2004.

Our other programs are also progressing, with the identification of frontrunners as potential treatments for anxiety and Multiple Sclerosis programs and the filing of three new patent applications.

Further recognition of the company's growth and future potential was achieved when Bionomics was ranked in the top 10 in the 2006 Deloitte Tech Fast 50 program this month.

We would like to thank our shareholders for their ongoing support in the last quarter and look forward to a busy and productive period ahead. ●

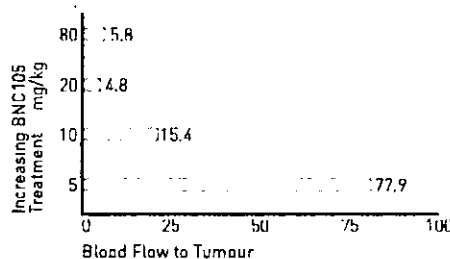
\*As reported by Genentech, www.gen.com

BNC105 is a new type of drug called a Vascular Disruption Agent (VDA) that acts by rapidly shutting down the blood supply to a tumour, thereby starving the tumour of the oxygen and nutrients it needs to survive.

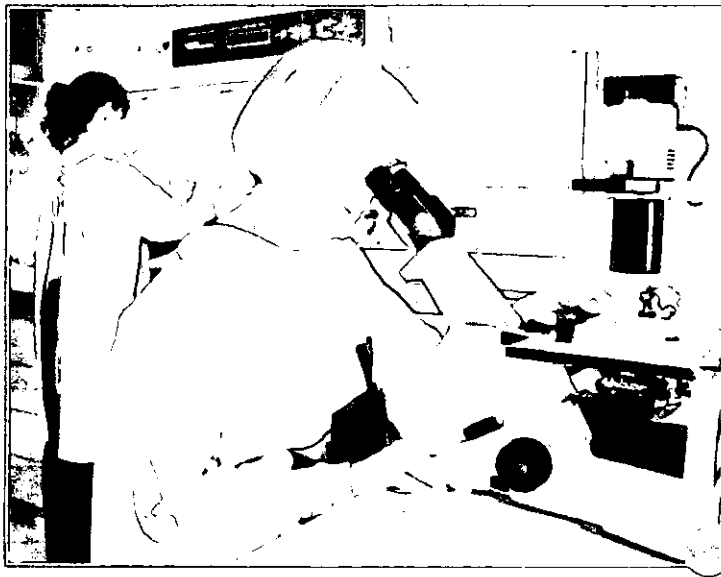
## Results with BNC105 strengthen evidence for anti-cancer activity

Dr Gabriel Kremmidiotis, our Vice President of Cancer Research, first presented data that BNC105 caused tumours to shrink in an animal model of breast cancer in October 2006, at an international conference in the UK.

As the delegates heard, BNC105 is the most potent of its class of vascular disruption agents or VDAs, is very selective for the small blood vessels (capillaries) supplying tumours and is also active against a model of human colon cancer.



"The results of these studies have been very encouraging", said Dr Kremmidiotis. He explained that increased doses of BNC105 treatment almost completely shut down the blood flow in the tumours and would cause them to starve to death (Data depicted in Figure 1\*). ●



Continued from front page Another important finding in 2006 was that the beneficial effect of BNC105 was sustained after treatment ceased. Since then, his team has generated a continuous stream of positive new results for BNC105.

Associate Professor Danny Rischin\*, a medical oncologist at Melbourne's Peter MacCallum Cancer Center, joined Bionomics last April as a clinical advisor to help us take BNC105 into clinical testing. He is well placed to assist in designing current and future clinical trials, having had extensive experience in early clinical trials with novel cancer therapeutics including VDAs.



BNC105 is in good hands, with

Dr Rischin being regarded as one of the opinion leaders in the VDA area.

Dr Rischin is Head of the Lung and of the Head and Neck Medical Oncology Service at the Peter MacCallum Cancer Centre, Australia's leading specialty cancer hospital and research centre. He is also an Associate Professor in the Department of Medicine at Melbourne University. He is the author of more than one hundred peer-reviewed publications. ○

## Contract manufacture of BNC105 sealed

In a very positive development announced in late October, Bionomics engaged SAFC Pharma, one of four operational units of the custom-manufacturing group of Sigma-Aldrich of St Louis, USA (NASDAQ: SIAL) to make 1.5 kg of BNC105 to the specifications required for human trials. SAFC Pharma is one of the 10 largest fine chemical businesses in the world and has a well-established track record in the GMP manufacture of drug candidates for use in FDA-approved clinical trials.

The fact that BNC105 was discovered using Bionomics' MultiCore® synthesis technology makes it easy to synthesize and thus is likely to lead to successful scale-up and GMP manufacture, which is often not the case for other new drug candidates. ○

Meet Bionomics at  
**AusBiotech 2006**  
**National Biotechnology Conference**

19-22 November 2006  
Sydney, Australia

**Australian Health and Medical Research Conference**  
26 November -  
1 December 2006  
Melbourne, Australia

**50th Anniversary Auckland Cancer Research Centre Conference**  
19-21 November 2006  
Auckland, NZ

**Drug Design in the Vines**  
3-7 December 2006,  
Hunter Valley, Australia

**JP Morgan Healthcare Conference**  
8-11 January 2007,  
San Francisco, USA

**The American Association for Cancer Research [AACR] Annual Meeting**  
14-18 April 2007,  
Los Angeles, USA

**Bio2007**  
6-9 May 2007,  
Boston, USA

**American Society of Clinical Oncology [ASCO] Annual Meeting**  
1-5 June 2007,  
Chicago, USA

**European Cancer Conference**  
23-27 September 2007,  
Barcelona, Spain

## Anxiety Application Reaches New Milestone

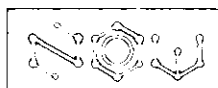
Our quest in the anxiety program is to find a drug that treats anxiety without the unwanted side effect of causing sedation (a disadvantage of Valium) and which can be taken by mouth as a tablet or capsule.

Under the leadership of Dr Sue O'Connor\* we have reached our first milestone and identified a frontrunner called BNC210 that appears to fit these criteria at this early stage of development. We have a series of lead compounds and the most advanced anxiety compounds have been shown to reduce anxiety levels in rodent models without increasing sedative side effects.

"BNC210 has demonstrated very promising effects in preclinical anxiety models so far," said Dr O'Connor. "Further studies will confirm whether BNC210 is the best candidate for Bionomics to develop for clinical trials," she added.

Anxiety affects about 19 million patients in US alone and so-called anxiolytic drugs (eg Valium and Prozac), have both been blockbusters in a worldwide market estimated at US\$5-12 billion. ○

**Factors Affecting Future Performance** This publication contains "forward-looking" statements within the meaning of the United States Private Securities Litigation Reform Act of 1995. Any statements contained in this publication that relate to prospective events or developments, including, without limitation, statements made regarding Bionomics' development candidate BNC105, its drug discovery programs and pending patent applications 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. Results of studies performed on competitors products may vary from those reported when tested in different settings. Subject to the requirements of any applicable legislation or the listing rules of any stock exchange or which a disclosure is required, we disclaim any intention or obligation to update any forward-looking statements as a result of developments occurring after the date of this publication.



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