Bionomics

BIONOMICS NOW

CEO Report

Dear Shareholders

You will be aware that Bionomics' largest shareholder, Start-up Australia Ventures, has lodged an invitation for its 27.76% stake in the Company. The tender process is scheduled to close on March 31, 2011 unless varied by Start-up at its discretion. As a successful tenderer would be required to make a takeover bid for all the shares in Bionomics, your Board has appointed NYSE listed corporate advisers, Greenhill Caliburn, who are highly experienced in this area, with a view to optimising outcomes for all Bionomics shareholders.

I hasten to assure you that management remains focused on maintaining momentum for both of our lead programs by reaching important clinical objectives in coming months. I am committed to our strategy which is centred on building value in our very exciting drug candidates.

As reported at Bionomics' Annual General Meeting in October, our lead assets, anti cancer agent BNC105 and anxiety and depression drug BNC210 are both proceeding steadily through human trials here in Australia as well as in the US and Europe. **Our concurrent programs cement Bionomics' status as a clinical development company to be reckoned with.**

In 2010 BNC105 emerged arguably as the leading vascular disrupting agent (VDA) in development in the world, based on its clear competitive advantages. Interim data for BNC105 from the Phase II renal cancer and mesothelioma trials are eagerly anticipated in coming months and I look forward to sharing these results with you in forthcoming issues of Bionomics Now. **Meanwhile the recent European approval to start concurrent Phase Ib trials of BNC210 conducted in France by Forenap Pharma has put the spotlight on BNC210.**

Bioshares Coverage of Bionomics' AGM

On 29 October, Bioshares (number 383) featured extensive coverage of Bionomics' AGM saying that "**confidence was riding high"** and that the company is "**approaching a transformational year in 2011**".

This article can be found in the investor section of Bionomics' website. If you would like a copy of the article please contact Bionomics via **email to investorrelations@bionomics.com.au** or by **calling 08 8354 6101 and we will be delighted to mail a copy to you.**

Rapid BNC210 clinical trial progress

The BNC210 clinical program has progressed rapidly and productively in a very short space of time. To briefly recap, two Phase Ia trials of BNC210 were completed in the first half of 2010 by the Pain and Anaesthesia Research Centre (PARC) at the Royal Adelaide Hospital under the guidance of Professor Paul Rolan.

The first trial showed that BNC210 was safe and well tolerated with no clinically significant side-effects. Blood levels of the drug, sufficient to achieve efficacy when compared with animal trials, were reached suggesting that a once-a-day dose is feasible.

A second trial built on this data by showing that BNC210 taken after food achieved up to four times higher levels in the blood than when taken on an empty stomach. This means that less drug is likely to be required to achieve efficacy, widening the therapeutic window and further reducing the risk of side-effects.

Even at the highest doses tested, there were no clinically significant side-effects and this is in marked contrast to currently marketed drugs whose efficacy is counter balanced by adverse effects that include sedation, memory impairment and loss of motor co-ordination.

CONT. RAPID BNC210 CLINICAL TRIAL PROGRESS

This clinical trial data was presented at the European Congress of Neuropsychopharmacology (ECNP) in September. Bionomics' scientists also presented data at ECNP that BNC210 effectively overcomes heightened anxiety in a rodent model of chemically-induced panic. This followed the demonstration early in the year of the antidepressant activity of BNC210 and has further positive implications because panic is an important segment of the anxiety market.

Our European Phase Ib trials were designed to provide valuable data which will further differentiate BNC210 from currently marketed drugs used to treat anxiety which have numerous side effects. Both trials also further evaluate biomarkers of BNC210 activity including the levels of stress hormones which are altered in response to anxiety. The results of both trials are anticipated to be available in the first quarter of 2011.

One trial is evaluating the effect of BNC210 on chemically-induced panic in otherwise healthy volunteers. A peptide called CCK-4 is used to induce anxiety and a brief panic attack. Xanax, a benzodiazepine like Valium, was the first drug approved to treat panic attacks around 30 years ago and remains the most frequently prescribed psychiatric drug in the US, with one prescription issued every second in 2009.

The second trial compares the effects of BNC210 and Lorazepam on attention and memory. Lorazepam is a benzodiazepine or Valium-like drug which is known to impair memory and also cause sedation, neither of which side-effects have been observed with BNC210 to date. The trial also evaluates the effects of BNC210 on brain activity using EEG. From rodent studies we know that BNC210 elicits a different pattern of brain activity compared to Valium-type drugs. If this is also the case in humans it will provide additional confirmation of the differences in profile of BNC210 and benzodiazepines.

Data at premier Neuroscience conference extends BNC210 positioning

While waiting for the outcomes of the clinical program, further animal studies have been conducted to enhance our knowledge of the way BNC210 works in alleviating stress and panic. At Neuroscience last month, the latest preclinical data was presented in which heightened anxiety is simulated in rodents using different chemicals that relate to key pathways for anxiety and depression targeted by currently marketed drugs. The new data showed that BNC210 acts rapidly on the relevant molecular pathways unlike other drugs that require prolonged treatment for activity to develop. This indicates potential to treat forms of acute anxiety, including panic attacks.

BNC210 has major competitive advantages over current drugs including Prozac, Lexapro, Effexor and Zoloft, as well as popular anxiety drugs Xanax and Valium. Our studies indicate that it lacks sedative, memory impairing and addictive properties and is safe to take with other medications because it doesn't inhibit important metabolizing enzymes in the liver.

Collectively these data now enable Bionomics to strongly position BNC210 in our strategy to partner BNC210 for Phase II development and beyond with a large company. Our promising anxiolytic candidate has rapidly developed potential in just one year to be "**an improved treatment for acute and generalized anxiety disorders and for depression**". Not surprisingly, the markets for these extended indications are very significant being in excess of US$26 billion per annum world-wide.

2011 is anticipated to be a transformational year for Bionomics. As I have already indicated, significant clinical data will become available from both the BNC210 and BNC105 programs to enable the Company to execute the next stage of its growth strategy based on the licensing potential of multiple drug candidates generated by our proven and productive platforms.

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See Bionomics

10-13 January, 2011
JP Morgan Healthcare Conference,
San Francisco, US

10-12 February, 2011
Lorne Cancer Conference, February 10-12, 2011, Lorne, VIC

Bionomics in the News

BNC210 was recently highlighted in a Channel 9 News story. Video of this story is available for viewing on our home page at **www.bionomics.com.au**

Dr Deborah Rathjen
Chief Executive Officer