Bionomics

AN UPDATE FOR OUR SHAREHOLDERS

BIONOMICS NOW

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FEBRUARY 2013

CEO REPORT

DEAR SHAREHOLDERS

In the past six months your Company has advanced its international standing as a drug discovery and development company. Bionomics now has an operational presence on three continents and we are successfully implementing our partnering strategy for key compounds across a number of development programs.

In an important strategic move last September, Bionomics acquired San Diego-based cancer stem cell (CSC) therapeutics company Eclipse Therapeutics Inc in a deal which gives us leadership in the CSC area as well as a foothold in the US. The Eclipse acquisition has also resulted in the immediate addition of two promising preclinical programs to our cancer portfolio, the first of which, BNC101, (formerly ET101), is expected to enter human trials in 2014.

In addition:

- Our lead cancer program, BNC105 is tracking well in Phase II clinical trials in renal cell cancer and ovarian cancer that will underpin licensing negotiations for the program later this year.
- Our out-licensed anxiety drug candidate BNC210 (IW-2143) has commenced further clinical development in the hands of our development and commercialisation partner, Ironwood Pharmaceuticals.
- We have selected the drug candidate BNC375 for our major internal CNS development program which targets the improvement of memory in Alzheimer's Disease and other neurodegenerative disorders.

Changes have also occurred within the Company's Board and Management teams to meet the needs of the Company. Most significant is the introduction of new Chairman, Graeme Kauffman, who replaces Chris Fullerton at the helm after an eventful and progressive three years for Bionomics culminating in the two most significant transactions in the Company's history in 2012. Our highly experienced and skilled management has been duly strengthened with new in-house clinical expertise led by our Chief Medical Officer Dr José Iglesias and by the addition of the Eclipse team.

The year ahead will be focussed on progressing our partnering strategy, at the forefront of which is the BNC105 program though we are also concurrently pursuing licensing transactions for Kv1.3, which targets immune diseases such as multiple sclerosis and rheumatoid arthritis, and the Alpha 7 program drug candidate BNC375.

"I welcome the opportunity to take a leadership role within Bionomics. The last three years under Chris Fullerton's stewardship has seen a transformation in the Company, building a solid base for the next exciting growth phase of our development".

GRAEME KAUFMAN

MR GRAEME KAUFMAN BSC, MBA NON-EXECUTIVE CHAIRMAN

Mr Kaufman has wide ranging experience across the biotechnology sector, spanning scientific, commercial and financial areas. His experience with CSL Limited, Australia's largest biopharmaceutical company included responsibility for all of their manufacturing facilities, and the operation of an independent business division operating in the high technology medical device market. As CSL's General Manager Finance, Mr Kaufman had global responsibility for finance, strategy development, human resources and information technology. Mr Kaufman has also served as an Executive Director of ASX-listed Circadian Technologies and a Non-Executive Director of Amrad Corporation. He is currently Executive Vice President Corporate Finance with Mesoblast Limited, and a Non-Executive Director of Cellmid Limited.

BNC**105**

LATEST ON BNC105 CLINICAL TRIALS

BNC105 is arguably the most advanced Vascular Disrupting Agent in development for the treatment of solid cancers.

The BNC105 Phase I renal cancer trial results continue to mature and provide encouragement. Twelve patients, three at the top dose of 16mg/m2, were enrolled in the dose ranging (8 – 16 mg/m2) Phase I component of the trial. Patients receive repeated treatment cycles of BNC105 in combination with Novartis drug Afinitor and are withdrawn from the trial if their tumour progresses.

At last report to Bionomics, 8 of the 12 patients have achieved stable disease that is, their tumours stopped growing.

One patient remains on the trial and over a period of 18 months has received 24 cycles of treatment so far. The median Progression-Free Survival for renal cancer patients treated with Afinitor alone as a second line therapy, reported by Novartis is 4.9 months. Through the combination with BNC105 Bionomics is aiming to improve the efficacy of Afinitor.

As patient enrolment in the renal and ovarian trials is completed, Bionomics will be presenting further supporting data at international conferences, including ASCO-GU and ASCO, ahead of the anticipated release of renal cancer trial results later this year. This will add substantially to the data package that we anticipate will enable us to secure a suitable license for this lead drug candidate in our oncology portfolio.

BNC**375**

INTRODUCING BNC375 – A TREATMENT FOR MEMORY LOSS IN ALZHEIMER'S DISEASE

Bionomics is now amongst the leaders of new therapeutic approaches in the treatment of Alzheimer's disease.

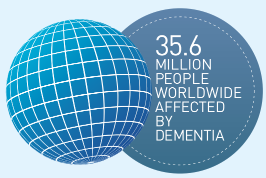
Our latest drug candidate BNC375 is a positive allosteric modulator of the α7 nicotinic acetylcholine receptor and has the potential to treat memory loss in Alzheimer's disease and other neurodegenerative conditions such as Parkinson's disease, Schizophrenia and ADHD by improving memory and potentially reducing brain tissue inflammation. It has been found to be effective across a panel of animal models of impaired learning and memory. To date it has shown no signs of side-effects. We believe that BNC375 is a well differentiated drug candidate compared with competing agents in development as this table of points of difference for BNC375 illustrates.

BNC375 COMPETITIVE ADVANTAGES*

CHARACTERISTIC	BIONOMICS' BNC375	COMPETING AGENTS
Potent	✓	✓
Enhances action of endogenous ligand	✓	✗
Does not cause receptor desensitization	✓	✗
No potential for development of tolerance	✓	✗
Selectivity over other nicotinic receptors	✓	✓

* Based on preclinical studies.

This year Bionomics will commence GMP manufacturing and formal toxicology studies with the objective of filing an Investigational New Drug (IND) application with the US Food and Drug Administration (FDA), as it further enhances the licensing package around BNC375.



The estimated worldwide costs of dementia, including direct and indirect costs of care, was $604 billion with an estimated 35.6 million people worldwide affected by dementia in 2010. This is expected to double every 20 years reaching 65.7 million in 2030 and 115.4 million in 2050. In the US alone an estimated 5.3 million people have Alzheimer's disease including 14% of people over 71 years of age.

Source: Business Insights, May 2011, Advances in Alzheimer's Disease Drug Discovery: Innovations, challenges, and future directions.

CANCER STEM CELL THERAPEUTICS

BNC101

Cancer stem cell (CSC) therapies are widely regarded as the next significant advance in cancer treatment and the Eclipse acquisition has given us a springboard to the forefront of this exciting field. Bionomics is already gaining repute for innovation in cancer treatment with BNC105, arguably the leading vascular disrupting agent (VDA) in development in the world. The addition of a second leading-edge approach considerably strengthens our oncology capability and status on the world stage.

The Eclipse platform fits admirably with Bionomics' existing portfolio and offers strong new synergies.

First, we now have a fourth platform technology, CSC Rx Discovery™, to complement Bionomics' proprietary Multicore®, Angene® and IonX® platforms. CSC Rx Discovery™ fills the gap by identifying antibody and small molecule therapeutics that inhibit the growth of cancer stem cells, so we now have a comprehensive drug discovery engine.

Second, Bionomics' oncology pipeline is boosted by two preclinical programs that are well down the track towards human trials. CSC targeting antibody BNC101 (formerly ET101) is expected to enter the clinic in 2014. This timing fits very well with current clinical scheduling of BNC105 which is currently in Phase II human trials for the treatment of renal and ovarian cancers.

Dual action BNC105 acts by shutting down the blood supply of existing tumours and killing the tumour cells. BNC101 directly targets cancer stem cells, from which tumours and metastases originate. So while both compounds target solid tumours they do so in very different ways thereby potentially preventing the growth and spread of cancer.

At this time we believe that colon, breast and pancreatic cancers could be targeted by BNC101.

US TRIALS FOR IW-2143

IW-2143
BNC210

We're delighted with the progress made since licensing our anxiety program to Ironwood Pharmaceuticals in January 2012. Ironwood is now conducting a Phase I trial for IW-2143 (BNC210) in the USA following the filing of an Investigational New Drug (IND) application with the U.S. Food and Drug Administration (FDA). As this trial progresses it is anticipated that a US$2 million milestone payment to Bionomics by Ironwood will be triggered.

When we chose Ironwood we were looking for a Company that we felt had the depth of skills and expertise to take IW-2143 through development and to market. The strength of Ironwood as our partner of choice has been illustrated throughout 2012 including when Ironwood achieved US FDA approval for its lead product LINZESS™ (Linaclotide) last August. The drug, to treat irritable bowel syndrome with constipation (IBS-C) and chronic idiopathic constipation (CIC) in adults, became available in pharmacies in the US in December, with reported net sales in Q4 of US $19.2 million. Linaclotide is also now approved in Europe with the brand name Constella®. In January 2013, Ironwood raised US$175 million through a debt offering further underlining its capacity to progress IW-2143.

R&D TAX INCENTIVE CASH REFUND OF $4.2 MILLION ANTICIPATED – REIMBURSEMENT FOR FY12 R&D INVESTMENT

Bionomics has lodged its FY2012 tax return and anticipates that it will shortly receive an R&D tax incentive cash refund from the Australian government of $4.2 million for R&D expenses incurred in FY2012. We anticipate that with the lodgement of the Company's FY2013 tax return later this year, Bionomics will be eligible for an additional, similar refund based on our projected investment in R&D in the current financial year.

Bionomics has made successful submissions for advance findings for overseas expenditure to be eligible for the R&D tax incentive. So far $8.9 million in overseas expenditure over the three year period from 1 July 2011, in relation to investment in BNC105 cancer drug clinical trials being conducted in Australia, USA, Singapore and New Zealand and to R&D activities associated with its Alzheimer's disease drug candidate BNC375 has been found eligible for refund.

Bionomics will be making further submissions in coming weeks covering overseas investments in R&D across the company's entire portfolio of drug candidates including BNC101.

This important funding allows Bionomics to continue to make appropriate investments in its R&D programs ensuring that they remain globally competitive.

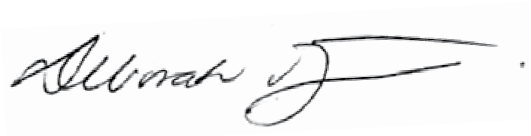
DR JOSÉ IGLESIAS MD
CHIEF MEDICAL OFFICER

Dr Iglesias, who commenced employment on 1 November 2012, is a seasoned medical professional with 22 years global experience in the biopharmaceutical industry. He has spent the past six years at Celgene Corporation and its wholly owned subsidiary Abraxis Bioscience as VP of Clinical Development for Celgene with previous roles including CMO and VP of Global Clinical Development and Medical Affairs at Abraxis. Previously, Dr Iglesias worked in several positions at US pharmaceutical giant Eli Lilly over 10 years, including his appointment as Oncology Medical Advisor for the Australia and the Asia Pacific region between 2002 and 2004. A graduate from the Montevideo School of Medicine, Dr Iglesias has been published more than 50 times and is an active member of ASCO, AACR and ESMO.

OUTLOOK FOR 2013

Bionomics is well positioned to drive forward its concurrent programs. Working capital in 2013 will be largely focussed on building value through BNC105 and by progressing the BNC101 and BNC375 drug candidates through IND enabling studies and GMP manufacture in preparation for human trials.

Cash of $17.3 million as at 30 June 2012 is being supplemented by R&D tax offset rebates and more particularly by building licensing revenues. This will become more evident as the year unfolds. For example there is considerable commercial interest in Kv1.3 as a target for the global immunomodulators market which was estimated at US$46.8 billion in 2010. Bionomics will take advantage of this interest in executing a broader partnership strategy for the program in the near term, to be followed by the anticipated out-licence of the BNC105 cancer program.



Dr Deborah Rathjen
Chief Executive Officer

View the Pharma TV interview with Deborah on the Bionomics website under the Latest News section.

IN THE NEWS

Pharma TV interview from AusBiotech 2013 Conference highlighting strategic partnering and diverse pipeline in CNS and Oncology.

Bionomics listed in Baker Young Top Picks for 2013. Adelaide Advertiser, Business News Section, Tuesday, 1 January 2013.

SEE BIONOMICS

ASCO GU
14–16 February 2013
Orlando, USA

ANZ GYNAECOLOGICAL ONCOLOGY GROUP ANNUAL MEETING
20–23 March 2013
Gold Coast, Australia

AACR ANNUAL MEETING
6–10 April 2013
Washington, USA

ASCO
31 May – 4 June 2013
Chicago, USA

E-NEWSLETTER

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