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ASX ANNOUNCEMENT
1 June 2012

BNC105 TRIAL DATA PRESENTED AT AMERICAN SOCIETY FOR CLINICAL ONCOLOGY (ASCO)

- **Renal cancer trial pairs BNC105 with Novartis' Afinitor, Phase I data supports the compatibility of both compounds at full dosage levels:**
 - **Combination safe and well tolerated**
 - **12 patients enrolled with 5 patients having completed over 10 cycles of treatment**
 - **2 patients remain on treatment**
 - **Phase II trial ongoing**
- **BNC105 has the potential to represent an entirely new treatment paradigm for patients with renal cancer**
- **Mesothelioma Phase II trial results updated:**
 - **30 patients enrolled**
 - **1 patient showed an objective response with corresponding reduction in mesothelin levels**
 - **13 patients showed stable disease**
 - **Plasma biomarkers showed significant changes consistent with vascular activity**

Bionomics Limited (ASX: BNO) (ADR: BMICY) will present clinical trial data from its ongoing US trial of BNC105 in patients with metastatic renal cancer and the completed Australian trial in patients with mesothelioma at the annual American Society for Clinical Oncology (ASCO) meeting in Chicago, Illinois. BNC105 is a novel, proprietary compound being developed by Bionomics as a Vascular Disruption Agent (VDA) for treatment of solid tumours.

Renal Cancer Trial

Bionomics is conducting a US multi-centre Phase II clinical trial of BNC105 in combination with everolimus (Afinitor) in patients with progressive metastatic Renal Cell Carcinoma (RCC). Afinitor is an mTOR inhibitor, which is used as a treatment after patients have failed therapy with Tyrosine Kinase Inhibitors (TKI), such as Sutent. Afinitor, which was approved by the FDA for the treatment of renal cancer in 2009 and is marketed by global Pharma company Novartis, had sales of US\$850 million in 2011.

This poster presentation, to be given by the Principal Investigator, Dr Thomas E. Hutson of the Texas Oncology-Baylor Charles A. Sammons Cancer Center, provides an update with further data from the Phase I component of the trial. The Phase II component of the study is currently underway and more than 30 US-based clinical trial sites have been activated to date.

The primary objective of the Phase I component of the clinical trial was to examine the safety and tolerability BNC105 in combination with Afinitor. Twelve patients were enrolled to the Phase I component. Five patients completed over 10 cycles of treatment and currently two patients remain on treatment.

The results indicate that the recommended dose of Afinitor is well tolerated when combined with the previously identified Phase II dose level of BNC105 of 16 mg/m², supporting the use of both Afinitor and BNC105 at their full dose levels.

Plasma pharmacokinetic analysis of drug levels indicated no interaction between BNC105 and Afinitor, confirming the compatibility of the drug combination.

Mesothelioma Trial

This single arm Phase II trial conducted by the Australasian Lung Cancer Clinical Trials Group and the NH&MRC Clinical Trials Centre, enrolled patients progressing after first line chemotherapy with pemetrexed (Alimta) and cisplatin. Thirty patients were enrolled into the trial with one patient showing an objective response. Thirteen patients were classified as having stable disease according to RECIST for mesothelioma. BNC105, at a dose of 16mg/m² was well tolerated, a finding consistent with clinical experience to date.

The poster describes for the first time the measurement of a number of candidate plasma biomarkers. Statistically significant changes were observed in candidate biomarkers which are consistent with the vascular activity of BNC105. These include changes in MIP-1beta (p=0.0023), IL-8 (p=0.0007), IL-10 (p=0.0018), TNFR2 (p=0.0001) and IL-16 (p=0.0037). In addition mesothelin levels, a potential marker for mesothelioma, in the patient showing an objective response achieved a decrease to less than 75% of baseline after one treatment cycle. Two additional patients with stable disease similarly achieved decrease in mesothelin to less than 75% of baseline.

The objective tumour response, safety profile and tolerability of BNC105 warrant further research into its integration with established chemotherapy regimens.

Key poster information:

Session Title:	Genitourinary Cancer
Session Type:	General Poster Session
Date:	Sunday 3 June 2012
Time:	8:00am – 12:00pm
Location:	S Hall A2
Presentation Title:	Phase I results of a phase I/II trial of BNC105P with everolimus in metastatic renal cell carcinoma (mRCC) patients previously treated with VEGFR tyrosine kinase inhibitors.
Poster Board No:	5B
Primary:	Genitourinary Cancer

Session Title: Lung Cancer - Non-small Cell Local-regional/Small Cell/Other Thoracic Cancers
Session Type: General Poster Session
Date: Saturday 2 June 2012
Time: 1:15pm – 5:15pm
Location: S Hall A2
Presentation Title: Phase II trial of BNC105P as second-line chemotherapy for advanced malignant pleural mesothelioma (MPM): Australasian Lung Cancer Trials Group and NHMRC Clinical Trials Centre Collaboration.
Poster Board No: 39F
Primary: Lung Cancer

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About Bionomics Limited

Bionomics (ASX: BNO) is a leading international biotechnology company which 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.

BNC105, which is undergoing clinical development for the treatment of cancer, is based upon the identification of a novel compound that potently and selectively restricts blood flow within tumours. BNC105 offers blockbuster potential if successfully developed. A clinical program is also underway for the treatment of anxiety disorders and depression based on BNC210, a novel compound which stimulates neurite outgrowth. BNC210 is partnered with Ironwood Pharmaceuticals. Bionomics has a partnered program with Merck Serono for new treatments for multiple sclerosis.

Bionomics' discovery and development activities are driven by its three technology platforms: Angene®, a drug discovery platform which incorporates a variety of genomics tools to identify and validate novel angiogenesis targets (involved in the formation of new blood vessels). 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. These platforms underpin Bionomics' established business strategy and Bionomics is committed to securing partners for its key compounds.

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

Factors Affecting Future Performance

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