

ASX ANNOUNCEMENT 26 March 2010

BNC105 Phase II Mesothelioma Clinical Trial Starts

- 60 patients at 12 centres in Australia conducted by Australasian Lung Cancer Trials Group and NHMRC Clinical Trials Centre.
- Second Phase II clinical trial for BNC105 initiated this quarter
- Follows successful Phase I clinical trial of promising vascular disrupting agent

26 March 2010, Adelaide (Australia): Bionomics Limited (ASX: BNO) will initiate the second Phase II clinical trial of vascular disrupting agent BNC105, this time in patients with advanced mesothelioma, a deadly asbestos related cancer.

The second Phase II clinical trial of BNC105 to be initiated this quarter, Bionomics has already commenced Phase II testing of the anti-cancer properties of BNC105 in renal cancer in the United States. The commencement of these two Phase II trials follows a successful BNC105 Phase I clinical trial in patients with advanced cancers at the Peter MacCallum Cancer Centre, the Western Hospital, Austin Health and the Royal Melbourne Hospital.

Bionomics announced in December 2009 the collaboration with the Australasian Lung Cancer Trials Group (ALTG) and the NHMRC Clinical Trials Centre (CTC) to conduct the clinical trial in mesothelioma. Dr Anna Nowak, Professor at the Faculty of Medicine, University of Western Australia and consultant medical oncologist at Sir Charles Gairdner Hospital is the trial's Principal Investigator.

Mesothelioma is a form of cancer that is usually caused by exposure to asbestos. Malignant cells typically develop in the protective lining that covers most of the body's internal organs. Research shows that the most common site is the outer lining of the lungs and internal chest wall.

Most people who develop mesothelioma previously held jobs where they were exposed to asbestos dust fibres. An increasing number of patients with mesothelioma were exposed to asbestos in the building industry or through home renovations.

Despite treatment, mainly with chemotherapy, the disease usually carries a poor prognosis.

Dr Anna Nowak commented "Mesothelioma remains a substantial problem in Australia and other parts of the world. An early clinical trial of BNC105 suggested some promise in mesothelioma. This Phase II trial will provide hope and an opportunity to participate in a research study for people with mesothelioma who do not have other options for treatment".

"The Australian Lung Cancer Trials Group is very happy to have partnered with Bionomics to carry out a clinical trial of this interesting novel therapy in centres around Australia. The investigators are particularly pleased to be working with an Australian company, and that the study has been developed, approved and opened for patients within a very short timeframe." Dr Nowak added.

"I am delighted to report the rapid approval and initiation of this clinical trial. We are expecting to report interim results of this study in mesothelioma patients early in 2011," said Dr Deborah Rathjen, CEO & Managing Director of Bionomics.

"Mesothelioma has virtually no effective treatment after first line chemotherapy and patients typically have a life expectancy of less than 1 year. The long latency, or time for the disease to develop, means that we are yet to see the peak incidence of mesothelioma over the next decade." Dr Rathjen added.

In 2005, there were 597 new cases of mesothelioma diagnosed in Australia and in 2006 there were 486 deaths attributed to mesothelioma. It usually is a fatal cancer, typically manifesting in patients 20 to 40 years after exposure to asbestos.

Background to Phase II mesothelioma trial:

The title of Bionomics' planned clinical trial is: *Phase II trial of BNC105P as 2nd line chemotherapy for advanced malignant pleural mesothelioma*.

It is a single arm, unblinded study for patients with mesothelioma who have progressed on platinum/pemetrexed chemotherapy. BNC105 will be administered on days 1 and 8 of 21 day cycles. Treatment will continue until disease progression.

The primary objective is to determine the tumour response rate. Secondary endpoints include progression free survival, quality of life, overall survival and treatment duration.

Further details of the clinical trial are contained in the Clinical Appendix following this announcement.

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Clinical Appendix

Name of Trial	Phase II trial of BNC105P as 2 nd line chemotherapy for advanced malignant pleural mesothelioma
Primary Endpoints	Response rate as measured by modified RECIST criteria
Secondary Endpoints	 progression free survival treatment duration adverse events health-related quality of life changes in lung function overall survival
Blinding Status	Unblinded, single arm
Product Development Status	Phase II
Treatment Method (route/frequency/dose levels)	10 minute IV infusion, administered on days 1 & 8 of a 21 day repeating cycle; single dose level
Number of Trial Subjects	60
Subject Selection Criteria	For patients who have progressed on platinum/pemetrexed chemotherapy (ie 2 nd line chemotherapy in advanced malignant pleural mesothelioma)
Trial Location(s)	Australian-based. Up to 12 Australasian Lung Cancer Trial Group (ALTG) sites.
Expected Completion	2 year accrual period; follow-up period of 1 year after last patient is recruited
Trial Standard	ICH-GCP

About Bionomics Limited

Bionomics (ASX: BNO) is a leading Australian drug discovery and development company. Bionomics 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, BNC105 for the treatment of cancer, is based upon the identification of a novel compound that potently and selectively restricts blood flow within 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

About the Australasian Lung Cancer Trials Group (ALTG)

The ALTG is a multi-disciplinary organisation dedicated to reducing the incidence, morbidity and mortality of lung and thoracic cancer and improving the quality of life of lung and thoracic cancer patients in Australia and New Zealand through the coordination and facilitation of high quality clinical research.

About the NHMRC Clinical Trials Centre (CTC)

CTC, a clinical research organisation, runs large multicentre investigator-initiated clinical trials, takes part in trials of national and international collaborative trial groups and contributes expertise to trials run by others. The CTC was established in 1988 as a research unit of the National Health and Medical Research Council (NHMRC). It is affiliated with the Faculty of Medicine, University of Sydney.

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 technologie 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.