

# ASX/Media Announcement

# Benitec MOU with Biomics Biotechnologies Co., Ltd China

# Hepatitis B Collaboration

14 July 2009, Melbourne, Australia: Benitec Limited (ASX: BLT) has signed a Memorandum of Understanding with China based Biomics Biotechnologies Co. Ltd. The companies will collaborate on a DNA directed or vector expressed RNAi for the treatment of chronic hepatitis B virus (HBV) infection.

"We are delighted that the scientific teams at Benitec Ltd and Biomics will be working together on this Hepatitis B initiative. Biomics was founded by Dr. York Zhu and, since its foundation in 2006, Biomics has grown to be a leading Asian RNAi therapeutics company with combined technology platforms of full-sites siRNA library, drug targets screening and identification, siRNA structure modification and drug delivery systems" said Sue MacLeman, Chief Executive Officer, Benitec Limited.

"Chronic hepatitis B virus (HBV) infection is one of the leading causes of liver cirrhosis and hepatocellular carcinoma (HCC). Current treatment strategies of HBV infection including the use of interferon (IFN)- $\alpha$  and nucleotide analogues such as lamivudine and adefovir have met with only partial success. Therefore, it is necessary to develop more effective antiviral therapies that can clear HBV infection with fewer side effects. DNA directed RNA interference (ddRNAi or vector expressed RNAi) has the potential of treating HBV infection" she added.

The first step in this collaboration will be for the scientific teams to develop a project plan for target identification and validation. Once this target is validated it will undergo preclinical testing before moving to early stage clinical trials. The companies will jointly share in intellectual property developed during this project and will also jointly collaborate in product development and commercialisation.

"We are pleased to be working with Benitec Ltd on this important global health problem. Hepatitis B is one of the major diseases of mankind and is a serious global public health problem. It is estimated that about one-third of the global population - around 2 billion people - have been infected with the hepatitis B virus at some stage in their lifetime. Of these, about 360 million people remain chronically infected carriers of the disease - most of them unaware they are infected but capable of spreading the disease to others" said Dr York Zhu, Chief Executive Officer, Biomics Biotechnologies Co. Ltd.

## CONTACT:

#### **BENITEC LTD**

Sue MacLeman Chief Executive Officer +61 437 211 200

#### About Benitec

Benitec is an Australian biotechnology company focused on licensing its extensive intellectual property portfolio and developing therapeutics to treat serious diseases using its proprietary ddRNAi (vector expressed) technology. For additional information, please visit <u>www.benitec.com</u>.

#### About Biomics Biotech

Biomics Biotechnologies Co. Ltd. is a biopharmaceutical company focusing on R&D of RNAi therapeutic technology based in Nantong, China. Biomics Biotech owns an integrated proprietary technical platform of SiRNA screening, chemical modification and target tissue delivery. A few siRNA therapeutics, such as for Age-related Macular Degeneration (AMD) and Hepatoma, are in the process of pre-clinical study. For more detail, please visit <u>http://www.biomics.cn/en/index.html</u>

### Gene silencing

Gene silencing is about controlling the flow of genetic information. Our genome operates by sending instructions for the manufacture of proteins from DNA in the nucleus of the cell to the protein synthesizing machinery. These instructions are conveyed by messenger RNA (mRNA). In 1998 it was discovered that a certain mechanism can degrade mRNA from a specific gene. This mechanism is RNA interference. It is activated when RNA molecules occur as double-stranded pairs in the cell. Double-stranded RNA activates biochemical machinery which degrades those mRNA molecules that carry a genetic code identical to that of the doublestranded RNA. When such mRNA molecules disappear, the corresponding gene is silenced.

RNA interference is of great importance for the regulation of gene expression and can be used against viral infections. RNA interference is already being widely used in basic science as a method to study the function of genes and Benitec believes it will lead to novel therapies.