

## ASX ANNOUNCEMENT

### **Benitec's China partner, Biomics Biotechnologies, named "Asia Pacific Emerging Company of the Year 2013"**

**Sydney Australia, 20 March 2013:** Benitec Biopharma's collaboration partner, China based Biomics Biotechnology, has been named BioSpectrum's Asia Pacific Emerging Company of the Year 2013. With a portfolio of more than 40 patents, Biomics is, according to BioSpectrum, on the road to becoming one of Asia's leading RNA interference (RNAi) therapeutic technology companies.

Benitec and Biomics have been collaborating on the development of a Hepatitis B therapeutic based on Benitec's DNA Directed RNA Interference (ddRNAi) technology. The companies have filed patents on more than 20 effective RNAi sequences that can silence the HBV polymerase gene, and are currently reaching the final design of a triple cassette DNA construct that is expected to reach *in vivo* proof of concept testing later this year.

Benitec's CEO, Dr Peter French commented: "This award recognises the excellent work that Biomics, under the leadership of Dr York Zhu, has accomplished in the RNAi space over the past two years. I have found Biomics to be a professional and technically excellent and resourceful partner throughout our dealings with them to date. We are particularly excited about the advancements that Biomics and we have achieved in developing a ddRNAi-based novel therapeutic for Hepatitis B. Hepatitis B represents a significant unmet clinical need, with 350 million people chronically infected with the virus worldwide. We expect the program will be able to gain significant regulatory and clinical leverage from the development of Benitec's Hepatitis C therapeutic, TT-034, which essentially utilises the same design and delivery vehicle."

Biomics' Founder and CEO Dr York Zhu said, "I have always wished to turn the RNAi mechanism into real therapeutics to cure many incurable diseases. Biomics has recognized collaborations with partners such as Benitec Biopharma as one of the fastest ways to achieve this and we continue to be excited by the development of important treatments for diseases such as Hepatitis B."

***For more information please contact:***

**Dr Peter French | Chief Executive Officer**

Phone: +61 (02) 9555 6986 | [pfrench@benitec.com](mailto:pfrench@benitec.com) | [www.benitec.com](http://www.benitec.com)

***About Hepatitis B:***

Hepatitis B virus (HBV) is a major health issue worldwide, particularly in Asia. About a quarter of the world's population, more than 2 billion people have been infected with HBV. This includes 350 million chronic carriers of the virus. There are currently no satisfactory treatments for the disease. Benitec Biopharma in partnership with Biomics Biotechnologies (Nantong, China) is developing a therapy for HBV using DNA delivered RNAi (ddRNAi) technology to treat infected individuals. The design of the therapy is modelled on Benitec's HCV therapeutic, TT-034.



**About TT-034:** TT-034 is a ddRNAi-based construct targeting the hepatitis C virus (HCV). HCV is particularly amenable to this approach as replication of its RNA genome occurs entirely within the cytoplasm of infected hepatocytes (liver cells), the same location of the cell's endogenous RNAi machinery.

TT-034 uses a synthetic DNA expression template to simultaneously express three short hairpin RNAs (shRNAs) that cleave three non-overlapping and well-conserved sequences within the HCV genome, thereby rendering it incapable of further replication. The presence of multiple therapeutic shRNA species may also help prevent the generation of viral escape mutants. The three independent promoters that drive expression of the shRNA have been carefully designed to produce sufficient quantities of shRNA to ensure therapeutic activity, while eliminating toxicity. The expression cassette for TT-034 is delivered via an adenovirus-associated viral vector, known to highly target the liver and known for persistence for months or even years after a single administration of the drug. When administered at certain levels, a single dose of TT-034 was shown in *in vivo* studies to transduce nearly 100% of hepatocytes, the sole site of active HCV replication in humans, without any adverse effects and shRNA was persistent out to 180 days, the duration of the study.

**About Benitec Biopharma Limited:** Benitec Biopharma Limited is an ASX-listed biotechnology company (ASX Code: BLT) based in Sydney, Australia. The company has a pipeline of in-house and partnered therapeutic programs based on its patented gene-silencing technology, ddRNAi. Benitec is developing treatments for chronic and life-threatening human conditions such as Hepatitis C, Hepatitis B, wet age-related macular degeneration, cancer-associated pain, drug resistant lung cancer and oculopharyngeal muscular dystrophy based on this technology. In addition, Benitec has licensed ddRNAi technology to other biopharmaceutical companies who are progressing their programs towards the clinic for applications including HIV/AIDS, retinitis pigmentosa and Huntington's disease. For more information on Benitec refer to the Company's website at [www.benitec.com](http://www.benitec.com).