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ASX RELEASE

Benitec and Medistem Demonstrate Value of ddRNAi in Preventing Heart Transplantation Rejection

Sydney. July 30, 2012. Benitec Biopharma Ltd (ASX: BLT) and Medistem Inc. (MEDS) announced today that a paper demonstrating the potential of ddRNAi to significantly overcome transplant rejection had been published in July's edition of the peer reviewed clinical journal *American Journal of Transplantation*[1]. Benitec Biopharma's CEO Dr Peter French and Medistem's CEO Dr Thomas Ichim were co-authors on the paper.

"This is the first time that the innate immune system has been targeted for the purpose of transplantation tolerance...This is a completely different approach to what others are doing," Dr Ichim stated.

The significance of this study for Benitec is that adds to the independent validation of the broad potential of Benitec Biopharma's ddRNAi technology to provide novel solutions to diverse human health conditions as demonstrated by Medistem[1,2] and others.

In this work, in an animal transplantation model, transplant recipients were treated with ddRNAi-expressing vectors before a fully MHC-mismatched heart transplantation was conducted. Transplanted hearts only survived 5-8 days in untreated recipients. However, ddRNAi alone, or in combination with a low dose of rapamycin (an immunosuppressant drug used to prevent organ transplant rejection) significantly prolonged the transplanted heart survival by 36.7 and 88.8 days respectively. The authors stated that the results "... provide proof-of-principle evidence that knocking down [specific genes using ddRNAi] may have the potential to prevent graft rejection in heart transplantation."

The genes knocked down by the ddRNAi constructs were MyD88 and TRIF, genes known to be involved in activating cell mediated immunity, an important factor in organ transplant rejection.

Benitec Biopharma's CEO, Dr French, stated "These results, along with many others being generated in the RNA interference field, clearly demonstrate the broad therapeutic potential of ddRNAi. With our dominant IP position in the field and the unique nature of our technology, we are now in a very good position to realise the value of our ddRNAi technology. Our association with Medistem has been fruitful in demonstrating the breadth of application of ddRNAi beyond the specific programs being pursued by Benitec directly. Thanks to Medistem, prevention of heart transplant rejection along with Medistem's previously announced results in using ddRNAi in cell therapy for rheumatoid arthritis[2] can now be added to the ever-expanding list of applications."

About Medistem Inc.

Medistem Inc. is a biotechnology company developing technologies related to adult stem cell extraction, manipulation, and use for treating inflammatory and degenerative diseases. The company's lead product, the endometrial regenerative cell (ERC), is a "universal donor" stem cell being developed for critical limb ischemia and heart failure. A publication describing the support for use of ERC for this condition may be found at http://www.translational-medicine.com/content/pdf/1479-5876-6-45.pdf .

Cautionary Statement: This press release does not constitute an offer to sell or a solicitation of an offer to buy any of our securities. This press release may contain certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified. Future events and actual results could differ materially from those set forth in, contemplated by, or underlying the forward-looking information. Factors which may cause actual results to differ from our forward-looking statements are discussed in our Form 10-K for the year ended December 31, 2007 as filed with the Securities and Exchange Commission.

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About Benitec Biopharma

Benitec Biopharma Limited is developing novel treatments for chronic and life-threatening conditions based on targeted gene silencing activity using a transformational technology: DNA-directed RNA interference (ddRNAi) - sometimes called expressed RNAi. The technology's potential to address unmet medical needs and to cure disease results from its demonstrated ability to permanently silence genes which cause the condition. Importantly, this technology's target gene and related gene pathways will rarely have presented as a therapeutic avenue for research for the traditional small molecule agents, currently accounting for the majority of today's pharmaceutical products.

Benitec Biopharma either owns or exclusively licenses from CSIRO more than 40 granted or allowed patents in the field of RNA interference for human therapeutic applications. Patents have been granted in key territories such as the USA, the UK, Japan, Europe, Canada and Australia. In addition, Benitec Biopharma has almost 50 patent applications pending for which it is the owner or exclusive licensee from CSIRO, and has further intellectual property under development as a result of its pipeline program.

Founded in 1997 and trading publicly since 2001, Benitec Biopharma is listed on the Australian Securities Exchange (ASX) under the symbol "BLT". Benitec Biopharma aims to deliver a range of novel ddRNAi-based therapeutics to the clinic in partnership with the pharmaceutical industry. Besides a focused R&D strategy in infectious diseases, cancer and chronic cancer-associated pain, Benitec Biopharma is pursuing programs with licensees that have advanced to pre-clinical and/or clinical trials.

Benitec Biopharma videos can be viewed at www.youtube.com/user/BenitecNews

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2. Li, R *et al*. Gene silencing of IL-12 in dendritic cells inhibits autoimmune arthritis. *J Translational Med* 2012; 10:19-29.