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## **ASX ANNOUNCEMENT**

## Benitec Biopharma licenses ddRNAi technology to Regen BioPharma Inc for the development of Cancer Vaccines

## **Key Points:**

- US-based biotechnology developing cancer vaccines based on Dendritic Cells
- License allows further investigation of Benitec's ddRNAi technology's role in silencing an immunodulatory molecule (IDO) that is over-expressed in cancer

**Sydney Australia, Tuesday 6 August 2013**. Benitec Biopharma Ltd (ASX: BLT) is pleased to announce that it has entered into a licensing agreement with San Diego (US) based Regen BioPharma Inc a subsidiary of Bio-Matrix (OTCQB:BMSN). Benitec's exclusive licence allows Regen to develop cancer vaccines using Benitec's ddRNAi gene silencing technology.

Benitec's licence to Regen covers the application of ddRNAi to silence indoleamine 2,3 — doxygenase (IDO) in Dendritic Cells. IDO is associated with immune-suppression and is over-expressed in cancer. Regen has produced pre-clinical evidence that modification of these cells using ddRNAi targeting the silencing of IDO should significantly enhance their efficacy as anti-cancer vaccine agents. A peer-reviewed publication describing this work was published in the February 2013 volume of the International Journal of Cancer (*Zheng et al. Silencing IDO in dendritic cells: a novel approach to enhance cancer immunotherapy in a murine breast cancer model. Int J Cancer. 2013 Feb 15;132(4):967-77).* Whilst the terms are commercial-inconfidence, they are within the expected guidelines for small biotech companies in the early stage of therapeutic development, with fees based on the achievement of agreed milestones.

Chief Executive Officer of Benitec Biopharma Ltd, Dr Peter French, commented, "Benitec is very pleased to have executed this licensing deal with Regen BioPharma. Using ddRNAi to manipulate Dendritic Cells to stimulate the immune system to kill cancer cells is an innovative concept for the treatment of cancer in a non-toxic manner. Regen joins a growing list of biotechnology companies that have recognised the advantage of licensing Benitec's transformational gene silencing technology, ddRNAi, to develop novel therapies for human disease. For Benitec this provides the opportunity to generate additional evidence that validates and reinforces the potential of our platform technology."

Chairman & Chief Executive Officer of Regen BioPharma, Dr. David Koos, commented, "Benitec is the leader in clinical development of ddRNAi, which allows for "gene-specific surgery". By combining our existing data with the issued patents and experience of Benitec, we look forward to developing an immune-based, non-toxic, cancer treatment initially targeting breast cancer."



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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.

**About Regen BioPharma:** Regen BioPharma, Inc., a subsidiary of Bio-Matrix Scientific Group, Inc. (OTCBB: BMSN), is a biotechnology company focused on identifying undervalued regenerative medicine applications in the stem cell space and rapidly advancing these technologies through preclinical and Phase I/ II clinical trials. For more information refer to the company's website http://www.regenbiopharma.com/