September 27, 2017

Propanc Biopharma Highlights Therapeutic Potential of PRP

PRP Reverses the EMT Process, Stops Tumor Progression and Metastasis and Represses CSCs

MELBOURNE, AUSTRALIA -- (Marketwired) -- 09/27/17 -- Propanc Biopharma Inc. (OTCQB: PPCB) ("Propanc Biopharma" or "the Company"), a clinical stage biopharmaceutical company focusing on development of new and proprietary treatments for cancer patients suffering from solid tumors such as pancreatic, ovarian and colorectal cancers, today announced that results from recent scientific experiments provide strong indicators of PRP's therapeutic potential as a new clinical approach that might ultimately improve outcomes for cancer sufferers. The conclusion comes from observing the dramatic reduction of Epithelial to Mesenchymal Transition (EMT) markers as a consequence of PRP treatment, which not only reverses the EMT process, thereby stopping tumor progression and metastasis, but also represses the development of Cancer Stem Cells (CSCs).

The EMT is a process by which the characteristics of a cell become altered, where epithelial cells (from a normal functioning organ) adopt characteristics of mesenchymal cells (from lymphatic and circulatory systems, as well as bone or connective tissue), which enables them to migrate, invade surrounding tissues and survive longer. It is usually a normal biological process during embryogenesis and wound healing, but is also involved with tumor metastasis, chemo-resistance and spreading of CSCs, and is known to interact with other pathways central to cancer progression. Pathways which play an especially important role in aggressive tumors, like pancreatic cancer.

"Being able to simultaneously affect invasion, chemo-resistance and cancer stem cells makes the EMT an attractive target for developing new treatments, like PRP," said Dr Julian Kenyon, Propanc Biopharma's Chief Scientific Officer. "Especially in cases of pancreatic cancer, with its rapid growth and dense fibrous tissue, which is a product of mesenchymal fibroblast cells and the EMT. My colleagues and I are convinced that halting this process is an extremely promising approach, especially for pancreatic cancer sufferers."

Part of the Orphan Drug Designation (ODD) application for treatment of pancreatic cancer recently granted by the US Food and Drug Administration (FDA) involved experiments investigating the expression of key genes involved in the EMT, or the generation of CSCs, using human pancreatic cancer stem cells treated with PRP. Results showed up-regulation of selective genes that are usually down-regulated during the EMT process. E-Cadherin, involved in cell to cell adhesion and an indicator of an 'epithelial' cell, was increased 4-fold in response to PRP treatment. Furthermore, Kruppel-like factor 17 (KLF17), a negative regulator of metastasis and EMT, increased 6-fold. The latter results particularly relevant because KLF17 directly suppresses EMT, angiogenesis (tumor blood vessel formation), invasion and metastasis.

"I look forward to targeting pancreatic cancer when we commence clinical development of PRP," said Professor Kutz, Propanc Biopharma's Chief Medical Officer. "The results from our genetic testing of various cancer markers provides strong evidence of a positive effect against aggressive tumor types, like pancreatic cancer. Indeed, based on the scientific evidence and the mechanism of action, as well as supportive human data from patients treated with a proenzyme suppository by Dr Kenyon at the Dove Clinic, we are convinced there is a significant effect on hormonal tumors, which includes ovarian and prostate cancers as additional target indications. In fact, a second ODD application to the FDA for ovarian cancer is currently under preparation."

PRP is a solution for once daily intravenous administration of a combination of two pancreatic proenzymes trypsinogen and chymotrypsinogen. Currently progressing towards First-In-Human studies, PRP aims to prevent tumor recurrence and metastasis from solid tumors. Eighty percent of all cancers are solid tumors and metastasis is the main cause of patient death from cancer. According to the World Health Organization, 8.2 million people died from cancer in 2012. Consequently, a report by IMS Health states innovative therapies are driving the global oncology market to meet demand, which is expected to reach $150 Billion by 2020. The Company's initial target patient populations are pancreatic, ovarian and colorectal cancers, representing a combined market segment of $14 Billion predicted in 2020, by GBI Research.

To view Propanc Biopharma's "Mechanism of Action" video on anti-cancer product candidate, PRP, please click on the following link: http://www.propanc.com/news-media/video

To be added to Propanc Biopharma's email distribution list, please click on the following link: http://ir.propanc.com/email-alerts and submit the online request form.

About Propanc Biopharma:

Propanc Biopharma is a clinical stage biopharmaceutical company developing new cancer treatments initially for patients suffering from pancreatic, ovarian and colorectal cancers. We have developed a formulation of anti-cancer compounds, which exert a number of effects designed to control or prevent tumors from recurring and spreading throughout the body. Our products involve or employ pancreatic proenzymes, which are inactive precursors of enzymes. In the near term, we intend to target patients with limited remaining therapeutic options for the treatment of solid tumors. In future, we intend to develop our lead product to treat (i) early stage cancer and (ii) pre-cancerous diseases and (iii) as a preventative measure for patients at risk of developing cancer based on genetic screening. For more information, visit: www.propanc.com.

Forward-Looking Statements:

All statements other than statements of historical fact contained herein are "forward-looking statements" for purposes of federal and state securities laws. Forward-looking statements may include the words "may," "will," "estimate," "intend," "continue," "believe," "expect," "plan" or "anticipate" and other similar words. Although we believe that the expectations reflected in our forward-looking statements are reasonable, actual results could differ materially from those projected or assumed. Our future financial condition and results of operations, as well as any forward-looking statements, are subject to change and to inherent risks and uncertainties including those regarding our earnings, revenues and financial condition, our ability to implement our plans, strategies and objectives for future operations, our ability to execute on proposed new products, services or development thereof, our ability to establish and maintain the proprietary nature of our technology through the patent process, our ability to license from others patents and patent applications, if necessary, to develop certain products, our ability to implement our long range business plan for various applications of our technology, our ability to enter into agreements with any necessary manufacturing, marketing and/or distribution partners for purposes of commercialization, the results of our clinical research and development, competition in the industry in which we operate, overall market conditions, and any statements or assumptions underlying any of the foregoing. Other risks, uncertainties and factors that could cause actual results to differ materially from those projected may be described from time to time in reports we file with the Securities and Exchange Commission, including our reports on Forms 10-K, 10-Q and 8-K. We do not intend, and undertake no obligation, to update any forward-looking statement contained herein, except as required by law.

Media Contact:
Parker Mitchell
parkeramitchell@gmail.com

Source: Propanc Biopharma, Inc.