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Propanc Biopharma Confirms PRP Enhances Chemosensitivity and Alters Tumor Microenvironment of Pancreatic Tumor Cells

MELBOURNE, Australia--(BUSINESS WIRE)-- **Propanc Biopharma, Inc.** (OTC Pink: PPCB) ("Propanc" or the "Company"), a biopharmaceutical company developing novel cancer treatments for patients suffering from recurring and metastatic cancer, today announced that PRP enhances the sensitivity of resistant pancreatic tumor cells to standard chemotherapy treatment and alters the tumor microenvironment by decreasing the fibrotic tissue and its malignancy (ability to spread into surrounding tissues). The results were reported by the Company's joint researcher, Mrs. Belén Toledo Cutillas, MSc, at the laboratory of Professor Macarena Perán, PhD, University of Jaén, Granada, Spain.

Various methods, including apoptosis (programmed cell death) and viability analysis, live/dead assays, and RT-qPCR (real time quantification of gene expression) analyses confirmed PRP enhances the sensitivity of pancreatic tumor cells to standard chemotherapy treatment and decreases expression of genes related to chemoresistance. It was also proven that a major pathway, TGF-β, responsible for tumorigenesis (production or formation of tumors) and metastasis (cancer spread), is involved with the observed effects by inhibiting this pathway after PRP treatment. Similar analyses and an *in vivo* (in a living organism) study evaluating the effects on the tumor microenvironment confirmed transformational changes to the extracellular matrix components of the resistant tumors and according to Mrs. Cutillas, "seems to re-educate the malignant tumor cells by inducing apoptosis and reversing their malignant phenotype (cellular characteristics)."

Dr Julian Kenyon, MD, MB, ChB, Propanc's Chief Scientific Officer said, "Results from the experiments conducted by Belen demonstrates the effects of PRP on reducing chemoresistance in pancreatic tumor cells, which is a significant issue among pancreatic adenocarcinoma (PDAC) patients, who have a poor 5-year survival rate of less than eight percent. We look forward to investigating the clinical effects in patients as we progress with future planned clinical trials, where an opportunity for a combinatorial therapeutic strategy may be uncovered to treat these resistant tumors."

PRP is a mixture of two proenzymes, trypsinogen and chymotrypsinogen from bovine pancreas, administered by intravenous injection. A synergistic ratio of 1:6 inhibits growth of most tumor cells. Examples include pancreatic, ovarian, kidney, breast, brain, prostate, colorectal, lung, liver, uterine, and skin cancers. Orphan Drug Designation status of PRP has been granted from the US Food and Drug Administration (FDA) for treatment of pancreatic cancer.

About Propanc Biopharma, Inc.

Propanc Biopharma, Inc. (the “Company”) is developing a novel approach to prevent recurrence and metastasis of solid tumors by using pancreatic proenzymes that target and eradicate cancer stem cells in patients suffering from pancreatic, ovarian, and colorectal cancers. For more information, please visit www.propanc.com.

The Company’s novel proenzyme therapy is based on the science that enzymes stimulate biological reactions in the body, especially enzymes secreted by the pancreas. These pancreatic enzymes could represent the body’s primary defense against cancer.

To view the Company’s “Mechanism of Action” video on its anti-cancer lead product candidate, PRP, please click on the following link: http://www.propanc.com/news-media/video.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements reflect management’s current expectations, as of the date of this press release, and involve certain risks and uncertainties. Forward-looking statements include statements herein with respect to the planned studies and market projections described above and the successful execution of the Company’s business strategy. The Company’s actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors. Such risks and uncertainties include, among other things, our ability to establish and maintain the proprietary nature of our technology through the patent process; the availability of financing; the Company’s ability to implement its long range business plan for various applications of its technology; the Company’s ability to enter into agreements with any necessary business partners; the impact of competition; the obtaining and maintenance of any necessary regulatory clearances applicable to applications of the Company’s technology; and management of growth and other risks and uncertainties that may be detailed from time to time in the Company’s reports filed with the SEC.

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