

Propanc Biopharma Concludes PRP Could Become an Effective Chemosensitizer Agent Against Pancreatic Cancer

PRP May Help Overcome Growth of Fibrotic Tissue Surrounding Resistant Tumors

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 Chief Scientific Officer and Co-Founder, Dr. Julian Kenyon MD, MB, ChB, has recently come to the conclusion that PRP could become an effective chemosensitizer agent against pancreatic cancer. Chemotherapy activates certain growth factors, which directly activate cancer-associated fibroblasts (CAFs) to induce collagen deposits in pancreatic ductal adenocarcinoma, thus increasing tumor resistance and becoming unresponsive to treatment, according to Kim, *et al.*, *Nature Communications*, journal, October 22, 2022. Pancreatic adenocarcinoma (PDAC) accounts for 80% of pancreatic cancers and has a 5-year survival rate of less than 8%. According to Dr. Kenyon, chemotherapy-induced fibrosis in PDAC highlights an "opportunity for a combinatorial therapeutic strategy to treat these resistant tumors."

Cancer-associated fibroblasts (CAFs) are one of the abundant cell types in the external fibrous walls of tumors, which is the major source of the extracellular matrix within the tumor microenvironment (TME). Emerging evidence indicates that the dense collagen matrix increases resistance to standard anti-PDAC therapies. Furthermore, activated CAFs stimulate cellular signals that promote tumor growth through angiogenesis (blood vessel formation) and immunosuppression. As a result, various therapeutic targets have been identified to support CAF activation, reduce tumor resistance, and improve patient prognosis. Despite extensive efforts, none of these attempts has received FDA approval for the treatment of PDAC due to limited efficacy. One reason for the frustrating outcome could be due to the genetic variability of the CAF population within the TME, making genetic sequencing and targeting difficult. Therefore, the key is to target genetic variations which are less subject to mutation. Another option is to enforce CAFs to express different cellular signaling pathways, which re-educates the cell instead of targeting eradication, leading to decreasing the influence of the TME in drug uptake, immune evasion, tumor progression and further tumor dispersion.

"PDAC resistance to standard chemotherapy remains a significant challenge and consequently results in a poor prognosis for sufferers. Recent attempts to address this effect have focused on the inhibition of CAFs to prevent formation of fibrotic tissue, which contributes to tumor resistance, but with limited results due to genetic variability among patients," said Dr. Kenyon. "This is where PRP comes in. We recently confirmed PRP's effects on the tumor microenvironment and its ability to alter the expression of CAFs and limit its ability to increase tumor resistance. PRP is a unique approach because, rather than

target the genetic sequence to inhibit cellular signaling pathways, it re-educates these cells to overcome tumor resistance. This could have tremendous implications for PRP as a chemosensitizer agent with standard therapies to generate better clinical outcomes for PDAC patients. We look forward to providing further scientific data as we continue our joint research program with our partners at the Universities of Jaén and Granada in Spain.”

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 kidney, ovarian, breast, brain, prostate, colorectal, lung, liver, uterine, and skin cancers.

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

All statements other than statements of historical facts contained in this press release are “forward-looking statements,” which may often, but not always, be identified by the use of such words as “may,” “might,” “will,” “will likely result,” “would,” “should,” “estimate,” “plan,” “project,” “forecast,” “intend,” “expect,” “anticipate,” “believe,” “seek,” “continue,” “target,” or the negative of such terms or other similar expressions. These statements involve known and unknown risks, uncertainties, and other factors, that may cause actual results, performance, or achievements to differ materially from those expressed or implied by such statements. These factors include uncertainties as to the Company’s ability to continue as a going concern absent new debt or equity financings; the Company’s current reliance on substantial debt financing that, as of the date of this press release, it would have substantial difficulty repaying in cash; the Company’s ability successfully to remediate material weaknesses in its internal controls; the Company’s ability to reach research and development milestones as planned and within proposed budgets; the Company’s ability to control costs; the Company’s ability to obtain adequate new financing on reasonable terms on an as-needed basis; the Company’s ability successfully to initiate and complete clinical trials and to develop PRP, its lead product candidate; the Company’s ability to obtain and maintain patent protection; the Company’s ability to recruit employees and directors with accounting and finance expertise; the Company’s dependence on third parties for services; the Company’s dependence on key executives; the impact of government regulations, including FDA regulations; the impact of any future litigation; the availability of capital; changes in economic conditions; competition; and other risks, including, but not limited to, those described in the Company’s periodic reports that are filed with the Securities and

Exchange Commission and available on its website at <http://www.sec.gov>. These forward-looking statements speak only as of the date hereof and the Company disclaims any obligations to update these statements except as may be required by law.

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