

May 19, 2017



Propanc Biopharma Highlights PRP's Potential to Reprogram Cancer Stem Cells (CSCs)

MELBOURNE, AUSTRALIA -- (Marketwired) -- 05/19/17 -- [Propanc Biopharma Inc.](#) (OTCQB: PPCH) ("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 fresh new insights have emerged into how cancer stem cells (CSCs) are able to resist standard treatments, become more aggressive and spread rapidly. Published in *Oncogene*, by researchers from the Bellvitge Biomedical Research Institute south of Barcelona, Spain, the findings have significant implications for Propanc Biopharma's lead product PRP, which reprograms CSCs so that they are no longer malignant and a threat to the patient. PRP is a solution for once daily intravenous administration of a combination of two pancreatic proenzymes trypsinogen and chymotrypsinogen.

One of the authors from the study, Dr Miguel Ángel Pujana, describes why tumors adapt to and resist certain therapies, like mTOR inhibitors, a treatment used in advanced stages of breast cancer. He links mTOR inhibition with increased expression of certain genes, like EVI1, which contributes to epithelial to mesenchymal transition (EMT), a key process by which cancer cells become stem cell-like, motile and invasive, seeding new tumors. Dr Miguel concludes, "Tumor cells are able to adapt to treatment through a phenotype (character) shift that makes them more aggressive and sustains their metastatic potential." Data from hundreds of cell lines expand on the concept that CSCs are frequently the source of therapy resistance and metastasis, the main cause of patient death from cancer.

"When administering PRP to a patient, we are essentially reprogramming CSC gene expression, pushing these cells back to a normal, less malignant state, so they die naturally," said Dr Kenyon, Propanc's Chief Scientific Officer. "Reversing the EMT process is a key feature of PRP and is fast becoming a credible solution to controlling CSCs, which are responsible for cancer spreading, or metastasis, the main cause of patient death from cancer."

"The latest scientific discoveries regarding CSC reprogramming shows we are on the right track, which we believe is not reflected in our current market capitalization," said James Nathanielsz Propanc's Chief Executive Officer. "Nevertheless, we are advancing towards First-In-Human studies and remain excited about developing PRP as a new therapeutic approach for cancer sufferers. We remain focused on delivering long term value to our loyal shareholders."

The rationale for developing PRP is based on a set of in-vitro studies on CSCs, as well as xenograft and syngeneic mouse models of ovarian and pancreatic cancers, respectively. In

summary, these data indicate that the dramatic reduction of cellular markers associated with the process of EMT as a consequence of PRP treatment, could not only reverse the EMT process with the implication to stop tumor progression and metastasis, but also seem to suppress the development of CSCs. Consequently, these results are strong indicators of the therapeutic potential of PRP that could be categorized as an anti-CSC therapeutic drug.

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.

Investor Contacts:

Consulting for Strategic Growth 1 Ltd

Stan Wunderlich

swunderlich@cfsg1.com

Media Contacts:

Parker Mitchell

parkeramitchell@gmail.com

Source: Propanc Biopharma, Inc.