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Propanc Biopharma Offers a Novel Way to Stop Cancer

Differentiation therapy has distinct advantages over Conventional Therapeutic Strategies

MELBOURNE, Australia--(BUSINESS WIRE)-- [Propanc Biopharma, Inc.](#) (OTCQB: PPCB) ("Propanc" or the "Company"), a biopharmaceutical company developing novel cancer treatments for patients suffering from recurring and metastatic cancer, today announced a novel way to stop cancer by inducing a process called "cell differentiation". Known as differentiation therapy, the key objective is to convince malignant cells to stop proliferating and return to do their work as a specific cell type. There are advantages of differentiation therapy over conventional therapeutic strategies. Differentiation therapy does not target cell death, so healthy cells within the patient will not be compromised, unlike chemotherapeutic drugs or gamma irradiation.

Firstly, most people understand that cancer develops when cells in the body start to divide rapidly and uncontrollably, with an ability to migrate from one location and spread to distant sites. A cell becomes cancerous when it becomes undifferentiated. Essentially, the cell forgets to do its job and invests all its energy into proliferating. Unlike normal cells, cancer cells multiply, but do not differentiate. Therefore, most common cancer therapies work by taking advantage of the uncontrolled proliferation of cancer cells and kill these cells by targeting the cell division machinery. These therapies are effective, but also affect healthy cells, particularly those with a high rate of cell turnover, thus inducing undesirable effects.

Conversely, differentiation therapy induces cancer cells into the pathway of terminal differentiation (fully differentiated) and eventual senescence (i.e., loss of a cell's division and growth). Differentiation therapy acts not only against cancer cells, but interestingly can turn cancer stem cells (undifferentiated cells) towards completely differentiated (i.e., normal) cells.

But what lesson can we learn from our own body? Are there any natural elements within our organism that could help us fight against cancer? As a matter of fact, yes, there are enzymes, which are natural proteins that stimulate and accelerate biological reactions in the body. Particularly enzymes secreted by the pancreas that are essential for the digestion of proteins and fats. More than 100 years ago, Professor John Beard from Edinburgh University first proposed that pancreatic enzymes represent the body's primary defense against cancer and would be useful as a cancer treatment. Since then, several scientists have endorsed Beard's hypothesis with encouraging data from patient treatment.

Since 2007, Propanc is developing a long-term therapy based on a pancreatic proenzyme formulation to prevent tumor recurrence and metastasis, the main cause of patient death from cancer. PRP is a novel, patented formulation consisting of two proenzymes mixed in a synergistic ratio. After extensive laboratory research and a limited amount of human testing, Propanc has evidence that PRP reduces cancer cell growth via promotion of cell

differentiation, enhances cell adhesion (cell to cell contact) and suppresses metastasis progression, has no serious side effects and improves patient survival.

“Differentiation therapy could be the best way to stop cancer because it is a unique approach to target cancer cells whilst leaving healthy cells alone, which reduces side effects whilst successfully stopping the cancer from returning and spreading,” said Dr Julian Kenyon, Propanc’s Chief Scientific Officer. “We believe PRP compliments existing treatment methods and look forward to our planned early-stage clinical development of PRP in advanced cancer patients suffering from solid tumors like pancreatic, ovarian and colorectal cancers.”

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, which 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 it is unable to repay in cash; the Company’s ability to successfully 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; the Company’s ability to successfully initiate and complete clinical trials and its ability to successfully 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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