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# Propanc Biopharma's Peer Reviewed Articles for Proenzymes Cancer Treatment Generates "Unprecedented" Interest

*Two Publications Reach 10 Citations & 4,500 Reads, Respectively*

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 two scientific, peer reviewed journal articles published by the Company and its research partners reached 10 citations and 4,500 reads, respectively, in August, 2024. "This shows unprecedented interest in our field from researchers and among the broader scientific community," said Dr Kenyon, MD, MB, ChB, Propanc's Chief Scientific Officer.

The first article, which reached 10 citations, published in Scientific Reports, is entitled, "*Pancreatic proenzymes treatment suppresses BXPC-3 pancreatic Cancer Stem Cell subpopulation and impairs tumour engrafting.*" From the publishers of Nature, it is an online, open access journal, which publishes from all areas of the natural and clinical sciences. According to an insider, Scientific Reports is published on the most prestigious site of the National Institute of Health (NIH) and considered top line coverage: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6684636/>

Published data from the Company's joint research and development program were generated in conjunction with the Universities of Jaén and Granada, Biosanitary Research Institute of Granada, and University Hospital, Spain. Cancer stem cells (CSCs) subpopulation within the tumour is responsible for metastasis and cancer relapse. Exposure of human pancreatic CSCs to proenzymes resulted in significant decrease of specific pancreatic CSC markers. Also, *in vivo* (in a living organism) anti-tumor, xenograft (tissue graft) studies demonstrated high anti-tumour efficacy against tumors induced by human pancreatic CSCs. They concluded that "proenzymes treatment is a valuable strategy to suppress the CSC population in solid pancreatic tumours."

The second article, achieved 4,500 reads, also published in Scientific Reports, entitled "*A formulation of pancreatic proenzymes provides potent anti-tumor efficacy: A pilot study focused on pancreatic and ovarian cancer.*" Published data from the Company's R&D program were conducted with vivoPharm Pty Ltd, Australia, and the Dove Clinic for Integrated Medicine, UK, along with the Company's joint researchers. Highlights include anti-angiogenic (anti-tumor blood vessel formation) effects of proenzymes, along with analysis of epithelial to mesenchymal transition (EMT) markers performed on human cancer cells treated with proenzymes. The EMT is a mechanism by which cancerous cells become motile and invasive, as well as immortal, thus seeding new tumors. For online access: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5656641/>

Additionally, clinical efficacy of a suppository formulation of pancreatic proenzymes in the context of a UK Pharmaceutical Specials Scheme, led by Dr Kenyon, where 19 from 46 patients (41.3%) with late-stage cancers, had a survival time significantly longer than expected. Mean survival of 9.0 months was significantly higher than mean life expectancy, 5.6 months, in a one-way ANOVA (analysis of variance) test ( $\alpha = 0.05$ ,  $P$  less than 0.05).

For diagnosed pancreatic and ovarian cancer patients, there is a 20% survival rate and a 5-year relative survival rate of 29%, respectively, according to the National Cancer Institute. The global market projection for pancreatic cancer drugs is \$6.93 billion by 2030, according to Brainy Insights and for ovarian cancer drugs is \$13.9 billion by 2029, according to iHealthcareAnalyst.

“Survival rates, especially for pancreatic and ovarian cancers, continue to remain low. As a result, there is a pressing market need for new therapies, but without severe, or serious side effects associated with standard treatments,” said Dr Kenyon. “We look forward to advancing our lead asset, PRP, into early-stage clinical development to further improve the significant life extension I first observed using proenzymes treatment in the UK Pharmaceuticals Scheme.”

### **About PRP:**

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.

To view the Company’s “Mechanism of Action” video on the Company’s lead asset, PRP, please click on the following link: <http://www.propanc.com/news-media/video>.

### **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](http://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.

### **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 because 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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