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New Research Shows PharmaCyte Biotech's Melligen Cell Line Can Reverse Diabetes

Diabetes Consortium Member Prof. Ann Simpson Publishes Major Research

SILVER SPRING, Md., April 10, 2015 (GLOBE NEWSWIRE) -- PharmaCyte Biotech, Inc. (OTCQB:PMCB), a clinical stage biotechnology company focused on developing targeted treatments for cancer and diabetes using its signature live-cell encapsulation technology, Cell-in-a-Box®, today announced that Prof. Ann Simpson (a member of PharmaCyte Biotech's international Diabetes Consortium) and her colleagues at the University of Technology Sydney and the University of Sydney in Australia have published a major research article titled "Reversal of diabetes following transplantation of an insulin-secreting human liver cell line: Melligen cells" in the journal *Molecular Therapy – Methods & Clinical Development*.

This journal is part of the prestigious Nature Publishing Group and is the official journal of the American Society for Gene and Cell Therapy. This research article can be viewed in its entirety at http://www.nature.com/articles/mtm201511.

The article describes the development of the Melligen cell line and notes that it was developed from human liver cells. Numerous tests were done during the various stages of the development process and studies were carried out to show that Melligen cells secreted insulin in response to physiological concentrations of glucose (blood sugar). Furthermore, when Melligen cells were transplanted into diabetic mice whose immune systems were essentially not functioning, the blood glucose levels of the mice became normal. This observation illustrates that Melligen cells can reverse the diabetic condition.

Most importantly, however, the authors of the article note that, for the Melligen cells to be effective in treating Type 1 diabetes in humans where the insulin-producing β cells of the pancreas have been destroyed, it will be necessary to protect those cells from rejection by the body's immune system after they have been introduced into the body. The article points out that one way to protect the Melligen cells would be to encapsulate the cells in protective "cocoons" prior to being placed into a diabetic patient. If this is done, the authors believe that encapsulated Melligen cells may offer a cure for Type 1 diabetes.

PharmaCyte Biotech's live cell encapsulation technology, Cell-in-a-Box®, appears to be the ideal encapsulation technology for this purpose. In fact, Melligen cells have already been successfully encapsulated using the Cell-in-a-Box® process and experiments are already underway to ensure that encapsulation does not detract from the beneficial properties of the Melligen cells in any way.

Prof. Simpson commented, "Type 1 diabetes mellitus is a serious disorder that significantly reduces patients' quality of life and costs governments many millions of dollars in patient care. It is hoped that the Melligen cells, which have been shown to reverse diabetes in rodents with a normal response to glucose, once encapsulated in the Cell-in-a-Box® capsules will be an easily accessible treatment for patients."

Kenneth L. Waggoner, CEO of PharmaCyte Biotech, said, "We congratulate Prof. Simpson and her colleagues on the publication of this very important article about Melligen cells which summarizes years of effort by the individuals involved. Its publication in such a highly regarded scientific, peer-reviewed journal is laudable indeed. This research illustrates why PharmaCyte Biotech is very fortunate to have Prof. Simpson as one of the founding members of its international Diabetes Consortium and a consultant to PharmaCyte Biotech. It is anticipated that Prof. Simpson will play a major role in the development of our treatment for insulin-dependent diabetes that consists of Melligen cells encapsulated using the Cell-in-a-Box® technology."

About PharmaCyte Biotech

PharmaCyte Biotech is a clinical stage biotechnology company focused on developing and preparing to commercialize treatments for cancer and diabetes based upon a proprietary cellulose-based live cell encapsulation technology known as Cell-in-a-Box®. This unique and patented technology will be used as a platform upon which treatments for several types of cancer, including advanced, inoperable pancreatic cancer, and diabetes are being built. PharmaCyte Biotech's treatment for pancreatic cancer involves low doses of the well-known anticancer prodrug ifosfamide, together with encapsulated live cells, which convert ifosfamide into its active or "cancer-killing" form. These capsules are placed as close to the cancerous tumor as possible to enable the delivery of the highest levels of the cancer-killing drug at the source of the cancer. This "targeted chemotherapy" has proven remarkably effective and safe to use in past clinical trials. In addition, PharmaCyte Biotech is working towards improving the quality of life for patients with advanced pancreatic cancer and on treatments for other types of solid cancerous tumors.

PharmaCyte Biotech is also developing treatments for cancer based upon chemical constituents of the *Cannabis* plant, known as cannabinoids. In doing so, PharmaCyte Biotech is examining ways to exploit the benefits of Cell-in-a-Box® technology in optimizing the anticancer effectiveness of cannabinoids, while minimizing or outright eliminating the debilitating side effects usually associated with cancer treatments. This provides PharmaCyte Biotech the rare opportunity to develop "green" approaches to fighting deadly diseases, such as cancer of the pancreas, brain and breast, which affect hundreds of thousands of individuals worldwide every year.

Safe Harbor

This press release may contain forward-looking statements regarding PharmaCyte Biotech and its future events and results that involve inherent risks and uncertainties. The words "anticipate," "believe," "estimate," "expect," "intend," "plan" and similar expressions, as they relate to PharmaCyte Biotech or its management, are intended to identify forward-looking statements. Important factors, many of which are beyond the control of PharmaCyte Biotech, could cause actual results to differ materially from those set forth in the forward-looking

statements. They include PharmaCyte's ability to continue as a going concern, delays or unsuccessful results in preclinical and clinical trials, flaws or defects regarding its product candidates, changes in relevant legislation or regulatory requirements, uncertainty of protection of PharmaCyte Biotech's intellectual property and PharmaCyte Biotech's continued ability to raise capital. PharmaCyte Biotech does not assume any obligation to update any of these forward-looking statements.

More information about PharmaCyte Biotech can be found at www.PharmaCyteBiotech.com. It can also be obtained by contacting Investor Relations.

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