

## PharmaCyte's Research on Medical Uses of Cannabinoids Supported by Recent Scientific Article

SILVER SPRING, Md., July 05, 2016 (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<sup>®</sup>, announced today that a recently published scientific article supports PharmaCyte's ongoing research efforts that concern medical uses for constituents of *Cannabis* known as cannabinoids. The article titled "Amyloid proteotoxicity initiates an inflammatory response blocked by cannabinoids" was published in the journal, Aging and Mechanisms of Disease and appeared online on June 23, 2016. The article can be viewed in its entirety at http://www.nature.com/articles/npjamd201612

The Chief Executive Officer of PharmaCyte, Kenneth L. Waggoner, commented, "This research again demonstrates the potential benefit of cannabinoids in treating deadly and debilitating diseases such as cancer and neurodegenerative diseases. Our Cell-in-a-Box<sup>®</sup> live-cell encapsulation technology provides a unique, versatile and natural platform for the delivery of potentially beneficial cannabinoids. It is PharmaCyte's goal to use the combination of the Cell-in-a-Box<sup>®</sup> technology and cannabinoids or cannabinoid-like compounds to develop effective and safe treatments for some of the deadliest forms of cancer for which such treatments do not presently exist, such as cancer of the pancreas, brain and breast, which affect hundreds of thousands of individuals worldwide every year."

The studies reported in the article, conducted by researchers at The Salk Institute for Biologic Studies and the University of California San Diego, showed that the inflammatory response initiated by "beta amyloid plaque" is blocked by cannabinoids. Beta amyloid plaque is an aggregating protein that has been linked to neurodegenerative conditions such as Alzheimer's disease, Parkinson's disease and Huntington's disease. Accumulation of toxic beta amyloid plaque within nerve cells results in inflammation and nerve cell death. It is believed to be an early event in the development of many conditions associated with old age. The study showed that marijuana-derived cannabinoid molecules, such as tetrahydrocannabinol, stimulate the removal of beta amyloid plaque between neurons, block the inflammatory response and are thus protective against nerve cell death. This is the first study to show that cannabinoids affect both inflammation and amyloid beta accumulation in nerve cells. The implications are broad as there are currently no available drugs that significantly inhibit the cell death that is associated with these diseases.

## **About PharmaCyte Biotech**

PharmaCyte Biotech is a clinical stage biotechnology company 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<sup>®</sup>." This technology will be used as

a platform upon which treatments for several types of cancer and diabetes are being developed. PharmaCyte's treatment for cancer involves encapsulating genetically modified live cells that convert an inactive chemotherapy drug into its active or "cancer-killing" form. These encapsulated live cells are placed as close to a cancerous tumor as possible. Once implanted, a chemotherapy drug that needs to be activated in the body (ifosfamide) is given intravenously at one-third the normal dose. The ifosfamide is carried by the circulatory system to where the encapsulated cells have been placed. When the ifosfamide, which is normally activated in the liver, comes in contact with the encapsulated live cells, activation of the chemotherapy drug takes place at the source of the cancer without any side effects from the chemotherapy. This "targeted chemotherapy" has proven effective and safe to use in past clinical trials.

In addition to developing a novel treatment for cancer, PharmaCyte is developing a treatment for Type 1 diabetes and insulin-dependent Type 2 diabetes. PharmaCyte plans to encapsulate a human cell line that has been genetically engineered to produce, store and release insulin in response to the levels of blood sugar in the human body. The encapsulation will be done using the Cell-in-a-Box<sup>®</sup> technology.

## 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 or its management, are intended to identify forward-looking statements. Important factors, many of which are beyond the control of PharmaCyte, 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's intellectual property and PharmaCyte's continued ability to raise capital. PharmaCyte does not assume any obligation to update any of these forward-looking statements.

More information about PharmaCyte can be found at<u>www.PharmaCyte.com</u>. It can also be obtained by contacting Investor Relations.

Investor Relations:
PharmaCyte Biotech, Inc.
Investor Relations Department
Telephone: 917.595.2856
Email: Info@PharmaCyte.com



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