October 30, 2018

PharmaCyte Biotech Announces Publication of United States Patent Application for Cancer Therapies

LAGUNA HILLS, Calif.--(BUSINESS WIRE)-- PharmaCyte Biotech, Inc. (OTCQB: PMCB), a clinical stage biotechnology company focused on developing targeted cellular therapies for cancer and diabetes using its signature live-cell encapsulation technology, Cell-in-a-Box®, announced today that its Patent Application titled "Encapsulated Cells Producing Cytochrome P450 and Methods of Use Thereof," which covers a targeted therapy to treat solid cancerous tumors, was published in the United States on September 27, 2018, (Publication No. US 2018/0271794 A1). Unlike the previously announced PCT Application, which was international in nature, this Patent Application is specific to the United States.

PharmaCyte Biotech's Chief Executive Officer, Kenneth L. Waggoner, stated, "This patent application in concert with the previously announced PCT application (Publication No. WO 2018/175576) that was filed to gain protection in most major markets worldwide, if granted, will provide protection for PharmaCyte's technology for 20 years without a gap in patent protection – until March 2038.

"Publication of this U.S. Patent Application by the U.S. Patent and Trademark Office (USPTO) is significant in allowing us to protect our unique complex cancer therapy for many years in this country. This development becomes more and more important as we progress with our clinical trial in patients with locally advanced, non-metastatic, inoperable pancreatic cancer (LAPC).

"As described in the Patent Application, through use of the Cell-in-a-Box® live-cell encapsulation technology, PharmaCyte may be able to develop unique therapies for other forms of solid tumors, particularly where safety and efficacy are of major concern."

This Patent Application also includes methods of treating cancerous tumors other than pancreatic cancer, such as those of the liver, breast and colon. This could be accomplished by using cancer prodrugs such as ifosfamide and its "sister" drug cyclophosphamide together with encapsulated live human cells that overexpress a form of the cytochrome P450 enzyme system normally found in the liver (the same encapsulated cells used in PharmaCyte's pancreatic cancer therapy). The patent application also includes using PharmaCyte's platform technology with other cancer chemotherapy prodrugs against a variety of tumors other than those noted above. In all cases, the Cell-in-a-Box® cellulose-based-live-cell encapsulation technology will be used to prepare the "biologic" part of any of the cancer treatments.

The original Provisional Patent Application that preceded the current application was filed with the USPTO on March 21, 2017, well before the Bavarian Nordic patents expired. The current application was filed with the USPTO on March 21, 2018. There should be no gap in

patent protection assuming PharmaCyte's patent application is granted.

About PharmaCyte Biotech

PharmaCyte Biotech is a clinical stage biotechnology company developing cellular therapies for cancer and diabetes based upon a proprietary cellulose-based live cell encapsulation technology known as "Cell-in-a-Box®." This technology will be used as a platform upon which therapies for several types of cancer and diabetes are being developed.

PharmaCyte's therapy for cancer involves encapsulating genetically engineered human cells that convert an inactive chemotherapy drug into its active or "cancer-killing" form. For pancreatic cancer, these encapsulated cells are implanted in the blood supply to the patient's tumor as close as possible to the site of the tumor. Once implanted, a chemotherapy drug that is normally activated in the liver (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 implanted. When the ifosfamide flows through pores in the capsules, the live cells inside act as a "bio-artificial liver" and activate the chemotherapy drug at the site of the cancer. This "targeted chemotherapy" has proven effective and safe to use in past clinical trials and results in no treatment related side effects.

PharmaCyte's therapy for Type 1 diabetes and insulin-dependent Type 2 diabetes involves encapsulating 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 cell lines being studied and developed are human liver cells, stem cells and beta islet cells. The encapsulation will be done using the Cell-in-a-Box® technology. Once the encapsulated cells are implanted in a diabetic patient, they are designed to function as a "bio-artificial pancreas" for purposes of insulin production.

Safe Harbor

This press release contains forward-looking statements, which are generally statements that are not historical facts. Forward-looking statements can be identified by the words "expects," "anticipates," "believes," "intends," "estimates," "plans," "will," "outlook" and similar expressions. Forward-looking statements are based on management's current plans, estimates, assumptions and projections, and speak only as of the date they are made. We undertake no obligation to update any forward-looking statement because of new information or future events, except as otherwise required by law. Forward-looking statements involve inherent risks and uncertainties, most of which are difficult to predict and are generally beyond our control. Actual results or outcomes may differ materially from those implied by the forward-looking statements due to the impact of numerous risk factors, many of which are discussed in more detail in our Annual Report on Form 10-K and our other reports filed with the Securities and Exchange Commission.

More information about PharmaCyte Biotech can be found at www.PharmaCyte.com. Information may also be obtained by contacting PharmaCyte's Investor Relations Department.

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