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PharmaCyte Biotech Announces Encapsulation Material Does Not Alter Cellular DNA

LAGUNA HILLS, Calif.--(BUSINESS WIRE)-- PharmaCyte Biotech, Inc. (NASDAQ: PMCB), a biotechnology company focused on developing cellular therapies for cancer and diabetes using its signature live-cell encapsulation technology, Cell-in-a-Box®, today announced further results from a third test of biocompatibility of its CypCaps™ product candidate for pancreatic cancer. The tests results showed that the empty capsule material is not "mutagenic." A mutagen is a physical or chemical agent that permanently changes genetic material, usually DNA, in an organism and thus increases the frequency of mutations above the natural background level.

PharmaCyte's Chief Executive Officer, Kenneth L. Waggoner, said, "As we continue to receive data from a myriad of tests that are currently in progress, we are generating exactly the data we expected to generate when we began addressing the U.S. Food and Drug Administration's desire to see more data. These latest test results continue to support the safety of PharmaCyte's product candidate, CypCaps. In line with data generated previously, we are confident that the encapsulation material used for CypCaps is biocompatible, safe and not toxic. Each of the tests that we're conducting should continue to demonstrate this."

The study, which was performed by a third-party Contract Research Organization (CRO) in compliance with OECD Principles of Good Laboratory Practice [C(97)186/Final and ENV/MC/CHEM (98)17] and in accordance with four regulatory guidelines (OECD and ISO) was designed to determine if the device component of CypCaps (the empty capsule material) can cause mutations by altering DNA. The specific objective of the study was to evaluate whether two differently prepared extracts of empty capsule material can induce reverse mutations in specific genes in four indicator strains of bacteria *Salmonella typhimurium* and one indicator strain of *Escherichia coli*. The third-party CRO concluded from the data obtained that the empty capsule material is "non-mutagenic."

To learn more about PharmaCyte's pancreatic cancer treatment and how it works inside the body to treat locally advanced inoperable pancreatic cancer, we encourage you to watch the company's documentary video complete with medical animations at: https://www.PharmaCyte.com/Cancer.

About PharmaCyte Biotech

PharmaCyte Biotech, Inc. is a 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 is being 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 we believe results in little to 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 and release insulin in response to the levels of blood sugar in the human body. The encapsulation of the cell line will be done using the Cell-in-a-Box technology. Once the encapsulated cells are implanted in a diabetic patient, we anticipate that they will function as a "bio-artificial pancreas" for purposes of insulin production.

Safe Harbor

This press release may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that express the current beliefs and expectations of the management of PharmaCyte. Any statements contained herein that do not describe historical facts are forward-looking statements that are subject to risks and uncertainties that could cause actual results, performance, and achievements to differ materially from those discussed in such forward-looking statements. Factors that could affect our actual results include our ability to raise the necessary capital to fund our operations and to find partners to supplement our capabilities and resources, our ability to satisfactorily address the issues raised by the FDA in order to have the clinical hold on our IND removed, as well as such other factors that are included in the periodic reports on Form 10-K and Form 10-Q that we file with the U.S. Securities and Exchange Commission. These forward- looking statements are made only as of the date hereof, and we undertake no obligation to update or revise the forward-looking statements, except as otherwise required by law, whether as a result of new information, future events or otherwise.

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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