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PharmaCyte Biotech Study Proves Capsule Material Is Not Toxic For Encapsulated Cells

LAS VEGAS--(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 that the empty capsule material that makes up PharmaCyte's CypCaps® pancreatic cancer product candidate is not toxic for the encapsulated cells inside the CypCaps.

PharmaCyte's Chief Executive Officer, Kenneth L. Waggoner, said, "We have completed another study that proves exactly what we expected to find in the data. Like previous biocompatibility studies on our CypCaps product candidate to treat locally advanced, inoperable pancreatic cancer (LAPC), this study demonstrates that the capsule material is not in any way toxic to our encapsulated live cells. This study also confirms previously obtained data that the capsule material is bio-inert."

The study was performed to assess the cytotoxic (cell toxicity) potential of extracts of cellulose sulphate capsules using a standard line of mouse fibroblast cells known to be sensitive to toxic influences. The study was performed in compliance with the OECD Principles of Good Laboratory Practice [C(97)186/Final and ENV/MC/CHEM(98)17], International Standard (ISO) 10993-5, Third Edition 2009-06-01, "Biological Evaluation of Medical Devices - Part 5: Tests for In vitro cytotoxicity," and International Standard (ISO) 10993-12, Fifth Edition 2021-01, "Biological Evaluation of Medical Devices - Part 12: Sample preparation and reference materials."

Extracts of the capsule material were prepared by a third-party Contract Research Organization (CRO) laboratory using physiological saline or dimethyl sulphoxide (DMSO) as solvents. Different concentrations of each of the extracts were added to mouse fibroblast cells. The cells were examined 24 hours later under the microscope by the CRO for any abnormal cell morphology and the possible presence of cell lysis. The capsule material was found to be "non-cytotoxic" to mouse fibroblast cells at all of the concentrations examined.

To learn more about PharmaCyte's pancreatic cancer treatment and how it works inside the body to treat LAPC, we encourage you to watch PharmaCyte'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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