For Immediate Release
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SUNSHINE BIOPHARMA'S Adva-27a DESTROYS CANCER CELLS EXPRESSING P-GLYCOPROTEIN, A MARKER PRESENT IN OVER 50% OF ALL CANCER TYPES

Montreal, Quebec, Canada – (GLOBE NEWSWIRE) – Sunshine Biopharma Inc. (OTC PINK: "SBFM"), a pharmaceutical company focused on the research, development and commercialization of oncology and antiviral drugs, today announced that it has elucidated the mechanism of action of Adva-27a, the Company's flagship anticancer drug candidate. Adva-27a has been found to have two activities: (i) evasion of P-glycoprotein, and (ii) inhibition of Topoisomerase II. P-glycoprotein is the most often encountered transmembrane efflux protein responsible for multidrug resistance in over 50% of all cancer types. By escaping the efflux pump of P-glycoprotein, Adva-27a is able to accumulate inside cancer cells and destroy them by inhibiting Topoisomerase II, a DNA unwinding enzyme preferentially used by cancer cells to multiply.

Multidrug resistance is by far the biggest challenge in cancer therapy and P-glycoprotein is the major culprit. A plethora of anticancer drugs that are central to chemotherapeutic regimes are susceptible to the P-glycoprotein efflux activity. Among these are the vinca alkaloids (vinblastine and vincristine), the taxanes (paclitaxel and docetaxel), the anthracyclines (doxorubicin and daunorubicin), the topoisomerase inhibitors (topotecan and etoposide), and the tyrosine kinase inhibitors (dasatinib and gefitinib). Sunshine Biopharma's P-glycoprotein evading small molecule, Adva-27a, represents an effective alternative to all of these drugs.

In addition, it has been recognized that most cancers consist of a heterogeneous population of drug-sensitive and drug-resistant cells. During the course of current chemotherapy regiments, drug-sensitive cells are selectively destroyed and resistant cells become the dominant cancer cell population, leading to recurrence and metastasis. Unlike existing chemotherapy drugs, Adva-27a is able to destroy both populations of cancer cells resulting in more complete eradication of the cancer being treated.

"The implications of this development are vast in the context of cancer therapy as a whole," said Dr. Steve Slilaty, CEO of Sunshine Biopharma. "We are excited to soon have a new drug available for cancer sufferers around the world," he added.

About Sunshine Biopharma

Sunshine Biopharma is focused on the research, development and commercialization of oncology and antiviral drugs.

In the area of antiviral drugs, Sunshine Biopharma is currently engaged in the development of an oral treatment for COVID-19. Severe Acute Respiratory Syndrome-Coronavirus-2 (SARS-CoV-2) is the causative agent of COVID-19, the ongoing pandemic that has claimed the lives of over 3.4 million people worldwide since it first appeared in December 2019. There are currently no drugs that can effectively arrest replication of the virus in people who have contracted the illness. Sunshine Biopharma has completed the synthesis of four potential inhibitors of PLpro and subsequently identified a lead compound, SBFM-PL4. On February 1, 2021, Sunshine Biopharma entered into an exclusive license agreement with the University of Georgia for two Anti-Coronavirus compounds which the University of Georgia had previously developed and patented. The Company is currently advancing the development of these two compounds in parallel with its own SBFM-PL4 by conducting a transgenic mice study in collaboration with the University of Georgia, College of Pharmacy. The mice being used in the study have been genetically engineered to express the human angiotensin-converting enzyme 2 (hACE2) transmembrane protein in their lungs making them susceptible to lethal infection by SARS-CoV-2. The SARS-CoV-2 virus uses the hACE2 receptor to gain entry into human cells to replicate. The goal of the study is to determine if these protease inhibitors will protect the hACE2-transgenic mice from disease progression and death following infection with SARS-CoV-2. Should these mice studies prove successful, Sunshine Biopharma plans to submit the results to the FDA for authorization to conduct testing on actual COVID-19 patient volunteers in a Phase I clinical trial setting.

In addition, to working on the development of a treatment for COVID-19, Sunshine Biopharma is engaged in the development Adva-27a, a unique anticancer compound. Tests conducted to date have demonstrated the effectiveness of Adva-27a at destroying Multidrug Resistant Cancer Cells, including Pancreatic Cancer cells, Small-Cell Lung Cancer cells, Breast Cancer cells, and Uterine Sarcoma cells. Clinical trials for Pancreatic Cancer indication are planned to be conducted at McGill University's Jewish General Hospital in Montreal, Canada. Sunshine Biopharma is owner of all patents and intellectual property pertaining to Adva-27a.

Safe Harbor Forward-Looking Statements

This press release may contain forward looking statements which are based on current expectations, forecasts, and assumptions that involve risks as well as uncertainties that could cause actual outcomes and results to differ materially from those anticipated or expected, including statements related to the amount and timing of expected revenues statements related to our financial performance, expected income, distributions, and future growth for upcoming quarterly and annual periods. These risks and uncertainties are further defined in filings and reports by the Company with the U.S. Securities and Exchange Commission (SEC). Actual results and the timing of certain events could differ materially from those projected in or contemplated by the forward-looking statements due to a number of factors detailed from time to time in our filings with the SEC. Among other matters, the Company may not be able to sustain growth or achieve profitability based upon many factors including but not limited to general stock market conditions. Reference is hereby made to cautionary statements set forth in the Company's most recent SEC filings. We have incurred and will continue to incur significant expenses in our expansion of our existing as well as new service lines noting there is no assurance that we will generate enough revenues to offset those costs in both the near and long term. Additional service offerings may expose us to additional legal and regulatory costs and unknown exposure(s) based upon the various geopolitical locations we will be providing services in, the impact of which cannot be predicted at this time.

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