For Immediate Release
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SUNSHINE BIOPHARMA UPGRADES COVID-19 PROVISIONAL PATENT APPLICATION TO FULL PCT APPLICATION

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 timely filed a nonprovisional patent application in the form of a PCT in the United States for its COVID-19 treatment under development. Sunshine had originally filed a provisional patent application covering the COVID-19 treatment on May 22, 2020. This priority date has been maintained in the newly filed PCT application.

In addition to the original subject matter pertaining to inhibitors of the Main Coronavirus protease, Mpro, the PCT application contains data and extends coverage to include the Papain-Like Coronavirus protease, PLpro. The latter is an important antiviral target as it is involved in suppression of the host immune system thereby leading to more severe illness.

The etiologic agent of the current COVID-19 global pandemic is Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), one of several strains of Coronavirus capable of infecting humans and causing serious illness. SARS-CoV-2 produces several functional proteins in infected human cells by cleaving them from two overlapping viral polyproteins, pp1a and pp1ab. One of these functional proteins is a cysteine protease referred to as the main protease, Mpro (also called 3CLpro and nsp5). In addition to Mpro, a second cysteine protease, called PLpro, is generated. Mpro and PLpro cleave the viral polyproteins at a number of specific sites thereby generating several mature proteins essential for viral replication. PLpro also cleaves certain host cell proteins resulting in suppression of the immune system and elevated morbidity. Because of their functional indispensability in viral replication, Mpro and PLpro are attractive targets for the development of anti COVID-19 therapy.

In collaboration with the University of Georgia, College of Pharmacy, Sunshine has been pursuing the development of several PLpro inhibitors and currently has two drug candidates of such under evaluation in hACE2-transgenic mice. Sunshine anticipates that the COVID-19 treatment under development will also be effective against the variants of concern.

"The PCT represents a major milestone for our COVID-19 treatment project, as it strengthens our intellectual property position and allows us to file patents on a worldwide basis going forward," said Dr. Steve Slilaty, CEO of Sunshine Biopharma.

About Sunshine Biopharma's Coronavirus (COVID-19) Treatment

Severe Acute Respiratory Syndrome-Coronavirus-2 (SARS-CoV-2) is the causative agent of the ongoing COVID-19 pandemic that has claimed the lives of over 3.2 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.

About Adva-27a Anticancer Drug

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.

For Additional Information Contact:
Camille Sebaaly, CFO
Sunshine Biopharma Inc.
Direct Line: 514-814-0464
camille.sebaaly@sunshinebiopharma.com
www.sunshinebiopharma.com