



**For Immediate Release  
April 5, 2022**

## **Sunshine Biopharma's Newly Designed mRNA Molecules Prove Effective Against Multidrug Resistant Cancer Cells**

### ***A Potential Multi-Billion Dollar Global Market Opportunity for Cancer Treatments***

Montreal, Quebec, Canada – (GLOBE NEWSWIRE) – Sunshine Biopharma, Inc. (NASDAQ: "SBFM" and "SBFMW"), a pharmaceutical company focused on the research, development and commercialization of oncology and antiviral drugs, today announced that two of its newly designed mRNA molecules are effective at destroying cancer cells grown in culture.

The cytotoxicity tests were performed on a variety of cancer cells including multidrug resistant breast cancer cells (MCF-7/MDR), ovarian adenocarcinoma cells (OVCAR-3), and pancreatic cancer cells (SUIT-2). Toxicity studies using non-transformed (normal) human cells (HMEC cells) showed that these mRNA molecules had little or no cytotoxic effects. These new mRNA molecules are readily adaptable for delivery into patients using the mRNA vaccine technology. The Company anticipates filing a patent application in connection with these results soon.

"We are delighted by these findings in connection with our ongoing mRNA-as-therapeutic-agents research," said Dr. Steve Slilaty, CEO of Sunshine Biopharma. "The potential use of mRNA to treat cancer opens the door to many possibilities for patients including convenience, reduced toxicity and enhanced efficacy," he added.

### **About Sunshine Biopharma**

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 6.1 million people worldwide since it first appeared in December 2019. Sunshine Biopharma is working on the development of a treatment for COVID-19 and has completed the synthesis of four potential inhibitors of PLpro and subsequently identified a lead compound, SBFM-PL4. In addition, the Company recently expanded its research efforts into finding other PLpro inhibitors by entering into a collaboration agreement with the University of Arizona. The collaboration is focused on determining the in vivo safety, pharmacokinetics, and dose selection properties of three University of Arizona owned PLpro inhibitors, followed by efficacy testing in mice infected with SARS-CoV-2. The Company

holds the first option to negotiate for a commercial, royalty-bearing license for all intellectual property developed by University of Arizona under the research project.

In addition to working on the development of a treatment for COVID-19, Sunshine Biopharma is engaged in the development of 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.

### **Cautionary Note Regarding Forward Looking Statements**

*This press release and statements of the Company's management made in connection therewith contain "forward-looking statements" (as defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended) concerning future events. Words such as "may", "could", "expects", "projects," "intends", "plans", "believes", "predicts", "anticipates", "hopes", "estimates" and variations of such words and similar expressions are intended to identify forward-looking statements. These statements appear in a number of places in this release and include all statements that are not statements of historical fact. These statements involve known and unknown risks and are based upon several assumptions and estimates, which are inherently subject to significant uncertainties and contingencies, many of which are beyond the Company's control. Actual results may differ materially from those expressed or implied by such forward-looking statements. Factors that could cause actual results to differ materially include, but are not limited to, the risk factors described in the Company's filings with the SEC. The Company's SEC filings can be obtained free of charge on the SEC's website at [www.sec.gov](http://www.sec.gov). Except to the extent required by law, Sunshine Biopharma, Inc. (the "Company") expressly disclaims any obligations or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the Company's expectations with respect thereto or any change in events, conditions, or circumstances on which any statement is based.*

### **For Additional Information:**

Sunshine Biopharma Media Contacts:  
TraDigital IR  
Direct Line: 917-633-8980  
[investors@sunshinebiopharma.com](mailto:investors@sunshinebiopharma.com)

Sunshine Biopharma Inc. Contacts:  
Camille Sebaaly, CFO  
Direct Line: 514-814-0464  
[camille.sebaaly@sunshinebiopharma.com](mailto:camille.sebaaly@sunshinebiopharma.com)  
[www.sunshinebiopharma.com](http://www.sunshinebiopharma.com)