



**For Immediate Release  
April 7, 2014**

**SUNSHINE BIOPHARMA INCREASES THE EFFECTIVENESS OF Adva-27a LEAD COMPOUND 9.5-FOLD AGAINST BREAST AND PANCREATIC CANCER IN VITRO**

Montreal, Quebec, Canada -- (MARKETWIRE) -- Sunshine Biopharma Inc. (OTCQB: SBFM), a pharmaceutical company focused on the research, development and commercialization of drugs for the treatment of various forms of cancer today announced that it has resolved the two isomeric forms of its lead anticancer compound, Adva-27a, and as a result the specific activity of the drug candidate has increased 9.5-fold. Sunshine Biopharma had previously announced that the concentration at which Adva-27a inhibited 50% of the activity of Topoisomerase II (IC50) was 13.7 micromolar (see press release issued on October 5, 2011). As a result of today's development Adva-27a's IC50 has dropped 9.5-fold, to 1.44 micromolar. This implies that significantly lower quantities of the drug can be used to achieve the same effect.

"Isomeric forms of a compound refer to the fact that the compound has different arrangements of its atoms in space," said Dr. Steve N. Slilaty, Chief Executive Officer of Sunshine Biopharma. "Isomeric forms do not have identical properties. In the case of Adva-27a, the molecule exists in the alpha or beta form. This is a lot like a person's left hand and right hand. While the two hands look identical, they actually are not. They are mirror images of each other but are not superimposable. The fact that they are not superimposable means that they are not identical. Similarly, the alpha and beta forms of Adva-27a are not superimposable. The implications of all of this for our future breast cancer and pancreatic cancer patients are lower therapeutic dosages, which theoretically should result in reduced side-effects."

**About Adva-27a**

Adva-27a is Sunshine Biopharma's lead anticancer compound, a small molecule that has recently been shown to be effective at killing multidrug resistant breast cancer cells, small-cell lung cancer cells, uterine sarcoma cells and pancreatic cancer cells (Published in ANTICANCER RESEARCH, Volume 32, Pages 4423-4432, October 2012). Adva-27a is currently in the IND-Enabling stage of development. The original U.S. patent covering Adva-27a was issued on August 7, 2012 under U.S. patent number 8,236,935. The Company is planning a Phase I clinical trial of Adva-27a for pancreatic cancer in parallel to the Phase I clinical trial of Adva-27a for multidrug resistant breast cancer to be conducted at McGill University's Jewish General Hospital in Montreal (Canada).

## **Safe Harbor Forward-Looking Statements**

*To the extent that statements in this press release are not strictly historical, including statements as to revenue projections, business strategy, outlook, objectives, future milestones, plans, intentions, goals, future financial conditions, future collaboration agreements, the success of the Company's development, events conditioned on stockholder or other approval, or otherwise as to future events, such statements are forward-looking, and are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The forward-looking statements contained in this release are subject to certain risks and uncertainties that could cause actual results to differ materially from the statements made.*

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