
FOR IMMEDIATE RELEASE

Actinium Pharmaceuticals announces Collaboration with Memorial Sloan Kettering Cancer Center for a Novel Targeted Cancer Immunotherapy

September 30, 2002 Actinium Pharmaceuticals, Inc. (API) announced today its collaboration with Memorial Sloan-Kettering Cancer Center (MSKCC) in the field of alpha particle immunotherapy (APIT) by signing a license, development and commercialization agreement.

APIT combines the potent killing power of alpha particle emitting radioactive atoms (bismuth-213 or actinium-225) with specific monoclonal antibodies to target cancer cells. Once injected into the body, the radioactive drugs travel through the bloodstream until the antibody moiety locks onto or moves into a cell. Once at the target, the short-range radiation kills the cell. "You can inject small doses of these molecules, which circulate, find their target cells, invade them and eventually kill the cells. These are extremely potent drugs," comments Dr. David A. Scheinberg, Chief of the Leukemia Service at MSKCC.

In a Phase I study completed in 1999, MSKCC treated 18 patients with Acute Myeloid Leukemia (AML) in a dose escalation study using bismuth-213. In this study, the therapy successfully eliminated large numbers of tumor cells without significant clinical side effects to the patient. API is currently undertaking a follow up AML clinical study in which 11 patients have so far been treated with bismuth-213 in conjunction with cytarabine, a chemotherapy drug. Results thus far continue to be encouraging without additional side effects elicited by the combination.

During 2001, Dr. Scheinberg conducted preclinical research using the isotope actinium-225, as a medical isotopenanogenerator. Initial studies of human cancers in laboratory experiments, indicated actinium-225 was effective in killing the cancer cells, using only a few atoms of actinium-225. These cancers included leukemia, breast, ovarian, lymphoma, neuroblastoma, and prostate. The effects were

confirmed in animal studies of mice bearing human tumors. API has plans to conduct a Phase I clinical study in patients with AML in 2003 using actinium-225.

“API brings its supporting patent position for use of these unique, short half-life alpha-particle emitting radioisotopes actinium-225 and bismuth-213 to this collaboration,” said Dr. Maurits Geerlings, API’s President and CEO. “We also bring extensive experience with radiochemical operations, broad-spectrum engineering expertise, and a commitment to make available future supply sources for these isotopes.” The isotopes originate from uranium-233, a byproduct from nuclear power plants. API has teamed with other companies to develop a proposal to stabilize legacy uranium-233 stored at Oak Ridge National Laboratory, which would eliminate millions of dollars spent annually by the U.S. Department of Energy to safely store the nuclear material. This is seen as a great opportunity for the DOE to reduce expensive storage costs and stabilize hazardous material while at the same time producing bismuth-213 and actinium-225 for use in novel cancer therapies.

“Together, we hope to bring APIT to full-scale clinical use and commercialization by identifying, developing and licensing important therapeutic applications for these isotopes,” Geerlings explained. “We will work in partnership with developers and manufacturers who have successfully demonstrated monoclonal antibodies potentially useful for APIT.”

For more information, call Dr. Maurits Geerlings, API’s President and CEO at 703 299 9755.
