ACTINIUM ANNOUNCES FURTHER DEVELOPMENT OF ACTIMAB-A MANUFACTURING

New Collaboration To Validate Tenfold Improvement in Manufacturing Yields

NEW YORK, NY – April 7, 2014 – Actinium Pharmaceuticals, Inc. (NYSE MKT: ATNM) (“Actinium” or “the Company”), a biopharmaceutical Company developing innovative targeted payload immunotherapeutics for the treatment of advanced cancers, announced that it started a collaboration with IsoTherapeutics Group of Houston, TX to complete studies required for introduction of a new manufacturing process for Actimab-A. The new manufacturing process that results in a tenfold improvement of manufacturing yield has been developed by the Company internally in collaboration with IsoTherapeutics. IsoTherapeutics will perform additional experiments to generate documentation necessary for regulatory submissions.

Actimab-A is in a multicenter clinical trial for older patients diagnosed with acute myeloid leukemia (AML). Further improvements in manufacturing efficacy are integral components of the drug development process.

“Alpha particle immunotherapy is a new approach in oncology and for such novel technologies manufacturing development is inextricably linked with clinical development,” said Dr. Kaushik J. Dave, the President and CEO of Actinium Pharmaceuticals. “We are encouraged by the big advancements we are making in both areas and confirmation of our methods from our partners and collaborators. These advances have application beyond any individual drug.”

About Actimab-A

Actimab-A, Actinium’s second program is continuing its clinical development in a Phase 1/2 trial for newly diagnosed AML patients over the age of 60 in a single arm multicenter trial. The Company expects to make significant progress in the Phase 2 portion of the trial and announce interim results in 2014. Actimab-A is being developed as a first line therapy and has attracted support from some of the leading experts at the most prestigious cancer treatment hospitals due to the potential of its safety and efficacy profile.

Actimab-A consists of the Lintuzumab monoclonal antibody and actinium 225. Actinium-225 decays by giving off high-energy alpha particles, which kill cancer cells. When
actinium decays, it produces a series of daughter atoms, each of which gives off its own alpha particle, increasing the chances that the cancer cell will be destroyed. Lintuzumab is the humanized version of M195 and is a monoclonal antibody that targets CD33, found on myeloid leukemia cells. Both the alpha particle technology and lintuzumab were initially developed at Memorial Sloan Kettering Cancer Center.

About Actinium Pharmaceuticals

Actinium Pharmaceuticals, Inc. (ATNM.OB) is a New York-based biopharmaceutical company developing innovative targeted payload immunotherapeutics for the treatment of advanced cancers. Actinium’s targeted radiotherapy is based on its proprietary delivery platform for the therapeutic utilization of alpha-emitting actinium-225 and bismuth-213 and certain beta emitting radiopharmaceuticals in conjunction with monoclonal antibodies. The Company’s lead radiopharmaceutical Iomab™-B will be used in preparing patients for hematopoietic stem cell transplant, commonly referred to as bone marrow transplant. The Company is preparing a single, pivotal, multicenter Phase 3 clinical study of Iomab™-B in refractory and relapsed Acute Myeloid Leukemia (AML) patients over the age of 55 with a primary endpoint of durable complete remission. The company’s second program, Actimab-A, is continuing its clinical development in a Phase 1/2 trial for newly diagnosed AML patients over the age of 60 in a single-arm multicenter trial. For more information, please visit www.actiniumpharmaceuticals.com.

Contact:

Actinium Pharmaceuticals, Inc.
Investor/Media Relations: Corey Sohmer, (646) 459-4201
Email: csohmer@actiniumpharmaceuticals.com

Forward-Looking Statement for Actinium Pharmaceuticals, Inc.

This news release contains “forward-looking statements” as defined in the Private Securities Litigation Reform Act of 1995. These statements are based on management’s current expectations and involve risks and uncertainties, which may cause actual results to differ materially from those set forth in the statements. The forward-looking statements may include statements regarding product development, product potential, or financial performance. No forward-looking statement can be guaranteed and actual results may differ materially from those projected. Actinium Pharmaceuticals undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise.