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Actinium Pharmaceuticals Opens Enrollment for the Fourth and Final Cohort in the Company's Ongoing Phase I/II Trial in Acute Myeloid Leukemia

Successful Completion of the Third Cohort of AML Patients Followed by Opening of the Trial for Treatment at Increased Dose Level

NEW YORK, NY -- (Marketwired) -- 03/24/15 -- 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 today that the Company is moving forward with enrollment and treatment of additional patients in its clinical trial for acute myeloid leukemia (AML) in patients over the age of 60. Actinium will proceed with patient screening and enrollment for the fourth cohort, who, in keeping with trial protocol, will be injected with two doses 4 to 7 days apart of the Company's investigational new drug Actimab-A at a higher activity level of 2.0 µCi/kg per dose.

In the previously completed third cohort in which patients received two doses of Actimab-A at 1.5 µCi/kg per dose two out of three Actimab-A treated patients achieved complete remission with different degrees of hematological recovery (CRi). These responses were documented in the settings of high pre-treatment leukemia burdens of up to 80% in the bone marrow. In the second cohort treated at a lower dose level of Actimab-A of 1.0 µCi/kg per dose, one patient achieved CRi.

"As we start this last dose level in the Phase 1 portion of our trial, we are very encouraged with results so far," commented Kaushik J. Dave, President and CEO of Actinium Pharmaceuticals. "We hope to establish the maximum tolerated dose soon which would allow us to proceed with the Phase 2 portion of the trial, as agreed with the FDA."

The trial is a prospective, open-label study, designed to determine the safety and efficacy of Actimab-A in newly diagnosed AML patients who cannot tolerate current high dose chemotherapeutic regimens.

Actinium previously announced positive interim data from the ongoing Phase 1/2 trial of Actimab-A in older patients with newly diagnosed Acute Myeloid Leukemia ("AML"). Most notably, median overall survival ("OS") of the seven secondary AML patients (with prior myelodysplastic syndrome, or MDS) in the study was 9.1 months, which compares favorably to historical norms of 2 to 5 months depending on the treatment modality. Older AML patients are already higher risk, with secondary AML patients considered to have the more severe and less treatable form of AML, and as a consequence have shorter expected survival. The clinical abstract was published and is available online in Blood, the official

Journal of the American Society of Hematology.

About Actimab-A

Actimab-A is a radiolabeled antibody being developed for newly diagnosed AML in patients over 60, and is currently in a multicenter Phase 1/2 clinical trial. Based on Actinium's alpha-particle immunotherapy (APIT) platform, Actimab-A consists of the CD33 antibody lintuzumab linked to the actinium-225 payload. Actimab-A has attracted support from leading experts at the prestigious and high-volume cancer treatment hospitals due to the potential of its safety and efficacy profile, as well as its potential potency, specificity and ease of use. Clinical trials are being conducted at world-class cancer institutions such as Memorial Sloan Kettering Cancer Center, MD Anderson Cancer Center, Johns Hopkins Medicine, Columbia University Medical Center, University of Pennsylvania Health System, Fred Hutchinson Cancer Research Center, and the Texas Oncology-Baylor Charles A. Sammons Cancer Center. The Company expects additional updates to its Phase 1/2 clinical trial in December 2014. Actimab candidates are in early development for other cancers.

About Actinium Pharmaceuticals

Actinium Pharmaceuticals, Inc. (www.actiniumpharma.com) is a New York-based biopharmaceutical company developing innovative targeted payload immunotherapeutics for the treatment of advanced cancers. Actinium's targeted radiotherapy products are 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 product candidate Iomab-B is designed to be used, upon approval, in preparing patients for hematopoietic stem cell transplant, commonly referred to as bone marrow transplant. The Company plans to conduct a single, pivotal, multicenter Phase 3 clinical study of Iomab-B in refractory and relapsed AML patients over the age of 55 with a primary endpoint of durable complete remission. The Company's second product candidate, 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.

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 such 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 undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

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