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Clinical Trial Results for Actimab-A Presented at the 57th American Society of Hematology Annual Meeting

Complete Remission Rate of 29% Seen in the Three Highest Dose Cohorts, Favorable Safety and Tolerability Reported

NEW YORK, NY -- (Marketwired) -- 12/08/15 --

Actinium Pharmaceuticals, Inc. (NYSE MKT: ATNM) ("Actinium" or "the Company"), is a biopharmaceutical company developing innovative targeted payload immunotherapeutics for the treatment of advanced cancers. Actinium announced today that Dr. Joseph Jurcic of Columbia University Medical Center presented data from the Phase 1 portion of the Company's Actimab-A Phase 1/2 clinical trial. The data were presented in a poster session at the 57th American Society of Hematology (ASH) Annual Meeting currently ongoing in Orlando, FL.

Actimab-A is being studied in Acute Myeloid Leukemia (AML) patients over the age of 60 that have not received prior therapy and have declined or are unsuitable for intensive induction chemotherapy. In total, 14 patients, who had median CD33 expression of 81%, were treated in four cohorts at escalating doses of 0.5 microcuries per kilogram ($\mu\text{Ci/kg}$), 1.0 $\mu\text{Ci/kg}$, 1.5 $\mu\text{Ci/kg}$ and 2.0 $\mu\text{Ci/kg}$. After cycle 1, eight of eleven patients (73%) evaluated had mean bone marrow blast reduction of 72%. Objective responses were seen in four of fourteen patients (29%) after one cycle of therapy with one patient achieving complete remission, two patients achieving complete remission with incomplete platelet count recovery and one patient achieving complete remission with incomplete blood count recovery.

"The rate of remission and tolerability results seen with Actimab-A in this trial are very encouraging, as elderly patients diagnosed with AML have limited options and prognosis is typically poor," stated Dr. Joseph Jurcic, study investigator at Columbia University Medical Center. "I look forward to continuing to dose Actimab-A in a greater number of patients in the next segment of the Phase 1/2 clinical trial to evaluate the full potential of this therapy."

"These latest data from our CD33 targeting program provide yet another validation for our approach of utilizing targeted alpha-emitters in older high risk AML patients, an area of high unmet medical need. We have seen utility of our platform with the first generation CD33-Bismuth-213 construct in previous trials, and our next generation CD33-Actinium-225 labeled product is providing all the additional advantages we have expected. This enhances our confidence in Actimab-A's potential" said Dr. Dragan Cicic, Chief Medical Officer of Actinium Pharmaceuticals. "Based on the strong responses and safety data seen with doses of Actimab-A above 1 $\mu\text{Ci/kg}$, we are moving towards the Phase 2 portion of the trial so that

this important therapeutic option can be made available to patients as quickly as possible."

About Actimab-A

Actimab-A, Actinium's most advanced alpha particle immunotherapy program, is currently in a single arm, multicenter trial Phase 1/2 trial for newly diagnosed AML patients over the age of 60. Actimab-A is being developed as a first-line therapy and it 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 monoclonal antibody, lintuzumab, and the radioisotope, 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, which is abundantly 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. (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 beta-emitting iodine-131 radiopharmaceuticals in conjunction with monoclonal antibodies. The Company's lead radiopharmaceutical product candidate lomab-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 lomab-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 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.

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