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Actinium Pharmaceuticals Highlights Successful Investigator Meeting for Pivotal Phase 3 Iomab-B SIERRA Trial

Attendance of Leading Bone Marrow Transplant Physicians and Multi-disciplinary Teams from Largest Bone Marrow Transplant Centers Indicates Strong Support for the Iomab-B SIERRA Trial

NEW YORK, NY -- (Marketwired) -- 07/20/16 --

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 conducted a successful investigator meeting on July 15 - 16, 2016 in Dallas, Texas. The purpose of the investigator meeting was to bring together bone marrow transplant physicians, care providers and clinical research coordinators from current and prospective clinical trial sites in the pivotal, Phase 3 SIERRA clinical trial for Iomab-B. Members of Actinium's scientific advisory board, clinical development team and management team presented educational content pertaining to Iomab-B and the SIERRA trial to the meeting attendees. Actinium was joined by members of MedPace, Inc., Actinium's Clinical Research Organization (CRO) for the SIERRA trial. The meeting drew over 85 attendees including principal investigators, care providers and clinical research coordinators from many of the leading bone marrow transplant centers from across the United States.

Felix Garzon, M.D., Ph.D., Actinium's Senior Vice President and Head of Clinical Development said, "The Investigator Meeting furthers our confidence in our ability to successfully execute the pivotal Phase 3 trial for Iomab-B. It was clear from the meeting that there is great enthusiasm from transplant, nuclear medicine and hematology physicians for Iomab-B. Actinium's clinical development team is excited to work with these physicians to progress the SIERRA trial efficiently and effectively."

The pivotal Phase 3 SIERRA trial is a multi-center, randomized, controlled study that will enroll 150 patients and it is designed to evaluate if treatment with Iomab-B followed by a bone marrow transplant can increase durable Complete Remission (dCR) rates of 6 months compared to physician's choice of chemotherapy followed by a bone marrow transplant or other treatment modalities with curative intent. There are currently no effective treatments approved by the FDA for AML in this patient population and there is no defined standard of care. The SIERRA trial will include independent Data Monitoring Committee (DMC) reports, which will occur at 25, 50, 75 and 100 percent patient enrollment with the potential for two additional ad-hoc DMC reports. Approximately 150 medical centers provide AML bone marrow transplants, with the top 30 centers performing over 50 percent of the AML BMT procedures. Actinium expects many of the highest volume BMT centers to participate in the

SIERRA trial in light of the results of previous studies with Iomab-B conducted in almost 300 patients. Iomab-B has demonstrated the potential to create a new treatment paradigm for bone marrow transplants by: expanding the pool to otherwise ineligible patients who do not have any viable treatment options currently; enabling a shorter and safer preparatory interval for HSCT; reducing post-transplant complications; and demonstrating a clear survival benefit including curative potential.

Sandesh Seth, Actinium's Executive Chairman stated, "I am delighted by the attendance and enthusiasm that I witnessed at the Investigator Meeting this past weekend. Actinium is fortunate to have such strong support from the leading bone marrow transplant centers, which we can only attribute to the potential for Iomab-b to fulfill a dire unmet medical need as an induction and conditioning agent prior to a bone marrow transplant for patients with relapsed or refractory Acute Myeloid Leukemia who are over the age of 55. We are thankful for the physicians and centers that will be participating in our trial but most importantly we are grateful for the opportunity to be able to provide such a potentially life saving therapy to patients who currently have no viable treatments available."

More information about Iomab-B and the SIERRA trial can be found by visiting www.actiniumpharma.com.

About the SIERRA trial

The SIERRA (*S*tudy of *I*omab-B in *E*lderly *R*elapsed or *R*efractory *A*ML) trial is a multi-center, randomized, controlled pivotal Phase 3 study of Iomab-B in patients with relapsed or refractory Acute Myeloid Leukemia (AML) who are over the age of 55. The Company established an agreement with the FDA that the path to a Biologics License Application (BLA) submission could include the SIERRA trial, if it is successful. The primary endpoint in the pivotal Phase 3 trial is durable complete remission, defined as a complete remission lasting at least 6 months and the secondary endpoint will be overall survival at one year. There are currently no effective treatments approved by the FDA for AML in this patient population and there is no defined standard of care. Iomab-B has completed several physician sponsored clinical trials examining its potential as a conditioning regimen prior to HSCT in various blood cancers, including the Phase 1/2 study in relapsed and/or refractory AML patients. The results of these studies in almost 300 patients have demonstrated the potential of Iomab-B to create a new treatment paradigm for bone marrow transplants by: expanding the pool to ineligible patients who do not have any viable treatment options currently; enabling a shorter and safer preparatory interval for HSCT; reducing post-transplant complications; and showing a clear survival benefit including curative potential.

About Iomab-B

Iomab-B is a radioimmunotherapy consisting of BC8, a novel murine monoclonal antibody, and iodine-131 radioisotope. BC8 has been developed by the Fred Hutchinson Cancer Research Center to target CD45, a pan-leukocytic antigen widely expressed on white blood cells. This antigen makes BC8 potentially useful in targeting white blood cells in preparation for hematopoietic stem cell transplantation in a number of blood cancer indications, including acute myeloid leukemia (AML), chronic myeloid leukemia (CML), acute lymphoblastic leukemia (ALL), chronic lymphocytic leukemia (CLL), Hodgkin's disease (HD), Non-Hodgkin lymphomas (NHL) and multiple myeloma (MM). When labeled with radioactive isotopes, BC8 carries radioactivity directly to the site of cancerous growth and bone marrow while avoiding

effects of radiation on most healthy tissues. Iomab-B is being studied in the pivotal Phase 3 SIERRA trial and is designed to be used, upon approval, in preparing patients with relapsed or refractory AML over the age of 55 for hematopoietic stem cell transplant (HSCT), commonly referred to as bone marrow transplant (BMT).

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 radioimmunotherapy 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 is conducting a single, pivotal, multicenter Phase 3 clinical study of Iomab-B in refractory or 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 patients newly diagnosed with AML over the age of 60 in a single-arm multicenter trial.

Forward-Looking Statements 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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