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Actinium Pharmaceuticals Announces Research Collaboration with Memorial Sloan Kettering to Support Further Clinical Expansion of Actimab-A's Backbone Therapy Strategy

NEW YORK, March 20, 2025 /PRNewswire/ -- **Actinium Pharmaceuticals, Inc.** (NYSE AMERICAN: ATNM) (Actinium or the Company), a pioneer in the development of targeted radiotherapies, today announced that is has entered into a sponsored research agreement with Memorial Sloan Kettering Cancer Center (MSKCC) to expand Actimab-A's mutation agnostic mechanism of action. The collaboration has two specific objectives. The first objective is to study Actimab-A in combination with targeted therapies including FLT3 and menin inhibitors to define transcriptional profiles in AML cells following treatment with these combinations. The second objective is to assess the activity of Actimab-A-based combinations on primary AML patient-derived ex vivo samples from patients with and without prior Venetoclax + hypomethylating agent (HMA) treatment. The collaboration will be done with members of MSKCC's leukemia and early drug development specialist teams.

Actinium Pharmaceuticals, Inc.

Actimab-A has demonstrated a mutation agnostic profile with positive clinical results in high-risk relapsed and refractory (r/r) AML patients including those with a TP53 gene mutation, prior Venetoclax treatment and prior bone marrow transplant (BMT). Additionally, Actimab-A has demonstrated mechanistic synergy with improved antileukemic activity and /or tumor control with FLT3 inhibitors, menin inhibitors for NPM1 mutant and KMT2A rearrangement and IDH1&2 inhibitors in preclinical studies. NPM1 and KMT2A are present in approximately 30%, FLT3 mutations are present in approximately 25-30% and IDH1&2 are present in approximately 10-20% of AML cases.

Sandesh Seth, Actinium's Chairman and CEO, said, "In 2025 we are reimagining and revitalizing our Actimab-A program leveraging its mutation agnostic, backbone therapy profile. This collaboration with MSKCC will further expand and support novel Actimab-A combinations with targeted therapies like FLT3 and menin inhibitors in AML. As we have demonstrated in combination with CLAG-M, Actimab-A has the potential to improve patients'

outcomes via its novel and differentiated mechanism to target radiosensitive AML blasts and produce lethal double strand DNA breaks via the Actinium-225 payload for which there are no known resistance or repair mechanisms. We are eager to execute this collaboration and look forward to generating important data from AML patient derived models. Our goal is to address the unmet needs of over 100,000 patients with myeloid malignancies across the treatment journey with Actimab-A, which represents a multi-billion-dollar market opportunity. With recently initiated trials, this exciting research collaboration and clinical data expected in the second half of 2025, we believe we are making great progress to achieve our goal."

Actimab-A is Actinium's lead radiotherapeutic that delivers Actinium-225, a potent alpha-emitter radioisotope payload that can produce lethal double strand DNA breaks to kill targeted cells that express CD33. CD33 is expressed ubiquitously in AML and in other myeloid malignancies, giving Actimab-A backbone therapy potential. Actimab-A is being advanced into a pivotal Phase 2/3 in combination with the chemotherapy regimen CLAG-M in patients with relapsed or refractory AML and in newly diagnosed AML in combination with Venetoclax and ASTX-727 (Taiho Oncology, an Otsuka holdings company) a novel oral hypomethylating agent (HMA) under a cooperative research and development agreement (CRADA) with the National Cancer Institute (NCI). Actinium is also developing Actimab-A for solid tumor indications by targeting myeloid derived suppressor cells (MDSCs), CD33 expressing immune cells, which are overexpressed in the tumor microenvironment that can limit the efficacy of PD-1 checkpoint immunotherapies and are associated with poor outcomes. Actinium's solid tumor program is comprised of several controlled, head-to-head clinical trials that will evaluate the combination of Actimab-A with the PD-1 checkpoint inhibitors KEYTRUDA® versus KEYTRUDA® alone, and Actimab-A with OPDIVO® versus OPDIVO® alone initially in HNSCC or Head and Neck Squamous Cell Carcinoma and NSCLC or Non-Small Cell Lung Cancer with a separate trial for each indication.

About Actinium Pharmaceuticals, Inc.

Actinium is a pioneer in the development of targeted radiotherapies intended to meaningfully improve patient outcomes. Actinium is advancing its lead product candidate Actimab-A, a CD33 targeting therapeutic, as potential backbone therapy in acute myeloid leukemia (AML) and other myeloid malignancies leveraging the mutation agnostic alpha-emitter radioisotope payload Actinium-225 (Ac-225). Actimab-A has demonstrated potential activity in relapsed and refractory acute myeloid leukemia (r/r AML) patients in combination with the chemotherapy CLAG-M including high rates of Complete Remissions (CR) and measurable residual disease (MRD) negativity leading to improved survival outcomes and is being advanced to a pivotal Phase 2/3 trial. In addition, Actinium is engaged with the National Cancer Institute (NCI) under the Cooperative Research and Development Agreement (CRADA) for development of Actimab-A in AML and other myeloid malignancies. The first clinical trial under the CRADA will evaluate the triplet combination comprised of Actimab-A, Venetoclax (Abbvie/Roche) an oral Bcl-2 inhibitor and ASTX-727 (Taiho Oncology, an Otsuka holdings company) a novel oral hypomethylating agent (HMA) in frontline acute myeloid leukemia (AML) patients. Additionally, Actinium is developing Actimab-A as a potential pan tumor therapy in combination with PD-1 checkpoint inhibitors including KEYTRUDA® and OPDIVO® by depleting myeloid derived suppressor cells (MDSCs), which represents a potential multi-billion-dollar addressable market. Iomab-ACT, Actinium's next generation conditioning candidate, is being developed with the goal of improving patient access and outcomes for potentially curative cell and gene therapies. Iomab-B is an

induction and conditioning agent prior to bone marrow transplant in patients with r/r AML, which Actinium is seeking a potential strategic partner for the U.S. In addition, the company's R&D efforts are primarily focused on advancing several preclinical programs for solid tumor indications. Actinium holds 230 patents and patent applications including several patents related to the manufacture of the isotope Ac-225 in a cyclotron.

For more information, please visit: https://www.actiniumpharma.com/

Forward-Looking Statements

This press release may contain projections or other "forward-looking statements" within the meaning of the "safe-harbor" provisions of the private securities litigation reform act of 1995 regarding future events or the future financial performance of the Company which the Company undertakes no obligation to update. These statements are based on management's current expectations and are subject to risks and uncertainties that may cause actual results to differ materially from the anticipated or estimated future results, including the risks and uncertainties associated with preliminary study results varying from final results, estimates of potential markets for drugs under development, clinical trials, actions by the FDA and other governmental agencies, regulatory clearances, responses to regulatory matters, the market demand for and acceptance of Actinium's products and services, performance of clinical research organizations and other risks detailed from time to time in Actinium's filings with the Securities and Exchange Commission (the "SEC"), including without limitation its most recent annual report on form 10-K, subsequent quarterly reports on Forms 10-Q and Forms 8-K, each as amended and supplemented from time to time.

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