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Actinium Highlights Mutation Agnostic Antileukemic Activity of Actimab-A Against FLT3, NPM1, KMT2A and TP53 Mutations in AML Models Demonstrating Backbone Potential for Acute Myeloid Leukemia Treatment at the American Association for Cancer Research Annual Meeting

- Actimab-A significantly potentiated and prolonged efficacy in combination with standard of care targeted therapies including hypomethylating agent azacitidine, FLT3 and menin inhibitors in in-vivo AML models
- Actimab-A is the only CD33 targeted radiotherapy with Actinium-225 isotope payload in development for AML and other myeloid malignancies
- Actimab-A is currently being advanced in several combination studies including a Phase 2/3 trial in combination with CLAG-M in relapsed/refractory AML and in combination with Venetoclax and ASTX-727, an oral hypomethylating agent from Taiho Oncology in frontline AML under a CRADA with the NCI

NEW YORK, April 28, 2025 /PRNewswire/ -- **Actinium Pharmaceuticals, Inc.** (NYSE AMERICAN: ATNM) (Actinium or the Company), a pioneer in the development of targeted radiotherapies, today highlighted data presented at the American Association for Cancer Research (AACR) Annual Meeting supporting Actimab-A's mutation agnostic antileukemic effect and backbone therapy potential in preclinical acute myeloid leukemia (AML) models. The preclinical data demonstrate that the combination of Actimab-A with standard of care AML therapies including menin and FLT3 inhibitors and the hypomethylating agent (HMA) azacitidine resulted in significant antileukemic activity in AML cells lines with FLT3, NPM1, KMT2A and TP53 mutations. Additionally, in animal models, Actimab-A significantly enhanced tumor growth inhibition, prolonged the duration of response and survival when combined with the menin inhibitor revumenib (Syndax Pharmaceuticals, Inc.), and potentiated AML cell killing in combination with the FLT3 inhibitor gilteritinib (Astellas Pharma US, Inc.) and HMA azacitidine.

Sandesh Seth, Actinium's Chairman and CEO, said, "In multiple clinical trials, Actimab-A has demonstrated potent single agent activity, synergy with other therapeutic modalities and efficacy in patients with high-risk features such as a TP53 mutation. To our knowledge, Actimab-A is the only AML therapy to achieve all of these outcomes, which we attribute to its mutation agnostic, backbone therapy profile. The data presented at AACR further support Actimab-A's mutation agnostic mechanism of action across several of the most commonly expressed mutations and synergy with the targeted therapies approved for patients with these mutations. With multiple clinical trials underway and being planned across the AML treatment settings, we are focused on generating strong clinical outcomes starting in the second half of this year and committed to realizing Actimab-A's potential for patients who have significant unmet needs."

Actimab-A is Actinium's lead radiotherapy 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 such as myeloid dysplastic syndromes (MDS), which Actinium estimates to be an addressable market of over 100,000 patients in the U.S. and EU5. Actimab-A is also being advanced into a pivotal Phase 2/3 trial 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) an oral hypomethylating agent (HMA) under a cooperative research and development agreement (CRADA) with the National Cancer Institute (NCI). 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).

The Actimab-A AACR presentation is available for viewing on the Presentations& Webinars page of Actinium's website HERE.

Title: Actimab-A (Lintuzumab-Ac-225) has potent mutation agnostic antileukemic activity in preclinical models of AML
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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. ATNM-400 is Actinium's novel non-PSMA targeting Ac-225 radiotherapy for prostate cancer, which is supported by preclinical data demonstrating higher efficacy than Pluvicto (PSMA-617-Lutetium-177) and potent efficacy in Pluvicto resistant prostate cancer models. 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.

Investors:
investorrelations@actiniumpharma.com

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