March 27, 2025

Actinium Pharmaceuticals Announces ATNM-400 a Novel Non-PSMA Targeting First in Class Prostate Cancer Radiotherapy Leveraging Actinium-225

- 99.8% tumor growth inhibition achieved with a single dose of ATNM-400 in preclinical prostate cancer models

- ATNM-400 accumulated in tumors for up to 144 hours and showed minimal uptake in healthy tissues in prostate cancer xenograft model

- Initial ATNM-400 preclinical data to be presented at AACR including results in Pluvicto resistant prostate cancer models

NEW YORK, March 27, 2025 /PRNewswire/ -- **Actinium Pharmaceuticals, Inc.** (NYSE AMERICAN: ATNM) (Actinium or the Company), a pioneer in the development of targeted radiotherapies, today announced ATNM-400, a novel, non-PSMA targeting, first in class radiotherapy for prostate cancer utilizing the Actinium-225 (Ac-225) radioisotope. Initial preclinical data from ATNM-400 will be presented at the American Association for Cancer Research (AACR) Annual Meeting being held on April 25 - 30, 2025, in Chicago, IL. The ATNM-400 AACR abstract will include the results from in vitro and in vivo studies including biodistribution imaging and efficacy analyses with various dose levels of ATNM-400. Actinium continues to advance ATNM-400 with additional data expected from Pluvicto-resistant prostate cancer models at AACR. Pluvicto (Lu-177-PSMA-617) is a prostate-specific membrane antigen (PSMA) directed targeted radiotherapy that uses the beta-particle emitting radioisotope Lutetitium-177 (Lu-177) that is approved for patients with metastatic prostate cancer. Pluvicto is marketed and sold by Novartis and generated sales of $1.39 billion in 2024. ATNM-400 is differentiated from Pluvicto as it targets a different marker than PSMA that has been shown to be overexpressed in patients with prostate cancer and uses the alpha-particle emitter Ac-225, which is more potent than Lu-177 but has a shorter path length, which could result in fewer off-target effects.

Sandesh Seth, Actinium's Chairman and CEO, said, "The current era of radiotherapy is built

on the clinical and commercial success of Pluvicto in prostate cancer. The field is now looking to address patients that do not respond or progress after Pluvicto therapy. We believe ATNM-400 can address this high unmet need and we are incredibly excited by our data to date. As anticipated, we have seen robust tumor control and ATNM-400 has shown to be well tolerated in preclinical studies, which we believe is due to the precise and potent cell-killing of Ac-225. We are also highly excited by the results of our biodistribution studies that showed selective tumor uptake with minimal uptake in normal tissues. By focusing on a non-PSMA target, we also believe ATNM-400 has the potential to address some of the toxicities reported with Pluvicto and other PSMA targeting radiotherapies such as xerostomia. We are eager to present our ATNM-400 data at AACR and to continue to advance this highly novel prostate cancer candidate."

Highlights from the abstract include:

- ATNM-400 selectively binds to prostate cancer cells, undergoes rapid internalization, and induces dose-dependent cytotoxicity
- In prostate cancer xenograft mouse models, ATNM-400 accumulated in tumors for up to 144 hours, while showing minimal uptake in normal tissues
- Small animal SPECT/CT imaging with Indium-111-labeled antibody confirmed selective tumor accumulation and clearance from healthy tissues
- A single dose of ATNM-400 achieved 68.5% tumor growth inhibition at 20 µCi/kg and 99.8% at 40 µCi/kg, with all doses being well tolerated

ATNM-400 AACR Presentation Details

Title: ATNM-400 is a novel Actinium-225 antibody radioconjugate with strong efficacy in preclinical models of prostate cancer

Abstract Number: 578

Session: PO.ET08.01 - Theranostics and Radiotheranostics

Date & Time: April 27, 2025 – 2:00 pm – 5:00 pm

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. ATNM-400 is Actinium's novel non-PSMA targeting Ac-225 radiotherapy for prostate cancer, which is supported by preclinical data and is being advanced to clinical trials. 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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