November 6, 2023

Actinium Presents Preclinical Data at SITC Demonstrating Actimab-A's Potential to Restore T Cell Immunity in the Solid Tumor Microenvironment Supporting Immunotherapy Combinations

- Actimab-A can target CD33 positive immune suppressing myeloid derived suppressor cells and restore T cell proliferation and effector response
- Solid tumor MDSC infiltration and uptake of Actimab-A confirmed by SPECT/CT imaging in a humanized non-small cell lung cancer model

NEW YORK, Nov. 6, 2023 /PRNewswire/ -- Actinium Pharmaceuticals, Inc. (NYSE AMERICAN: ATNM) (Actinium or the Company), a leader in the development of targeted radiotherapies, today announced data was presented at Society of Immunotherapy of Cancer (SITC) 38th Annual Meeting on Saturday, November 4, 2023, further supporting Actimab-A, the Company's clinical stage targeted radiotherapeutic comprised of the CD33 targeting antibody lintuzumab and the Actinium-225 (Ac-225) alpha-particle emitting payload.

The poster highlighted Actimab-A's ability to target and deplete myeloid-derived suppressor cells (MDSCs), which uniformly express CD33. MDSCs are a cell population of interest as they remodel the tumor environment and promote immune evasion. Actinium believes Actimab-A has the potential to be used in combination with immunotherapy, including immune checkpoint inhibitors, to enhance antitumor immunity via targeted MDSC depletion. Supportive data from the SITC presentation includes:

- Actimab-A reduced cancer patient-derived MDSCs in a dose-dependent manner ex vivo and decreased MDSC viability approximately two-fold greater than a non-radiolabeled CD33 antibody
- MDSC suppression of activated T cell proliferation and cytokine effector function ex vivo was restored following treatment with Actimab-A
- Actimab-A significantly depleted MDSCs in peripheral blood of tumor-bearing humanized mice compared to non-radiolabeled CD33 antibody in vivo
- SPECT/CT imaging confirmed uptake of lintuzumab in humanized mice at the sites of

non-small cell lung cancer tumor indicating enrichment of CD33+ MDSCs in the tumor microenvironment

Sandesh Seth, Actinium's Chairman and CEO, commented, "These data further increase our enthusiasm for Actimab-A's potential in solid tumor indications. Immunotherapy has had a profound impact on patient outcomes across multiple solid tumor indications, however, there are still several indications with high unmet needs and significant room to further improve patient outcomes. By depleting MDSCs in a targeted manner, we are excited by the prospect of Actimab-A synergizing with immunotherapy to enhance antitumor immunity. We look forward to continuing to advance this initiative in continuing our goal to address high unmet patient needs with our targeted radiotherapeutics."

About Actinium

Actinium develops targeted radiotherapies to meaningfully improve survival for people who have failed existing oncology therapies. Advanced pipeline candidates Iomab-B (pre-BLA), an induction and conditioning agent prior to bone marrow transplant, and Actimab-A (National Cancer Institute CRADA pivotal development path), a therapeutic, have demonstrated potential to extend survival outcomes for people with relapsed and refractory acute myeloid leukemia. Actinium plans to advance Iomab-B for other blood cancers and next generation conditioning candidate Iomab-ACT to improve cell and gene therapy outcomes. Actinium's technology platform is the basis for collaborations with Astellas Pharma and AVEO Oncology/LG Chem Life Sciences for solid tumors. Actinium holds more than 220 patents and patent applications.

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.

Contact:
investorrelation@actiniumpharma.com

View original content to download multimedia:https://www.prnewswire.com/news-releases/actinium-presents-preclinical-data-at-sitc-demonstrating-actimab-as-potential-to-

restore-t-cell-immunity-in-the-solid-tumor-microenvironment-supporting-immunotherapy-combinations-301977723.html

SOURCE Actinium Pharmaceuticals, Inc.