September 20, 2024

Actinium Pharmaceuticals Announces Publication of Results from the Phase 3 SIERRA Trial of Iomab-B in the Journal of Clinical Oncology

- Iomab-B is the first CD45 targeted radiotherapy for conditioning in development to enable potentially curative bone marrow transplant and represents an alternative to chemotherapy-based approaches
- SIERRA achieved durable Complete Remission primary endpoint and Event-Free Survival secondary endpoint with high statistical significance
- Iomab-B was well tolerated in the older, heavily pretreated relapsed/refractory AML patients with active disease enrolled in the SIERRA trial
- Actinium to seek strategic partner for Iomab-B for further development in the U.S. following completion of interactions with FDA for additional head-to-head clinical trial to demonstrate overall survival benefit

NEW YORK, Sept. 20, 2024 /PRNewswire/ -- **Actinium Pharmaceuticals, Inc.** (NYSE AMERICAN: ATNM) (Actinium or the Company), a leader in the development of Antibody Radiation Conjugates (ARCs) and other targeted radiotherapies, today announced the publication of the Phase 3 SIERRA results of Iomab-B in the peer-reviewed Journal of Clinical Oncology (JCO). The article, titled, "Randomized Phase III SIERRA Trial of ^{131}I-Apamistamab Before Allogeneic Hematopoietic Cell Transplantation vs Conventional Care for Relapsed/Refractory Acute Myeloid Leukemia" and is available online on the ASCO Journal of Clinical Oncology website HERE.

The Phase 3 SIERRA (**S**tudy of **I**omab-B in **E**lderly **R**elapsed **R**efractory **A**ML) trial was a randomized, multi-center, controlled trial that enrolled 153 patients aged 55 and above with active relapsed or refractory Acute Myeloid Leukemia (r/r AML), including heavily pre-treated patients and those with high-risk characteristics such as a TP53 mutation. The SIERRA trial compared outcomes of patients receiving Iomab-B (Iodine-131-apamistamab) and a bone marrow transplant (BMT) to physician's choice of salvage chemotherapy and standard allogeneic BMT in the control arm.

The SIERRA trial met the primary endpoint of durable Complete Remission (dCR) of 6-months following initial complete remission after BMT with high statistical significance (p-value of <0.0001) with 22% of patients (13/76) achieving dCR in the Iomab-B arm compared to 0% of patients (0/77) in the control arm. A significant improvement in Event Free Survival (EFS), a secondary endpoint of the SIERRA trial with a Hazard Ratio = 0.22 (p-value <0.0001) was also achieved. SIERRA did not meet the secondary endpoint of overall survival (OS) on an intent to treat basis analysis due to the high crossover rate with nearly 60% of control arm patients receiving Iomab-B followed by a BMT.

The Phase 3 SIERRA results were first presented in a late-breaker presentation at the Transplantation & Cellular Therapy (TCT) Tandem Meetings of the American Society for Transplantation and Cellular Therapy (ASTCT) and the Center for International Blood & Marrow Transplant Research (CIBMTR) in February 2023. Since TCT, the results of the SIERRA trial have been presented in several oral presentations at leading BMT, hematology, nuclear medicine and nursing meetings and congresses in the U.S. and EU. Supplemental analyses of the SIERRA results have shown improved survival outcomes in patients with a TP53 mutation, which is associated with poor outcomes, as well as increased 1-and 2-year overall survival in patients aged 65 and above.

Dr. Sergio Giralt, Deputy Division Head, Division of Hematological Malignancies and Attending Physician, Adult BMT Service at the Memorial Sloan Kettering Cancer Center, and leading SIERRA Trial investigator and corresponding author, said, "The SIERRA trial was important for the field of transplant and demonstrated for the first time in a randomized study that the CD45 antibody-radioconjugate Iomab-B can provide patients with improved access to a potentially curative hematopoietic stem cell transplant, and improved outcomes compared to current chemotherapy-based regimens. Importantly, Iomab-B demonstrated a statistically significant improvement in key efficacy endpoints including durable Complete Remission and event-free survival. The SIERRA trial was conducted as multiple new therapies gained approval and was designed to address the nuances and difficulty of treating this patient population including allowing physician's choice of care in the control arm given the heterogeneity of treatment across institutions and the crossover design to provide best patient care. Despite multiple drug approvals for patients with AML, there remains no curative options for older patients with relapsed or refractory disease and outcomes for these patients also remain dismal. My fellow investigators and I are disappointed that the SIERRA trial will not support the approval of Iomab-B despite the positive results and significant unmet medical need of this patient population. However, there is continued significant interest from the transplant community to participate in the upcoming phase 3 study with Iomab-B to provide patients access to this important drug candidate."

On August 05, 2024, Actinium announced that after concluding both its clinical and Chemistry, Manufacturing and Controls ("CMC") interactions with the FDA regarding the BLA pathway for Iomab-B, the FDA determined that demonstrating an overall survival benefit in a randomized head-to-head trial is required for a BLA filing, and the SIERRA trial alone will not be adequate for BLA filing.

Sandesh Seth, Actinium's Chairman and CEO, stated, "We are excited that the SIERRA results have been published in the peer-reviewed Journal of Clinical Oncology. We believe the SIERRA trial was a major advancement for the field of BMT and targeted

radiotherapeutics but most importantly for patients with relapsed and refractory AML. We look forward to completing our interactions with the FDA to finalize the specifics of the additional Phase 3 randomized trial and working to secure a U.S. partner for Iomab-B. In doing so, we hope to accelerate Iomab-B reaching patients with high unmet need that can benefit from a bone marrow transplant."

About Actinium Pharmaceuticals, Inc.

Actinium develops targeted radiotherapies to meaningfully improve survival for people who have failed existing oncology therapies. Advanced pipeline candidates Iomab-B, an induction and conditioning agent prior to bone marrow transplant, and Actimab-A (National Cancer Institute CRADA pivotal development path), a therapeutic agent, 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 holds more than 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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