

Actinium Poster Detailing Actinium-225 Labeled Daratumumab Selected in Top Poster Award Competition at 2019 Society of Nuclear Medicine and Molecular Imaging Annual Meeting

- Actinium poster selected from more than 1,110 posters presented at SNMMI awarded second place in oncology therapeutics track
- Significantly higher cell killing ability and antitumor effect observed with Ac-225 labeled daratumumab compared to unlabeled daratumumab

NEW YORK, June 26, 2019 /PRNewswire/ -- Actinium Pharmaceuticals, Inc. (NYSE AMERICAN: ATNM) ("Actinium") today announced that a poster detailing Actinium's preclinical work with the CD38 antibody daratumumab, a blockbuster therapy marketed as Darzalex® by Johnson & Johnson for patients with Multiple Myeloma, labeled with the radioisotope Ac-225 or Actinium-225 has been selected as a top poster at SNMMI for inclusion in a competitive poster competition at the 2019 Society of Nuclear Medicine and Molecular Imaging Annual Meeting. The poster titled, "225AC-CD38 antibody targeting is effective and well tolerated in experimental models of lymphoma and multiple myeloma" was selected from more than 1,100 posters that were presented at this year's SNMMI and awarded second place in the Oncology: Basic, Translational & Therapy track (Click here for poster).

Highlights from the poster include:

- Ac-225 labeled daratumumab, at an equimolar concentration, demonstrated superior antitumor activity to naked daratumumab in DAUDI lymphoma tumor xenograft model and provided a survival benefit
- Tumor cell death in cell culture was increased as much as ten-fold following exposure to Ac-225 labeled daratumumab, approaching one-hundred percent cell death in certain cell lines
- Immunoreactivity for the target antigen CD38 was similar to naked daratumumab demonstrating that arming the antibody with Ac-225 preserved daratumumab's CD38 targeting ability

Dr. Dale Ludwig, Actinium's Chief Scientific Officer, presented the poster at SNMMI.

Actinium's AWE or Antibody Warhead Enabling technology platform generated the Ac-225 daratumumab ARC or Antibody Radiation-Conjugate. Actinium's AWE platform is covered by

know-how and trade secrets that cover the generation, development, methods of use and manufacturing of ARC's. Actinium's AWE intellectual property portfolio is comprised of 28 patent families and over 100 issued and pending patents having useful life extending out as far as 2039.

Dr. Ludwig commented, "We are honored that our poster was recognized for this competition from the over 1,100 posters and great work that was presented at this year's SNMMI. It was apparent from SNMMI that the radiopharmaceutical field, particularly targeted radiotherapies, is experiencing significant growth and rapid innovation. Actinium is dedicated to staying at the forefront of the field. Our commitment is evidenced by our expanded research efforts that have resulted in a significant number of new patent filings and presentations at international conferences. Further, our active research collaboration with Astellas Pharma is ongoing and we are working to complete the third and final module of the program. Through our AWE technology platform, we have demonstrated the ability to utilize multiple isotopes with multiple targeting agents to generate potent ARCs, giving us unmatched breadth and abilities in therapeutics discovery and development. Together with Actinium's clinical experience and comprehensive supply chain capabilities, we can offer partners and collaborators a turnkey solution from R&D to the clinic and beyond."

About Actinium Pharmaceuticals, Inc.

Actinium Pharmaceuticals, Inc. is a clinical-stage biopharmaceutical company focused on improving patient access and outcomes to cellular therapies such as BMT or Bone Marrow Transplant and CAR-T with its proprietary ARC or Antibody Radiation-Conjugate targeted conditioning technology. Actinium is also developing its proprietary AWE or Antibody Warhead Enabling technology platform, which utilizes radioisotopes including iodine-131 and the highly differentiated actinium-225 coupled with antibodies, to target a variety of antigens that are expressed in hematological and solid tumor indications. It is developing a multi-disease, multi-target pipeline of clinical-stage ARC's targeting the antigens CD45 and CD33 for targeting conditioning and as a therapeutic either in combination with other therapeutic modalities or as a single agent for patients with a broad range of hematologic malignancies including Acute Myeloid Leukemia (AML), Myelodysplastic Syndrome (MDS) and Multiple Myeloma (MM). Actinium's lead product candidate, lomab-B, is in a pivotal Phase 3 trial for re-induction and conditioning prior to a BMT for patients with active relapsed or refractory AML or Acute Myeloid Leukemia. BMT is the only curative treatment option for this patient population and currently no standard of care exists. Actimab-MDS is its second pivotal program for targeted conditioning that will study the ARC comprised of the anti-CD33 monoclonal antibody lintuzumab linked to the radioisotope actinium-225 in patients with high-risk MDS in combination with RIC or Reduced Intensity Conditioning prior to a BMT. Its ACT or Adoptive Cell Therapy program targets CD45 and utilizes a lower dose of iodine-131 than lomab-B or lutetium-177 and is intended to be used for targeted conditioning or lymphodepletion prior to CAR-T and adoptive cell therapies as a replacement to nonoptimized chemotherapies, such a Flu/Cy or fludarabine and cyclophosphamide, that is used in standard practice today. Actinium also has multiple clinical trials ongoing, in startup phase, or in planning, to use its CD33 ARC in combination with other therapeutic modalities such as chemotherapy, targeted agents or immunotherapy. It has initiated several combination trials, including a doublet combination trial with its CD33 ARC and venetoclax, a BCL-2 inhibitor, for patients with relapsed or refractory AML, a triplet combination trial with venetoclax and an HMA or hypomethylating agent and in combination with the salvage chemotherapy regimen

CLAG-M (cladribine, cytarabine, filgrastim and mitoxantrone) for patients with relapsed or refractory AML. Actinium is also studying its CD33 ARC as single agent for patients with penta-refractory multiple myeloma. Its AWE technology platform enables Actinium's internal pipeline and with the radioisotope actinium-225 is being utilized in a collaborative research partnership with Astellas Pharma, Inc. Actinium's clinical programs and AWE technology platform are covered by a portfolio of over 100 patents covering composition of matter, formulations, methods of use, the DOTA linker technology for actinium-225 applications and methods of manufacturing the actinium-225 radioisotope in a cyclotron.

Forward-Looking Statements for Actinium Pharmaceuticals, Inc.

The information in this press release contains forward-looking statements regarding future events, including statements about Actinium's expectations regarding the terms of the offering or completion of the offering. Actinium intends such forward-looking statements to be covered by the safe harbor provisions contained in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Actual results or developments may differ materially from those projected or implied in these forward-looking statements. Factors that may cause such a difference include, without limitation, risks and uncertainties related to market and other conditions, the satisfaction of customary closing conditions related to the offering and the impact of general economic, industry or political conditions in the United States or internationally. There can be no assurance that Actinium will be able to complete the offering on the anticipated terms, or at all. More information about the risks and uncertainties faced by Actinium are more fully detailed under the heading "Risk Factors" in Actinium's Annual Report on Form 10-K for the year ended December 31, 2018 filed with the SEC. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this press release. Except as required by law, Actinium assumes no obligation to update publicly any forwardlooking statements, whether as a result of new information, future events or otherwise.

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