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Actinium Strengthens Leadership Team with Appointment of Dr. Avinash Desai as Executive Vice President of Clinical Development, Operations and Medical Affairs

- Dr. Desai has over twenty-five years of hematology and oncology-focused clinical development and medical affairs experience, including the successful launches of targeted therapies, monoclonal antibodies, and PARP inhibitors

NEW YORK, Nov. 19, 2020 /PRNewswire/ --**Actinium Pharmaceuticals, Inc.** (NYSE AMERICAN: ATNM) ("Actinium") today announced the appointment of Avinash Desai, MD, to the position of Executive Vice President of Clinical Development, Operations and Medical Affairs, effective immediately. In this role, Dr. Desai will lead Actinium's medical affairs strategies for Iomab-B to the transplant and hematology communities as well as for Actimab-A to the hematologist communities. In addition, he will play an integral role in the strategic development of the Iomab-B clinical programs.

Dr. Mark Berger, Actinium's Chief Medical Officer, said, "We are pleased to have Dr. Desai join the leadership team. His expertise in medical affairs and clinical strategy will be a great asset for Actinium as we advance the SIERRA trial through its final phase and prepare for next steps. Avi's experience working with hematology and oncology clinical candidates through registrational studies and successful commercial launches will be helpful as we continue to advance our CD45 and CD33 programs towards multiple registrational studies and prepare for the BLA filing and commercialization of our late-stage asset, Iomab-B."

"I am thrilled to join Actinium as EVP of Clinical Development, Operations and Medical Affairs at such a crucial point for the Company," stated Dr. Desai. "Recent clinical achievements with Iomab-B and Actimab-A uniquely position the Company to make a real impact in targeted conditioning and the treatment of patients with relapse or refractory Acute

Myeloid Leukemia (R/R AML). I look forward to working with the leadership team in advancing these product candidates to patients who continue to have a significant unmet need despite recently approved therapeutic agents."

Dr. Desai is an industry veteran in the hematology and oncology field, most recently serving as Vice President, Head of U.S. Medical Affairs – Oncology at Glaxo Smith Kline (GSK). Over the course of his twenty-five-year career, Dr. Desai has successfully designed and implemented clinical development, U.S. and global medical affairs, and life cycle management plans for a variety of pharmaceutical products. This has included participation in multiple INDs, NDAs, and sNDA submissions and efficiently managing the product Scientific Advisory Boards (SAB) and Data and Safety Monitoring Boards (DSMB) for hematology, oncology and therapeutic candidates. At GSK, he established the U.S. medical affairs oncology team that oversaw the launch readiness plans for three novel oncology products—Blenrep® in multiple myeloma, Zejula® in ovarian cancer, and dostarlimab in endometrial cancer. In addition to GSK, Dr. Desai has overseen the clinical development, implementation and delivery of oncology life cycle management plans for various oncology therapies at several leading global pharmaceutical companies, including Eli Lilly & Company (Lilly), Janssen Pharmaceuticals, Inc. and Takeda, Inc. Prior to GSK, he was the VP of Global Medical Affairs at Lilly, during which time he oversaw the global medical affairs team for Lilly's GI Oncology portfolio. Earlier in his career, Dr. Desai contributed to the approval of Janssen's myeloma drug Darzalex® (daratumumab) and leading and strategically executing medical affairs activities globally for Velcade® (bortezomib). Prior to Janssen, Dr. Desai was responsible for the international development of oncology products in solid tumors and hematological malignancies at Sanofi, where he successfully executed pivotal trials that led to NDA submission for Jevtana® (cabazitaxel).

Sandesh Seth, Actinium's Charmain and Chief Executive Officer, stated "As Actinium approaches key milestones for Iomab-B and Actimab by year-end and sets the stage for a milestone rich 2021, Dr. Desai's impressive experience in medical affairs, clinical development and operational management will be extremely valuable. Avi's successful track record and demonstrated operational excellence will greatly benefit Actinium as we prepare for the commercialization of Iomab-B and the registrational trials for our CD33 program in R/R AML. Avi's deep experience gained through multiple commercial launches will be important in guiding our efforts as we further expand our medical affairs activities in the top tertiary care hospitals that treat R/R AML to support Iomab-B and Actimab-A and we look forward to his contributions to our leadership team."

About Actinium Pharmaceuticals, Inc. (NYSE: ATNM)

Actinium Pharmaceuticals, Inc. is a clinical-stage biopharmaceutical company developing ARCs or Antibody Radiation-Conjugates, which combine the targeting ability of antibodies with the cell killing ability of radiation. Actinium's lead application for our ARCs is targeted conditioning, which is intended to selectively deplete a patient's disease or cancer cells and certain immune cells prior to a BMT or Bone Marrow Transplant, Gene Therapy or Adoptive Cell Therapy (ACT) such as CAR-T to enable engraftment of these transplanted cells with minimal toxicities. With our ARC approach, we seek to improve patient outcomes and access to these potentially curative treatments by eliminating or reducing the non-targeted chemotherapy that is used for conditioning in standard practice currently. Our lead product candidate, I-131 apamistamab (Iomab-B) is being studied in the ongoing pivotal Phase 3

Study of Iomab-B in Elderly Relapsed or Refractory Acute Myeloid Leukemia (SIERRA) trial for BMT conditioning. The SIERRA trial is over seventy-five percent enrolled and positive single-agent, feasibility and safety data has been highlighted at ASH, TCT, ASCO and SOHO annual meetings. More information on this Phase 3 clinical trial can be found at sierratrial.com. I-131 apamistamab will also be studied as a targeted conditioning agent in a Phase 1 study with a CD19 CAR T-cell Therapy with Memorial Sloan Kettering Cancer Center and Phase 1/2 anti-HIV stem cell gene therapy with UC Davis. In addition, we are developing a multi-disease, multi-target pipeline of clinical-stage ARCs targeting the antigens CD45 and CD33 for targeted 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, myelodysplastic syndrome and multiple myeloma. Ongoing combination trials include our CD33 alpha ARC, Actimab-A, in combination with the salvage chemotherapy CLAG-M and the Bcl-2 targeted therapy venetoclax. Underpinning our clinical programs is our proprietary AWE (Antibody Warhead Enabling) technology platform. This is where our intellectual property portfolio of over 100 patents, know-how, collective research and expertise in the field are being leveraged to construct and study novel ARCs and ARC combinations to bolster our pipeline for strategic purposes. Our AWE technology platform is currently being utilized in a collaborative research partnership with Astellas Pharma, Inc. Website: https://www.actiniumpharma.com/

Forward-Looking Statements for Actinium Pharmaceuticals, Inc.

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.

Contacts:

Investors:
Clayton Robertson
Actinium Pharmaceuticals, Inc.
crobertson@actiniumpharma.com

Hans Vitzthum
LifeSci Advisors, LLC
Hans@LifeSciAdvisors.com
(617) 430-7578

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