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Actinium Appoints Seasoned Leader Caroline Yarbrough as Chief Commercial Officer to Spearhead Iomab-B Commercialization

- Caroline joins Actinium from Novartis where she served as Portfolio General Manager, US Oncology
- Proven commercial leadership experience spans hematology, oncology and rare diseases at Novartis, Glaxo SmithKline, Bristol Myers Squibb, ViroPharma and Merck & Co.

NEW YORK, Nov. 2, 2022 /PRNewswire/ -- **Actinium Pharmaceuticals, Inc.** (NYSE AMERICAN: ATNM) (Actinium or the Company), a leader in the development of targeted radiotherapies, today announced the appointment of Caroline Yarbrough as Chief Commercial Officer. Caroline joins Actinium from Novartis where she most recently served as Portfolio General Manager, US Oncology, with full P&L responsibility of a diverse portfolio of brands and development assets with revenues in excess of a billion dollars. Previously, she led the chronic myelogenous leukemia (CML) portfolio, a billion-dollar business comprising TASIGNA® and SCEMBLIX®. She also led strategic account management during the launch period for KYMRIAH®, the first approved CAR-T cell therapy.



"I am excited that Caroline has joined our team to build the commercial organization at this juncture given the recently announced positive and statistically significant topline data from the Iomab-B pivotal Phase 3 SIERRA trial," stated Sandesh Seth, Actinium's Chairman and Chief Executive Officer. "In our view, Iomab-B has the potential to change the treatment paradigm for elderly AML patients who have active disease. These patients are currently unable to access a potentially curative bone marrow transplant as chemotherapy based conditioning regimens are either unsafe or ineffective. The number of patients who fall into this category far outnumber those patients in remission who are currently transplanted and thus Iomab-B, if approved, has the potential to set a new standard of care and greatly expand the eligible patient pool. Given, this opportunity, a person of Caroline's caliber and skill set is the right commercial leader for Actinium at this time."

"Caroline's broad commercial expertise includes building organizations and successful

launches in a variety of cancer treatment settings including hematology, CAR-T cellular therapy and rare diseases. Her mix of skills and deep understanding of the strategies and tactics required to successfully commercialize a complex CAR-T like KYMRIAH will serve Actinium well as she propels forward our commercialization plans for lomab-B. Caroline will lead our efforts to build a highly focused, nimble commercial organization that can successfully realize the market potential of lomab-B as a first in class product in an area of high unmet need," Mr. Seth stated.

Mr. Seth added, "We also look forward to the overall survival data from the Actimab-A+CLAG-M trial by year-end and with business development opportunities growing it was prudent to expand the leadership team appropriately so that Dr. Swaminathan can focus exclusively on leading our business development efforts as Chief Business Officer. The team thanks him for his work in preparing a solid plan upon which Caroline can build and looks forward to leveraging his extensive business development expertise."

Prior to Novartis, Caroline's career spanned multiple large pharmaceutical and biotechnology companies, including Glaxo SmithKline (GSK), Bristol Myers Squibb (BMS), ViroPharma and Merck, where she held roles with increasing responsibilities. At GSK, she led marketing for Votrient® and Tykerb® in breast cancer, renal cell carcinoma and soft tissue sarcoma, which comprised fifty percent of GSK's oncology revenue for the US. For nearly a decade, Caroline held roles at BMS leading commercial activities in neuroscience, immunology, multiple myeloma, CML and other solid tumors. Caroline has a BA in Biology from the University of Delaware, where she received the Peter White Undergraduate Research Fellowship, an MBA from the Goizueta Business School at Emory University and a PhD in International Business from Nijenrode University.

Caroline Yarbrough added, "I feel fortunate to become a key part of the Actinium team and lead its efforts to commercialize this potentially transformational radiotherapy. The recent positive Phase 3 topline data and lomab-B's strong historical results hold the promise of expanding the market for BMT, initially for older patients with relapsed/refractory AML who have a very poor survival prognosis as they cannot access a BMT. Excitingly, given the prior clinical use of lomab-B, which demonstrated its potential in multiple other transplant settings, we look forward to label expansion opportunities and enabling lomab-B to realize its full potential as a first in class conditioning regimen that can change the treatment paradigm and establish a new standard of care."

About lomab-B and the Pivotal Phase 3 Trial

lomab-B is a first-in-class targeted radiotherapy intended to improve patient access to a potentially curative bone marrow transplant by simultaneously and rapidly depleting blood cancer, immune and bone marrow stem cells that uniquely express CD45. Multiple studies have demonstrated increased survival in patients receiving a BMT, however, an overwhelming majority of relapsed or refractory patients with blood cancers do not receive BMT as current treatment approaches do not produce a remission, which is required to be considered eligible for receiving a successful BMT. Studied in over 400 patients, lomab-B has demonstrated nearly universal access to BMT, increased survival and good tolerability in multiple clinical trials including the recently completed pivotal Phase 3 SIERRA trial in patients with active (leukemic blasts >5%), relapsed or refractory acute myeloid leukemia (r/r AML) age 55 and above. The SIERRA trial produced positive topline results, meeting its primary endpoint of durable Complete Remission (dCR) of 6 months with a high degree of

statistical significance ($p < 0.0001$). Actinium intends to prepare and submit a Biologics License Application (BLA) seeking approval for lomab-B to address the estimated 10,000 patients annually age 55+ with r/r AML who do not access BMT with currently available therapies. lomab-B has been granted Orphan Drug Designation from the U.S. Food and Drug Administration (FDA) and has patent protection into 2037.

The pivotal Phase 3 SIERRA (Study of lomab-B in Elderly relapsed or refractory AML) is a 153-patient, randomized, multi-center clinical trial, studying lomab-B compared to the control arm of physician's choice of salvage therapy. Control arm options included chemotherapies like cytarabine and daunorubicin and targeted agents such as a Bcl-2 inhibitor (Venetoclax), FLT3 inhibitors and IDH 1/2 inhibitors. The SIERRA control arm reflects real-world treatment of r/r AML patients with over 20 single agents or combination of agents as no standard of care exists for this patient population. Data from full patient enrollment was presented at the Transplantation & Cellular Therapy Tandem Meetings in April 2022 showing that 100% of patients receiving lomab-B accessed BMT and engrafted without delay. lomab-B was also shown to be well tolerated given its targeted nature, consistent with its previous clinical data. The SIERRA trial enrolled patients at 24 leading transplant centers in the United States and Canada that perform over 30% of AML BMTs.

Developed at the Fred Hutchinson Cancer Research Center, a pioneer in the field of BMT, lomab-B is supported by data in six disease indications including leukemias, lymphomas and multiple myeloma, which afflict over 100,000 patients annually. Actinium intends to pursue additional indications for lomab-B leveraging the positive SIERRA trial data and its robust clinical experience. Actinium also intends to pursue international regulatory approvals independently and through partnerships. In April 2022, Actinium licensed the European, Middle East and North African commercial rights for lomab-B to Immedica AB, a fully-fledged independent pharmaceutical company headquartered in Sweden. In exchange, Actinium received an upfront payment of \$35 million USD with the potential for an additional \$417 million USD in regulatory and sales milestones and mid-twenty percent royalties. Europe represents a commercial opportunity double the size of the United States by number of patients with AML receiving BMT. lomab-B has been granted Orphan Drug Designation by the European Medicines Agency (EMA) and has received positive Scientific Advice from the Committee for Medicinal Products for Human Use (CHMP) of the EMA indicating that the Phase 3 SIERRA trial design, primary endpoint and planned statistical analysis are acceptable as the basis for a Marketing Authorization Application.

About Actinium Pharmaceuticals, Inc.

Actinium Pharmaceuticals, Inc. is a clinical-stage biopharmaceutical company developing targeted radiotherapies to deliver cancer-killing radiation with cellular level precision to treat patients with high unmet needs. Actinium's clinical pipeline is led by radiotherapies that are being applied to targeted conditioning, which is intended to selectively deplete a patient's disease or cancer cells and certain immune cells prior to a bone marrow transplant (BMT), gene therapy or adoptive cell therapy, such as CAR-T, to enable engraftment of these transplanted cells with minimal toxicities. Our lead product candidate, I-131 apamistamab (lomab-B) has been studied in over four hundred patients, including the pivotal Phase 3 Study of lomab-B in Elderly Relapsed or Refractory Acute Myeloid Leukemia (SIERRA) trial for BMT conditioning. Topline data from the SIERRA trial was positive with the study meeting its primary endpoint with a high statistical significance ($p < 0.0001$). Additional data

from the SIERRA trial is expected to be presented by year-end. Iomab-ACT, low dose I-131 apamistamab, is being studied as a targeted conditioning agent in a Phase 1 study with a CD19 CAR T-cell Therapy with Memorial Sloan Kettering Cancer Center with NIH funding. Actimab-A, our second most advanced product candidate has been studied in approximately 150 patients with Acute Myeloid Leukemia or AML, including in ongoing combination trials with the chemotherapy regimen CLAG-M and with venetoclax, a targeted therapy. Actimab-A or lintuzumab-Ac225 is an Actinium-225 based antibody radiation conjugate targeting CD33, a validated target in AML. Actinium is a pioneer and leader in the field of Actinium-225 alpha therapies with an industry leading technology platform comprising over 190 patents and patent applications including methods of producing the radioisotope AC-225. Our technology and expertise have enabled collaborative research partnerships with Astellas Pharma, Inc. for solid tumor theranostics, with AVEO Oncology Inc. to create an Actinium-225 HER3 targeting radiotherapy for solid tumors, and with EpicentRx, Inc. to create targeted radiotherapy combinations with their novel, clinical stage small molecule CD47-SIRPα inhibitor. More information is available on Actinium's website:
<https://www.actiniumpharma.com/>.

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