Job title	Senior/Principal Scientist, Radiochemistry
Reports to	Senior Director, Head of Radiopharmacology
Location	On-site (NYC)

Company

Actinium Pharmaceuticals develops targeted radiotherapies to improve patient outcomes. Our lead candidate, ATNM-400, is a first-in-class Actinium-225 (Ac-225) therapy for prostate cancer, lung cancer, and breast cancer, showing superior preclinical efficacy and synergy with existing treatments. Actimab-A, targeting CD33 for AML and other myeloid malignancies, has demonstrated high remission rates in patients and is advancing to pivotal clinical trials, including combination studies with Venetoclax, ASTX-727, and now PD-1 inhibitors (KEYTRUDA, OPDIVO) for solid tumors. Additional clinical programs include Iomab-ACT and Iomab-B for transplant conditioning. Actinium also pursues preclinical solid tumor programs and holds ~240 patents, including for Ac-225 production. Building on our expertise and leadership in targeted radiotherapies, Actinium is rapidly accelerating our investigational research efforts and is looking for talented individuals to join the team.

Job Overview

Actinium is seeking an individual to lead the next wave of breakthroughs in targeted radiotherapies as our **Senior/Principal Scientist, Radiochemistry**. In this high-impact role, you will serve as the scientific leader for all radiochemistry efforts across our Oncology pipeline, shaping novel targeted radiotherapies from concept through IND-enabling studies.

You will join a fast-paced, science-driven biotech developing first-in-class targeted radiotherapies with the potential to transform outcomes across solid tumors. The ideal candidate is an expert in radiochemistry, radiometal chelation, and radioconjugate design, with deep experience spanning both therapeutic and imaging radionuclides (e.g., Ac-225, Lu-177, Zr-89, In-111, Cu-64, Ga-68). A strong track record in PET/SPECT imaging agent development, chelator optimization, and structure-function evaluation is highly desirable.

This is a unique opportunity to drive innovation across isotope selection, chelator architecture, conjugation chemistry, dosimetry-enabling imaging, and translational development for targeted radiotherapies in a rapidly expanding organization.

Key Responsibilities

- Provide scientific leadership across Actinium's targeted radiotherapy programs, defining innovation priorities for radiochemistry and radioconjugate development.
- Design, synthesize, and optimize chelators and bifunctional chelators for Actinium-225, Lutetium-177, and imaging isotopes; evaluate stability, radiolabeling kinetics, and in vivo performance.
- Lead conjugation, radiolabeling, and purification workflows (e.g., Ac-225, Lu-177, Zr-89, In-111; antibodies, minibodies, peptides, nanobodies) to support therapeutic and diagnostic programs.
- Develop PET and SPECT imaging agents to enable patient selection, target validation, PK/PD assessment, and dosimetry for targeted radiotherapy programs for Oncology.

- Drive experimental design and execution of radiochemistry studies, including analytical characterization (radio-HPLC, radio-TLC, gamma spectrometry, radioactivity measurement).
- Partner cross-functionally with In Vitro Biology, In Vivo Pharmacology, Translational Sciences, and CMC to advance programs through IND and early clinical development.
- Author nonclinical study reports, CMC sections, and radiochemistry content for regulatory filings (IND, IMPD, patent applications).
- Expand and protect Actinium's intellectual property, including new linker design, new chelators, radioconjugation strategies, radiolabeling innovations, and structure-activity insights.
- Manage external collaborations and CRO relationships, including academic radiochemistry labs and imaging centers.

Qualifications

- Ph.D. in Radiochemistry, Organic Chemistry, Radiopharmaceutical Sciences, Nuclear Pharmacy, or related field.
- 8-10+ years of industry/academic experience developing targeted radiotherapies and/or radiopharmaceutical imaging agents (PET/SPECT), from discovery through IND filings.
- Extensive hands-on expertise with radiometal chelation, bifunctional chelator design (e.g., DOTA and emerging ligand systems), and bioconjugation chemistry.
- Demonstrated experience with therapeutic isotopes (Ac-225, Lu-177) and imaging isotopes (Zr-89, Cu-64, In-111, Ga-68) including radiolabeling, purification, stability studies, and in vivo translation.
- Strong track record in developing PET/SPECT imaging agents, imaging-guided dosimetry, and translational radionuclide imaging.
- Expertise with analytical and radiochemical instrumentation (size-exclusion HPLC, radio-HPLC, radio-TLC, , gamma spectrometry, LC-MS a plus).
- Proven ability to lead programs through preclinical development into regulatory submission, with authorship of publications, patents, or regulatory documents.
- Strong critical thinking, creativity, and scientific curiosity, with an entrepreneurial mindset and ability to thrive in a fast-growing biotech environment.
- Exceptional written and oral communication skills, with the ability to influence across functions and present to technical and non-technical audiences.

What We Offer

Compensation will be commensurate with experience. Actinium offers competitive base salaries, performance bonuses, equity incentive plans, 401(K) with company matching and comprehensive health benefits.

Apply Now

If you are ready to pioneer the future of radiopharmaceuticals, apply today through LinkedIn or our careers page on our website https://www.actiniumpharma.com/


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