

Korea announces first-of-its-kind research agreement to discover radiopharmaceutical compounds

19 November 2024 | News

SK Biopharmaceuticals seals 1st actinium-225-based collaborative research agreement with Korea Institute of Radiological and Medical Sciences



SK Biopharmaceuticals, a biotech company in South Korea, has entered into an agreement with the Korea Institute of Radiological and Medical Sciences (KIRAMS), Korea's premier research institution dedicated to the study and advancement of radiological and medical sciences, to collaborate on discovering and developing preclinical radiopharmaceutical drug candidates.

This marks the first collaborative research agreement in which both sides will aim to discover radiopharmaceutical compounds and investigate novel oncological treatments, using *actinium-225* (^{225}Ac), an *alpha*-particle emitting *radioisotope* that selectively kills cancer cells.

The research for radiopharmaceutical therapy (RPT) focuses on this application that has been gaining attention for its high potential in nuclear medicine.

SK Biopharmaceuticals has already initiated its ^{225}Ac -based research as it secured a supply of the radioisotope from TerraPower Isotopes, a subsidiary of TerraPower, a nuclear innovation company whose investors include SK Biopharmaceuticals' parent SK Inc. and Bill Gates.

SK Biopharmaceuticals and KIRAMS will seek to submit an Investigational New Drug application by 2027, as they leverage each other's resources to optimize their drug discovery efforts. SK Biopharmaceuticals said it could significantly reduce the time and cost of new drug development, with KIRAMS' researchers, facilities and equipment using the radioisotope, enabling the company to further accelerate in securing and expanding its RPT pipeline and capability.

The agreement is in line with SK Biopharmaceuticals' so-called "RPT Roadmap" recently introduced to become a global leading RPT player by 2027, as the company will fortify its RPT business by discovering new drug compounds, extending supply and production capacities, and developing a tech platform, via strengthened internal assets and strategic partnerships.

In addition to the ^{225}Ac supply agreement aligned with its roadmap, the company has in-licensed SKL35501 (FL-091) radiopharmaceutical compound targeting neuropeptide Y receptor 1 (NTSR1) solid tumours.