

RADIOPHARM THERANOSTICS ENTERS INTO SUPPLY AGREEMENT WITH TERTHERA FOR TERBIUM-161 ISOTOPE

Agreement will supply Tb-161 for RAD 602, a potential first in class radiopharmaceutical for treatment of brain cancers

SYDNEY, 17 April 2023 - Radiopharm Theranostics (ASX:RAD, "Radiopharm" or the "Company"), a developer of radiopharmaceutical products for both diagnostic and therapeutic uses, is pleased to announce an agreement with TerThera to supply the Company with Terbium-161 (Tb-161).

The Tb-161 isotope will be linked to a proprietary peptide to form RAD 602, a radiotherapeutic that is being developed by Radiopharm to target protein tyrosine phosphatase mu (PTPmu or PTP μ). PTP μ is expressed in cancer cells but has limited expression in healthy tissue. Radiopharm will initiate a Phase I dose escalating trial of RAD 602 for treatment of patients with brain cancers during the fourth quarter of calendar 2023.

"We are excited to initiate our RAD 602 clinical trial, which is the first dose escalating radiopharmaceutical study leveraging the strong therapeutic properties of Tb-161 in brain tumors," said Riccardo Canevari, CEO and Managing Director of Radiopharm Theranostics. "This novel therapeutic isotope represents a potential first in class targeted radiotherapeutic that can expand treatment options for patients living with cancer. We believe that Radiopharm has achieved a strong competitive advantage from being the first company to do a phase I trial using this isotope, and securing supply of this relatively scarce isotope."

Terbium-161 is a highly promising isotope for targeted cancer treatment due to its unique characteristics of radiation emitted, which includes both Auger electrons and short-range beta particles. The beta radiation travels only a few millimeters and Auger electronic emission has a higher linear energy transfer that travels less than the width of a single cell. Tb-161 has shown excellent bioequivalence presenting a biodistribution comparable to currently used radiolanthanides and is potentially superior to Lutetium-177 (Lu-177) due to Auger effect increasing potency and efficacy in selectively destroying tumor cells while leaving surrounding healthy tissue largely unaffected.

"TerThera is positioned to meet the growing global demand for radioisotopes in oncology by providing a highly sustainable and uninterrupted supply of Terbium-161," said Philippe van Overeem, CEO of TerThera. "We are proud to partner with Radiopharm Theranostics to supply their innovative radioligand pipeline and to help enable development of a new generation of therapeutic radiopharmaceuticals."

The costs associated with the purchase of Tb-161 are not material in relation to RAD's annual budgeted expenditure and will be met from existing funds. The initial order for preclinical use is expected in April 2023, with the first order for clinical use expected in

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October 2023. The effective date of the supply agreement is 17 April 2023 and there are no material preconditions. The supply agreement is for an initial period of three years and may be extended for additional two years, unless agreed otherwise by either party. Cancellation provisions are at industry standard rates. Radiopharm will own all data generated and all inventions and discoveries made or conceived from its clinical trials.

About TerThera BV

TerThera is a radionuclide production focussed company based in The Netherlands. The founders and staff of TerThera have decades of experience in the nuclear medicine industry and are giving their full focus on the production of the innovative radionuclide Terbium-161 (Tb-161). TerThera is building a global platform to meet the growing demand for radionuclides in oncology and nuclear medicine.

About Radiopharm Theranostics

Radiopharm Theranostics is a clinical stage radiotherapeutics company developing a world-class platform of innovative radiopharmaceutical products for diagnostic and therapeutic applications in areas of high unmet medical need. Radiopharm has been listed on ASX (RAD) since November 2021. The company has a pipeline of six distinct and highly differentiated platform technologies spanning peptides, small molecules and monoclonal antibodies for use in cancer, in pre-clinical and clinical stages of development from some of the world's leading universities and institutes. The pipeline has been built based on the potential to be first to market or best in class. The clinical program includes one Phase II and three Phase I trials in a variety of solid tumour cancers including breast, kidney and brain. Learn more at RadiopharmTheranostics.com.

Authorised on behalf of the Radiopharm Theranostics board of directors by Executive Chairman Paul Hopper.

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