

23rd International Conference on

Cancer Research & Pharmacology

March 26-27, 2018 Edinburgh, Scotland

Radionuclide therapy of malignant bone lesions

Manfred Fischer¹ and Luster M²

¹Institut of Radiologie, Strahlentherapie und Nuklearmedizin, Kassel, Germany

²University Hospital Marburg, Germany

Radionuclide therapy in patients suffering from bone metastases is used since decades. Primarily this treatment was approved for bone pain palliation (⁸⁹Strontium in bone lesions due to HRPC, ¹⁵³Samarium for osteoblastic bone metastases, independently from the primary tumor). In 2013, ²²³Radium was approved for treatment of HRPC bone metastases. A prolongation of median survival in the verum group vs. placebo group of 3.6 months was observed. β -emitting radionuclides in combination with chemotherapy may lead to a significant prolongation of median survival up to 10 months compared to patients only getting radionuclides, together with also significant improvement of pain syndrome. More recently radiolabeled PSMA ligands are used in clinical trials and on a compassionate use basis for diagnostic procedures in various primary, mainly prostate cancer tumors as well as in therapy of those tumors expressing PSMA on the cell surface and showing sufficient tracer uptake. Studies with either ⁶⁸Gallium-PSMA PET/CT or ^{99m}Tc-PSMA for diagnostic procedures and ¹⁷⁷Lutetium-PSMA ligands for treatment of HRPC bone and soft tissue lesions are showing high sensitivity and for treatment excellent response rates given their predominant use as last line treatment. However, prospective studies are needed to define the role of this approach in the management of advanced prostate carcinoma.

Biography

Manfred Fischer is currently working as a Professor at the Institut of Radiologie, Strahlentherapie und Nuklearmedizin, Kassel, Germany. His area of Interest are Radiotherapy, Cancer.

manfred.fischer@aol.de

Notes: