Record Nr. UNINA9910780709103321 Therapeutic Radiopharmaceuticals Labelled with Copper-67, Rhenium-**Titolo** 186 and Scandium-47 / / International Atomic Energy Agency Pubbl/distr/stampa Vienna, Austria:,: International Atomic Energy Agency,, [2021] ©2021 **ISBN** 92-0-127322-3 Edizione [First edition.] 1 online resource (58 pages) Descrizione fisica Disciplina 616.07/575 Soggetti Radioisotope scanning Radiopharmaceuticals Radioisotopes in pharmacology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Theranostic radiopharmaceuticals have shown tremendous capabilities in the last decade in the treatment and diagnosis of human diseases via nuclear medicine procedures. In particular, the use of radiometals has experienced a great increase as a result of the development of relevant production technologies. This publication presents the outcome of an IAEA coordinated research project (CRP) focusing on the production, quality control and radiopharmaceutical aspects of three key radionuclides, 67CU, 186Re and 47Sc, which have been selected based on their theranostic potential and their dual production routes. The publication was compiled using inputs from experts in the field as well as presenting the overall results of the CRP. It contains separate sections for each radionuclide including: nuclear data and information on targetry, irradiation, chemical separation, quality control as well as sample radiopharmaceutical production. The findings and considerations will be of use to scientists and technologists interested in translating research reactor and cyclotron based radioisotope

production into practice, as well as to post graduate students in the

field.