



Special Track Session 12

Dosimetry Committee

Tuesday, October 7, 16:45 – 18:15

Session Title

Round Table: Unlocking the Potential: Can Total Body PET Revolutionise Dosimetry?

Moderators

Julia Brosch-Lenz (Glen Burnie, United States of America)

Fabian Schmidt (Tübingen, Germany)

Round Table Participants

Silvano Gnesin (Lausanne, Switzerland)

David Bourhis (Brest, France)

Pedro Fragoso Costa (Essen, Germany)

Charalampos Tsoumpas (Groningen, Netherlands)

Pia Linder (Tübingen, Germany)

Educational Objectives

1. Understand current limitations of PET for dosimetry and the role of Total-Body PET in improving dosimetric accuracy for Y-90-based therapies, including SIRT and emerging theranostic agents (e.g., FAPI, CXCR4).
2. To assess the added value of long axial field-of-view PET for kinetic modelling, therapy planning, and treatment monitoring.
3. Understand practical considerations for implementing TB-PET in clinical workflows, including protocol design, patient handling and motion management and insights into broader applications and future directions of TB-PET through diverse expert experiences and perspectives from early-career researchers.

Summary

This round table brings together clinical and technical experts to discuss the transformative potential of Total-Body PET (TB-PET) in the field of radionuclide dosimetry. With a focus on Y-90-based therapies, including SIRT and novel ligands, the session will address current challenges in quantification and explore new opportunities enabled by long axial field-of-view PET systems. The discussion will cover pre-therapy planning, interims monitoring, and post-therapy evaluation. Some panelists have already transitioned from standard axial FOV to TB-PET and will reflect on known limitations of conventional systems and lessons learned from early TB-PET implementation. Practical considerations such as protocol design, motion handling, and clinical workflow integration will be emphasized. A junior researcher's perspective will offer insights into emerging directions of personalized dosimetry. of dosimetry practice. Panelists also bring broader experience with diverse radiotracers and advanced imaging protocols, offering additional context on the versatility of TB-PET technology.

Key Words

Total-Body PET; LAFOV PET; Dosimetry; SIRT Y-90; Theranostics, Kinetic Modelling