



Special Track Session 14

Radiopharmaceutical Sciences Committee & Oncology and Theranostics Committee
Wednesday, October 21, 09:45–11:15

Session Title

Round Table Discussion: Pairing for Precision – Is There an Ideal Theranostic Combination for Radiometal-Based Therapy?

Moderators

Sarah Spreckelmeyer (Berlin, Germany)
Wolfgang Fendler (Essen, Germany)

Round Table Participants

Niklaus Schaefer (Lausanne, Switzerland): Who Are Our Real Competitors? Positioning Radiometal Theranostics in Today's Oncology

Yann Seimbille (Rotterdam, Netherlands): The Vector is the Key – Ligand Design Ultimately Defines Theranostic Success

Michelle Ma (London, United Kingdom): The Chelator Can Provide True Precision, Including Optimal Radiometal Coordination

Afshan Ashfaq (Marburg, Germany): The Radionuclide Duo Defines the Biology – Physics and Dosimetry Derive Precision and Efficacy

Educational Objectives

1. Understand the current clinical landscape of radiometal-based theranostic radiopharmaceuticals.
2. Analyse how biological vectors influence targeting, pharmacokinetics, and therapeutic outcomes.
3. Evaluate the role of chelators in radiometal stability, safety, and translational success.
4. Compare different strategies for pairing diagnostic and therapeutic radionuclides.
5. Critically discuss whether a single ideal theranostic combination exists or whether optimisation must be indication-specific.

Summary

Radiometal-based theranostics lie at the heart of precision nuclear medicine, yet the definition of the ideal theranostic combination remains debated. Should clinical applicability and existing evidence drive our choices, or should innovation in ligand design and chelation chemistry take precedence? This interactive debate will confront these perspectives through a challenger format, engaging the audience with live questions, polls, and real-world scenarios. By exploring clinical practice, molecular design, and coordination chemistry side by side, the session aims to move beyond dogma and stimulate critical thinking on how best to pair diagnostics and therapy for truly personalised radiometal-based treatments.

Key Words

Theranostics; Radiometals; Chelators; Biological Vectors; Radiopharmaceutical Design; Precision Medicine