



Joint Symposium 6

Translational Molecular Imaging & Therapy + Radiopharmaceutical Sciences Committee / ESTRO

Tuesday, October 7, 09:45 – 11:15

Session Title

Radiobiological Aspects of PRRT

Chairpersons

Katharina Lückérath (Essen, Germany)

Jean-Pierre Pouget (Montpellier, France)

Programme

- 09:45 – 10:15 **David Sánchez Artuñedo** (Barcelona, Spain): How does TRT differ from conventional external radiotherapy: generalities.
- 10:15 – 10:45 **Zach Morris** (Madison, United States of America): Absorbed dose Dose rate, dose heterogeneity and their impact on (local and systemic) biological effects
- 10:45 – 11:15 **Kevin Harrington** (Chelsea, United Kingdom): The interplay between DNA damage, DNA damage/replication stress response, and immunomodulation

Educational Objectives

1. The biological impact of radiation qualities and quantities
2. The local and systemic anti-tumor mechanisms induced by TRT
3. The relevance of DNA damage and cell death mechanisms for response to TRT

Summary

Radiobiology is the “missing link” between PET image, tumor radiation dose and TRT outcome. The EANM session “Radiobiological Aspects of Targeted Radiotherapy” provides an overview of the radiobiological principles shaping the future of TRT; it will explore how different radiation types affect the tumor ecosystem and how this can be leveraged to improve TRT strategies.

Key Words

Radiobiology; DNA damage; cell death; immunomodulation; dose heterogeneity