CME Session 2
Oncology and Theranostics Committee
Sunday, October 20, 09:45 - 11:15

Session Title
PSMA PET and Radioligand Therapy

Chairpersons
Karolien Goffin (Leuven, Belgium)
Matthias Eiber (Munich, Germany)

Programme

09:45 - 10:10	**Matthias Eiber** (Munich, Germany): PSMA PET: Radiotracers and Clinical Trial Data
10:10 - 10:30	**Anca Grosu** (Freiburg, Germany): Impact Of PSMA PET On Radiation Oncology Planning
10:30 - 10:55	**Jochen Walz** (Marseille, France): PSMA RLT: The Data Behind It And Trials Under Progress
10:55 - 11:15	**Oliver Sartor** (Rochester, USA): Next Steps In PSMA RLT: Applications and Radionuclides

Educational Objectives
1. Overview of clinical trial data on PSMA-radiopharmaceuticals for imaging and radionuclide treatment of prostate cancer
2. Overview of clinical indications for PSMA-PET imaging in prostate cancer including planning of radiation treatment in primary and oligometastatic prostate cancer
3. Outlook into current clinical trials for PSMA-based radioligand therapy, including application in novel clinical indications and of novel radionuclides

Summary
The session will summarize clinical trial results on PSMA-radiopharmaceuticals in prostate cancer imaging. Key studies show PSMA-PET imaging's superior accuracy, sensitivity, and specificity compared to conventional methods, highlighting its ability to detect prostate cancer lesions at various stages. The clinical use of PSMA-PET in initial staging, detecting biochemical recurrence, and assessing metastatic disease will be discussed, focusing on its impact on clinical decision-making and patient management, especially when conventional imaging is inconclusive.

Insights on how PSMA-PET influences patient selection for radiation therapy, particularly in primary and oligometastatic prostate cancer, will be provided. The precision of PSMA-PET in identifying target lesions for tailored and effective radiation treatment plans will be discussed. Case studies and trial data will illustrate the benefits of PSMA-PET in optimizing radiation therapy outcomes by accurately delineating tumor boundaries and guiding dose escalation strategies.

The session will also review key trials on PSMA-based radioligand therapy, focusing on efficacy and safety profiles. Data from studies like the VISION trial will highlight significant improvements in overall and progression-free survival for patients treated with PSMA-targeted radioligands. The discussion will cover common adverse effects and management strategies. Finally, future directions in PSMA-based radioligand therapy, including potential applications in earlier prostate cancer stages and combination with other treatments, will be explored. The development and evaluation of novel radionuclides with improved therapeutic indices will also be discussed, concluding with ongoing and upcoming trials to expand PSMA-based treatments.

Key Words
PSMA PET; PSMA RLT; radiopharmaceuticals; RT planning