



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)

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 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 in prostate cancer
2. Overview of clinical indications for PSMA-PET imaging in prostate cancer
3. Gain insight into the impact of PSMA PET on the selection of patients for and planning of radiation treatment in primary and oligometastatic prostate cancer
4. Overview of clinical trial data on PSMA-based radioligand therapy in prostate cancer
5. Gain insight into next steps in PSMA-based radioligand therapy, including application in novel clinical indications and of novel radionuclides

Summary

The session will provide a comprehensive analysis of clinical trial results evaluating PSMA-radiopharmaceuticals in prostate cancer imaging. Key studies highlight the accuracy, sensitivity, and specificity of PSMA-PET imaging compared to conventional imaging techniques, demonstrating its superior ability to detect prostate cancer lesions at various stages of the disease. Clinical indications for the use of PSMA-PET imaging in prostate cancer will be discussed, including its role in initial staging, detection of biochemical recurrence, and assessment of metastatic disease. Emphasis will be placed on the impact of PSMA-PET imaging on clinical decision-making and patient management, particularly in cases where conventional imaging is inconclusive.

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



The session will also review pivotal clinical trials investigating PSMA-based radioligand therapy, focusing on its efficacy and safety profiles. Data from trials such as the VISION study will be presented, highlighting significant improvements in overall survival and progression-free survival in patients treated with PSMA-targeted radioligands. The discussion will also cover common adverse effects and strategies for their management. Finally, future directions in PSMA-based radioligand therapy will be explored, including potential applications in earlier stages of prostate cancer and in combination with other therapeutic modalities. The development and clinical evaluation of novel radionuclides with potentially improved therapeutic indices will also be discussed. The session will conclude with a look at ongoing and upcoming trials aimed at expanding the therapeutic landscape of PSMA-based treatments.

Key Words

PSMA PET; PSMA RLT; radiopharmaceuticals; RT planning