



LIPS Session 1

Neuroimaging Committee

Sunday, October 18, 08:00–09:30

Session Title

Neuroimaging Brain Metastases: Updates on Diagnosis and Therapy

Chairpersons

Nathalie Albert (Munich, Germany)

Matthias Preusser (Vienna, Austria)

Programme

08:00–08:20 **Matthias Preusser** (Vienna, Austria): Current Clinical Management and New Therapies

08:20–08:45 **Antoine Verger** (Nancy, France): Diagnostic Imaging of Brain Metastases

08:45–09:10 **Nathalie Albert** (Munich, Germany): PET RANO BM Criteria – New Avenues for Clinical Trials

09:10–09:30 **Nelleke Tolboom** (Utrecht, Netherlands): Targeted Radionuclide Therapy for Brain Metastases

Educational Objectives

1. Review the current clinical management of brain metastases and emerging systemic and local therapeutic strategies, including novel targeted and immunotherapies.
2. Understand the role of advanced diagnostic imaging, particularly MRI and PET, in the detection, characterisation, and response assessment of brain metastases.
3. Discuss new imaging-based response criteria, including PET RANO BM, and their implications for clinical trials and the development of targeted radionuclide therapies.

Summary

This session provides a comprehensive overview of the evolving management of brain metastases, from clinical decision-making to innovative therapeutic approaches. Current standards of care and emerging treatments are presented, highlighting how advances in systemic therapies are reshaping patient outcomes. The session emphasises the critical role of diagnostic imaging in brain metastases, focusing on state-of-the-art MRI and PET techniques for diagnosis and treatment monitoring. Novel PET RANO BM criteria are discussed as promising tools to improve response assessment and standardisation in clinical trials. Finally, targeted radionuclide therapy is introduced as a potentially transformative treatment option, illustrating the growing integration of molecular imaging and therapy in neuro-oncology.

Key Words

Brain Metastasis; Brain Metastases; Amino Acid PET; Radionuclide Therapy