Joint Symposium 7 (Physics + Dosimetry Committee / American Association of Physicists in Medicine (AAPM))
Sunday, October 13, 16:30-18:00

Session Title
Interventional Nuclear Medicine

Chairpersons
Assen Kirov (New York, United States / AAPM)
Bernhard Sattler (Leipzig, Germany)

Programme
16:30 - 16:50  Fijs van Leeuwen (Leiden, Netherlands): Nuclear Medicine Approaches in Guiding Surgical Procedures - Review and Current Status
16:50 - 17:10  Assen Kirov (New York, United States of America / AAPM): Methodological Aspects of PET/CT Guided Interventions
17:10 - 17:30  Marnix Lam (Utrecht, Netherlands): Future Perspectives of Radioembolization Interventional Methods
17:30 - 17:50  Andreas Melzer (Leipzig, Germany): NM Guided Focused Ultrasound - A Potential Future Application
17:50 - 18:00  All Speakers: Panel Discussion, Questions

Educational Objectives
1. To learn about minimally invasive interventional procedures as an emerging field in many disciplines in medicine.
2. To learn about the current status of guiding interventions using molecular imaging and the methodological aspects of this process, particularly when it comes to hybrid imaging such as PET/CT.
3. To learn about alternative procedures of interventions such as focussed ultrasound, the clinical entities it is applied to and the potential of molecular imaging procedures for its guidance and follow up.
4. To learn about radioembolization techniques and devices as a combination of classical interventional radiology procedures as a facilitator for the intraarterial/intratumoral application of therapeutic radionuclides, its image guided planning, monitoring and verification as well as future perspectives and emerging alternative radionuclides.

Summary
More and more nuclear medicine imaging procedures gain interest for guiding surgical and interventional radiology procedures. This Session gives an overview of molecular imaging guided interventions, their basics and methodological aspects as well as their emerging, present and potential clinical applications. Radioembolization of liver lesions using radioactive microspheres is also reviewed as a rapidly growing technique requiring both interventional radiology and nuclear medicine expertise.

Keywords
Molecular Imaging guided Interventions, Radioembolization, focussed ultrasound