Pre-Congress Symposium 3  
Bone & Joint Committee + Oncology & Theranostics + Paediatrics Committee  
Tuesday, October 5, 09:00-12:00

Session Title  
Radiosynoviorthesis - Master Class in Science and Practice

Chairperson  
Tim Van den Wyngaert (Edegem, Belgium)

Programme  
09:00 - 09:30  Lene Terslev (Copenhagen, Denmark): Changing Paradigms in (Osteo)Arthritis Management

09:30 - 10:00  Thynn Thynn Yee (London, United Kingdom): Challenges in the Management of Haemophilia

10:00 - 10:30  Yaser Jabbar (London, United Kingdom): Tackling the Target Joint - Radiosynoviorthesis Versus Surgery

10:30 - 11:00  Break

11:00 - 11:30  Friso M. van der Zant (Alkmaar, Netherlands): EANM Guideline - Patient Selection, Isotopes, Multidisciplinary Collaboration

11:30 - 12:00  Willm Uwe Kampen (Hamburg, Germany): EANM Guideline - Procedural Aspects, Arthrocentesis and Radiation Protection

12:00 - 12:05  Summary by Chairperson

Educational Objectives
1. Recognize the current challenges and unmet needs in the clinical management of (osteo)arthritis and haemophilia associated joint disease.
2. Understand the mechanism of action, optimal clinical indications, and patient benefit of radiosynoviorthesis.
3. Know the contents of the new EANM guideline on radiosynoviorthesis and the different aspects to take into account when implementing this technique in your clinical practice environment. This includes patient selection, isotopes, local implementation, practical aspects, and post-procedural care.

Summary  
Radiosynoviorthesis (RSO) is known for almost 70 years and is indicated in patients suffering from various inflammatory joint diseases. The three approved radionuclides yttrium-90 citrate, rhenium-186 sulfide and erbium-169 citrate deliver their high-energy beta particles to the innermost cell layer of the
synovium, resulting in a significant decrease in synovitis with less joint effusion and pain, leading to improved mobility of the joint and a better quality of life for the patient to perform daily duties and responsibilities without severe pain and pain-related restriction. Besides primary inflammatory conditions, RSO is also very effective in patients with hemophilic joint disease, characterized by synovitis induced by iron and inflammatory factors after joint bleeding. Moreover, the inhibitory effect on neoangiogenesis may contribute to a decreased bleeding tendency and reduce the risk of developing severe joint degeneration, the so-called hemarthropathy. The best clinical improvement is seen in patients suffering from high inflammatory activity in an early phase of their underlying disease when subsequent degenerative changes are not too pronounced. Thus, radiosynoviorthesis should be considered early by an interdisciplinary team consisting of the referring physician (e.g., rheumatologist, hematologist, orthopedic surgeon) and the nuclear medicine physician. This multi-disciplinary pre-congress symposium will address the clinical and technical aspects of RSO and introduce the new EANM guideline on RSO.

Key Words
Radiosynoviorthesis, Synovitis, (Osteo)arthritis, Haemophilia