



Joint Symposium 3

Translational Molecular Imaging & Therapy Committee / European Association of Urology (EAU)

Monday, September 11, 15:00 – 16.30

Session Title

Metastases Directed Prostate Cancer Surgery - Translational Challenges and Possibilities

Chairpersons

Sophie KNIPPER (Berlin, Germany)

Sergi VIDAL-SCIART (Barcelona, Spain)

Programme

15:00 - 15:20 **Elio Mazzone (Milan, Italy):** Surgical removal of nodal metastases in prostate cancer, what is the clinical value?

15:20 - 15:40 **Tessa Buckle (Leiden, Netherlands):** Translation and implementation of (radio)tracers for nodal management of prostate cancer

15:40 – 16:05 **Thomas Wendler (Munich, Germany):** An engineers overview of radioguided surgery modalities that support targeted nodal dissections in the pelvis

16:05 – 15:30 **Sophie Knipper (Berlin, Germany):** State of the art in PSMA-guided surgery

Educational Objectives

1. Understand the clinical need for image guidance in prostate cancer surgery.
2. Understand the translational possibilities and challenges in tracer development and engineering.
3. Obtain an overview of the current state-of-the-art in the field.

Summary

Urology is a clinical discipline that has proven itself as early adaptor of new medical technologies. Herein the European association of urology (EAU) has played a leading role. Well-known examples of pioneering are the large-scale employment of robotic surgery and the widespread use of PSMA as tumor biomarker. The intersection of these two examples also provides unique opportunities for the field of nuclear medicine. Namely for the subdiscipline of interventional molecular imaging or radioguided surgery. This murgence of EAU and EANM specializations allows high-end clinical procedures such as the targeting of (salvage)oligometastases to set the context for new chemical and technical innovations. Providing a driver for translational science. Initial collaborations between urologists and nuclear medicine, and affiliated researchers, have already yielded several translational success stories. Today a rapidly growing amount of new (radio)pharmaceuticals and medical devices finding their way into clinical trials that have the intent to advance the precision of prostate cancer surgery. Looking forward, a joint challenge is to establish consensus on the best image-guidance strategies and to gather clinical evidence that supports procedural acceptance in guidelines and routine care.

Key Words

Prostate cancer, radioguided surgery, PSMA, tracers, engineering