

## Joint Symposium 17

Drug Development / European Organisation for Research and Treatment of Cancer (EORTC)

Thursday, October 29, 13:30-15:00

### Session Title

**Benchside to Bedside and Back - What do we Learn from the Clinic?**

### Chairperson

Luigi Aloj (Cambridge, United Kingdom)

### Programme

- 13:30 - 13:52 Frederike Bensch (Groningen, Netherlands): Immuno-PET to Assess Response to PD-L1 Blockade
- 13:52 - 14:14 Egesta Lopci (Milan, Italy / EORTC): Imaging Tumour Metabolism in Response to Immunotherapy
- 14:14 - 14:36 Martin Glas (Essen, Germany): Application of Radiolabelled Amino Acids to Brain Tumour Imaging
- 14:36 - 14:58 Filip de Vos (Ghent, Belgium): Development of New Radiolabelled Amino Acids for Neuro-Oncology Applications

### Educational Objectives

1. To provide a critical perspective on translational nuclear medicine from the perspective of non-clinical and clinical researchers.
2. Provide case studies of clinical application and avenues for back-translation in areas of current scientific interest for oncology in Nuclear Medicine.
3. Expose audience to concepts in designing pre-clinical studies to support clinical trial applications.

### Summary

PET combined with CT or MRI is a widespread and effective imaging tool for the diagnosis and management of patients with cancer. Its inherent quantitative nature enables accurate, reproducible measurements of radiopharmaceutical uptake in the tumour during diagnostic work-up, therapy and treatment follow-up. Full utilisation of PET in oncology is impeded by inadequate provision of suitable specific imaging agents and incomplete pre-clinical support for advanced clinical trials. To address this new imaging agents are under continuous development but few transition to clinical trial and even fewer to commercialisation/widespread application; the reasons for this must be further understood. PET can integrate further in oncology through support for clinical trials of new treatment or patient management strategies. A key aspect of this approach is to design appropriate pre-clinical experiments to then guide the clinical trial and support applications to regulatory bodies.

This session will be address avenues for clinical translation of radiotracers and support for clinical research through appropriate design of pre-clinical imaging experiments. By providing expert opinion in these areas from pre-clinical and clinical researchers attendees will leave the session informed on the subject of clinical translation in Nuclear Medicine applied to oncology.

### Key Words

Translation, oncology, bench-to-bedside