

#### **CME Session 4**

Neuroimaging + Radiopharmacy Committee

**Wednesday, October 20, 18:00-19:30**

#### **Session Title**

**Imaging Neuroinflammation - Everything You Always Wanted to Know, But Were Afraid to Ask**

#### **Chairperson**

Bart van Berckel (Amsterdam, Netherlands)

#### **Programme**

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|---------------|---|
| 18:00 - 18:29 | Matthias Brendel (Munich, Germany): Background of TSPO and Non-TSPO Targets and Their Radiotracers              |
| 18:29 - 18:58 | Bart van Berckel (Amsterdam, Netherlands): Imaging Neuroinflammation with TSPO Ligands - A Critical Reappraisal |
| 18:58 - 19:27 | Donatienne van Weehaeghe (Leuven, Belgium): Imaging Neuroinflammation - Beyond TSPO Receptors                   |
| 19:27 - 19:30 | Session Summary by Chairperson  |

#### **Educational Objectives**

1. Identify different targets for imaging neuroinflammation
2. Identify validated TSPO tracers and tracers for other targets
3. Critically assess the quality of current neuroinflammation literature

#### **Summary**

Imaging neuroinflammation has been an active research area in nuclear medicine for several decades but proves to be very difficult. In the past few years, a multitude of new neuroinflammation tracers has been published but validation differs substantially between tracers. This session will provide a review of established and new targets for neuroinflammation imaging and a critical assessment of tracers for these targets.

#### **Key Words**

TSPO, P2X7, quantification, microglia, astrocytes, tracer kinetic modelling