



Special Track Session 12

Oncology and Theranostics Committee

Debate

Tuesday, October 22, 16:45 - 18:15

Session Title

Long Axial Field of View: Value for Money?

Moderators

Joyce van Sluis (Groningen, Netherlands)

Christophe Deroose (Leuven, Belgium)

Point of View: LAFOV PET delivers on its promises and will do so even more in the future Speaker

Barbara Malene Fisher (Copenhagen, Denmark)

Point of View: LAFOV PET is only for the happy few

Roland Hustinx (Liège, Belgium)

Educational Objectives

This debate among experts will give you with more insights into

1. Clinical advantages and research opportunities of LAFOV vs standard PET
2. Technical advantages and challenges of LAFOV PET systems
3. Cost-benefit of LAFOV PET from both a clinical and research perspective
4. Future perspectives of LAFOV PET

Summary

Technical advantages of Long Axial Field of View (LAFOV) PET systems such as the much higher sensitivity have already been described in great detail. However, now that these systems have been used extensively in a clinical and scientific setting during the past years, it is the right time to discuss what this experience has taught us about LAFOV PET systems and their impact on routine PET imaging and clinical research. Can it be argued that the higher costs are justified, given the benefits in terms of research knowledge and clinical diagnostics, possibly with increased patient throughput? Should system costs be reduced significantly, or dedicated funding schemes be made available to allow a more widespread adoption of LAFOV PET scanners? Or should the axial field of view be better matched with clinical or research applications that do not require full-body coverage but mainly focus on single organ imaging? Have the various technical challenges of LAFOV PET been addressed sufficiently including efficient handling of the very large data sets and appropriate data correction and reconstruction methods to obtain high-quality, quantitative PET data? Has the clinical translation of LAFOV PET been successful with the gain in sensitivity and thus improved image quality resulting in improved disease staging and increased diagnostic confidence? And finally, do the technical advantages of LAFOV PET enable unique research applications compared to standard PET systems, such as studying multisystemic interactions? These are all points that can be touched upon during this debate session.

Key Words

LAFOV PET; clinical benefit; research potential; cost-benefit balance