CME 9
Oncology & Theranostics + Physics Committee
Tuesday, October 20, 08:00-09:30

Session Title
New PET Technologies - Digital Revolution or Big Bust?

Chairpersons
Nicolas Aide (Caen, France)
Irène Buvat (Paris, France)

Programme
08:00 - 08:20 Ian Amstrong (Manchester, United Kingdom): Background on the Recent Developments in PET Technology
08:20 - 08:40 Irène Buvat (Paris, France): Challenges for Heterogeneity Evaluation in the Era of New PET Technologies
08:40 - 09:00 Nicolas Aide (Caen, France): New PET Technology - Pushing the Limits
09:00 - 09:20 Carsten Kobe (Cologne, Germany): New PET Technology - Clinical Implications
09:20 - 09:30 Panel discussion

Educational Objectives
1. To be updated on recent developments in PET technologies including hardware and software evolutions
2. Learn how these new technologies may affect the way we perform and use simple (SUV, MATV) or more advanced PET metrics (texture features)
3. Learn about (evidence-based) pros and cons of new PET technologies for staging/restaging of various cancer types
4. Participate in a lively and somewhat controversial session

Summary
PET technologies, whether they involve hardware (digital PET) or software (advanced reconstruction algorithms) are constantly evolving and impact on our daily practice. While some of them gained immediate acceptance from the Medical Physics and PET readers communities, other faced controversies or even reluctance, such as point spread function (PSF) reconstruction in lymphoma patients. This joint session between the Physics and Oncology Committees of the EANM will provide the attendees with the latest updates in PET technologies as well as challenges that may be faced when performing quantitation and heterogeneity evaluation, across state-of-the-art and former generation PET/CT systems. These talks will be followed by two controversial lectures given in an effort to expose arguments from those who feel that new PET technologies should be embraced and used to reach the best diagnostic capabilities and colleagues feeling that in some cases these new technologies may be detrimental to the patients.

Key Words
Digital PET; PSF; BPL; small voxel reconstruction; quantification; heterogeneity