Pre-Congress Symposium 4 (Neuroimaging/Drug Development/Radiopharmacy)
Saturday, October 21, 09:00-12:00

Session Title
Tau Imaging in Humans

Chairs
Valentina Garibotto (Geneva)
Adriaan Lammertsma (Amsterdam)

Programme

09:00 - 09:20	Gabor Kovacs (Vienna): Tau Pathology in Tauopathies
09:20 - 09:40	Stefanie Krämer (Zurich): Preclinical Pharmacokinetic Modelling: A Strategy to Select and Compare Tracers?
09:40 - 10:00	Agneta Nordberg (Stockholm): Imaging Tau with 18F-THK5317
10:00 - 10:15	Discussion
10:15 - 10:45	**Coffee Break**
10:45 - 11:05	Tessa Timmers (Amsterdam): Imaging Tau with 18F-T807
11:05 - 11:25	Makoto Higuchi (Chiba): Imaging Tau with 11C-PBB3 and its 18F Derivatives
11:25 - 11:45	Claude Wischik (Aberdeen): Tau as a Therapeutic Target
11:45 - 12:00	Discussion

Educational Objectives

1. To learn the prevalence, sensitivity and specificity of different forms of tau pathology in neurodegenerative disorders
2. To understand the use of preclinical methods to evaluate and compare tau tracers
3. To review the current evidence on in vivo tau PET imaging
4. To learn about ongoing clinical trials targeting tau pathology

Summary

Tau pathology is a key molecular marker in Alzheimer's Disease (AD) and in a large spectrum of neurodegenerative disorders, indeed grouped under the name "tauopathies", including frontotemporal dementia, corticobasal degeneration and progressive supranuclear palsy.
The severity and spatial spread of tau pathology is strongly correlated with the severity of neurodegeneration and with the clinical picture, thus representing an ideal tool to monitor disease progression, with a great potential in clinical trials.
However, the molecular diversity (with different isoforms) and the relatively low concentration of tau makes it a challenging target for in vivo imaging.
A number of PET tracers able to visualize tau deposits in vivo has been validated in vitro and is currently under evaluation in phase II studies. The first published data show a good specificity in vitro and a spatial distribution in vivo consistent with the known spread of tau pathology in AD. But what is the affinity profile of these tracers for tau pathology beyond AD? And how comparable are the results obtained with the different tracers?
This pre-congress symposium will begin with the gold standard neuropathological description of tau deposits in tauopathies, will provide an update on the current evidence of tau PET tracer in vivo in preclinical and clinical studies and on the developments using tau as therapeutic target.