

Barcelona, Spain

Annual Congress of the
European Association of Nuclear Medicine

October 12 – 16, 2019
Barcelona, Spain

Pre-Congress Symposium 7

Neuroimaging Committee

Saturday, October 12, 13:00-16:00

Session Title

Reserve, Resilience and Protective Factors in AD - Contribution of Molecular Imaging

Chairpersons

Silvia Morbelli (Genoa, Italy)

Valentina Garibotto (Geneva, Switzerland)

Programme

13:00 - 13:20 Prashanthi Vemuri (Rochester, United States of America): Reserve and Resilience in AD - Evolution of the Concept

13:20 - 13:40 Shireen Sindi (Stockholm, Sweden): Multimodal Interventions and Dementia Prevention

13:40 - 14:00 Silvia Morbelli (Genoa, Italy): Functional Networks Underlying Cognitive Reserve

14:00 - 14:15 Discussion

14:15 - 14:45 Coffee Break

14:45 - 15:05 Valentina Garibotto (Geneva, Switzerland): Should we Considered Education as a Confounder on FDG-PET Diagnostic Accuracy in Alzheimer's Disease?

15:05 - 15:25 Merle Höning (Cologne, Germany): Contribution of Amyloid and Tau PET to the Understanding of Cognitive Reserve

15:25 - 15:45 Gaël Chételat (Caen, France): Meditation in the Ageing Population to Foster Reserve and Prevent Dementia

15:45 - 16:00 Discussion

Educational Objectives

1. To learn about the evolution of the concept of Reserve and Resilience in Alzheimer's Disease
2. To understand mechanism underlying reserve and resilience
3. To understand the value of molecular imaging in disclosing mechanisms related to cognitive reserve as well as its potential use as surrogate biomarker in interventional trials for dementia prevention

Barcelona, Spain

Annual Congress of the
European Association of Nuclear Medicine

October 12 – 16, 2019
Barcelona, Spain

Summary

Alzheimer's disease (AD) is characterized by a non-linear progressive course and several aspects influence the relationship between cerebral amount of AD pathology and the clinical expression of the disease. Brain cognitive reserve (CR) refers to the hypothesized capacity of an adult brain to cope with brain damage in order to minimize symptomatology. CR phenomenon contributed to explain the disjunction between the degree of neurodegeneration and the clinical phenotype of AD. The possibility to track brain amyloidosis (A β) and Tau pathology in vivo has huge relevance for AD diagnosis and new therapeutic approaches. The clinical repercussions of positron emission tomography (PET)-assessed A β load are certainly mediated by CR thus potentially hampering the prognostic meaning of amyloid PET in selected groups of patients. On the other side, amyloid PET, cerebrospinal fluid amyloidosis biomarkers as well as TAU PET imaging have recently provided new evidence for CR. The Pre-Congress Symposium will discuss the concept of Cognitive Reserve and Resilience in the framework of their more recent evolution as well as recent molecular imaging studies on these topics. The added value FDG, amyloid and TAU PET in disclosing mechanism related to CR and the effects of interventional strategies in dementing disorders will be also discussed.

Key Words

Positron emission tomography, Cognitive Reserve, TAU and amyloid PET