Session Title
Pseudoprogression and Pseudoresponse in Brain Tumours

Chairperson
Diego Cecchin (Padua, Italy)

Programme
29 min  Martin Glas (Essen, Germany): Neurooncologist - The Neurooncologist’s Perspective
29 min  Pia C. Maly Sundgren (Lund, Sweden): Neuroradiologist - An MRI Overview
29 min  Ian Law (Copenhagen, Denmark): Nuclear Medicine Physician - ...And What About PET?
3 min   Session Summary by Chairperson

Educational Objectives
1. To define neuro-oncologically the problem of pseudoprogression and pseudoresponse in brain tumours
2. To understand what could be done on the topic from a neuroradiological (MR) point of view
3. To learn what PET (and particularly aminoacid PET) could add to MR

Summary
When dealing with brain tumors quite often a rapid positive effect on imaging (pseudoresponse) could be noticed after antiangiogenic therapies. On the other hand, necrosis or chemoradiotherapy could mimic tumor recurrence on imaging (pseudoprogression). Response assessment in neuro-oncology (RANO) criteria are frequently not reliable in this setting. Combined PET (especially with aminoacids) and MR approaches (including radiomics) are increasing in literature. Both pseudo-phenomena confuse the assessment of outcome to therapies of brain tumours. Therefore, it is important to recognize/suspect the phenomena and have the proper tools to try to solve it. In this session experts in the field (Neurooncologist, Neuroradiologist and Nuclear Medicine Physician) will clarify what should be done when pseudoprogression or pseudoresponse are suspected.

Key Words
Neurooncology, Neuroradiology, Brain tumours, PET, aminoacid