Special Issue

The Role of Multimodal Imaging in Assessing the Biology and Staging of Neurodegenerative Disorders

Message from the Guest Editor

The development and validation of fluid and imaging biomarkers for Alzheimer's disease (AD) have changed the view on how patients with suspected dementia of the Alzheimer's type are evaluated and have contributed to the establishment of research criteria for the diagnosis and staging of AD. Neuroimaging tools such as amyloid and tau PET, FDG PET and MR imaging are included as biomarkers for the assessment of A, T and N pathological changes in AD. Recently, 2 biological staging systems for neuronal synucleinopathies (Parkinson's disease—PD; dementia with Lewy bodies—DLB) have been proposed, leveraging the development of assays to detect synuclein pathology and established imaging biomarkers of neurodegeneration. Multimodal imaging with PET and MRI offers the opportunity to detect and measure in vivo different pathological processes. Changes in blood flow, metabolism, protein misfolding and neurodegeneration, but also peripheral markers, can support early diagnosis of AD, PD and DLB and their biological characterization. This Special Issue aims to include the current status and advances in neuroimaging tools for in vivo biological characterization of these disorders.

Guest Editor

Prof. Dr. Andrea Varrone

Department of Clinical Neuroscience, Centre for Psychiatry Research, Karolinska Institute and Stockholm Health Services, BioClinicum, J4-14, Akademiska Stråket 1, 17176 Solna, Sweden

Deadline for manuscript submissions

20 March 2026

Brain Sciences

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.6
Indexed in PubMed

mdpi.com/si/246915

Brain Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
brainsci@mdpi.com

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Prof. Dr. Stephen D. Meriney
Department of Neuroscience, University of Pittsburgh, Pittsburgh, PA 15260, USA

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