Special Issue

Cell Death, Inflammation and Oxidative Stress in Neurodegenerative Diseases: Mechanisms and Cytoprotective Molecules 3.0

Message from the Guest Editor

Neurodegenerative diseases include multiple demyelinating neurodegenerative diseases: multiple sclerosis and peroxisomal and nondemyelinating leukodystrophies, and Alzheimer's disease, Parkinson's disease, Niemann–Pick disease, Huntington's disease, and amyotrophic lateral sclerosis or Charcot disease. Among the mechanisms involved in these pathologies, inflammation, oxidative stress, and cell death play crucial roles in their pathophysiology. It is therefore important to more thoroughly understand the involvement of cell death, inflammation, and oxidative stress in these diseases, as well as the cellular and molecular mechanisms that lead to it, and to identify the natural or unnatural molecules that can thwart these mechanisms. Apoptosis, autophagy, necroptosis, or other forms of cell death could be interesting therapeutic targets to aim at in order to combat the development of these neurodegenerative diseases. Cytokinic and non-cytokinic inflammation, as well as processes generating oxidative stress, could also be interesting targets in the pursuit of fighting these pathologies.

Guest Editor

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Deadline for manuscript submissions

closed (30 January 2025)

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/si/168245

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