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The Contribution of Non-Neuronal Cells in Neurodegeneration: From Molecular Pathogenesis to Therapeutic Challenges

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Message from the Guest Editors

Dear Colleagues,

Neuron loss occurring in neurodegenerative diseases represents just the tip of the iceberg in a series of events where cells, other than neurons, actively contribute to the pathogenic mechanisms, establishing harmful non-cell autonomous processes. In this aspect, amyotrophic lateral sclerosis is paradigmatic of the most common neurodegenerative disorders, since motor neuron demise, the major event characterizing the disease, is accompanied by the activation of astrocytic and microglial cells activation, oligodendroglial pathology, blood brain barrier permeabilization, T cells, macrophages and mast cells infiltration, neuromuscular junction dismantling, muscle alterations and dyslipidemia. Furthermore, the disease can involve the impairment of neurons other than the motor ones, such as those of the frontotemporal lobe.

The aim of this Special Issue is to highlight the role of non-neuronal cells in the onset and progression of different neurodegenerative diseases, such as Parkinson's, Alzheimer's and dementias, Huntington's, spinocerebellar ataxias, spinal muscular atrophy and prion diseases.

For further reading, please visit the [Special Issue website](#).



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Special Issue



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