Special Issue

Repurposing and Innovation: Drug Research in Neuroprotection

Message from the Guest Editor

Neurodegenerative diseases and a range of neurological disorders remain a major challenge facing modern medicine, and there are currently few treatments that can effectively prevent or reverse neuronal damage. From a pharmacological perspective, innovative compounds are often highly specific, targeting specific molecular cascades or receptors that play a role in neuronal survival and synaptic plasticity. However, they often encounter translational barriers. In contrast, drug repurposing utilizes compounds with well-defined pharmacodynamics and pharmacokinetics, including demonstrated CNS penetration and an established safety profile.

Therefore, this Special Issue will cover two interrelated aspects of modern pharmacology: the identification and characterization of novel neuroprotective compounds, and the strategic reuse of existing drugs for neuroprotective applications. We will mainly focus on the study of innovative substances with inherent neuroprotective properties and the re-evaluation of clinically approved drugs. We welcome submissions including mechanistic studies, preclinical models, clinical observations, and pharmacological analyses.

Guest Editor

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Message from the Editor-in-Chief

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