

Special Issue

Molecular Mechanisms and Emerging Therapies in Neurovascular Disease

Message from the Guest Editor

Neurovascular diseases, including stroke, cerebral aneurysms, cerebral sinus vein thrombosis, CNS angiitis, and vascular cognitive impairment, involve complex molecular mechanisms that disrupt the blood–brain barrier, vascular function, and neuronal integrity. Key molecular processes, such as endothelial dysfunction, inflammation, oxidative stress, and altered cellular signaling, contribute to disease pathogenesis. Recent advances in molecular research have identified critical biomarkers and signaling pathways, providing new insights into disease progression. Emerging therapies, including targeted molecular interventions, gene therapies, and novel drug delivery systems, aim to modulate these pathways and repair vascular and neuronal damage. Understanding these molecular mechanisms is essential for developing effective treatments and improving clinical outcomes in neurovascular disease management.

Guest Editor

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