

Special Issue

Molecular Mechanisms and Therapeutic Targeting of Autophagy in Cardiovascular Diseases

Message from the Guest Editor

Autophagy is a critical cellular process that helps to maintain cellular homeostasis by breaking down and recycling unnecessary or damaged components. Disruptions in autophagy have been linked to the development and progression of cardiovascular diseases. Researchers have identified various molecular mechanisms that play a role in autophagy and its relationship with cardiovascular diseases, including specific genes and proteins and the mTOR signaling pathway. Therapeutic targeting of autophagy has emerged as a promising approach to treat cardiovascular diseases. Small-molecule inhibitors, activators, and gene therapy approaches have been studied as potential therapeutic strategies. While small-molecule inhibitors have shown success in preclinical studies, further research is necessary to evaluate their safety and efficacy in humans. Gene therapy approaches, such as the delivery of autophagy-related genes to target tissues via adeno-associated virus (AAV) vectors, have also shown potential.

Guest Editor

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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