



The Molecular Basis of Extracellular Vesicles in Health and Diseases

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Message from the Guest Editor

Extracellular vesicles (EVs), i.e., nanoparticles with a bilayer membrane, are secreted by almost all cell types and can be found in body fluids. The composition of EVs is determined by their biogenetic molecular pathway and the microenvironment of the parent cell. Regardless of their origin, EVs carry a diverse set of bioactive molecules, including lipids, nucleic acids, and proteins, either inside the vesicle or exposed on their surface. Recent studies have provided valuable insight into the physiological and pathological roles of EVs. Technological advances in the detection, isolation, and characterization of EVs are significantly expanding and supporting research on their potential in the diagnosis and therapy of various diseases.

This Special Issue aims to provide comprehensive and critical knowledge on the pre-clinical and clinical applications of EVs in relation to the pathophysiology of different diseases, evaluate their diagnostic and therapeutic potential, and review the progress in this field. The published research articles will also provide new insights into the genetic and epigenetic predictors driven by EVs involved in the etiology of multiple diseases.





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Message from the Editor-in-Chief

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