

Special Issue

The Molecular Basis of Extracellular Vesicles in Health and Diseases—2nd Edition

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 bodily fluids. The composition of EVs is determined by their biogenetic molecular pathway, as well as 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, supporting research on their potential role 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.

Guest Editor

Dr. Taral R. Lunavat

Section for Pharmacology and Pharmaceutical Biosciences,
Department of Pharmacy, Faculty of Mathematics and Natural
Sciences, University of Oslo, Oslo, Norway

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MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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