Special Issue

New Insights into Stem Cell-Derived Exosomes in Human Health and Disease

Message from the Guest Editor

In recent years, stem cell-derived exosomes have emerged as potent mediators of intercellular communication, offering novel therapeutic and diagnostic possibilities across a broad spectrum of diseases. Unlike cell-based therapies, exosomes offer a cell-free approach that minimizes immunogenicity and tumorigenicity while preserving the ability to modulate immune responses, promote tissue repair, and influence disease progression. As our understanding of their biogenesis, cargo sorting mechanisms, and functional roles deepens, stem cell-derived exosomes are increasingly recognized for their translational potential in regenerative medicine, oncology, neurology, and immunology. This Special Issue highlights the latest advances in biology and the application of exosomes derived from various stem cell sources. We welcome contributions exploring their roles in health and disease, innovative isolation and characterization methods, and strategies to enhance their therapeutic efficacy. By gathering cutting-edge research and expert perspectives, this Issue seeks to provide a comprehensive overview of the field and identify new directions for clinical translation and biomedical innovation.

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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