Special Issue

Extracellular Vesicles and Exosomes as Therapeutic Agents

Message from the Guest Editor

Extracellular vesicles (EVs) are lipid-bound vesicles secreted by cells into the extracellular space. EVs are widely considered as promising therapeutic options because they have a long circulating half-life, are tolerated well by the human body, are capable of penetrating cell membranes and targeting specific cell types, and have the capacity to be engineered. Indeed, the use of EVs (predominantly exosomes) as therapeutic agents and/or drug-delivery systems in neurodegenerative diseases, cancers, stroke, myocardial infarction, and several other pathologies has been the subject of intense research. Despite recent advances, a better understanding of the mechanisms by which EVs function would help unlock the full potential of EV-based therapeutics. This Special Issue welcomes articles focused on the use of EVs—including exosomes -as therapeutic agents, with a focus on articles that provide a better understanding of the uptake, biodistribution, and trafficking of EVs or elucidate the mechanisms by which EVs exert their therapeutic effects.

Guest Editor

Dr. David J. Rademacher

Stritch School of Medicine, Core Microscopy Facility and Department of Microbiology and Immunology, Loyola University Chicago, Chicago, IL, USA

Deadline for manuscript submissions

closed (31 May 2025)



an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed



mdpi.com/si/143020

Biomedicines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

mdpi.com/journal/biomedicines





an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

- Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
- 2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).