Special Issue

The Role of Extracellular Vesicles in Drug Delivery

Message from the Guest Editor

Extracellular vesicles (EVs) are membrane-bound particles released from cells to deliver active biological molecules. Due to their unique biological properties, EVs recently emerged as efficient and safe drug delivery systems. EVs present low toxicity, low immunogenicity, and high stability in circulation, providing advantages over the use of synthetic delivery systems. Furthermore, EV drug delivery capabilities can be enhanced via EV engineering, which includes chemical and genetic EV modifications. Several lines of evidence showed the potential application of EVs as drug delivery agents in various clinical settings, including cancer treatment, gene therapy, and conventional drug resistance. Although EVs represent a promising and versatile platform for drug delivery, challenges such as efficient isolation, purification, and understanding of EV biology need to be addressed in future studies. In this Special Issue, we encourage investigators to contribute with high-quality original research, short communications, and review articles focused on EVs as novel drug delivery systems.

Guest Editor

Dr. Davide Brocco
Department of Pharmacy, University "G. D'Annunzio" Chieti-Pescara, Chieti, Italy

Deadline for manuscript submissions

31 January 2026

Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/217362

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

mdpi.com/journal/biomolecules

Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed

mdpi.com/journal/biomolecules

About the Journal

Message from the Editorial Board

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.

Editors-in-Chief

Prof. Dr. Peter E. Nielsen
Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan
Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

Author Benefits

Open Access

— free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

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

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)

MDPI