Special Issue

Induced Pluripotent Stem and Extracellular Vesicles in Biomedicine

Message from the Guest Editors

Induced pluripotent stem (iPS) cells are promising cell resources for tissue regeneration due to high selfrenewal and pluripotency and fewer ethical issues than embryonic stem cells. iPS cells provide new methods for studying stemness and the differentiation process in tissue development. Therefore, having the same features as embryonic stem cells, iPS cells can differentiate into all adult cell lines, providing a new model for studying patient-specific diseases and offering innovative regenerative and translational medicine approaches. However, despite the advantages of iPS cells, there are important limitations related to cell therapies, including immunogenicity. For this reason, research is currently focusing on studying vesicular products of stem cell secretomes, such as extracellular vesicles (EVs), as potential therapeutics that bypass the problems related to cell therapies. The study of EVs improves epigenetics knowledge to understand intercellular communication and the extracellular environment and can represent new approaches for cell-free therapies. Authors are invited to contribute original research articles and reviews to this Special Issue.

Guest Editors

Dr. Ylenia Della Rocca

Dr. Francesca Diomede

Dr. Jacopo Pizzicannella

Deadline for manuscript submissions

20 August 2025



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 8.1 Indexed in PubMed



mdpi.com/si/212787

International Journal of Molecular Sciences MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 8.1 Indexed in PubMed





Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

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

