

## Special Issue

# Natural and Artificial Vesicles and Nanoparticles against Brain Diseases

### Message from the Guest Editor

Brain diseases (BD) affect millions of people around the world. These pathologies (inflammatory, trauma, tumors, stroke and neurodegenerative disease) represent a considerable global social and economic burden and constitute an unquestionable emergency, and a grand challenge for neuroscientists. Furthermore, the improvement of the solubility, stability and release of the drugs/molecules in specific brain regions and in particular target cells are essential factors in developing an effective therapy. Several studies have reported that extracellular vesicles (EVs) are released from cells of the central nervous system (CNS), playing a significant role in its functions. For these effects, VEs can be used for therapeutic purposes or as brain drug delivery systems (BDDS). EVs and artificial nanovesicles can target a CNS cell-type in specific regions of the brain. In conclusion, EVs and artificial nanovesicles, thanks to their capacities, may represent a promising strategy against BD. Therefore, authors are invited to present original research articles, review papers or communications focused on the EVs and artificial nanovesicles as therapeutic tools to contrast BD.

### Guest Editor

Dr. Pasquale Picone

1. Dipartimento di Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche (STEBICEF), Università degli Studi di Palermo, 90128 Palermo, Italy
2. Istituto per la Ricerca e l'Innovazione Biomedica (IRIB), CNR, Via U. La Malfa 153, 90146 Palermo, Italy

### Deadline for manuscript submissions

closed (31 March 2022)



## International Journal of Molecular Sciences

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/81970](https://mdpi.com/si/81970)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/journal/](https://mdpi.com/journal/ijms)

[ijms](https://ijms)



## About the Journal

### 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 (Organic Chemistry)