

Special Issue

The Role of Neuroimmune Inflammation in Chemotherapy-Induced Side Effects

Message from the Guest Editors

Chemotherapy has increased the survival rate in cancer patients; however, despite the undisputed benefits, antitumoral drugs cause a wide range of known and little-known side effects, such as chemotherapy-induced neuropathy (CIN), chemotherapy-induced cognitive impairment (CICI). Emerging evidence indicates that neuroimmune inflammation at the peripheral and central nervous system level plays a pivotal role in the development of such complications. Infiltrated and resident immune cells or glial cells interact with the neuronal component, promoting a sensitization process and maladaptive plasticity that contribute to the progression of damage and finally result in clinical complications. In this scenario, both classic and newer biomolecules could represent novel pharmacological targets to counteract the development of chemotherapy-induced side effects but could also represent potential biomarkers to predict them. This Special Issue aims to collect recent findings regarding the role of neuroimmune inflammation in chemotherapy-induced side effects, identifying mechanisms and novel controlling networks or suggesting new potential pharmacological approaches to counteract or predict them

Guest Editors

Dr. Silvia Franchi

Department of Pharmacological and Biomolecular Sciences, Università degli Studi di Milano, Milano, Italy

Dr. Lorenzo Di Cesare Mannelli

Department of Neuroscience, Psychology, Drug Research and Child Health (NEUROFARBA), Pharmacology and Toxicology Section, University of Florence, 50139 Florence, Italy

Deadline for manuscript submissions

closed (31 July 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/66013

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