Special Issue

Defense Mechanisms of Neoplastic Cells against Chemical Stress

Message from the Guest Editors

There have been several breakthroughs in the treatment of neoplastic diseases, many of which allow curative therapy or significantly reduce the negative effects on patients' length and quality of life. Cancer chemotherapy is one of the essential therapeutic approaches to effective treatment. Highly active substances have been developed which significantly contribute to the suppression of the development of neoplastic diseases. However, patients may also be non-responders who do not respond to treatment with otherwise effective therapeutics. This is due to a decrease in the sensitivity of neoplastically transformed cells to the drug used. Tumor cells can use several inherent mechanisms to protect them from chemical stress, thus developing a drug-resistant phenotype. A special case of substance resistance is multidrug resistance, in which protective changes in the cellular phenotype provide resistance to different substances with essentially different structure and mechanism of action.

Guest Editors

Dr. Zdena Sulová

Institute of Molecular Physiology and Genetics, Centre of Bioscience, Slovak Academy of Sciences, Bratislava, Slovakia

Prof. Dr. Albert Breier

Institute of Biochemistry and Microbiology, Faculty of Chemical and Food Technology, Slovak University of Technology, 812 37 Bratislava, Slovakia

Deadline for manuscript submissions

closed (31 December 2020)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/48969

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





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 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 (Organic Chemistry)

