

Special Issue

Heterogeneity and Precision Oncology in Circulating Tumor Cells

Message from the Guest Editors

Circulating tumor cells (CTCs) are a rare subpopulation of cells found in the blood of patients with cancer. CTCs present in the blood have the potential to be used as a liquid biopsy for the early diagnosis, prognosis, and therapy response related to various cancers, in comparison to more conventional forms of tumor tissue biopsies. It is a treatment that is less invasive, more precise, and can be processed rapidly by collecting peripheral blood from the patients. The real-time sampling of CTCs could provide us with a critical insight into the tumor's molecular structure without resorting to the use of an invasive tissue biopsy, which can be useful in therapy selection and response monitoring in cancer patients. The heterogeneous nature of cancer is associated with inefficient clinical outcomes; therefore, the characterization of CTCs followed by their identification in clinical settings has the potential for use as an effective prognostic and therapeutic biomarker for selecting personalized precision-treatment options, resulting in the improved management of patients with cancer.

Guest Editors

Prof. Dr. Farhadul Islam

1. Department of Biochemistry and Molecular Biology, University of Rajshahi, Rajshahi 6205, Bangladesh
2. School of Medicine & Dentistry, Griffith University, Gold Coast, QLD 4222, Australia

Prof. Dr. Alfred King-Yin Lam

Cancer Molecular Pathology, Griffith Medical School, Griffith University, Gold Coast, QLD 4222, Australia

Deadline for manuscript submissions

closed (15 April 2024)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/139807

*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)* 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, and molecular biophysics. *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. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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, CAPus / SciFinder, and other databases.

Journal Rank:

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