# 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





# 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)

