



## Myeloid Cells: Multi-Functional Regulators of Immune Suppression and Tumor Progression

Guest Editors:

**Prof. Dr. Ali S. Arbab**

Tumor Angiogenesis laboratory,  
Georgia Cancer Center,  
Department of Biochemistry and  
Molecular Biology, Augusta  
University, Augusta, GA 30912,  
USA

**Prof. Dr. Hasan Korkaya**

Georgia Cancer Center,  
Department of Biochemistry and  
Molecular Biology, Augusta  
University, Augusta, GA 30912,  
USA

Deadline for manuscript  
submissions:

**closed (31 October 2019)**

### Message from the Guest Editors

Dear Colleagues,

Accumulating evidence suggests that tumour-induced immune cells of myeloid origin differentiate into cells that promote tumour growth and invasion in addition to their immunosuppressive role. Although myeloid-derived suppressor cells (MDSC) were initially identified in cancer patients and mouse models due to their potent immune-suppressive activity, they are now being implicated in the promotion of tumour metastasis by participating in the formation of pre-metastatic niches, angiogenesis and invasion. MDSCs are heterogeneous populations of immature myeloid cells that include monocytic (mMDSC) and granulocytic (gMDSC) subsets, both of which have been shown to be immune-suppressive. However, molecular, biochemical and functional characterizations of the MDSCs in preclinical and clinical settings remain to be explored. This special issue focus on the work which involves the molecular, biochemical and functional characterization of MDSCs, as well as the studies that explore the development and design of targeted therapeutics against MDSCs.

Prof. Dr. Ali S. Arbab

Prof. Dr. Hasan Korkaya

Guest Editors





an Open Access Journal by MDPI

## 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

## 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.

## 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 (Inorganic Chemistry)

## Contact Us

---

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI