Special Issue

Tumor Secretome in Translational Oncology

Message from the Guest Editor

Tumor adaptation to stress impinges on resistance to therapy. Therapy-instigated secretome rearrangement instructs the tumor microenvironment adaptive response, possibly through altered cell subpopulation dynamics. The reshaping of secretome in therapyresistant tumors is documented in many experimental settings (mesothelioma, NSCLC, melanoma, TNBC) and in some cases was shown to involve therapy-induced senescence, according to an SASP model. Cell autonomous and non-cell autonomous mechanisms cooperate to establish such a detrimental network, with a two-way communication among tumor and stroma. Secreted molecules may be pro-inflammatory cytokines, metabolites, or nucleic acids, in an ever growing list. Here, we consider how the tumor secretome influences response to therapy (including immunotherapy) and, mechanistically, how the effector molecules signal to the TME. We will consider TKIs, lipid signalling inhibitors, metabolic modulators, and senolytic drugs potentially interfering with the described processes and, therefore, of potential translational relevance in oncology.

Guest Editor

Dr. Mario Cioce

Laboratory of Molecular Medicine and Biotechnology, Department of Medicine, University Campus Bio-Medico of Rome, 00128 Rome, Italy

Deadline for manuscript submissions

closed (31 December 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/58381

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)

