Special Issue

Metabolism Research in Tumor-Associated Macrophages

Message from the Guest Editor

Tumor-associated macrophages (TAMs) are the major immune components of the tumor microenvironment (TME). A large body of scientific evidence indicates that TAMs play a crucial role in tumor development and progression. TAMs are a phenotypically diverse population of myeloid cells which display high plasticity and dynamic metabolic nature. Macrophages exhibit polarization into distinct phenotypic and functional subsets known as M1 and M2 macrophages in response to various activation stimuli. The dichotomy in M1 and M2 macrophages is also evident at the metabolic level. As metabolic reprogramming is recognized as a hallmark of cancers, a complete interpretation of protumoral and anti-tumoral metabolic switch in TAMs is essential to understand the molecular mechanisms in cancer. It is becoming clear that the "immunosuppressive and protumoral" behavior of TAMs results from a rewired metabolic program which affects disease progression and outcome in cancer.

This Special Issue will highlight the current state of the art in tumor-associated macrophages metabolism, metabolic inhibitors, and future directions for pro-tumor macrophage reprogramming strategies.

Guest Editor

Dr. Emanuele Giurisato

Department of Biotechnology Chemistry & Pharmacy, University of Siena, Siena, Italy

Deadline for manuscript submissions

closed (31 July 2023)



an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed



Biomedicines Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 biomedicines@mdpi.com

mdpi.com/journal/biomedicines





an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

- Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
- 2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).