

Special Issue

Cancer Immunology: From Molecular Mechanisms to Therapeutic Target through Emerging In Vitro Approaches

Message from the Guest Editor

In recent years, cancer immunotherapy has emerged as a promising therapeutic strategy to improve the treatment and benefits of individual patients. However, mechanisms behind tumor immunogenicity, immune cell invasion, adaptive immune responses against cancer, and escape mechanisms are still not completely elucidated. In this context, the availability of more reliable preclinical models capable of recapitulating the real complexity of the human tumor microenvironment while overcoming the limitations of traditional approaches becomes mandatory. In particular, it is important to find ways to evolve current in vitro/in vivo models to become more predictive of the human patient heterogeneity and response to testing therapies. This Special Issue will focus on translational research aimed at discussing the main challenges and possible future trends of cancer immunotherapies, by deepening novel and emerging in vitro approaches, such as immune component 3D tumor models, organ-on-chip technologies, tumor organoids, and 3D bioprinting.

Guest Editor

Dr. Silvia Scaglione

1. React4life SRL, 16121 Genova, Italy
2. National Research Council of Italy, Institute of Electronics, Information Engineering and Telecommunications (IEIT), 16149 Genova, Italy

Deadline for manuscript submissions

closed (29 February 2024)



Biomedicines

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/131268

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

[mdpi.com/journal/
biomedicines](https://mdpi.com/journal/biomedicines)





Biomedicines

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed



[mdpi.com/journal/
biomedicines](https://mdpi.com/journal/biomedicines)



About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal 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

1. 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).