

Special Issue

Applications of Plasma in Cancer Treatment and Physiology

Message from the Guest Editor

Cold plasma is proven to have a selective killing effect on tumors, as evidenced by growing in vitro and in vivo data during the past ten years. There are two main points of agreement among the research community. First, cold plasma can be used on a wide range of malignancies. Second, reactive oxygen and nitrogen species (RONS) are central players responsible for the majority of its effects. The RONS serve as a common point for regulating different signaling pathways leading to cell cycle arrest, DNA damage, and apoptosis in tumor cells. However, the type of cold plasma device and exposure interval may present altered effects. Moreover, little information is available on its interactions with the tumor microenvironment (TME). While novel and more effective plasma devices are encouraged, there is an urgent need to generate consensus on the standardization and applicability of plasma devices for clinical translation.

Guest Editor

Dr. Pradeep Bhartiya

School of Medicine, University of Colorado, Aurora, CO 80045, USA

Deadline for manuscript submissions

closed (30 June 2025)



Biomedicines

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/226323

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).