

Special Issue

Current Challenges and Future Trends in Intracranial Aneurysms: Mechanisms, Biomarkers, and Therapeutic Strategies

Message from the Guest Editors

Intracranial aneurysms (IAs) are a serious cerebrovascular condition that affect approximately 3% of the population, which can lead to a devastating subarachnoid hemorrhage and carry high rates of mortality and morbidity when they occur after a rupture has developed. The diagnosis and treatment of IAs have achieved significant advancements over the decades; however, critical challenges still exist. The biological mechanisms underlying aneurysm formation, growth, and rupture are incompletely understood, which complicates targeted prevention efforts. Robust, validated biomarkers for accurate risk prediction of aneurysm rupture and potential responses to aneurysm growth and treatment are urgent needs, which are essential for guiding personalized management strategies.

This Special Issue aims to addressing the latest advancements in the field of intracranial aneurysms, including mechanisms, biomarkers, and therapeutic approaches. It will cover various aspects of this pathology, exploring therapeutic strategies such as endovascular interventions, as well as emerging pharmacological and biological treatments that are driving translational research and improving patient outcomes.

Guest Editors

Prof. Dr. Zhongsong Shi

Department of Neurosurgery, Sun Yat-sen Memorial Hospital, Sun Yat-sen University, Guangzhou, China

Prof. Dr. Aichi Chien

Division of Interventional Neuroradiology, Department of Radiology, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA

Deadline for manuscript submissions

28 February 2026



Biomedicines

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/248029

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, CAPus / 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).