



an Open Access Journal by MDPI

Animal Models for Study of Pathophysiological Mechanisms of Hypertension and Its Complications

Guest Editors:

Dr. Josef Zicha

Department of Experimental Hypertension, Institute of Physiology of the Academy of Sciences of the Czech Republic, Prague, Czech Republic

Dr. Ivana Vaněčková

Department of Experimental Hypertension, Institute of Physiology, Czech Academy of Sciences, Prague, Czech Republic

Deadline for manuscript submissions:
closed (31 August 2022)

Message from the Guest Editors

Dear Colleagues,

Since essential hypertension is part of many important health care problems, it is necessary to investigate its mechanisms in animal models. This type of experimental research may have potential clinical importance. This Special Issue will be focused on several important topics, including:

1) The pathophysiological mechanisms responsible for:

i) Blood pressure elevation during hypertension development and maintenance; ii) Organ damage in chronic hypertension; iii) Drug targeting of hypertension and its complications.

2) The participation of:

i) Central and peripheral blood pressure control; ii) Vascular hypertrophy and endothelial damage; iii) Neural, humoral, and endocrine factors; iv) Immune mechanisms.

3) The role of:

i) Altered redox signaling; ii) Chronic inflammation; iii) Microbiome changes; iv) Genetic and/or environmental factors.

4) The progress in:

i) Pharmacological tools for the control of hypertension and organ damage; ii) Genetic modifications to alter blood pressure level; iii) Non-pharmacological interventions attenuating hypertension and its complications.





an Open Access Journal by MDPI

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

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.

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*, *CAPlus / SciFinder*, and other databases.

Journal Rank: JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q2 (*Medicine (miscellaneous)*)

Contact Us

Biomedicines Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/biomedicines
biomedicines@mdpi.com
[X@Biomed_MDPI](https://twitter.com/Biomed_MDPI)