Special Issue

Pharmacogenomics and Hypertension: Problems and Prospects

Message from the Guest Editors

Arterial hypertension has a strong underlying hereditary and environmental basis. Treatment has remained empiric, control rates are suboptimal, and there is minimal translation of genetics from the bench to the clinic. Although rare monogenic forms of hypertension with a distinct phenotype were initially well documented and provided specific treatments, the overall genetic risk for hypertension was considered to be polygenetic in origin. The initial GWAS studies could only explain 2% of the overall risk, which led to a degree of nihilism in relation to the pharmacogenetics of hypertension. The aim of this Special Issue is to review and publish cuttingedge research on new developments in the understanding of the genetics of arterial hypertension, the translation of genetic research to the clinic, and future directions for pharmacogenomics. We are soliciting original articles related to understanding the genetic architecture of hypertension, genetic risk scoring, Mendelian randomization, epigenetics, the pharmacokinetics and pharmacodynamics of antihypertensive drugs, translational research, and state-of-the-art manuscripts on the status of pharmacogenomics and future directions.

Guest Editors

Prof. Dr. Brian L. Rayner

Division of Nephrology and Hyertension, University of Cape Town, Cape Town, South Africa

Prof. Dr. Collet Dandara

Platform for Pharmacogenomics Research and Translation (PREMED), South African Medical Research Council & Division of Human Genetics, Faculty of Health Sciences, University of Cape Town, Cape Town, South Africa

Deadline for manuscript submissions

closed (25 July 2025)



Journal of Personalized Medicine

an Open Access Journal by MDPI

CiteScore 6.0
Indexed in PubMed



mdpi.com/si/185469

Journal of Personalized Medicine Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 jpm@mdpi.com

mdpi.com/journal/ jpm





Journal of Personalized Medicine

an Open Access Journal by MDPI

CiteScore 6.0 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Journal of Personalized Medicine is one of the few journals that covers the diverse areas involved in the field, including research at basic, translational, and clinical levels. It focuses on "omics"-level studies that seek to define the basis of interindividual variation in susceptibility for a disease, its prognosis or definition of clinical

subsets, and response to therapy (pharmacogenomics). We are also interested in systems biology as it relates to interindividual variation, and research on new methodologies, informatics, and biostatistics, in the aforementioned areas.

Editor-in-Chief

Prof. Dr. Kenneth P.H. Pritzker

Department of Laboratory Medicine and Pathobiology, Department of Surgery, University of Toronto, 6 Queens Pk Crescent W.F, Toronto, ON M5S 3H2. Canada

Author Benefits

High Visibility:

indexed within Scopus, PubMed, PMC, Embase, and other databases.

Journal Rank:

CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 21.5 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the first half of 2025).

