

Special Issue

Metformin: Mechanism and Application 2023

Message from the Guest Editor

Metformin, a mainstay in type 2 diabetes treatment according to EASD and ADA expert guidelines, represents an impressive example of an effective and safe drug that still inspires further research. Metformin has been proven to prevent the conversion of prediabetes to type 2 diabetes. In addition, evidence has been found that metformin acts against aging, metabolic syndrome, obesity, cardiovascular diseases, cancers, infertility in women with polycystic ovary syndrome (PCOS), and neurodegenerative disorders. New evidence has been accumulated that suggests that metformin exerts beneficial effects on bone and mineral metabolism, gut microbiota, and the immune system. Although metformin has been available on the pharmaceutical market since the 1960s, a great amount of research into its molecular mechanisms of action is ongoing. In an attempt to explain the pleiotropic effects of metformin, a number of biological targets involved in metabolic homeostasis, cell cycle, autophagy, apoptosis, oxidative stress, inflammation, and epigenetic regulation have been discovered.

Guest Editor

Dr. Agnieszka Sliwinska

Department of Nucleic Acids Biochemistry, Medical University of Lodz,
251 Pomorska Str, 92-213 Lodz, Poland

Deadline for manuscript submissions

closed (25 April 2024)



Pharmaceuticals

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/160436

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

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





Pharmaceuticals

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 7.7
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Because of your expertise in the field of drug sciences, I kindly invite you to consider publishing your current work, in the form of a research article or a review, in the open access electronic journal *Pharmaceuticals*. *Pharmaceuticals* is characterized by an active editorial board and a dynamic editorial staff. Manuscripts are peer-reviewed and a final decision is provided to authors within 4–6 weeks after submission. Papers are published on the web immediately after acceptance. For details on the submission process or any other matter, please do not hesitate to contact us. We hope to handle your contribution to *Pharmaceuticals* soon.

Editor-in-Chief

Prof. Dr. Amélia Pilar Rauter

Departamento de Química e Bioquímica (DQB) e Centro de Química Estrutural (CQE), Institute of Molecular Sciences, Faculdade de Ciências, Universidade de Lisboa, Lisboa, Portugal

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, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Pharmaceutical Science)