

Special Issue

Multidrug-Resistant Pathogens: Genomic Analysis, Resistance Mechanisms, and Clinical Challenges

Message from the Guest Editors

The alarming impact of multidrug-resistant pathogens worldwide requires urgent attention. The latest WHO reports reveal serious warnings of rising resistance rates, increased morbidity and mortality in patients, especially in children, and economic toll on public health systems. The prognosis and calculated trends are even worse, demanding innovative therapeutic strategies, enhanced preventive and surveillance systems, and interdisciplinary approaches that combat the escalating threat of multidrug resistance to public health. In this Special Issue, we welcome submissions that highlight recent research on multidrug-resistant pathogens, their mechanisms and spread, and the effects of new antimicrobials, especially those employed in clinical studies and other innovative strategies. In addition, we welcome papers that propose clinical strategies, dosage regimens and applications, and preventive measures. We also invite authors to submit original research or review articles that address the use of AI in dealing with multidrug-resistant pathogens.

Guest Editors

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Deadline for manuscript submissions

closed (31 December 2025)



Antibiotics

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.7
Indexed in PubMed



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About the Journal

Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery, use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciplines are all key. *Antibiotics* is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

Editor-in-Chief

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