Special Issue

Optimizing Antibiotic Use and Consumption: Integrating Surveillance, Policy and Practice

Message from the Guest Editor

Antimicrobial resistance (AMR) has emerged as a critical global health challenge, threatening the effectiveness of antibiotics that underpin modern medicine. In human health, inappropriate prescribing, inadequate adherence, and insufficient stewardship mechanisms contribute significantly to the acceleration of resistance. Optimizing antibiotics use is, therefore, an urgent priority to preserve therapeutic efficacy, reduce morbidity and mortality, and mitigate the burden on healthcare systems. This Special Issue of Antibiotics is dedicated to advancing scholarships on optimizing antibiotic consumption through the integration of surveillance, policy, and clinical practice. Surveillance systems remain foundational for tracking resistance patterns, identifying prescribing trends, and guiding evidence-based interventions. However, data alone is insufficient without supportive policies that enable translation into practice, foster accountability, and align incentives across healthcare levels. Equally essential is the implementation of stewardship strategies within hospitals, primary care, and community settings tailored to local epidemiology and healthcare infrastructure.

Guest Editor

Dr. Paola Lichtenberger

- 1. Division of Infectious Diseases, Department of Medicine, Miller
- School of Medicine, University of Miami, Miami, FL, USA
- 2. Division of Infectious Diseases, Department of Medicine, Jackson Memorial Hospital, Miami, FL, USA
- 3. Veteran's Affairs Healthcare Center, Miami, FL, USA

Deadline for manuscript submissions

30 March 2026



an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.7
Indexed in PubMed



mdpi.com/si/255094

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

mdpi.com/journal/ antibiotics





an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.7 Indexed in PubMed



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 disciples 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

Prof. Dr. Nicholas Dixon

School of Chemistry and Molecular Bioscience, University of Wollongong, Wollongong, NSW 2522, Australia

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 (Infectious Diseases) / CiteScore - Q1 (General Pharmacology, Toxicology and Pharmaceutics)

