

Special Issue

Optimization of Antibiotic Use in Hospitals: From Bench to Bedside

Message from the Guest Editors

Antimicrobial resistance is currently recognized as one of the most important clinical emergencies in hospital wards all around the world. It is particularly present in infectious disease wards, intensive care wards and surgical departments, and it is carefully studied in research laboratories and pharmaceutical industries. This emergency can be fought through supporting research on the discovery of new antibiotics, implementing rapid diagnostic tests to identify resistant microorganisms and their resistance to old and new antibiotics.

On this basis, appropriate antibiotic selection involves selecting the appropriate antibiotics for the resistant microorganisms involved in the infection. The prescription of different antibiotics must be personalized according to the microorganism involved and each patient's characteristics.

This Special Issue invites submissions of original research articles and review papers. The scope of research topics encompasses, but is not limited to, the rational application of antibiotics in clinical infections, the influence of antibiotic consumption on resistance profiles, and the underlying mechanisms governing the development of antibiotic resistance.

Guest Editors

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Deadline for manuscript submissions

31 October 2026



Antibiotics

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.7
Indexed in PubMed



mdpi.com/si/273370

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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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