

## Special Issue

# Pathogenic Microorganisms and Antibiotic Therapy in Infectious Disease

### Message from the Guest Editors

The management of patients with infections caused by multidrug-resistant (MDR) microorganisms is the greatest healthcare challenge of the 21st century. The impaired application of antibiotics and invasive diagnostic and therapeutic procedures have led to the development of resistance, mainly in Gram-positive and Gram-negative bacteria. The spread of MDR and extensively drug-resistant (XDR) strains has prompted clinicians to explore alternative therapeutic strategies against infections that offer a more targeted approach to treatment. An enhanced understanding of the pathogenic mechanisms of AMR should hopefully lead to innovative therapeutic strategies for "difficult-to-treat" infections and to the development of antimicrobial drugs that offer the greatest spectrum of activity while possessing the lowest chance of resistance. This Special Issue welcomes the submission of manuscripts that offer insights into the surveillance, epidemiology, genomics of antimicrobial resistance genes, novel antimicrobial stewardship approaches in the critically ill patient population and stewardship strategies employing novel antimicrobial therapies.

### Guest Editors

Dr. Angela Quirino

Dr. Grazia Pavia

Dr. Nadia Marascio

### Deadline for manuscript submissions

15 November 2025



## Antibiotics

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*Antibiotics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[antibiotics@mdpi.com](mailto:antibiotics@mdpi.com)

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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.

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### Editor-in-Chief

Prof. Dr. Nicholas Dixon  
School of Chemistry and Molecular Bioscience, University of  
Wollongong, Wollongong, NSW 2522, Australia

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