

Special Issue

Insights into Bacterial Resistance to Beta-Lactam Antibiotics and Treatment Approaches

Message from the Guest Editors

Antimicrobial resistance (AMR), particularly to β -lactam antibiotics, is one of the most severe and complicated health issues globally, fueled by interconnected factors across human, animal, and environmental health sectors. This Special Issue is dedicated to presenting recent advances and insights into bacterial resistance to β -lactam antibiotics, including novel β -lactamase enzymes, resistance gene dissemination, and the clinical impact of resistance on treatment outcomes. We invite submissions of original research, comprehensive reviews, and case studies addressing innovative antimicrobial combinations, β -lactamase inhibitors, resistance detection methods, and emerging therapeutic strategies. Topics include the discovery of novel β -lactamase enzymes, the spread of resistance genes, and the clinical repercussions of resistance on treatment outcomes. By integrating multidisciplinary perspectives, this issue seeks to contribute to the global effort against β -lactam resistance and guide future strategies in infection management.

Guest Editors

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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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