Special Issue

Surveillance of Carbapenem-Resistant Microbes and Strategies to Combat Them

Message from the Guest Editors

Antimicrobial resistance (AMR) constitutes a global concern and is one of the main threats to public health in the 21st century. Gram-negative bacteria developed high-level resistance to carbapenems but are often resistant to other first-line antibiotics such as clinical β-lactamase inhibitors and fluoroquinolones, becoming difficult-to-treat pathogens. The transfer of resistance genes among them has been decisive for the high levels of resistance they have reached. Additionally, clonal expansion and the presence of high-risk clones have been recognized among these pathogens. The surveillance of these resistant pathogens is essential for providing early warnings about emerging issues, identifying new resistance markers, and adapting resistance mechanisms' detection methods and antibiotic use to minimize therapeutic failures. This Special Issue aims to provide the latest research on the prevalence, resistance mechanisms, and control strategies of carbapenem-resistant pathogens in clinical settings. We aim to deepen our understanding of the factors driving resistance and to inspire the development of more effective solutions.

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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

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