



Antibiotics Resistance and Molecular Epidemiology of Carbapenem-Resistance Bacteria

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Message from the Guest Editors

Over the preceding decades, the spread of carbapenem-resistant and multi-drug-resistant infections is limiting therapeutic options and increasing hospital stay, healthcare costs, morbidity, and mortality. Carbapenem-resistant Gram-negative bacteria are listed by the World Health Organization as pathogens with critical priority for the development of new drugs. The surveillance of antimicrobial resistance is critical to providing early warning of emerging problems, monitoring changing patterns of resistance, and targeting and evaluating prevention and control measures. Epidemiological data are of primary importance to eventually identify new emerging resistance determinants in order to adapt the antibiotic usage at the local level with the aim of limiting therapeutic failures.

In this Special Issue, original research articles and reviews are welcome. Research areas may include, but are not limited to, the following:

- Molecular epidemiology of multi-drug-resistant Gram-negative bacteria
- Diagnostics of mobile genetic elements with innovative molecular approaches
- Role of beta-lactamases in carbapenem resistance

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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.

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