



Microbial Resistance to Carbapenems: Epidemiology, Detection and Treatment Options

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Deadline for manuscript
submissions:

20 November 2024

Message from the Guest Editors

Dear Colleagues,

During the last few years, we have been witnessing the adverse effects of the ‘post-antibiotic era’, characterized by ineffective drugs and the development of superbugs. Antimicrobial resistance represents a major threat to global health, and it has significant impacts regarding morbidity, mortality and healthcare costs. In particular, carbapenem resistance has emerged in Gram-negative pathogens such as *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Enterobacterales*, which are often implicated in serious, difficult-to-treat health-care-associated infections. Carbapenem-resistant, Gram-negative bacteria are listed by the WHO as pathogens with critical priority for the development of new drugs. Currently, a few new drugs and combinations, as well as old, revived drugs, have been used for the treatment of infections due to carbapenem-resistant pathogens. Therefore, this Special Issue seeks manuscripts regarding:

1. The epidemiology of carbapenem-resistant Gram-negative bacteria;
2. Different laboratory methodologies for prompt detection;
3. Treatment options for infections attributed to carbapenem-resistant pathogens.





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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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