Special Issue

Gram-Negative Multidrug Resistant Pathogen and Its Treatment

Message from the Guest Editor

During the COVID-19 pandemic, the emergence of extremely resistant microorganisms and an increase in the incidence of carbapenem resistance were documented, possibly related to the increased use of broad-spectrum antibiotics in patients with COVID-19. The rapid global spread of bacteria that have acquired new resistance mechanisms is one of the greatest threats to global health today, causing infections that are impossible to treat. The spread of carbapenemaseproducing Enterobacteriaceae (CFE), multidrugresistant (MDR) and extensively drug-resistant (XDR) strains of Pseudomonas aeruginosa are a global health problem due to their ease of transmission and difficulty of treatment. Nosocomial infections associated with these Gram-negative bacteria have high morbidity and mortality rates, usually occurring in immunocompromised patients and those with multiple comorbidities and undergoing diagnostic-therapeutic procedures and prolonged hospital stays. These bacteria have an outstanding capacity to be selected and to propagate antimicrobial resistance in vivo. For all these reasons, the development of new antibiotics is a top priority.

Guest Editor

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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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