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# Multidrug Resistance in Pseudomonas aeruginosa: Resistance Mechanisms, Epidemiology, and Impact of Resistance on Virulence, Clinical Outcomes, and Treatment

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### **Message from the Guest Editors**

Dear Colleagues,

*Pseudomonas aeruginosa* is one of the most common nosocomial pathogens, and continuously evolving resistance to multiple antimicrobial agents has become a significant health problem. MDR has been reported as an important determinant of clinical outcomes.

The main objective of this Special Issue is to improve our understanding of the impact of multidrug resistance in P. aeruginosa infections. For this purpose, this Special Issue considers all aspects of antibiotic resistance in P. regarding aeruginosa. Submissions resistance mechanisms, epidemiology of high-risk clones, the application of molecular diagnostic and genome sequencing, virulence determinants of *P. aeruginosa*, and the biological implications of resistance in virulence of P. aeruginosa are encouraged. In addition, manuscripts concerning the clinical and economic burden of multidrug in P. aeruginosa infections and MDR P. resistance *aeruginosa* therapeutics approaches are especially welcome.

**Keywoards**: *Pseudomonas aeruginosa*; multidrug resistant; extensively drug-resistant; virulence; biological cost







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## **Editor-in-Chief**

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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 supragovernmental 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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