Special Issue

Optimization of Antibiotic Use in Hospitals: From Bedside to Theory

Message from the Guest Editors

Antibiotics are the cornerstone of therapy for bacterial infections, especially for critically ill patients. Unreasonable use of antibiotics was associated with unfavorable outcomes, such as longer hospital stay, higher cost, and mortality. However, rational regimens of antibiotics remain at a continuous exploration phase. Currently, pharmacokinetic/pharmacodynamic (PK/PD) is of value in establishing rational regimens of antibiotics in human. Thus, not only is early empiric antibiotic administration important but the optimization of those agents is crucial as well. This Special Issue will center on optimization of antibiotic use in hospitals, and aims to optimize therapy in order to maximize efficacy and minimize side effects and emergence of resistance. It will focus on, but is not limited to, the choice of drug, right dosing, timing of treatments, PK/PD of antibiotics, management of special population, and novel models or technologies to determine the optimal regimens. The relationship between antibiotics uses and resistance in hospitalized patients are welcome as well.

Guest Editors

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Deadline for manuscript submissions

closed (30 April 2023)

Antibiotics

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.7
Indexed in PubMed

mdpi.com/si/136188

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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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