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Antibiotic Therapy Optimization in Special Populations

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Message from the Guest Editors

Dear Colleagues,

Individualized precision antibiotic therapy is critical to optimize treatment outcomes because sufficient antimicrobial concentrations are imperative to achieve maximal killing activity. However, the design of optimal individualized antibiotic therapy regimen is particularly complicating for the patient populations whose gradual or acute pathophysiologic alterations substantially impact antimicrobial pharmacokinetics and pharmacodynamics. These patient populations are collectively called *special populations* and include critically ill patients, elderly populations, obese individuals, etc.

In this Special Issue, scientific advances in designing optimal antibiotic therapy considering various patient characteristics will be discussed focusing on the aforementioned special patient populations. The multidisciplinary efforts in the field of antibiotic pharmacotherapy will provide insight for clinician scientists and healthcare professionals regarding the optimal antimicrobial therapy for special patient populations.

Keywords: clinical pharmacometrics; PK/PD optimization of antibiotic therapy; special populations







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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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