

## Special Issue

# TDM, Individual Dosing and Application of Antibiotics/Anti-infectives in Critically Ill Patients

### Message from the Guest Editors

Dear colleague, Inadequate empirical antimicrobial therapy, which does not cover the causative microorganism and starts with relevant delay, is associated with a substantial increase in morbidity and mortality in patients with sepsis and septic shock. Emerging evidence suggests that an insufficient antimicrobial exposure, i.e., when the pharmacokinetic/pharmacodynamic (PK/PD) target to kill or inhibit the growth of a pathogen is not attained, adversely affects clinical outcome as well. There is a growing body of evidence demonstrating that current dosing strategies result in suboptimal plasma concentrations (p.c.) leading to either inadequate antimicrobial exposure at the site of infection or potential toxic side effects in a relevant number of critically ill patients. Personalized dosing approaches, may be required to ensure optimal antibiotic exposure and better therapeutic outcomes in patients with severe infection and sepsis. This Special Issue seeks manuscript submissions that refine our understanding of adequate dosing and application of antibiotics in critically ill patients. Submissions on clinical aspects and recommendations are especially encouraged.

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### Guest Editors

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### Deadline for manuscript submissions

closed (30 April 2022)



## Antibiotics

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## About the Journal

### 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 disciplines 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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### Editor-in-Chief

Prof. Dr. Nicholas Dixon  
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