

Special Issue

Novel Antimicrobials for ESKAPE Pathogens: From Research to Treatment

Message from the Guest Editors

Antimicrobial resistance (AMR) poses one of the most serious threats to public health, a challenge further exacerbated by the declining number of truly novel antimicrobial agents in the pharmaceutical pipeline. Recently, AMR has increased at an alarming rate, becoming a critical worldwide issue for modern healthcare systems. In the United States, more than 2 million infections and about 23,000 deaths annually are attributed to antibiotic-resistant *Enterococcus faecium*, *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Enterobacter* species, collectively known as the ESKAPE pathogens. These microorganisms are responsible for the majority of hospital-acquired infections and are particularly notorious for their ability to evade the effects of existing antibiotics through diverse resistance mechanisms. This Special Issue aims to highlight recent advances and emerging strategies to combat ESKAPE pathogens and address the global need for next-generation antimicrobial therapies, including metal-based antimicrobials, anti-biofilm strategies, host-directed therapies, antimicrobial peptides, nanomaterials, and combination treatments.

Guest Editors

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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.

Editor-in-Chief

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