Special Issue

Advances in Antibiotic and Drug-Resistance Mechanisms, 2nd Edition

Message from the Guest Editors

The discovery of antibiotics has revolutionized medicine by enabling the efficient treatment of many life-threatening bacterial infections. Antimicrobial resistance (AMR) is today universally recognised as a global threat because of the rapid emergence and dissemination of resistant bacteria and genes among humans, animals, and the environment on the global scale and represents a heavy burden for healthcare systems all over the world. The currently estimated global AMR-related mortality rates are substantial, and this is an "ecosystem-related" problem threatening the interplay of human–animal and environmental health ("One Health"). The aim of this Special Issue is to present the state-of-the-art data on the last-resort antibiotics, either repurposed or novel antibiotics used in human therapy and their associated resistance mechanisms.

Keywords: AMR; novel antibiotics; resistance; mechanisms; diagnostics; One Health; in vitro; in vivo

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"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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