Special Issue

Bacterial Extracellular Vesicles: Vehicles for Pathogenesis and Antibiotic Resistance

Message from the Guest Editor

Bacterial extracellular vesicles (BEVs) have been implicated in the development and dissemination of antibiotic resistance. They can carry resistance genes and enzymes such as beta-lactamases, facilitate horizontal gene transfer, and influence bacterial adaptation under antibiotic stress, highlighting their potential not only as key players in resistance mechanisms but also as possible targets for novel therapeutic interventions. This Special Issue welcomes contributions that address, but are not limited to, the following topics:

- Mechanisms behind BEV formation, release, and regulation;
- BEV involvement in host-pathogen interactions;
- Roles of BEVs in horizontal gene transfer and resistance gene dissemination;
- BEVs as carriers of antibiotic resistance determinants:
- The impact of BEVs on microbial survival and adaptation under antibiotic pressure;
- The diagnostic and therapeutic potential of BEVs in infectious diseases:
- Novel approaches to targeting or engineering BEVs for antimicrobial applications;
- Methodologies for isolating, characterizing, and analyzing BEVs;
- Comprehensive reviews on BEV biology and clinical relevance.

Guest Editor

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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 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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