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

Prof. Dr. Eva Sapi
Department of Biology and Environment Science, University of New Haven, West Haven, CT 06516, USA

Deadline for manuscript submissions

30 June 2026

Antibiotics

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 10.2
Indexed in PubMed

mdpi.com/si/238169

Antibiotics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
antibiotics@mdpi.com

mdpi.com/journal/antibiotics

Antibiotics

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 10.2
Indexed in PubMed

mdpi.com/journal/antibiotics

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

Prof. Dr. Nicholas Dixon
School of Chemistry and Molecular Bioscience, University of Wollongong, Wollongong, NSW 2522, Australia

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Infectious Diseases) / CiteScore - Q1 (General Pharmacology, Toxicology and Pharmaceutics)

MDPI