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The Influence of Biofilm Aggregates and Antimicrobial Resistance on Clearance of Infection

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Message from the Guest Editors

The phenomenon of bacterial cell aggregation to form biofilms poses a key threat to the effective treatment of chronic bacterial infections. Biofilms render internalized cells passively resistant to antibiotic killing due to lowered levels of penetration, allowing surviving cells to persist and develop resistance to these antibiotics. Thus, the issue of how to remove/kill aggregated bacteria without enhancing antibiotic resistance has led researchers to investigate the use of parallel treatments (adjuvants, synergistically active compounds, and new antibiotics) to provide a better pathway towards aggregate penetration and bacterial eradication. The in vivo effects of some of these antibiofilm/antibiotic combinations are under now investigation.

In this Special Issue, we invite you to contribute original research and review articles describing the ability of antibiofilm treatments—traditional and novel—to enhance antibiotic effectiveness in the eradication of infecting bacteria. Particular emphasis is placed on treatments that have shown promising results in vivo (animal and human trials).









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Message from the Editor-in-Chief

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