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Positively Charged Antimicrobial Dendrimers

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Message from the Guest Editors

The rapid increase of antimicrobial resistance urgently requires new curative options. Inspired by natural cationic antimicrobial peptides, cationic molecules able to inhibit or kill bacteria, acting principally as external membrane disruptors, were synthetized.

Cationic antimicrobial dendrimers, compared to small drug molecules or traditional polymers, own improved long-term activity, selectivity, stability, and better capability to load traditional antibiotics, working in synergy and allowing reduced dosage.

In this contest, differently structured cationic dendrimers were industrialized, but the developing of polyester-based ones, in our opinion very attractive, because highly biodegradable, is still in its infancy. Additionally, their mechanism of action at molecular level, as well as the relationships structure/activity need more investigations.

This Special Issue wants to present the latest solutions in the field of antimicrobial cationic dendrimers, the structural strategies to improve their activity, selectivity and drug loading capacity and aim at providing information concerning their mechanisms of action.

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Message from the Editor-in-Chief

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I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

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