

Influence of polycations on antibacterial activity of lysostaphin

Kulikov S., Khairullin R., Varlamov V.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2015, Pleiades Publishing, Inc. The synergistic antibacterial activity of lysostaphin and polycations of different chemical structures against *Staphylococcus aureus* has been shown. Polycations improved the lytic activity of lysostaphin against the peptidoglycan of staphylococci. It is proposed that this resulted in decreased binding of positively charged lysostaphin with *S. aureus* cell-wall teichoic acids. These data provide an opportunity to search for polycations that would amplify the synergistic effect of lysostaphin or other antibacterial proteins against staphylococci.

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Keywords

antibacterial activity, chitosan, lysostaphin, polyallylamine, polycation, polyethyleneimine, *Staphylococcus aureus*, synergism