

## RESEARCH OF EFFICACY AND TOXICITY OF LINCOLISTIN

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**Summary.** The objective of our study was to determine efficacy and toxicity of Lincolistin (lincomycin+kolistin). The results on antimicrobial effects revealed that Lincolistin *in vitro* was most efficacious against *S. aureus* (transparency zone – 30.24±1.11 mm), against *S. agalactiae* (transparency zone – 23.05±1.43 mm), against *Candida albicans* (transparency zone – 27.85±1.31 mm), and least against *E.coli* (transparency zone – 20.19±0.52 mm).

Experiments of acute toxicity of Lincolistin were performed with nonlinear white mice and quinea-pigs by the method of probit - analysis proposed by Lichtfield and Wilcoxon (1963). Investigations revealed the following main toxicity parameters for Lincolistin: in white mice – LD<sub>50</sub> – 7.1 ml/kg of body weight; in quinea-pigs – 6.6 ml/kg.

Lincolistin have shown high efficiency against the main mastitis agents: staphylococci, streptococci and esherichias. From 10 cows treated with Lincolistin against subclinical and clinical mastitis 8 cows recovered (80.0 % efficacy). This was determined by clinical examination and laboratory analysis of milk samples.

After the injection of Lincolistin into the udder the antibacterial substances were excreted with milk in 60 hours.

**Keywords:** cow, Lincolistin, mastitis, treatment.