

Efficacy of vaccination and nisin Z treatments to eliminate intramammary *Staphylococcus aureus* infection in lactating cows

Key words: Subclinical mastitis, Intramammary infection,
Staphylococcus aureus, Bacterin, Nisin

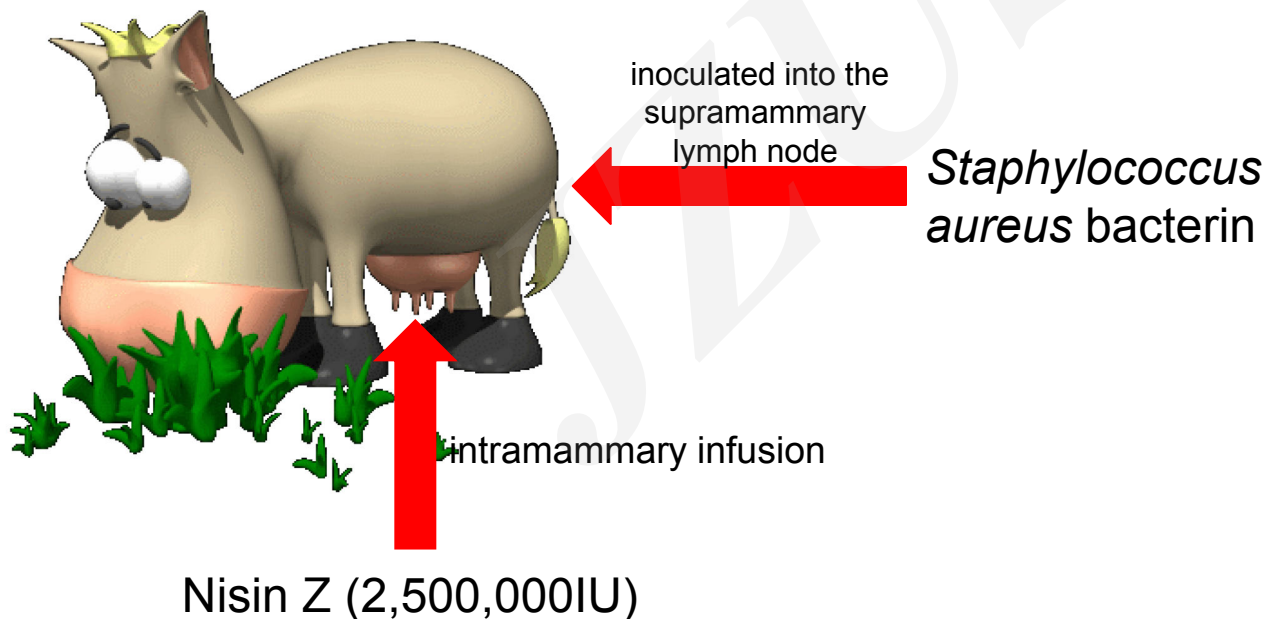


Research Summary

This study evaluated the effect of a *Staphylococcus aureus* bacterin and nisin on bovine subclinical mastitis.

Group	treatment
I	<i>Staphylococcus aureus</i> bacterin + Nisin Z
II	Nisin Z
III	No treatment as a control

Examinations and analyses
bacteriological examination
somatic cell count (SCC)
N-acetyl- β -D-glucosaminidase (NAGase) activity
milk protein and fat contents



Research conclusion

- Vaccination with *S. aureus* bacterin in the supramammary lymph node potentiated intramammary infusion of nisin for the treatment of subclinical intramammary *S. aureus* infections in lactating cows.
- When compared to the nisin-treated group, nisin-bacterin treatment significantly reduced intramammary *S. aureus* infections, reduced the number of quarters with high milk SCCs, and increased milk protein and fat contents.

