TECHNICAL INFORMATION UPDATE



Australian Study Supports Ongoing Use of Gudair®

Researchers at the University of Sydney have found that whilst Gudair reduces the prevalence of OJD within a flock, ongoing vaccination is essential to ensure the prevalence of OJD within the flock remains low, minimising losses due to this disease.

Background

Ovine Johne's disease (OJD) is an insidious disease which continues to cost farmers through lost productivity, increased stock losses and reduced trading options. Sheep infected with OJD can be actively shedding the bacteria for years before clinical signs are seen. These "shedders" will continue to be a source of infection on a property, and in a region, for many years.

In a recent Australian study researchers followed 41 self-replacing Merino flocks infected with OJD. These flocks had been consistently vaccinating lambs with Gudair for at least five years. Estimates of the prevalence of OJD within the flocks before the vaccination program commenced were compared to the prevalence of OJD within the flocks following five or more years of vaccination. In addition, the farmers were surveyed to identify which risk factors increased the likelihood of having a high prevalence of OJD infection within a flock.

Results

Dung samples were collected from all flocks to determine their OJD status and the level of OJD bacteria being shed in dung and contaminating pastures.

The key findings were:

- Gudair significantly reduced the prevalence of OJD within a flock.
- Shedding of the OJD bacteria was still detected in **over 80% of flocks** even after five years of consistent vaccination.
- Those flocks with a high level of OJD shedding reported that they had introduced new sheep or had straying sheep in the past five years.
- Farms where sheep were introduced were **three times** more likely to test positive for OJD, despite ongoing vaccination.
- The authors concluded that ongoing vaccination with Gudair is essential.



What does this mean?

Gudair has been shown to reduce deaths due to OJD by 90%². The vaccine has also been shown to reduce shedding of the OJD bacteria in the dung of infected flocks by 90%². However, Gudair does not completely prevent bacterial shedding in all vaccinated animals.

As many farmers with an OJD-infected flock see the benefits of a Gudair vaccination program, in the form of a reduction in visible disease and stock losses, there may be a temptation to cease vaccination.

The study reported here has shown that after five years of consistent vaccination of lambs with Gudair, there was evidence of continued shedding of bacteria in over 80% of the flocks examined. Therefore, should vaccination cease, any unvaccinated stock on the property are at risk of developing clinical disease and dying due to OJD.

In addition, buying in stock was found to be the primary risk factor in having a high prevalence of OJD within a vaccinated flock.

Conclusion

To control OJD it is important that flocks continue to vaccinate their lambs, take care when sourcing stock for purchase by requesting a sheep health statement and ensure any bought-in stock have been vaccinated, preferably as lambs.

Don't risk your flock, your neighbours' flocks or your trading options and ensure that all lambs are vaccinated with Gudair at marking.

For more information call Zoetis Veterinary Operations on 1800 814 883 or contact your local Zoetis Professional Sales Representative.



References

- 1. Windsor PA, Eppleston J, Dhand NK, Whittington RJ (2014). Effectiveness of Gudair® vaccine for the control of ovine Johne's disease in flocks vaccinating for at least 5 years, *Aust Vet J*, 92(7): 263-268.
- Reddacliff L, Eppleston J, Windsor P, Whittington R, Jones S (2006). Efficacy of a killed vaccine for the control of paratuberculosis in Australian sheep flocks, *Veterinary Microbiology*, 115: 77-90.

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