

Aureo S 700® in Prevention of Respiratory Disease in Calves

Abstract

A 28-day feeding study was conducted at a calf ranch in the U.S. to determine the effect of Aureo S 700 in the prevention of respiratory disease in calves. At weaning, 104 Holstein calves, weighing approximately 150 lb, were divided into two groups of 52 calves each and randomly assigned to the following treatments:

- Aureo S 700 providing 350 mg Aureomycin chlortetracycline and 350 mg sulfamethazine per head daily;
- unmedicated controls.

Body weights were recorded initially and at the end of the study. Both treatment groups received roughage and 4.5 lb of grain. For the medicated group, Aureo S 700 Premix was included in the grain. No other medication was fed. All animals were kept in open pens during the study.

Note: Aureo S 700 is approved for use in the feed for 28 days as an aid in maintenance of weight gains in the presence of respiratory disease such as shipping fever.

Summary

The results of this study show that Aureo S 700 reduced the incidence of respiratory disease (pneumonia) in treated calves by 75% compared to the unmedicated controls (Figure 1). Four unmedicated animals required treatment for pneumonia compared to only one animal in the Aureo S 700 group. Also, in the unmedicated group, two animals had diarrhea and one animal died.

Calves fed Aureo S 700 gained weight 0.26 lb (15%) faster, resulting in 7.6 lb total gain for 28 days compared to the unmedicated controls ($P < 0.001$) (Figures 2 and 3).

These results demonstrate the improved profitability from Aureo S 700 over the unmedicated controls. At a medication cost of \$1.86 per head for 28 days, Aureo S 700 can provide a return on investment of 2.3:1 to 3.9:1, depending on the calf selling price (Table 1).

FIGURE 1: Reduction of respiratory disease (pneumonia) incidence in weaned calves fed Aureo S 700 vs unmedicated controls.

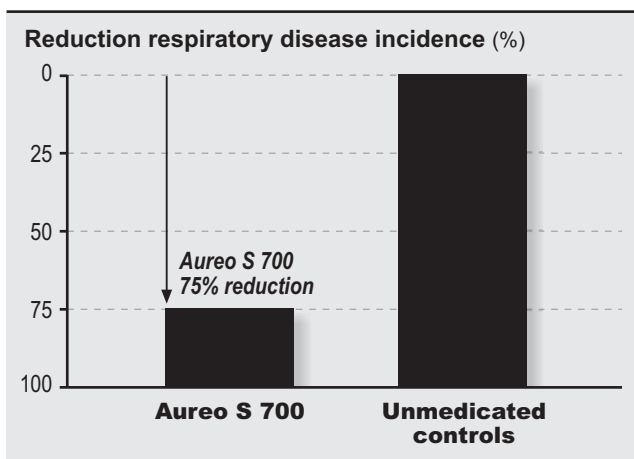


FIGURE 2: Average daily gain of weaned calves fed Aureo S 700 vs unmedicated calves.

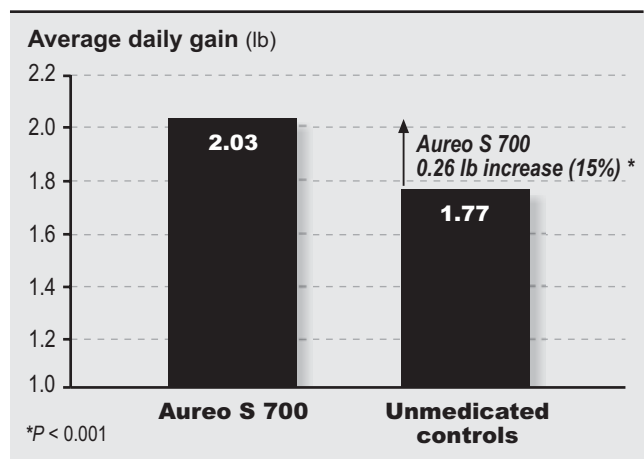


FIGURE 3: Total gain of weaned calves receiving Aureo S 700 vs unmedicated calves.

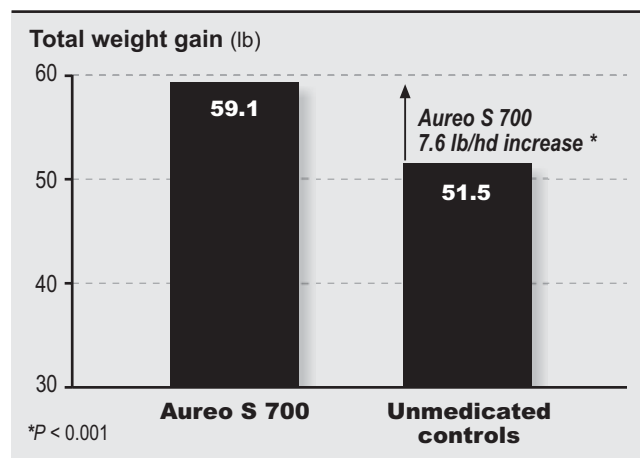


TABLE 1. Economic summary (per head vs unmedicated controls).*

Calf selling price/lb	Value of extra total weight gain from Aureo S 700	Return on investment from Aureo S 700
\$1.00	\$7.28	3.9:1
\$0.90	\$6.55	3.5:1
\$0.80	\$5.82	3.1:1
\$0.70	\$5.10	2.7:1
\$0.60	\$4.37	2.3:1

Extra total weight gain with Aureo S 700: **7.28 lb**
 Cost of Aureo S 700 medication for 28 days: **\$1.86**

* refer to Figures 1-3



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Additional technical information is available at www.alpharma.com