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Ceftiofur Prewean Medication Program: Birth to Market Data
J Bradford, C Zhou, T Ibayashi, D Kratzer
Pharmacia & Upjohn Animal Health

Introduction:

Tokach *et al* (AASP Proceedings, 1992) reported that pigs weaned at a heavier weight and showing a higher average daily gain through 7 days post – weaning weighed more per day of age and reached slaughter weight at an earlier age than pigs that weighed less at weaning or gained fewer pounds in the 7 days post-weaning period. Zhou *et al* (pending publication) showed that pigs medicated with ceftiofur on days 1, 7 and at weaning had lower pre-weaning mortality, were heavier, and gained more weight in the 7 days post-weaning than non-medicated controls

Objective and Methods:

This trial was conducted to compare mortality and production parameters in pigs treated with ceftiofur sodium (Naxcel™ Sterile Powder, Excenel™ Sterile Powder, Pharmacia & Upjohn) at day 1 (4 mg), day 7 (8 mg) and weaning (3mg/kg) with untreated controls from birth to market. Diseases of concern in this herd were pneumonia due to PRRS virus, *Mycoplasma hyopneumoniae*, and *Actinobacillus pleuropneumoniae*. This herd experienced 8-10% preweaning mortality. *E. coli* and *Streptococcus suis* were identified as major pathogens in pigs through the nursery phase. Pigs

were treated with ceftiofur (3 mg/kg) intramuscularly at day 1, day 7 and weaning. Pigs were weighed at birth, weaning, 7 days post-weaning and at market. Pigs were weaned at 20±3 days. Mortality and days to market were recorded. Average daily gain to weaning, weaning to 7 days post-weaning and birth to market were calculated.

Results:

In this trial, the performance of the ceftiofur pigs was superior for all parameters measured at all time points. Mortality birth to market was significantly improved in the treated pigs (p=.015). Average daily gain (ADG) birth-to-market and wean-to-market were significantly higher in the ceftiofur treated pigs (p< .001). This trial affirms the findings of Tokach that heavier pigs at weaning maintain an advantage to market. This trial also demonstrates that the use of ceftiofur in a strategically timed pre-weaning medication program to reduce mortality is effective in herds with a bacterial component to pre-weaning mortality. Additional benefits demonstrated at this location are improved weaning weights and improved performance throughout the finishing period.