The Midfield Group trial – SA, Australia

Principal Investigator/s: Dr Theresa Craig and statistician Dr Katie Page

Location: Mt Gambier, SA, Australia

Length: 92 days (October 2019 - January 2020)

Aim:
The aim of this research study was to quantify the effects on weight gain and carcass yield of cattle fed a conventional feedlot finisher ration containing Monensin, with that of cattle fed a diet containing a ProTect C feed additive, under commercial feedlot conditions with an accelerated, eight-day induction period onto a full-grain ration.

Study overview:
A total of 240 cattle, consisting of 120 beef steers and 120 Friesian bulls, were fed for an average of 92 days. Cattle were allocated to the Control-Monensin group beef steers (n=60), Control-Monensin group Friesian bulls (n=60), or Treatment-ProTect C group beef steers (n=60), and Treatment-ProTect C group Friesian bulls (n=60). All cattle were transitioned onto a full-grain diet over eight days.

Variables to be measured:
Average daily gain in kg, dressing percentage via hot carcass weight, fat cover in mm, mortality and morbidity (including liver adhesion), and feed conversion ratio.

Key findings:
There were no significant differences in performance between groups for body weight, average daily gain, and feed to gain ratio. ProTect C is just as efficacious in Friesian bull feeding as in conventional beef steer finishing systems. Feed efficiency data supports ProTect C as a replacement to conventional systems containing antibiotics.

- **Carcass weight**
  There was no significant difference between groups for carcass weight.

- **Dressing percentage**

The treatment group fed Protect C had a significantly higher ($p<0.05$) dressing percentage than the control group.

- **Liver abscess**

  There were very low levels of liver abscess for both the control (4%) and treatment groups (4%). The levels of liver adhesion were also low for the treatment (0.8%) and control (0.8%) groups.

Limitations:
There was a lack of financial data collected for this trial.

Learnings:
Greater transparency on animal morbidity as part of trial design needs to be considered.