Effect of trenbolone acetate on lot feedlot performance and *Certified Angus Beef* ® acceptance rate of beef steers and heifers. G.D. Fike[1] and M.E. King[1] [1]*Certified Angus Beef LLC, Manhattan, KS.*

Data from the 2000-2007 Certified Angus Beef LLC (CAB) Feedlot Licensing Program, representing 655 and 217 lots of beef steers and heifers, respectively, were used to quantify the effect of trenbolone acetate (TBA) on lot feedlot performance and CAB® acceptance rate (AR). Criteria for lots in the analyses were: all cattle were implanted, all cattle were black-hided, and lot size $\geq$ 20 head. Two analyses were performed based on the TBA implant status of the lot: (1) lots receiving at least one implant containing TBA (WTBA) vs. lots that did not receive an implant containing TBA (NOT); (2) lots implanted with a high-TBA implant (HTBA, 200 mg dose) vs. all other implants (COMB). Data for both TBA status groups were analyzed separately by gender. Lots of WTBA steers had 8.3% improvement in ADG, 6.7% improvement in F:G, 31.5% lower AR and 45.1% higher USDA Select rate (P<.0001) compared with NOT steers. Lot arrival weight for WTBA steers was 18.3 kg greater than NOT steers (P=.001). HCW was similar in both groups. In heifers, WTBA improved ADG by 10.7% (P=.009) and F:G by 9.4% (P=.0003). However, lot AR, lot USDA Select rate, lot arrival weight and HCW were similar in the WTBA and NOT groups. HTBA steers had 6.6% greater ADG (P=.0004), 6.1% lower F:G (P=.0009), 29.7% lower lot AR (P=.002), 34.2% more cattle grading USDA Select (P<.0001), 16.6 kg higher lot arrival weights (P=.04) and 15.9 kg heavier HCW (P<.0001) than COMB steers. Lots of HTBA heifers had 35.9% lower lot AR (P=.0002) and 39.1% higher lot USDA Select rate (P=.0007) compared with COMB heifers. Lot arrival weight, HCW, ADG and F:G were similar in HTBA and COMB heifers. The results of this study indicated that implants containing TBA improved ADG and F:G in steers and heifers. WTBA implants negatively affected lot AR in steers, but had no effect on this trait in heifers. High-dose TBA implants improved ADG and F:G in steers, but did not improve these traits in heifers. Lot AR was reduced in steers and heifers by implants containing high levels of TBA.

Key Words: Trenbolone Acetate, Implants, Beef Carcass