



SCIENTIFIC UPDATE FROM ELANCO ANIMAL HEALTH

Comparison of implanting programs in grazing stocker cattle and subsequent feedlot performance and carcass quality^{1,2}

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Overview

Two studies compared the effects of grazing implant protocols on cattle performance during grazing and feedlot phases. Details about each study are shown in the charts to the right.

Compared to Synovex® One-Grass, a single dose of Component® TE-G with Tylan® (trenbolone acetate and estradiol and tylosin tartrate implants) performed similarly during the stocker phase and resulted in increased quality.

	Stocker phase location	Feedlot phase location	head count
Study 1	OSU Marshall Wheat Pasture (Marshall, OK)	Deseret Cattle Feeders (Satanta, KS)	240
Study 2	South MS Branch Experiment Station 10 (Poplarville, MS)	Gregory Feeders (Tabor, IA)	300

	Variable	Component TE-G with Tylan	Synovex One-Grass
Study 1	Day 1 BW, lbs.	577	574
	Day 159 BW, lbs.	888	881
Study 2	Day 0 BW, lbs.	499	499
	Day 161 BW, lbs.	820	823

Cattle in each study were randomly assigned to one of three treatment groups which included Component TE-G and Synovex One-Grass. The studies followed the experimental model shown below (Figure 1).*

COMPONENT TE-G WITH TYLAN: 40 mg trenbolone acetate and 8 mg estradiol, implanted on Day 1

SYNOVEX ONE-GRASS: 150 mg trenbolone acetate and 21 mg estradiol benzoate with a 200-day payout, implanted on Day 1

Figure 1 EXPERIMENTAL MODEL

Component TE-G with Tylan given, Synovex One-Grass given

End grazing phase and begin feedlot phase

Day 1

Day 159/161

End of Study
Day 315/319



Study 1 results

The figures below summarize average daily weight gain and marbling scores for steers in each of the treatment groups.

Figure 2 AVERAGE STOCKER DAILY WEIGHT GAIN

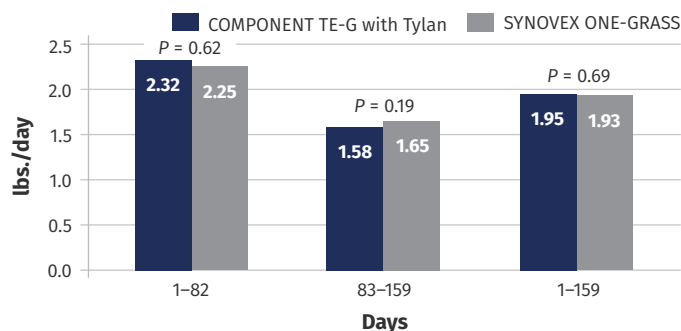
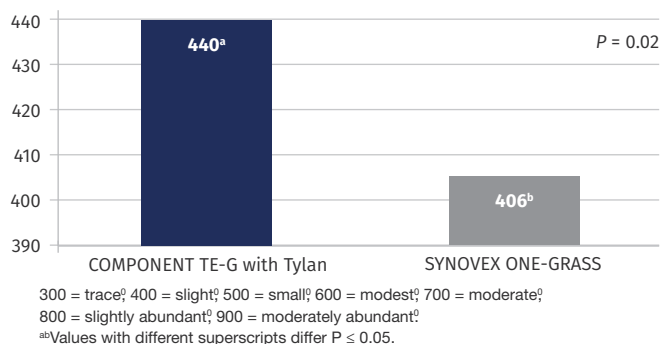


Figure 3 MARBLING SCORE



Study 2 results

The figures below summarize average daily weight gain and marbling scores for steers in each of the treatment groups.

Figure 4 AVERAGE STOCKER DAILY WEIGHT GAIN

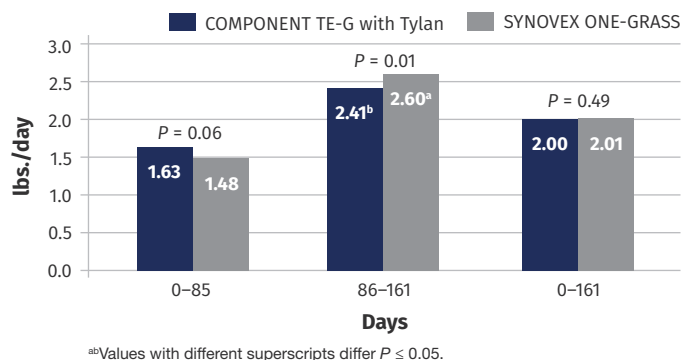
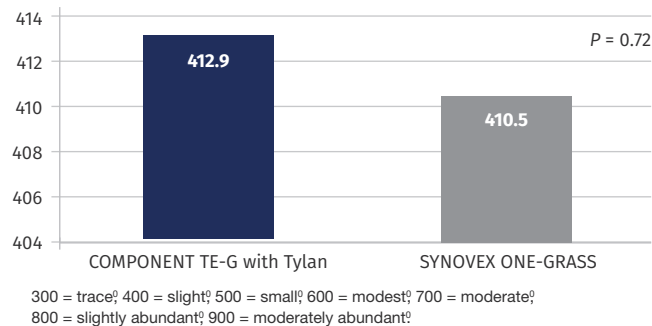


Figure 5 MARBLING SCORE



The Bottom Line

The results from these studies and previous studies^{3,4} support that one dose of Component TE-G with Tylan performs similar to Synovex One-Grass with about 75% less active ingredient present. Why pay a premium for similar performance and a potential negative impact on marbling score?

^{*}The third treatment in these studies included Component TE-G with Tylan (40 mg trenbolone acetate and 8 mg estradiol) implanted on Day 1 and again on Day 82/85. This treatment was not different (p > 0.49) from the first treatment group that implanted Component TE-G on Day 1. This treatment group was removed due to the request by the Center for Veterinary Medicine (CVM) for clarification of labeling regarding reimplantation within a production phase.

For all products: The label contains complete use information, including cautions and warnings. Always read, understand and follow the label and use directions.

Component TE-G with Tylan IMPORTANT SAFETY INFORMATION:

INDICATION: For increased rate of weight gain in growing beef steers and heifers on pasture (stocker, feeder, and slaughter).

Not approved for repeated implantation (re-implantation) with this or any other cattle ear implant in growing beef steers and heifers on pasture (stocker, feeder, and slaughter). Safety and effectiveness following reimplantation have not been evaluated.

DIRECTIONS FOR USE: Administer one dose in the ear subcutaneously according to label directions.

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

- Do not use in beef calves less than 2 months of age, dairy calves, and veal calves because effectiveness and safety have not been established.
- Do not use in animals intended for subsequent breeding, or in dairy cows.

¹ Elanco Animal Health. Data on File.

² Elanco Animal Health. Data on File.

³ Farney, J, Corrigan, M. Evaluation of 2 implants for growing steers grazing tall-grass prairie when using intensive early stocking. *Appl Anim Sci.* 2019 35(1):83-7.

⁴ Zoetis. Summary of five phase IIIB Synovex One-Grass studies. SYN-00089. 2016. Available at: https://www.zoetisus.com/_locale-assets/pdf/summary-of-five-phase-iiib-synovex-one-grass-studies.pdf. Accessed: July 28, 2020.

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