Elanco Component® with Tylan®

RESEARCH BRIEF

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® 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

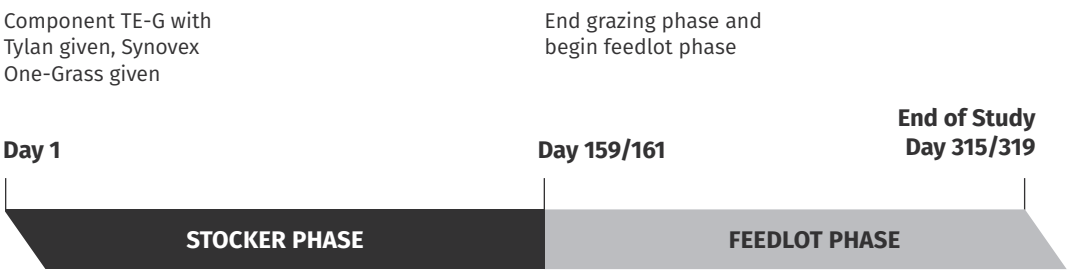
	VARIABLE	COMPONENT TE-G	SYNOVEX ONE-GRASS
Study 1	Day 1 BW, lbs.	577	574
	Day 159 BW, lbs.	888	881
Study 2	Day 0 BW, lbs.	499	499
	Day 161 BW, lbs.	820	823

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



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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

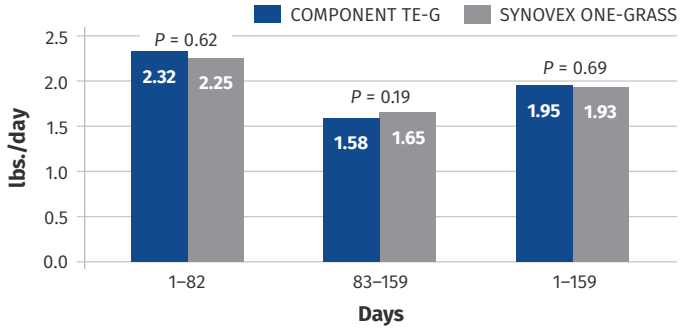
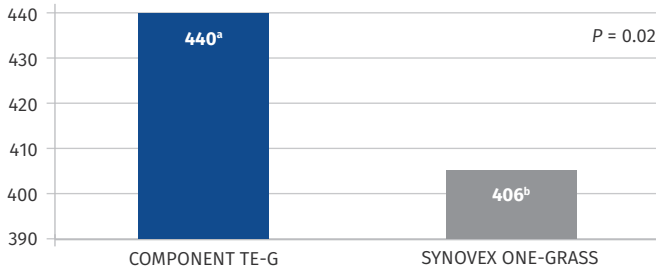


FIGURE 3 MARBLING SCORE

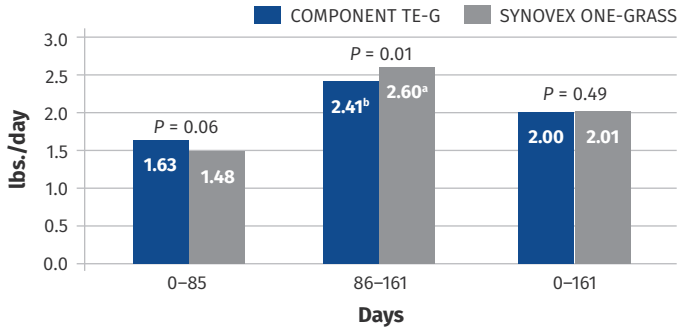


300 = trace; 400 = slight; 500 = small; 600 = modest; 700 = moderate; 800 = slightly abundant; 900 = moderately abundant.
[ab]Values with different superscripts differ $P \leq 0.05$.

STUDY 2 RESULTS

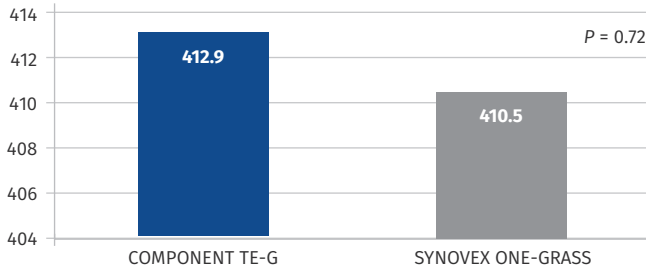
The figures below summarize average daily weight gain and marbling scores for steers in each of the treatment groups.

FIGURE 4 AVERAGE STOCKER DAILY WEIGHT GAIN



[ab]Values with different superscripts differ $P \leq 0.05$.

FIGURE 5 MARBLING SCORE



300 = trace; 400 = slight; 500 = small; 600 = modest; 700 = moderate; 800 = slightly abundant; 900 = moderately abundant.

THE BOTTOM LINE

The results from these studies and previous studies[3,4] support that one dose of Component TE-G 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.

Implants are indicated for increased rate of weight gain; see product labels for full indication. Administer one dose in the ear subcutaneously according to label directions.

[1]Elanco Animal Health. Data on File.
[2]Elanco Animal Health. Data on File.
[3]Farney, J., Corrigan, M. 2019. "Evaluation of 2 implants for growing steers grazing tall-grass prairie when using intensive early stocking." Appl Anim Sci. 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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