

In feedlot cattle, internal parasites have been shown to reduce feed intake, decrease weight gain, increase the amount of feed needed per pound of gain, and reduce the animal's ability to ward off disease because of impaired immunity (Snider et. al., 1986; Wiggin and Gibbs, 1990, Gomez-Munoz et. al., 2004).

In three out of four large-scale feedlot trials, with 10,381 animals, Safe-Guard® (fenbendazole) oral drench in combination with an Ivomec pour-on or injectable shows a clear advantage in dry matter intake, feedlot gain, improved health and pounds of beef produced.

Investing between \$1.50 to \$1.80 per head in a Safe-Guard oral drench dose has, on average, created \$17.18 of additional value - resulting in an ROI of 10:1 over an average 160-day feeding period.

Safe-Guard® + Ivomec® Injectable vs. Cydectin® (moxidectin) Injectable¹

Observations

Safe-Guard treated cattle had significantly higher daily feed intake, average daily gains, final weights and hot carcass weights. Safe-Guard treated cattle had significantly reduced morbidity compared to Cydectin Injectable alone.

The Safe-Guard group had an economic advantage of \$19.62/head compared to the Cydectin Injectable group.

ole'	SG + IVMINJ	CYDINJ	SG+IVMINJ ADV.	P-value
Initial weight, lbs	831	838		0.14
Dry matter intake, lbs/day	22.0	21.6	0.4	0.07
ADG, lbs	3.34	3.23	0.11	0.08
Morbidity, %	11.54	17.44	(5.90)	0.03
Total live weight gain, lbs	542	514	28	0.03
Hot carcass weight, lbs	882	867	15	0.05
Value created with SG + IVMINJ ²			\$19.62	

Safe-Guard + Ivomec PO vs. Dectomax® (doramectin) Injectable

Observations

Daily feed intake, daily gain, final weight, and hot carcass weight were improved using Safe-Guard oral drench in combination with Ivomec PO vs. cattle treated with Dectomax Injectable alone.

These combined performance benefits resulted in an Average Value/hd of \$9.01.

ıble	SG + IVPO	DMXINJ	ADV.	P-value
Initial weight, lbs	705	697		0.19
Dry matter intake, lbs/day	22.8	21.67	1.13	0.01
ADG, lbs	3.26	3.13	0.13	0.06
Total live weight gain, lbs	498	478	19.8	0.01
Hot carcass weight, lbs	780	763	17.6	0.01
Small intestine worm count (total), slaughter	16	2,425	(2,409)	0.01
Value created with SG + IVPO ⁴			\$9.01	

Safe-Guard + Ivomec Injectable vs. Ivomec Injectable or Safe-Guard⁵

Observations

Treatment with a combination of Safe-Guard oral drench and Ivomec Injectable was more effective at reducing parasite burden in feedlots.

Safe-Guard proved to be more effective on reducing brown stomach worm vs. an endectocide alone.

fe-Guard [®]	SG + IVMINJ	IVMINJ	SG	P-value	
Initial weight, lbs	606	602	605	0.43	
Dry matter intake, Ibs/day	17.33	17.45	17.36	0.64	
ADG, lbs	3.04	3.08	3.09	0.45	
Total live weight gain, lbs	551	560	564	0.41	
Hot carcass weight, lbs	758	757	762	0.61	
REDUCED PARASITE BURDEN	REDUCED PARASITE BURDEN				
Fecal egg counts (eggs/g), D 30 on feed	0.03ª	7.97 ^b	0.05ª	0.01	
REDUCED WORM COUNT					
Cooperia, slaughter (adult)	0	120	0	0.14	
Ostertagia, slaughter (adult)	510 ^a	1320 ^b	890ª	0.05	
Value created with SG + IVMINJ ⁴	\$4.20				

Safe-Guard + Ivomec PO vs. Ivomec PO³

Observations

Cattle treated with Safe-Guard oral drench and Ivermectin PO had improved health, with significantly fewer repulls.

The cattle in the Safe-Guard group had significantly higher feed intake, average daily gain, final weight and hot carcass weight. These combined performance benefits resulted in an Average Value/hd of \$22.19.

	SG + IVPO	IVPO	SG+IVPO ADV.	P-value
Initial weight, Ibs	745	743		0.83
Dry matter intake, lbs/day	17.83	17.39	0.44	0.04
ADG, lbs	3.4	3.26	0.13	0.01
Total morbidity, %	19.69	24.32	(4.63)	0.12
Total repulls, %	47.07	58.81	(11.74)	0.02
Total live weight gain, lbs	459	443	15.4	0.01
Hot carcass weight, lbs	745	734	11	0.01
Fecal egg counts, slaughter (eggs/g)	2.17	6.82	(4.65)	0.06
Value created with SG + IVPO ⁴			\$22.19	

- 1. J.P. Hutcheson, S.T. Nordstrom, H.L. Newcomb and T.A. Shelton; Intervet Inc., Millsboro, DE
- 2. Average Value/hd reflects:
- Purchase price using an 800 lb steer at \$101/cwt and a \$.04/lb slide according to actual weight
- Carcass price of \$146/cwt
- Live price of \$92/cwt, Fall 2007
- \$230/ton dry matter ration cost x feed consumed
- Safe-Guard drench, Ivomec, Cydectin (by treatment), viral vaccines and implants
- viral vaccines and implants
 Yardage at \$.25/hd/day
- Incremental profit margin prior to the cost of Safe-Guard
- 3. C.D. Reinhardt, J.P. Hutcheson, and W.T. Nichols Journal of Animal Science, 2006, 84:2243–2250.
- 4. Dr. Thomas E. Elam, FarmEcon.Com, 2007. Average Value/hd based on the March 1, 2007 pricing grid of Swift's Grand Island, Nebraska packing plant and March 11, 2007 USDA cut-out value of \$155.60/cwt for standard grade carcasses. Average Value/hd reflects incremental profit margin prior to the cost of Safe–Guard.
- 5. J.P. Hutcheson, and Wade T. Nichols, Chris D. Reinhardt, Marshall Streeter and David Yates; Intervet Inc.; Millsboro, DE
- a/b. Safe-Guard treatment group statistically equivalent to other treatments on all health and performance parameters.
- Safe-Guard is a registered trademark of Intervet Inc. or an affiliate.
- Cydectin is a registered trademark of Fort Dodge Animal Health, Inc. or an affiliate.
- Dectomax is a registered trademark of Pfizer Inc. Ivomec is a registered trademark of Merial, LLC.



