



## Weaning-Weight Comparison In Five Beef Herds Comparing Vision® 7 (2mL) To 5mL 7-Way Administered At Spring Branding

### Summary

In all five herds, steer and heifer mean weaning weights were 10.4 lbs. greater in Vision® 7 vaccinates than in 5mL 7-way vaccinates. A paired t-test was significant ( $P=0.04$ ). A 95% confidence interval of the data encompassing all five herds and both sexes was (6.3-16.5 lbs.)

### Introduction

Vision (2mL) clostridial vaccines were developed in response to the beef cattle industry's objection to large injection site lesions produced by 5mL multivalent clostridial vaccines. Clinical research has demonstrated the Vision vaccine to be considerably less reactive. In early trials assessing tissue reactions in young calves, a weaning-weight advantage was noted. The purpose of these trials was to confirm those observations.

### Materials and Methods

Five studies were conducted in three states by three different investigators. The herds were selected because of their size, excellent management and accurate production

record-keeping system. Several crossbreeding programs are represented in these beef herds. Calves were divided into treatment groups by sex, paired by birth dates and randomly assigned to treatment groups. At branding (roughly one to two months of age), pairs received subcutaneously either Vision 7 or traditional 5mL 7-way clostridial vaccines. All pairs were commingled throughout the trial and summered on semi-arid native pastures. At weaning, all calves were weighed, and weaning weights were adjusted to 205 days of age using computerized programs that account for age of the dam.

### Results

Steer and heifer mean weaning weights were, on average, 10.4 lbs. greater for the Vision vaccinates in each of five trials when compared to their respective pairs. A comparison of the mean weaning weight between the 2mL (Vision) and 5mL groups was conducted using the paired t-test. The analysis was done on combined data from the five participating ranches.

## Summary: Mean Adjusted Weaning Weights In Pounds

Herd	Sex	N (pairs)	Vision 7 (2mL)	Control (5mL 7-way)	Difference
1	S	43	589.5	582.3	7.2
	H	45	576.8	556.2	20.6
2	S	65	514.0	503.2	10.8
	H	76	491.8	487.0	4.8
3	S	44	553.0	549.2	3.8
	H	38	502.3	488.50	13.8
4	S	107	680.3	678.9	1.4
	H	84	628.6	617.1	11.5
5	S	110	660.7	647.8	12.9
	H	95	629.7	613.0	16.7
All 5 Herds Means	S		599.0	592.0	7.0
	H		565.0	552.0	13.0
Pooled Means			582.7	572.3	10.4
					(P=0.04)

These data were statistically analyzed by the paired t-test. Differences favoring Vision (2mL) were significant at the P=0.04 level and the 95% confidence interval was determined to be (6.3-14.5).