## **Technical Brief**



## Circo/MycoGard® was efficacious against a PCV2d/PRRSV174 challenge

Trial conducted by Swine Services Unlimited, Inc. compared the wean-to-finish performance of Circo/MycoGard® and another commercial vaccine after an individual pig PCV2d/PRRSV174 challenge.

## **Trial Design**

A total of 288 pigs (96 pigs/trt) were assigned to 3 treatments. Circo/MycoGard® (1 mL), Circumvent® PCV-M G2 (2 mL) or saline (1 mL) was administered once at weaning. Treatments were randomly allocated by litter and weight at weaning.

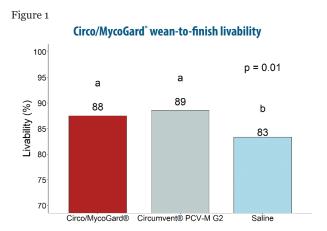
The sow farm was PRRSV, PEDV and Mhp negative. This source was PCV2 positive and recently repopulated. Pigs were housed in a commercial wean-to-finish (W-F) facility at SSUI Inc. in MN. Each pen contained all treatment groups allocated equally and randomly. Due to finishing space considerations, half of the pigs were randomly selected at challenge for removal at 10 weeks post vaccination (wpv).

Challenge was administered to each pig at 4 wpv. PCV2d was inoculated both IN (2 mL, 1 mL/nostril) and IM (1 mL). PRRSV174 was inoculated IM (2 mL). Processing fluid was collected from the selected farrowing group. Serum was collected from all pigs at weaning and challenge.

Performance analysis for W-F (0-20 wpv) was adjusted by weaning weight. Finishing space constraints required removal of half the pigs, so W-F livability was averaged over the two phases and W-F ADG was estimated from the pigs that remained in the study's performance (48 pigs/trt). Primary market pigs and light culls were based on the number of pigs alive at the end of the study.

### **Results**

W-F livability (Fig 1) and ADG (Fig 2) were equivalent for both vaccines.





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## **Results (continued)**

Primary market pigs and light culls were equivalent for both vaccines (Fig 3). Both vaccines were equivalent in finishing and nursery performance. Non-vaccinated pigs underperformed vaccinated pigs.

Final weight distribution (Fig 4) was equivalent with non-vaccinates having significantly lighter weight variation.

Processing fluids (n=2) from the selected farrowing group tested PCV2 PCR negative. Serum samples tested 5% (15/288) and 22% (64/288) PCV2 PCR positive at weaning and challenge respectively.

ORF2 sequences (n=2) were classified as PCV2a at weaning and PCV2e at challenge. Challenge was confirmed by PRRSV and PCV2 lesions, PCR and IHC in tissues. Tissues were collected at approximately 2 weeks after challenge from dead or euthanized pigs to confirm challenge.

## **Conclusion**

Both vaccines were equivalent in nursery and wean-to-finish performance with a strong PCV2d/ PRRS174 individual pig challenge. Non-vaccinates underperformed vaccinated pigs.

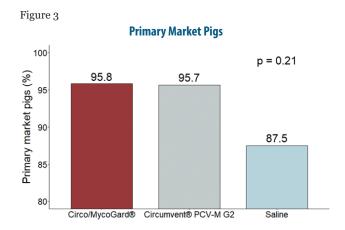
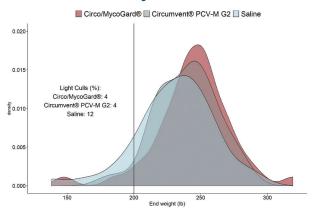


Figure 4





Porcine Circovirus Vaccine. Type 2, Killed Baculovirus Vector, Mycoplasma Hyopneumoniae Bacterin

Circo/MycoGard®

50 DOSES



This product has been shown to be effective for the vaccination of healthy piglets, 10 days of age or older against Porcine Circovirus, Type 2b, and Mycoplasma Hyopneumoniae. The duration of immunity has not been established. This product is composed of PCV2b.

For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

ADMINISTRATION AND DOSAGE: Dose: 1.0 ml intramuscularly (I.M.).

CAUTION: For animal use only. Do not mix with other products, except as specified on this label. In case of human exposure, contact a physician. Store at 2 to 8°C (35°F to 45°F). Do not freeze. Shake well before use. Use entire contents upon opening. Do not vaccinate within 21 days before slaughter. Transient reaction may occur at the injection site. If anaphylaxis occurs, use epinephrine equivalent. Contains (Thimerosal) as a preservative. merthiolate This product has not been tested in pregnant animals. For advice on revaccination frequency, consult your veterinarian.

Product No:

Serial No:

Exp. Date:

Manufactured by:

**Pharmgate Biologics Inc** 2575 University Avenue West, Suite 100. St. Paul, MN 55114 612-256-0930

VLN 329 / PCN 49K5.R1

