

**TITLE**

WEANING DID NOT AFFECT THE SEROLOGICAL RESPONSE TO INTRADERMAL PCV2 VACCINATION IN PIGLETS

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**CONTENT**

Background and objectives

The objective of this study was to investigate how timing of intradermal PCV2 vaccination affected the serologic response of piglets. We aimed to evaluate if the serologic response differed for Study A: vaccination before compared to at weaning and Study B: one week after weaning compared to at weaning.

Materials and methods

For each study four medium-sized piglets from 21 litters were selected in a farrow-to-finish farm. In study A, all piglets were vaccinated at 3.5 weeks. Half of these were weaned (A1), whereas the other half stayed with the sow for one further week (A2). In study B, half of the piglets were weaned at 3.5 weeks (B2), whereas the other half was weaned a week later (B1). At this point all were vaccinated in study B. In both studies, each piglet was blood sampled at vaccination and 4 weeks later. The serologic response was determined by an AlphaLISA (R&D Service Lab, MSD AH) reporting the log(2) PCV2 antibody level. Difference in antibody levels was evaluated using Student's t-tests with a significance level of 0.05.

Results

The mean antibody levels at vaccination did not differ between groups in neither Study A (A1:  $5.59 \pm 1.06$  log(2) ml, A2:  $5.61 \pm 1.09$  log(2),  $p=0.926$ ) nor Study B (B1:  $5.44 \pm 1.09$  log(2), B2:  $5.39 \pm 1.12$  log(2),  $p=0.949$ ). Similarly, the mean antibody levels four weeks after vaccination did not differ significantly between the groups in neither Study A (A1:  $7.89 \pm 1.25$  log(2), A2:  $8.06 \pm 1.09$  log(2),  $p=0.512$ ) nor Study B (B1:  $8.13 \pm 1.15$  log(2), B2:  $7.42 \pm 1.32$  log(2),  $p=0.173$ ). No PCV2 was detected in any of the studies.

Discussion and conclusions

The serologic response to intradermal PCV2 vaccine was not altered when vaccinating at weaning compared to vaccination before or after weaning.