

Weaning did not affect the serological response to intradermal PCV2 vaccination in piglets

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BACKGROUND AND OBJECTIVES

Intradermal (ID) vaccination is of great interest because of better animal welfare¹ and higher user safety due to needleless technology².

For convenience of the farmer it is often easiest to vaccinate around weaning.

Weaning stress however, is known to modulate immunological functions, enzyme activity of the gastro-intestinal tract and amino-acid synthesis³.

Our objective was to investigate if timing of porcine circovirus (PCV) ID vaccination affects the serologic response in piglets.

MATERIALS & METHODS

All vaccinations were done with Porcilis® PCV ID using the IDAL device (intradermal application of liquids, MSD Animal Health).

In substudy A we compared PCV2 vaccination one week before and around weaning (< 24 hours prior to weaning) and in substudy B vaccination around weaning and one week after.

At the beginning of each substudy, four medium-sized piglets from 21 litters were randomly allocated into two groups (A1 and A2; B1 and B2) and each piglet was ear-tagged individually.

Time of vaccinations, weaning and blood sampling in each substudy are displayed in Figure 1. Differences between groups were evaluated using Student's t-tests (logarithmic scale), separately for each substudy.

Figure 1.
Study design

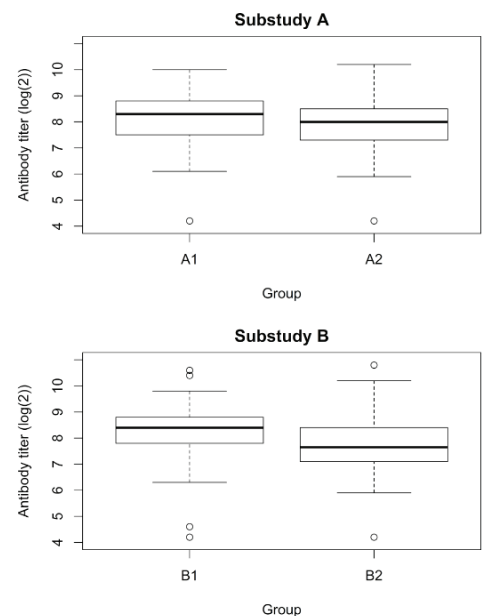


RESULTS

Antibody titers did not significantly differ between the two study groups in neither of the substudies (Figure 2).

Figure 2.

The antibody titer response when vaccinating the pigs one week before and around weaning (Substudy A, $p > 0.05$) and when vaccinating them around weaning and one week after (Substudy B, $p > 0.05$)



DISCUSSION & CONCLUSION

The serologic response to PCV2 ID vaccine was not altered by timing of vaccination related to weaning. The antibody response after vaccination was comparable with that of other studies⁴.

Thus, piglets can be vaccinated by the farmer's preference either one week before, around or one week after weaning.

REFERENCES

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