



IMMUNOLOGY & VACCINOLOGY

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COMPARATIVE STUDY TO MEASURE THE EFFECT OF PCV VACCINATION ROUTE (IM VS ID) ON BODY TEMPERATURE AND WEIGHT GAIN

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Background & Objectives

The objective of this trial was to compare the effects of the needle-free IDAL vaccination and the conventional needle-syringe vaccination procedure on Average Daily Gain (ADG) and rectal temperature of weaned piglets.

Materials & Methods

A total of 339 28 day old piglets were distributed in 3 study groups: i) vaccinated with Porcilis® PCV ID intradermally with IDAL (IDAL); ii) vaccinated with Porcilis® PCV intramuscularly (IM); iii) control, managed identically but not vaccinated (Control). At the time of vaccination, all pigs were picked up by their hind legs and vaccinated according to the treatment (control pigs were touched with the hand).

Rectal temperature and body weight were measured on 84 animals. Rectal temperature was assessed on day 0 (pre-), +1 (+28h), +2 (+42h) and +21. Piglets were weighed on day 0 and day +21 after vaccination. Rectal temperature and ADG were tested using the MIXED procedure in SAS. The model included the main effect of the treatment (2 levels) and the initial level at day 0 as the covariate.

Results

Rectal temperature was not significantly different between treatments at +28 hours (Control=39.4 \pm 0.47 °C, IDAL=39.4 \pm 0.44 °C, IM =39.5 \pm 0.41 °C; P=0.83); at +42 hours (Control=39.3 \pm 0.35 °C, IDAL=39.1 \pm 0.49 °C, IM =39.2 \pm 0.44 °C; P=0.15); and 21 days post-vaccination (Control=39.9 \pm 0.35 °C, IDAL=39.8 \pm 0.53 °C, IM =39.7 \pm 0.32 °C; P=0.15). The ADG at day 21 did not differ significantly (P = 0.45) between treatments (Control=440 g/day, IDAL=420 g/day, IM=440 g/day).

Discussion & Conclusion

The vaccination method and vaccination procedure did not affect rectal temperature or ADG, demonstrating that Porcilis® PCV and Porcilis® PCV ID are safe vaccines.