

Combined PCV2 and *Mycoplasma hyopneumoniae* piglet vaccination has a positive impact on fattener performance compared with M Hyo only in a PCV2 subclinically infected farm

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INTRODUCTION

Besides PMWS (Post Weaning Multi-systemic Syndrome) or PCVD-systemic disease, PCV2 is also involved in many subclinical infections. In addition, PCV2 and *Mycoplasma hyopneumoniae* (Mhyo) infection results in a negative effect on performance. PCV2 and Mhyo vaccinations are an efficient tool to reduce mortality, lesions, viremia and to improve growth. In this controlled and randomised trial, effect on fattener performance of a combined PCV2 and Mhyo piglet vaccine was compared against Mhyo vaccination only in a Mhyo positive herd with a subclinical PCV2 circulation.

MATERIAL AND METHODS

At 4 weeks of age, 168 piglets from the same farrowing batch were allocated into 84 pairs of similar piglets according to sex, weight, sow, or if not the same dam, sow parity and litter size. In each pair, one piglet was vaccinated with Porcilis[®] PCV M Hyo (2 ml IM) and one was vaccinated with one dose Mhyo vaccine according to the Marketing Authorisation (MA). Both groups (84 PCVM and 84 Mhyo) were exposed to natural PCV2 and Mhyo infection as evidenced by antibody seroconversion. Individual Feed Conversion Ratio (FCR), average daily weight gain (ADWG) and slaughterhouse data were registered. Furthermore, pneumonia lesions (IFIP reference method, lung scored 0 to 28), rhinitis lesions performed on snout computer tomography images (IFIP reference method, scored 0 to 20), clinical signs and mortality were also individually recorded.

RESULTS

ADWG at the end of the nursery phase was not different between the PCVM and Mhyo groups. PCVM group had a significantly higher ADWG than Mhyo group during the overall fattening period (+34 g/d) and for the growing (+35 g/d) and finishing (+30 g/d) periods. FCR during the fattening period was also numerically better for PCVM group (-0.06 point). PCVM group had significantly less pneumonia lesions than Mhyo group (mean score: 0.9 vs 2.2). Other criteria (clinical signs, mortality, rhinitis lesions and slaughterhouse data) were not significantly different between treatments.

CONCLUSIONS

In this high performing farm where PCV2 subclinically circulated in the fatteners, Porcilis PCV M Hyo vaccination significantly improved ADWG and lung lesions when compared against Mhyo only vaccination. Return on investment (ROI) was calculated with GT Direct, an IFIP economic calculator, based on ADWG improvement and vaccination cost difference (0.8 € per pig) and indicated a 1.7 € gain for Porcilis[®] PCV M Hyo vaccinated pigs.