



IMMUNOLOGY & VACCINOLOGY

IMM-010

COMPARISON OF DIFFERENT VACCINATION SCHEMES AGAINST PCV2 AND *M.HYO* IN EASTERN AUSTRIA

L. Schwarz¹, M. Dippel¹, U. Ruczizka¹, R. Schlegl², A. Pausenberger³, I. Hennig-Pauka⁴.

¹ VetMedUni Vienna, Wien, Austria; ² Intervet GesmbH, Wien, Austria; ³ Intervet Deutschland GmbH, Haar, Germany; ⁴ Field Station for Epidemiology, University of Veterinary Medicine, Bakum, Germany.

Introduction

Austrian piglets are usually vaccinated against *Mycoplasma hyopneumoniae* (*M.hyo*) and porcine Circovirus type 2 (PCV2). Separate vaccinations by monovalent PCV2 and two-shot *M.hyo* vaccines offer reliable protection but are more labor-intensive than a ready-to-use one-shot combination vaccine. This study compared lung lesions and detection of *M.hyo* and PCV2 by PCR after vaccination with Porcilis® PCV M Hyo or separate vaccinations.

Material & Methods

Piglets from 3 farrowing groups were randomly assigned to two groups: 386 piglets in group A were vaccinated at 21 days of age with Porcilis® PCV M Hyo, 390 piglets in group B were vaccinated on days 7 and 28 with Porcilis® M Hyo and on day 21 with Porcilis® PCV. All piglets were regularly weighed and blood samples and tracheobronchial swabs (TBS) were repeatedly collected from 50 randomly selected animals. Slaughter lung checks were performed on all pigs and tissue samples of the lungs were taken.

Results

Lung lesion scores and fattening performance were not significantly different between groups A and B. All samples tested negative for PCV2. Results of the examination of TBS and lung tissue samples for *M.hyo* varied between different PCR-methods: 54% (A) and 58% (B) tested positive in the nested PCR, whereas three other PCRs only had one single positive result. Immunohistochemistry (IHC) for *M.hyo* gave positive results in 17% (A) respectively 19% (B) of the samples.

Discussion and Conclusion

PCV2 could not be detected and *M.hyo* pressure was very low in this farm. The different results of the examination for *M.hyo* antigen in lung tissue and TBS samples by different *M.hyo* PCRs and IHC are an indicator of the different test sensitivities, which needs to be considered when performing routine diagnostics. Both vaccination schemes showed no significant differences in lung lesions and direct detection of *M.hyo* and PCV2.