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SEROLOGICAL RESPONSE TO *M.HYOPNEUMONIAE* AFTER VACCINATION OF BREEDING GILTS WITH SUVAXYN® CIRCO + MH RTU OR PORCILIS® PCV M HYO AT 3 WEEKS OF AGE

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Introduction

Future breeding gilts are often vaccinated as piglets against both Circovirus and *M. hyopneumoniae.* Later, typically before moving at around 12 weeks of age, it may be desirable to confirm low or absent *M. hyopneumoniae* infection by demonstrating a negative serological titer. Any vaccine induced antibodies could interfere with this assessment.

The aim of this study was to evaluate the difference in serological reaction after vaccination with either Porcilis® PCV MHyo or Suvaxyn® Circo+MH RTU.

Material and methods

On a Dutch farm producing breeding gilts and with an historically low incidence of *M.hyopneumoniae,* 13 animals from a batch vaccinated with Porcilis® PCV MHyo and 13 from a batch vaccinated with Suvaxyn® Circo+MH RTU were bled at 3, 7 and 11 weeks of age. Titers against *M. hyopneumoniae* were determined by IDEXX ELISA.

Results

All 13 Suvaxyn® Circo+MH RTU vaccinated gilts showed high maternal derived antibodies when vaccinated at 3 weeks of age. *S*amples became mainly negative at 7 weeks and completely negative at 11 weeks.

Samples from all 13 Porcilis® PCV MHyo vaccinated gilts also showed high maternal derived antibodies at 3 weeks. Samples at 7 weeks showed some declines (7/13) and some increases (6/13). At 11 weeks of age all blood samples showed higher titers than at 7 weeks.

Conclusion and Discussion

Circulating antibodies are not correlated with protection against *M. hyopneumoniae* but may still be induced by vaccination depending on the adjuvant used. The MetaStim adjuvant in Suvaxyn Circo+MH RTU is known to induce strong cell-mediated immunity but typically a minimal *M.hyopneumoniae* antibody response, although a strong anamnestic response is seen on subsequent challenge. Results confirm the absence of antibodies in non-challenged vaccinated pigs and likely lack of interference with later testing, in contrast to a vaccine containing a mineral oil adjuvant.