

SAFETY AND EFFICACY OF COMBINED ADMINISTRATION PORCILIS® PRRS & PORCILIS® BEGONIA

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Introduction and Objectives

Current vaccination instructions prescribes that administration of a commercial Porcine Respiratory and Reproductive Syndrome virus (PRRSV) attenuated vaccine (Porcilis® PRRS, Intervet International BV) and Aujeszky's disease virus (ADV) vaccine (Porcilis® Begonia, Intervet International BV) be separated by an interval of two weeks. However, in the field it is common practice to administer the two vaccines at the same time, mixed within the same syringe (simultaneous application).

The purpose of the present study was to verify experimentally the clinical efficacy of this practice, as measured by serum titres to each vaccine.

Materials and Methods

The study was conducted in a quarantine house with ADV and PRRSV free pigs. The pigs had previously received an ADV vaccination with a gE deleted vaccine.

Twenty seven gilts, aged 140 days and weighing an average of 65 kg were assigned randomly to two treatment groups. Group 1, comprising 11 gilts were given a single injection (simultaneous use) of the recommended doses of Porcilis PRRS and Porcilis Begonia vaccines, mixed within the same syringe. The 16 gilts in Group 2 were given two separate injections (concurrent use), at the same time, in different sites of the neck, one of each vaccine.

Blood samples were taken from all pigs on the day of vaccination (T0) and 35 days later (T1) and assayed for titres to ADV and PRRSV (serum neutralising (SN) titres for the ADV and Idexx PRRS ELISA kit for PRRS).

All animals were subjected to a daily clinical check from day 0 to day 35, and the following clinical parameters were scored: body temperature, dyspnoea and lethargy.

Statistical evaluation

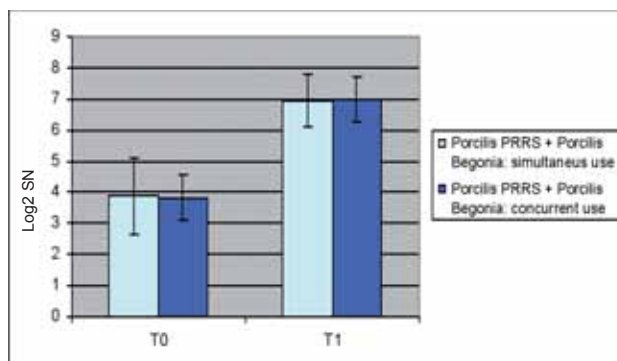
The individual gilt was the statistical unit. Descriptive statistics (frequency tables, means, standard deviations etc.) were used to summarise the data. SN-titres were analysed by analysis of covariance with T0 titres as covariate (ANCOVA). Results of ELISA test were analysed with two-sample T-test.

Significance was set at 0.05. All statistical analyses were performed with the statistical package SAS (SAS Institute Inc., Cary, NC, USA).

Results and Discussion

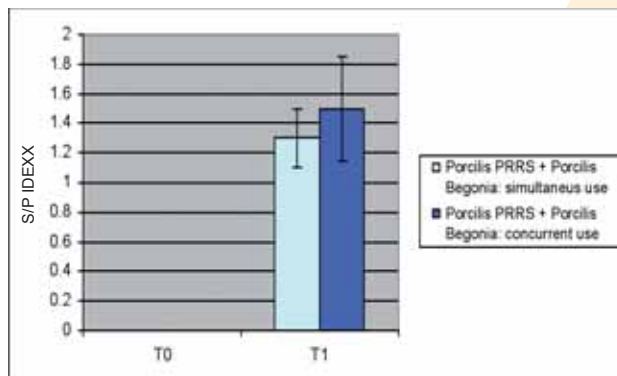
No local or systemic reactions were noted in either group. The SN-titres for ADV in Group 1 and Group 2 at T1 were resp. 6.94 ± 1.69 respectively 7.00 ± 1.41 (n.s.), see also figure 1.

Figure 1. ADV SN: average values



The ELISA titres for PRRS in Group 1 and Group 2 were 1.3 ± 0.40 respectively 1.5 ± 0.66 (n. s.), see figure 2. At T0 the titres were below detection level

Figure 2. PRRS ELISA: average values



Conclusion

There was no difference in local or systemic reactions or seroconversion between the two groups, suggesting that mixing the two vaccines within the same syringe is a safe and efficacious practice.