SAFETY OF THE MIXED ADMINISTRATION OF ERYSENG® PARVO AND UNISTRAIN® PRRS IN GILTS

Puig[1], A.; Fenech[1], M.; Fontseca[1], M.; Camprodon*[1], A.; Miranda[1], J.; Sitjà[1], M.; March[1], R.

*Corresponding author (agusti.camprodon@hipra.com)

[1]HIPRA, Amer (Girona), Spain.

INTRODUCTION

The aim of this study was to assess the safety of the combined administration of UNISTRAIN® PRRS and ERYSENG® PARVO through one overdose of UNISTRAIN® PRRS with the repeated administration of ERYSENG® PARVO in gilts.

MATERIALS AND METHODS

Thirty-one six-month-old gilts, clinically healthy and free from antibodies against PPV, E. rhusiopathiae and PRRSV, were randomly assigned to group 1 (n=20) and group 2 (n=11). Animals in group 1 were vaccinated intramuscularly three times two weeks apart: with one dose of ERYSENG® PARVO (2 ml/gilt, on day 0), with the combination of ERYSENG® PARVO and UNISTRAIN® PRRS (2 ml/gilt, combination of one dose of ERYSENG® PARVO and an overdose of UNISTRAIN® PRRS, on day 14) and with one dose of ERYSENG® PARVO (2 ml/gilt, on day 28, two weeks before mating). Animals in group 2 (non-vaccinated) received PBS following the same schedule as group 1.

The main variable observed and compared to the control group was the possible negative impact on gestation and on the offspring (analysed with Mann-Whitney U test; $p<0.05$). Body temperatures were recorded daily from day -1 until day 40, and 2, 4 and 6 hours after each vaccination, and were assessed using the ANOVA test ($p<0.05$). General clinical signs, local clinical signs and adverse reactions were evaluated daily from day -1 until day 40.

RESULTS

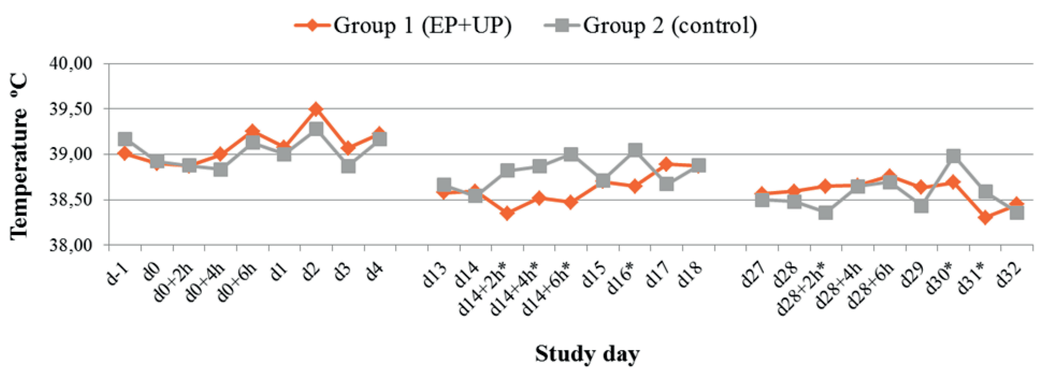

Figure 1. Mean body temperatures (°C) after vaccination. * Statistically different within the same day (ANOVA test; $p<0.05$).

After the vaccinations, all the gilt temperatures were within the physiological range (the maximum increase was 0.31 °C in group 1).

General or local clinical signs resulting from the vaccination were not broadly observed. The only systemic reaction was a mild depression observed in one vaccinated gilt 6 hours after the combined administration of ERYSENG® PARVO and an overdose of UNISTRAIN® PRRS (on day 14).

Regarding the reproductive performance there were no abortions or any alterations to normal progress of gestation. The farrowing parameters from the vaccinated group (total number of piglets born, number of piglets born alive, weak piglets at birth, number of stillborn piglets and number of the mummified piglets) were not statistically different compared to the control gilts and in both groups were within the expected physiological values.

Table 1. Reproductive and farrowing parameters

		Total piglets born	Total piglets born alive	Weak piglets (< 1 kg)	Total stillborn	Mummified piglets
Group 1 (EP+UP)	Total (%)	256	243 (94.92%)	13 (5.07%)	5 (1.95%)	8 (3.13%)
	Mean ± SD	12.8 ± 4.03	12.15 ± 4.16	0.65 ± 0.93	0.25 ± 0.44	0.44 ± 0.88
Group 2 (control)	Total (%)	162	147 (90.74%)	15 (9.25%)	9 (5.55%)	6 (3.70%)
	Mean ± SD	14.73 ± 3.92	13.36 ± 3.2	1.36 ± 1.20	0.82 ± 0.98	0.55 ± 0.82

No statistical differences between groups 1 and 2 were observed in the mean weight of piglets on the day of partum; the mean farrowing weight of piglets from the vaccinated group was 1.48 kg and from the control group was 1.45 kg.

CONCLUSIONS AND DISCUSSION

The safety of the combined administration of ERYSENG® PARVO and UNISTRAIN® PRRS is confirmed with regard to all the evaluated parameters (local reactions, general clinical signs and body temperature). The combined administration of ERYSENG® PARVO and UNISTRAIN® PRRS did not have any negative effects on the reproductive and farrowing parameters.

esphm 2015
EUROPEAN SYMPOSIUM OF PORCINE HEALTH MANAGEMENT

Laboratorios Hipra, S.A.
Avda. la Selva, 135
17170 Amer (Girona)
Spain

Tel (34) 972 43 06 60
Fax (34) 972 43 06 61
hipra@hipra.com
www.hipra.com