"SAFETY OF UNISTRAIN® PRRS ADMINISTERED INTRADERMALLY IN PIGLETS IN A MULTICENTRIC FIELD TRIAL"

Puig[1], A.; Fenech[1], M.; Perozo[1], E.; Busquet*[1], M.; March[1], R.

*Corresponding author (marta.busquet@hipra.com)

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

INTRODUCTION

The aim of this study was to evaluate the safety of UNISTRAIN® PRRS administered intradermally (ID) to piglets under field conditions.

MATERIALS AND METHODS

A multicentric, randomized, double blinded and controlled trial was carried out in 1532 animals (piglets from 3-4 weeks of age) distributed over 3 commercial farms (farms 1, 2 and 3) in Spain. The animals on each farm were randomly divided into two treatment groups. Group A (n=693) was vaccinated once at 3-4 weeks of age (day 0; d0) with 0.2 ml of UNISTRAIN® PRRS ($10^{3.5}$ $CCID_{50}$/animal; strain) administered ID with a suitable device. Group B, (n=839) as a control group, was injected with 0.2 ml of PBS (phosphate buffered saline) also ID with the same device.

All animals included in the trial were individually identified.

Different parameters (Table 1) were recorded from all the animals included in group A compared with group B to assess the safety of the UNISTRAIN® PRRS vaccine administered ID.

Table 1. Schedule of tasks performed:

Body temperature	d0, d0+4h, d1, d2
General clinical signs	d0, d0+4h, d1, d2, d3
Local reactions at the inoculation site	d0, d0+4h, d1, d2, d3 **Inflammation**: absence, slight, moderate, severe. **Redness**: absence, presence **Nodules**: absence, presence.
Adverse events	From d0 up to slaughterhouse

The pooled results of the three farms were obtained.

RESULTS

No serious or unexpected adverse events attributable to vaccination with UNISTRAIN® PRRS ID were observed. Likewise, no post-vaccination general clinical signs attributable to vaccination with UNISTRAIN® PRRS ID were observed.

No significant differences were observed in the increase of body temperature after vaccination between groups (Table 2).

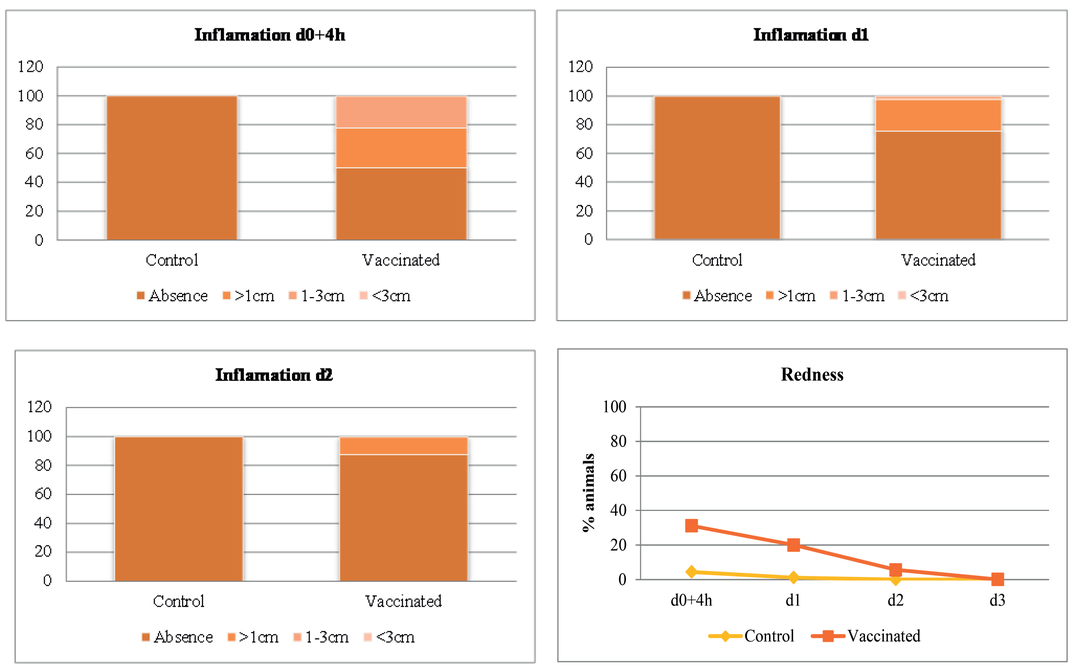
Table 2. Increase in rectal temperature after vaccination.

	Vaccinated	Control	p-value*
Increase d0+4h	0.20±0.45	0.20±0.44	0.915
Increase d1	-0.06±0.46	-0.01±0.46	0.494
Increase d2	0.04±0.50	-0.07±0.44	0.116

ANOVA test was used to calculate statistical differences. Increment based on the rectal temperature previous to vaccination (mean between days -1 and 0). *Differences were considered when $p<0.05$.

Regarding local reactions observed after vaccination (Figure 1), a slight to moderate inflammation could be seen in group A, which was resolved within 2 days post-vaccination. Redness was also observed at the inflammation area in some animals. No nodules were observed in any of the animals throughout the different monitoring days. In all cases, reactions resolved spontaneously three days post-vaccination without treatment.

Figure 1. Local reactions observed after vaccination.



Chi square (X^2) test was used to calculate statistical differences between groups. *Differences were considered when $p<0.05$.

CONCLUSIONS

The obtained results allow us to conclude that vaccination with UNISTRAIN® PRRS is safe when administered in piglets by the intradermal route with a suitable device according to the recommended vaccination program.

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