

SAFETY OF SOWS' MASS VACCINATION WITH ATTENUATED PRRS VACCINE IN FARMS UNDER PRRS STABLE STATUS

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BACKGROUND & OBJECTIVES

Sows' mass vaccination (SMV) with modified live virus vaccines (MLVv) is a very common strategy in order to control and prevent porcine reproductive and respiratory syndrome (PRRS) in breeding herds. Despite the safety of MLVv have been widely reported in experimental and under field conditions (1) (2), there are still some concerns about possible effects of SMV with MLVv, especially in breeding herds under PRRS stable conditions. The aim of this study was to assess the impact of SMV with UNISTRAIN®PRRS (HIPRA, Spain) on the productive performance of PRRS stable breeding herds.

MATERIALS AND METHODS

Data related to PRRS sows' vaccination, PRRS stability status and productivity was collected from 35 PRRS positive Spanish breeding herds enrolled in a one-year (February 2017-March 2018) systematic PRRS monitoring program (3). From this, a total of 51 SMV applied under PRRS stable status and without new PRRS infection for at least eight weeks post-vaccination were selected for the comparative analysis. Using abortions per one thousand sows (ABTHS), piglets born alive rate (BAR), pre-weaning mortality rate (PWMR), and wean piglets per one thousand sows (WPTHs) as key production indicators (KPI) for PRRS on weekly bases, we compared the productive performance of the breeding herd eight weeks before and eight weeks after SMV using a T-Student test (for BAR and WPTHs) or Wilcoxon test (for ABTHS and PWMR) for paired data for each of the KPI.

RESULTS

Averages of weekly KPI for PRRS for the eight weeks after SMV did not show any significant difference with the eight weeks prior to SMV (Table 1).

Table 1. Comparative study of KPI 8 weeks before and 8 weeks after SMV (T-Student or Wilcoxon test for paired data).

KPI	Prior-to-SMV (Mean±SD)	Post-SMV (Mean±SD)	p-value*
ABTHS	0.81±0.49	0.79±0.60	0.79
BAR (%)	91.8±0.03	91.6±0.03	0.40
PWMR (%)	11.8±0.02	12.2±0.03	0.47
WPTHs	550.3±56.3	550.2±61.4	0.98

* Significant difference= p-value<0.05

DISCUSSION & CONCLUSION

The lack of significant differences in measured KPI between weeks prior to vaccination and after vaccination with UNISTRAIN®PRRS applying a SMV program indicate there is no clinical impact on the productivity performance in breeding herds under PRRS stable status. Therefore, the use of MLVv for SMV can be considered a safe strategy for PRRS prevention even in farms with PRRS stability.

REFERENCES

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