VACCINATION ONCE WITH UNISTRAIN® PRRS IN GILTS CLINICALLY PROTECTS AGAINST HETEROLOGOUS PRRS INFECTION

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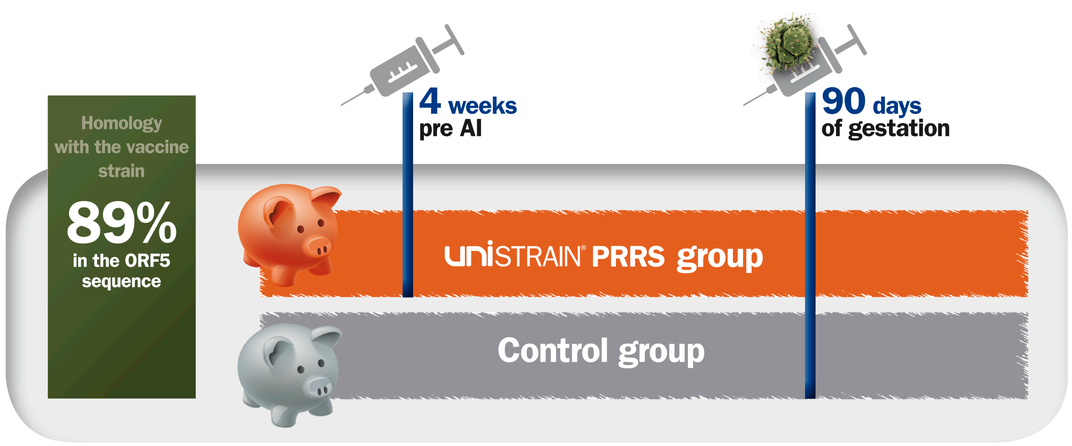
INTRODUCTION

Vaccination with modified live vaccines (MLV) is still the principal means used to control Porcine Reproductive and Respiratory Syndrome virus (PRRSV) infection. Evidences of safety and for vaccine-induced protective immunity against heterologous challenge has been also demonstrated (1, 2). In this study the heterologous efficacy of UNISTRAIN® PRRS was assessed in naïve gilts model. Reproductive performance was the main parameter to claim the efficacy.

MATERIALS AND METHODS

The vaccine was applied 4 weeks by IM route before mating to 8 naïve gilts. The efficacy was evaluated by means of an IN challenge at 90 days of gestation with an Italian pathogenic strain of European genotype of the PRRSV ($10^{6.8}$ $CCID_{50}$ / gilt). This study was carried out under a randomised and blinded basis.



RESULTS

After vaccine administration, gilts did not have any oestrus repetition and all of them got pregnant in the first heat (100% of fertility). No abortion occurred in any gilt (100% farrowing rate). Gestation length was the optimum for the right foetal development, and there were also statistically more liveborn and less weak and dead-born piglets (stillborn and mummies) after vaccination. Once more, it was demonstrated a heterologous cross-protection of MLV (3, 4).

CONCLUSIONS

Vaccination with UNISTRAIN® PRRS significantly reduced reproductive failure caused by wild-type infection during gestation.

Figure 1. Reproductive parameters after challenge with PRRSV (*t-test; **Mann-Whitney; p<0.05).

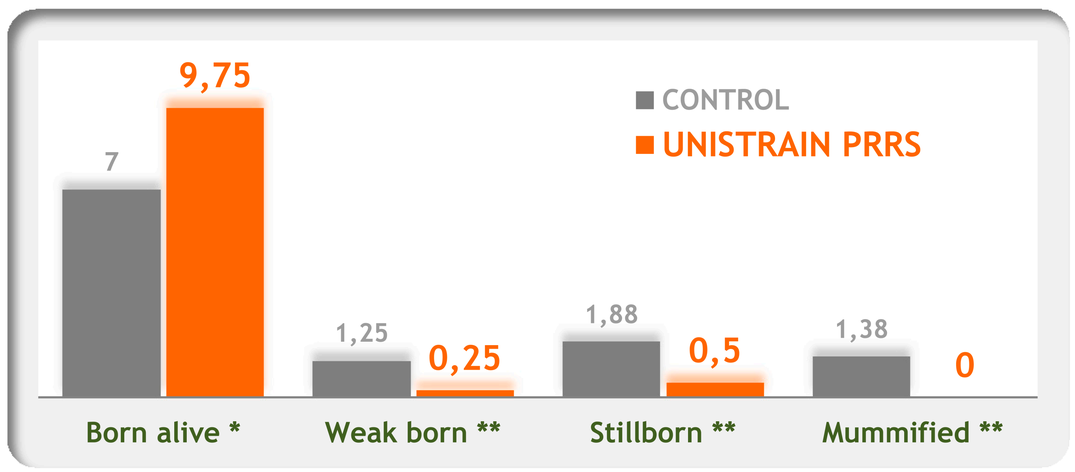
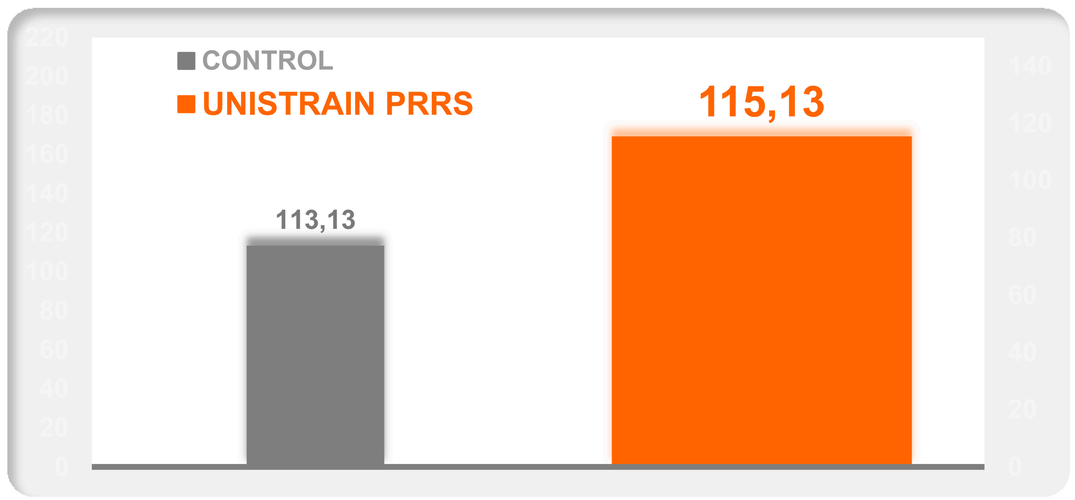


Figure 2. Gestation length(t-test; p<0.05).



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