

ONE DOSE OF UNISTRAIN® PRRS IN GESTATING SOWS CLINICALLY PROTECTS AGAINST HETEROLOGOUS PRRS INFECTION

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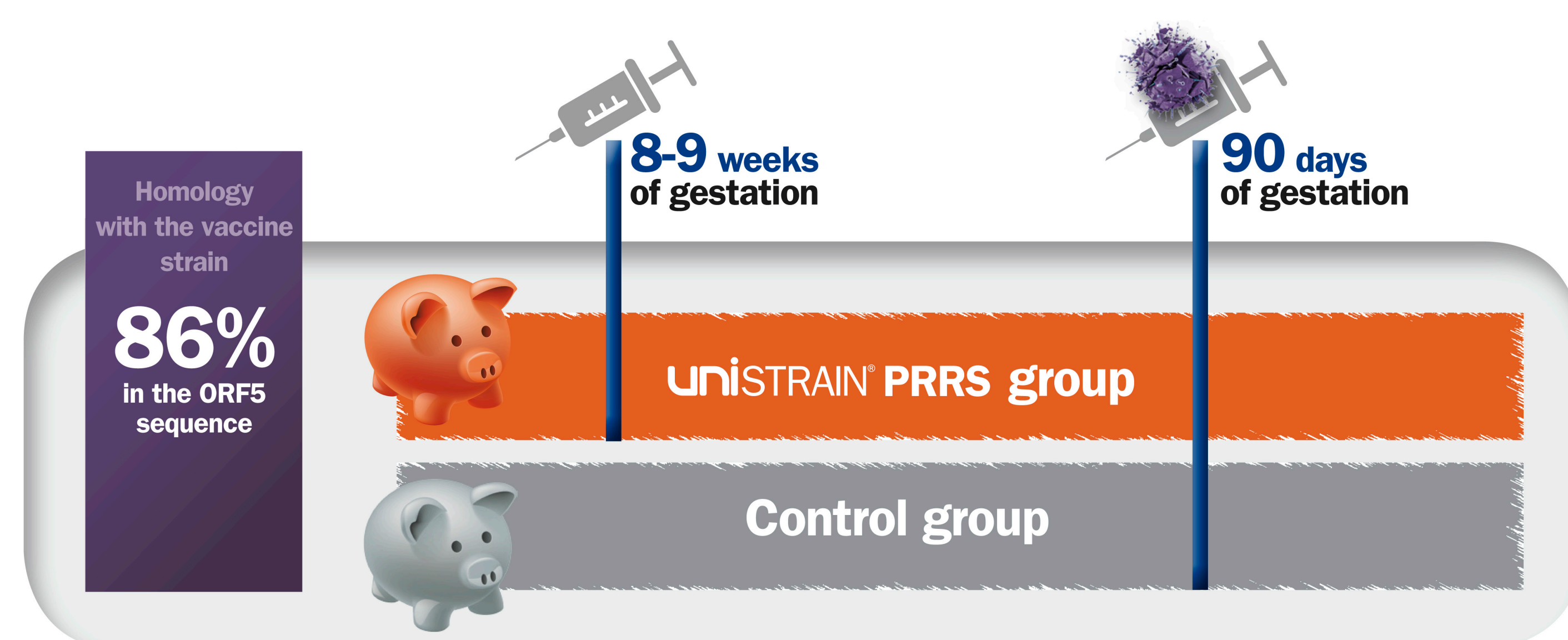
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INTRODUCTION

Vaccination is still the principal means used to control Porcine Reproductive and Respiratory Syndrome virus (PRRSV) infection; however the use of modified live vaccines (MLV) during gestation has been controversial. After evidences for vaccine-induced protective immunity against non-homologous challenge (1, 2), in this study the heterologous efficacy of UNISTRAIN® PRRS was assessed but in naïve gestating sow model. Reproductive performance was the main parameter to claim the efficacy.

MATERIALS AND METHODS

The vaccine was applied at 8-9 weeks of gestation by IM route to 9 naïve sows. A control gestating sows remained unvaccinated. The efficacy was evaluated by means of an IN challenge at 90 days of gestation with a heterologous pathogenic strain of European genotype of the PRRSV (Spanish strain isolated at 2007; $10^{6.54}$ CCID₅₀ / sow). This study was carried out under a randomised and blinded basis.



RESULTS

Vaccination with UNISTRAIN® PRRS significantly reduced reproductive failure caused by wild-type infection during gestation. After vaccine administration there was not any adverse effect derived from vaccination. No abortion occurred in any vaccinated sow (100% farrowing rate). Vaccination significantly reduced the number of stillborn and the apparition of mummies, also there was and increment of the number of liveborn piglets and a drop in the birth of weak piglets (3, 4).

CONCLUSIONS

It was clearly confirmed that vaccination with UNISTRAIN® PRRS during the second part of gestation was safe and able to reduce reproductive consequences of a heterologous PRRS infection at third trimester (were sows are more sensitive to the virus).

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

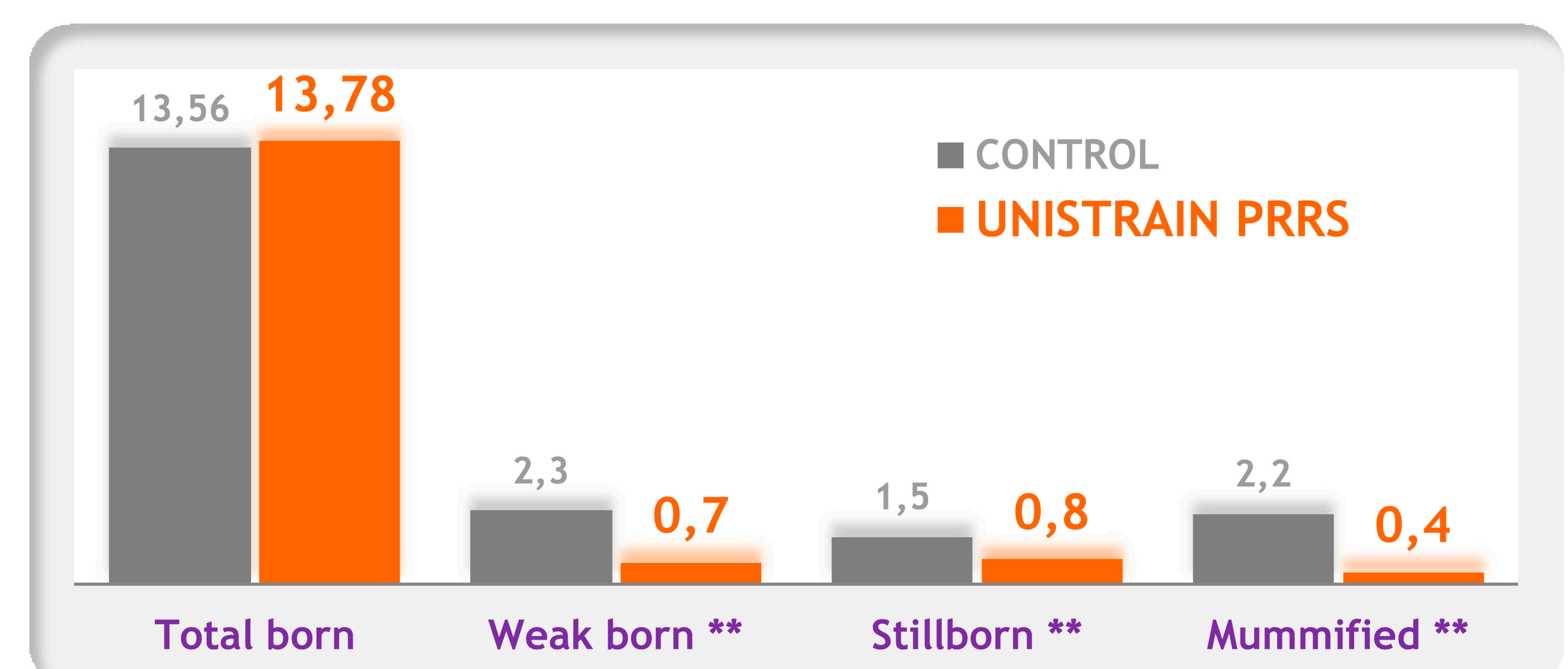
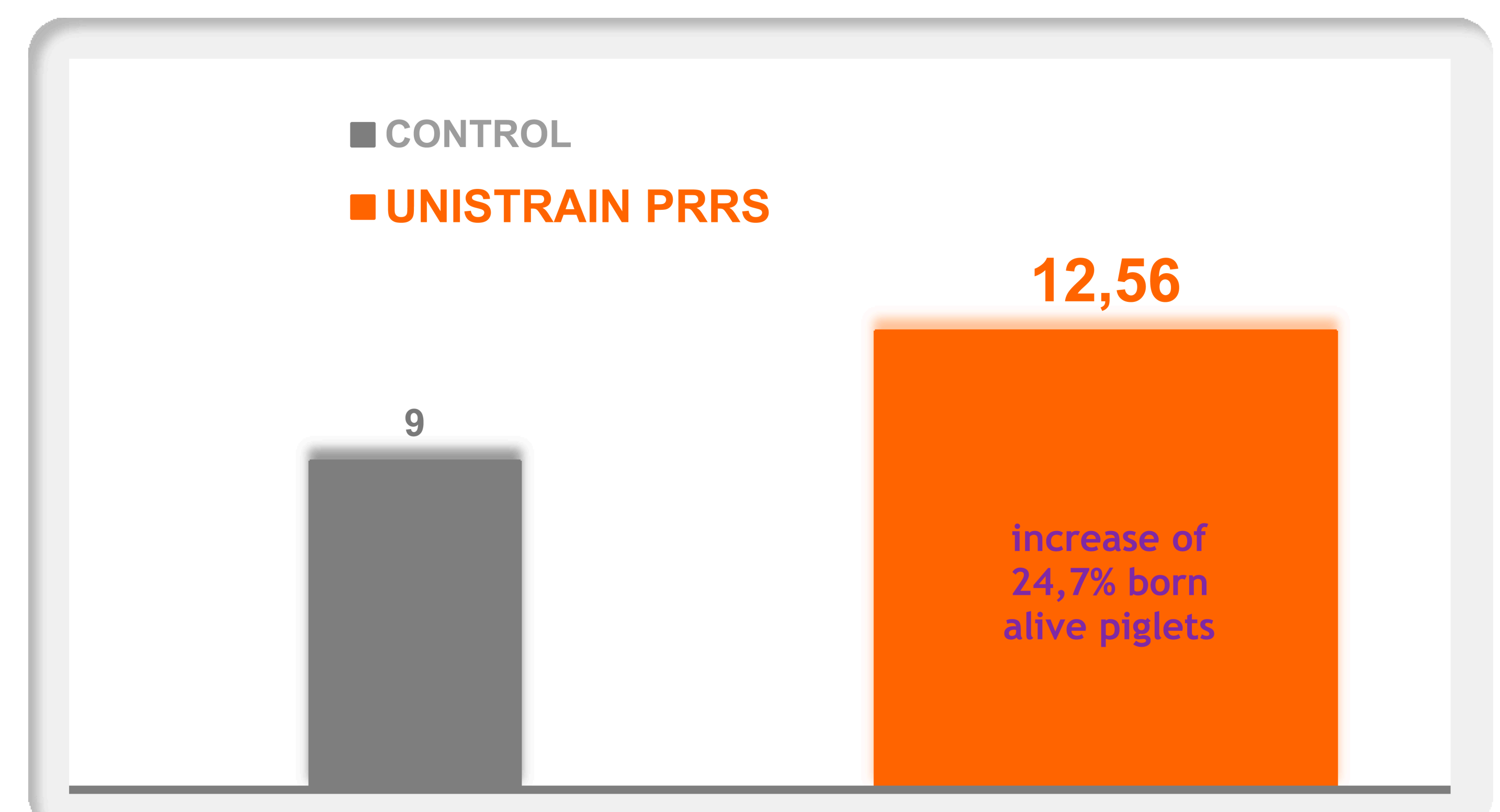


Figure 2. Mean in born alive piglets (t-test; $p < 0.05$).



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