

# BETTER PERFORMANCE OF PIGLETS BORN FROM UNISTRAIN® PRRS VACCINATED AND INFECTED GILTS WITH HETEROLOGOUS PRRSV STRAIN

Fenech, M.; Pla, H.; Madeo, X.; Roca, M.; Ros, M.; Sitjà, M.

Hipra, 17170 Amer, Girona, Spain

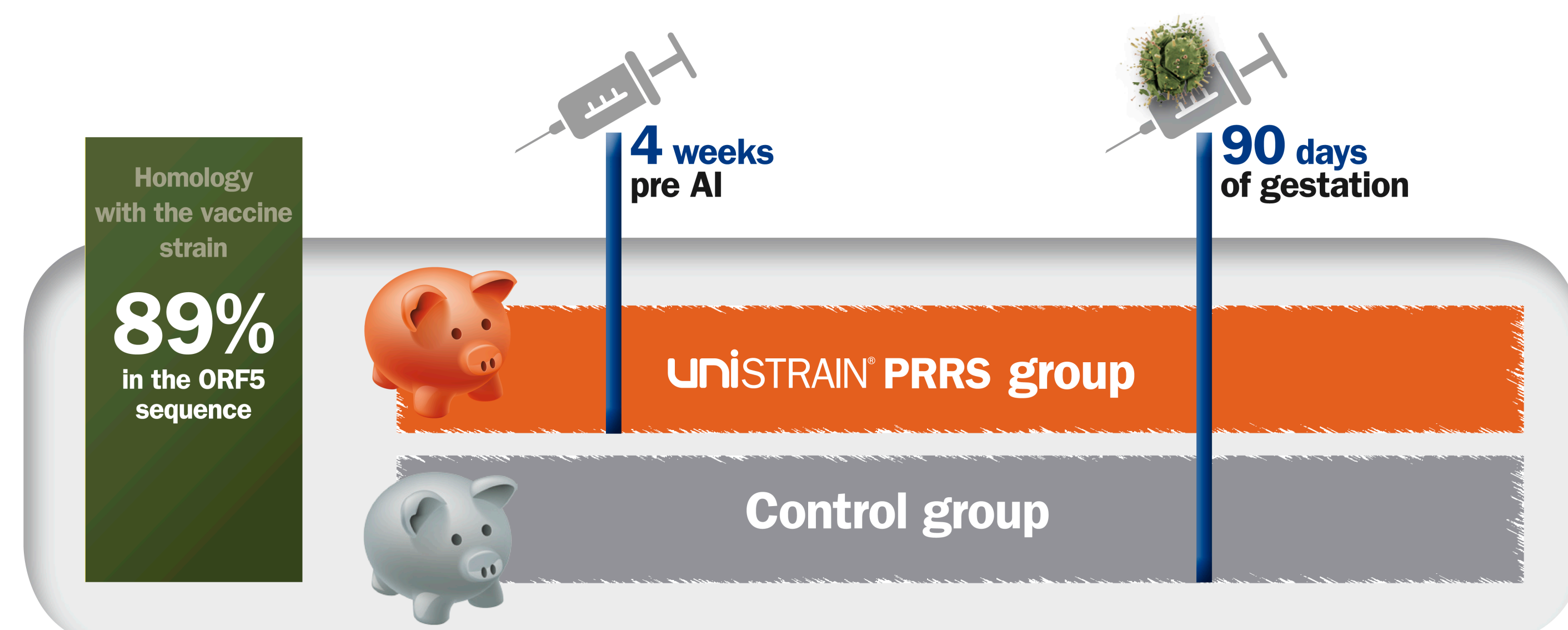
Corresponding author: [mar.fenech@hipra.com](mailto:mar.fenech@hipra.com)

## INTRODUCTION

Porcine reproductive and respiratory syndrome virus (PRRSV) can be transmitted from females to piglets during late gestation (1). Surviving neonates can exhibit the respiratory form (2) or be more susceptible to secondary infections during the lactation period. Piglet lactation performance after an heterologous challenge of PRRSV was compared between piglets born from UNISTRAIN® PRRS vaccinated and non-vaccinated gilts.

## 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<sub>50</sub> / gilt).



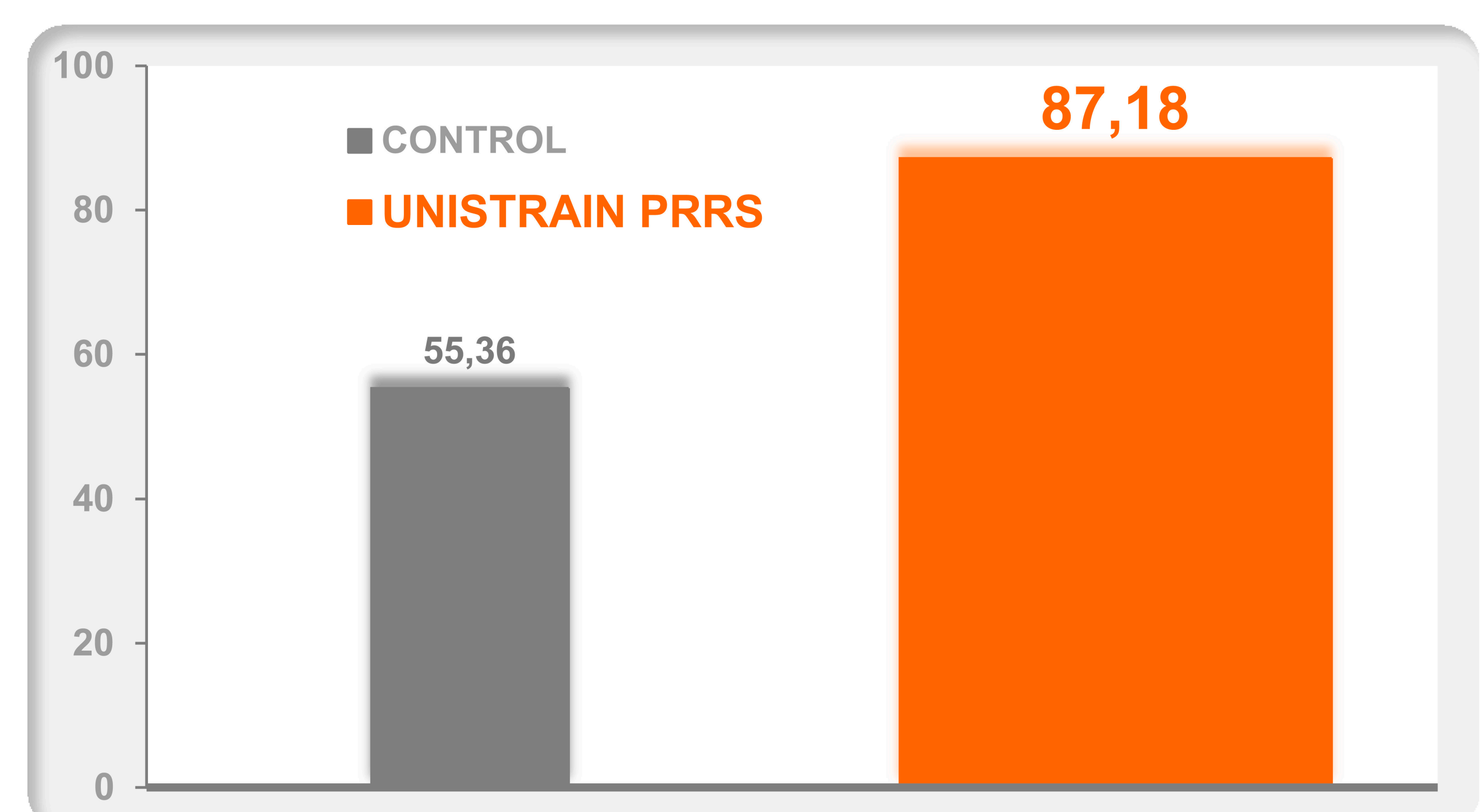
## RESULTS

The global piglet performance was statistically better in the piglets coming from vaccinated gilts: reduction of weak piglets (16.7% in vaccinated vs. 57.2% in control), the number of weaned piglets also incremented when vaccinating the females with UNISTRAIN® PRRS ( $8.5 \pm 2.51$  piglets vs.  $3.88 \pm 2.90$  piglets). Moreover, piglets from vaccinated group had higher weights at birth ( $1.65 \pm 0.32$  kg in vaccinated vs.  $1.33 \pm 0.29$  kg in control group) and at weaning ( $8.08 \pm 0.18$  kg in vaccinated group vs. the control one  $6.80 \pm 1.76$  kg). The average daily gain (ADG) was of 228g/piglet/day ( $\pm 44.95$ g) in vaccinated and in the non-vaccinated group was 193.15g/piglet/day ( $\pm 54.92$ g).

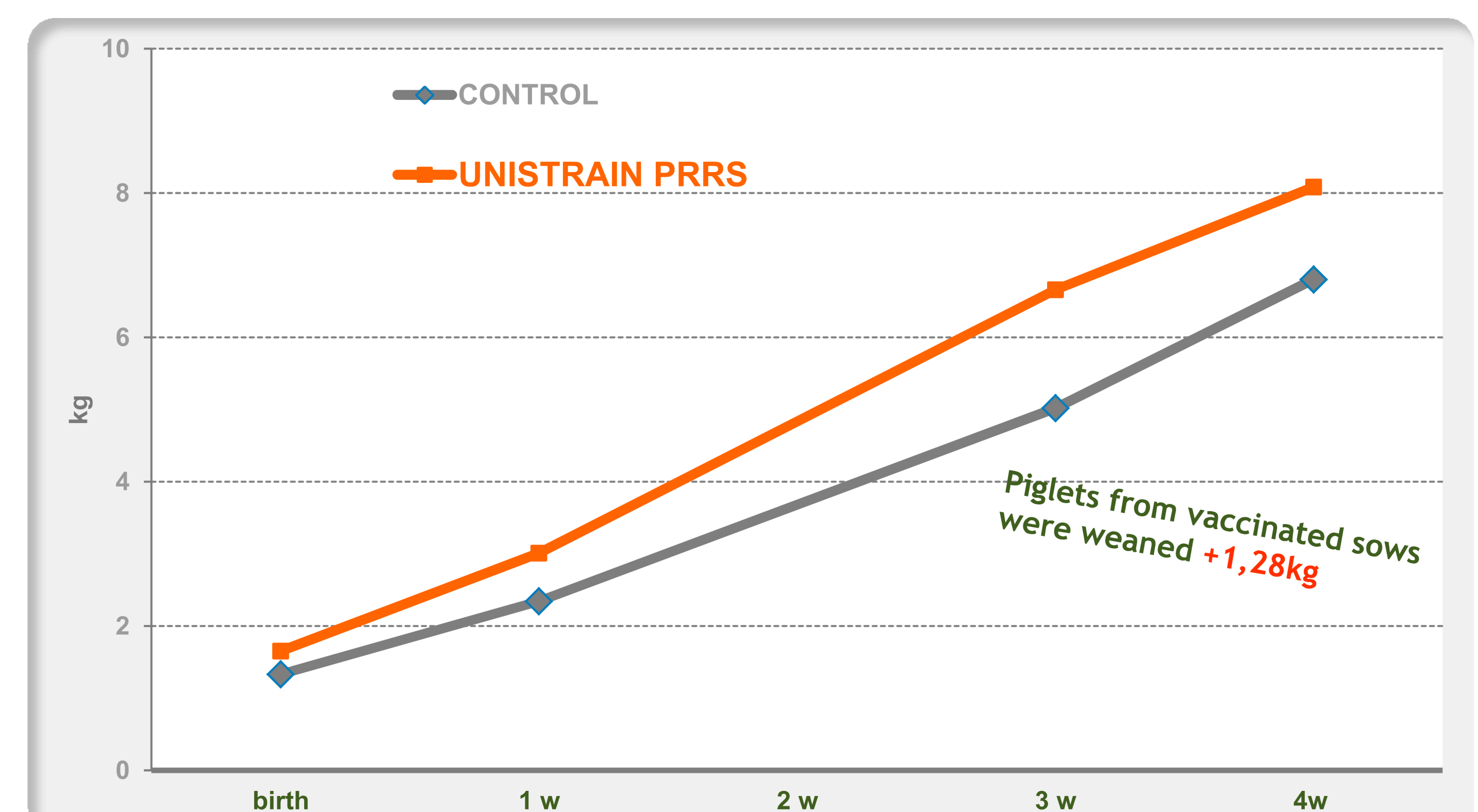
## CONCLUSIONS

Vaccination of gilts with UNISTRAIN® PRRS allowed piglets born from PRRSV infected gilts to survive and clearly perform better during lactation period.

**Figure 1.** Percentage of weaned piglets after PRRSV challenge (t-test;  $p < 0.05$ ).



**Figure 2.** Piglet weight during lactation (t-test;  $p < 0.05$ ).



## BIBLIOGRAPHY

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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](mailto:hipra@hipra.com)  
[www.hipra.com](http://www.hipra.com)