

# Impact of piglet PRRS vaccination with Ingelvac PRRSFLEX® EU on finishing performances in a French farrow to finish farm



C. Trombani<sup>1</sup>, M. Liber<sup>1</sup>, P. Glatre<sup>2</sup>, E. Lewandowski<sup>2</sup>

<sup>1</sup>BREIZHPIG SCOP SAS, Rue du Pontic - 29400 LANDIVISIAU, France; <sup>2</sup>Boehringer Ingelheim, <sup>3</sup>Allée de la Grande Egalonne, 35740 PACE, France

## INTRODUCTION

Porcine Reproductive and Respiratory Syndrome virus (PRRSv) is a major pathogen associated with swine disease. PRRSv infection causes respiratory disease, slower growth and increased mortality in growing and finishing pigs<sup>1</sup>. PRRSv is also a factor triggering production diseases<sup>2</sup>. Biosecurity measures, management measures and vaccination are implemented in infected farms in order to control PRRSv. The objective of this study was to evaluate the impact of a PRRS control plan on medication and production parameters in growing pigs in a farrow to finish farm.

## MATERIALS AND METHODS

This “before and after” study was carried out in a 450-sow farrow-to-finish farm in Brittany, France, with a two week production rhythm. Piglets are weaned at 21 days of age. The herd was at least positive for PRRSv, PCV2, Swine Influenza virus, *Mycoplasma hyopneumoniae* and *Actinobacillus pleuropneumoniae*. At the time of inclusion only gilts and sows were vaccinated against PRRSv with a PRRS MLV vaccine. The former vaccination program consisted in one injection in quarantine and one injection 7 weeks before each farrowing. PRRSv was regularly isolated by PCR from sera or lungs of diseased growing pigs in post-weaning or finishing phase. The ORF7 sequencing was carried out twice and showed each time no relationship with a registered vaccine strain. Before the start of the study, as a prerequisite, biosecurity and management measures were reviewed using the Boehringer Ingelheim France grid. Non-compliant points were insofar as possible corrected: all in-all out in farrowing and finishing rooms, 1 needle per sow, 1 needle per litter and 1 needle for 15 piglets maximum, cleaning and disinfection of the aisles after every pig transfers, boots and coveralls dedicated to farm sectors...

A whole herd vaccination on the same day with Ingelvac PRRSFLEX® EU (1 ml per pig, I.M.) and ReproCyc® PRRS EU (2 ml per sow, I.M.) was first carried out. Then a mass vaccination was implemented on the sow herd every 3 months. Every batch of piglets was vaccinated at 5 weeks of age. The selected criteria to assess PRRS control plan efficacy were recorded on the finishing phase. They include: ADG, loss rates, slaughter condemnations for pleuritis and antibiotic treatments.

## RESULTS

No side effects were recorded after the mass vaccination neither on the sows nor on the growing pigs. This confirms the safety of both PRRS vaccines used and especially the safety of ReproCyc® PRRS EU for sow mass vaccination. PRRS vaccinated pigs performed better resulting in an ADG moving from 725 g to 745 g and a loss rates from 6,2 to 5,2%. The carcass respiratory lesions dropped from 3 to 1,3%. The medical treatment cost was reduced from 1,30 to 1,10€ / pig only due to less antibiotic used.

## DISCUSSION AND CONCLUSION

Under the conditions of this study, vaccination of the piglets around weaning with Ingelvac PRRSFLEX® EU combined with the re-assessment of biosecurity and management measures help to better control Porcine Respiratory Disease Complex. The health status improvement leads to higher performances in finishing. The calculated ROI was 4.

## REFERENCES

1. Rossow, K.D., 1998. *Vet Pathol* 35, 1 – 20.
- 2) Fablet, C. et al, 2012. *Vet. Microbiol.* 157, 152 – 163.

Table 1: Evolution of the selected criteria in finishing phase

	Before PRRS control plan on growing pigs	PRRS control plan in place on growing pigs	Δ
ADG (G)	725	745	+20
Loss rate (%)	6,2	5,2	- 1
Carcass respiratory lesions (%)	3	1,3	- 1,7
Medical treatment cost (€)	1,30	1,10	-0,20

