



# **REPRODUCTION**

## **REP-009**

# EVALUATION OF REPRODUCTIVE PERFORMANCE OF FIXED TIME ARTIFICIAL INSEMINATION VERSUS CONVENTIONAL MULTIPLE INSEMINATION PROTOCOL IN IBERIAN SOWS

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#### Introduction

The aim of this study was to compare the efficacy of a FTAI program using Buserelin  $4\mu g/ml$  (Porceptal®, MSD Animal Health) and conventional based estrous insemination on reproductive performance in commercial Iberian sows during favorable season.

#### **Material and Methods**

A total of 42 multiparous sows (Iberian x Duroc breed, located in a commercial farm in Badajoz, Spain) were included in the study and were randomly assigned to Control (CS, n=21) and Porceptal group (PS, n=21). Sows were weaned on D0. In CS, estrus was checked once a day from D4 until heat onset and two AI were done at 4 and 24h after estrous detection. PS were treated with 2.5ml of Porceptal® (i.m.  $10\mu g$  buserelin)  $135\pm3h$  after D0, and were FTAI 30-33h later (a single AI was performed). Females with estrous behavior before FTAI or not showing estrus at insemination were identified and excluded from the study. Pregnancy rate, gestation length, and farrowing data were recorded.

## Results

Pregnancy rates were not different between groups (CS: 86.6% vs PS: 81.6%; p >0.05). Gestation length of P dams was almost 2 days lower than in C ones (111.0  $\pm$ 0.18 vs 112.8  $\pm$ 0.17 d, respectively, p <0.001). Farrowing rate was not impacted by treatment (CS: 84.4% vs PS: 78.9%) and prolificacy was also not different (total born CS: 6.2  $\pm$ 0.38 vs PS: 6.6  $\pm$ 0.42 piglets; p>0.05). Piglet weight at birth from PS was significantly higher than CS (P<0.05) while no differences were observed in the intra-litter coefficient of weight variation (P>0.05).

## **Conclusions**

Although pregnancy rates or farrowing rates were not different between treatments, gestation length was shorter in Porceptal® compared to control sows. Number of total piglets delivered was not different between groups, but piglet weight was higher in the Porceptal group.