

# INTENSIVE IMMUNIZATION OF GILTS IMPROVES HEALTH STATUS OF THEIR PROGENIES

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## INTRODUCTION

Piglets weight at birth, weight gain and percentage of piglet survival during lactation are lower for primiparous than for multiparous sows litters, and this may have consequences into the nursery and finishing phases of growth.

One cause of the lower productive performance and viability observed in primiparous sows litters might be related to a lower immune transmission via colostrum, which would result in a higher susceptibility to pathogens and a lower health status.

The **objective** of this study was to evaluate the effect of intensive immunization of gilts on productive performance and health status of their progenies.

## MATERIALS AND METHODS

The experiment was conducted in a farrow-to-finish commercial farm in Mantova (Italy). Usual vaccination program of sows: Aujeszky, PRRS, Erysipela and Parvovirus.

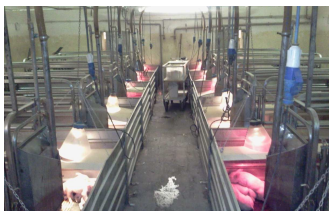
### Experimental treatments:

- **16 multiparous (SOW):** parities 3-6. Usual vaccination program.
- **16 gilts (GILT):** usual vaccination program.
- **16 gilts (H-GILT):** more intensively immunized adding Circovirus and colibacillosis vaccines.

### Data collected

- Individual weighing of progenies at birth, weaning (21 d age), end nursery (63 d), and every 2 months until slaughtering (270 d)
- Mortality: daily record
- At slaughtering, assessment of lung pneumonia lesions and presence of pleuritis.

Data were analysed by GLM models of SAS (v. 9.00).



## RESULTS

### ✓ HEALTH STATUS

- Body weight:
  - No differences at birth weight (1.5 kg).
  - At weaning and at the end of nursery phase, the SOW group had significantly higher BW.
  - At the end of fattening period no differences, but numerically higher in GILT (166.4 kg) than in SOW (163.0 kg) and in H-GILT (161.0 kg).
- Percentage of mortality was higher in GILT than in H-GILT and SOW (Figure 1).
- At slaughtering, presence of lung lesions was also higher in GILT than in H-GILT and SOW (Figure 2).

Figure 1- Percentage of mortality

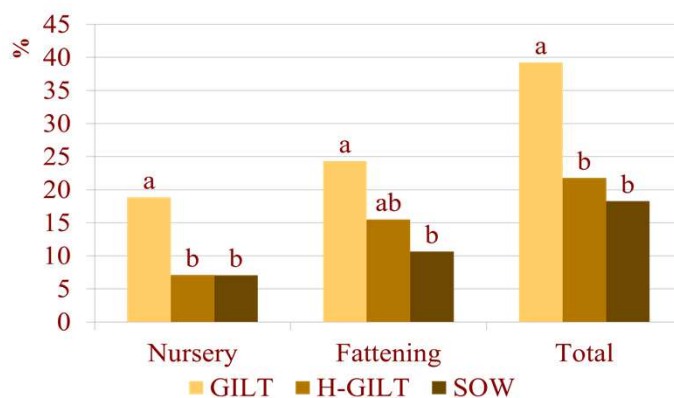
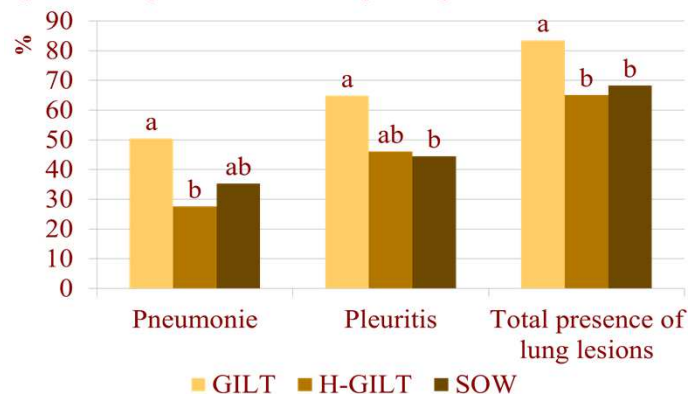


Figure 2- Lung lesions at the slaughtering



## CONCLUSION

Intensive immunization of gilts decreased mortality and the presence of lung lesions at the slaughtering, although did not affect productive performance.

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