

Effects of routine administration of Meloxicam (Metacam®) in sows after farrowing on piglets performance

S Andreoni¹, O Vischi¹, F Persico²

¹Boehringer Ingelheim Italia spa Divisione Vetmedica; ²DVM Vet practitioner; simone.andreoni@boehringer-ingelheim.com

INTRODUCTION

Swine is the specie that suffers from the highest lactation losses, from 12 % to 25 %¹.

PPDS (post partum dysgalactia syndrome) in sows is associated with economic losses in piglets with decreased growth and increased mortality; the use of NSAIDs as an adjunct therapy in PPDS is described to alleviate effects of inflammation and endotoxiemia in sows and to increase piglet survival².

The use of NSAIDs during lactation is limited to clinical PPDS in sows while is not common to treat both clinical as well as subclinical PPDS.

The aim of the study is to investigate the effects of a systematic administration of Metacam® (Boehringer Ingelheim Vetmedica GmbH) in sows under Italian swine production management conditions.

MATERIALS AND METHODS

The field trial was conducted in two farms with different PPDS incidence (Farm A: 700 sows farrow-to-wean, Farm B: 250 sows farrow-to-wean) located in the center and north of Italy respectively. Overall, 203 sows were randomly allocated on the day of farrowing, to group “treated” (93 sows: 42 Farm A, 51 Farm B) or group “control” (110 sows: 49 Farm A, 61 Farm B). All sows were uniquely identified by numbered ear tag and their litters by farrowing pen number. No cross-fostering was allowed between the two groups, while it was possible within the same group.

In the control group only clinical cases of PPDS were injected with Metacam® while all sows in the treated group received a Metacam® injection IM at 0,4 mg/kg b.w. (2 ml/100 kg b.w.).

Referred to sanitary prevention procedure active in the farms, all the sows received a parenteral antibiotic treatment at farrow.

The efficacy of the treatment was evaluated by comparing mortality rate and body weight at weaning date (21d Farm A, 25d Farm B). Body weight data were analyzed by Student’s test. Mortality rate was analyzed using the Chi-Square-test. Significance level was $p < 0.05$.

RESULTS

Overall, 2.743 born alive piglets were included in the trial (1.241 treated vs 1.502 control). Total piglet mortality rate up to weaning was significantly lower in the Metacam® group compared to control group (7.57 % vs. 12.12 %; $p = 0.0001$) (figure 1). This resulted in higher survival rate of treated group (92,43 % vs 87,88 %)

In the control group 10/49 sows of farm A and 1/61 sow of farm B were treated for clinical PPDS.

Regarding litter performances, piglets from treated sows showed higher weight at weaning than the control group (Farm A 6.06 vs 5.67 Kg $p < 0,05$; Farm B 6,86 vs 6,59 Kg $p > 0,05$) (Figure 2).

FIGURE 1: MORTALITY RATE % ($p = 0,0001$)

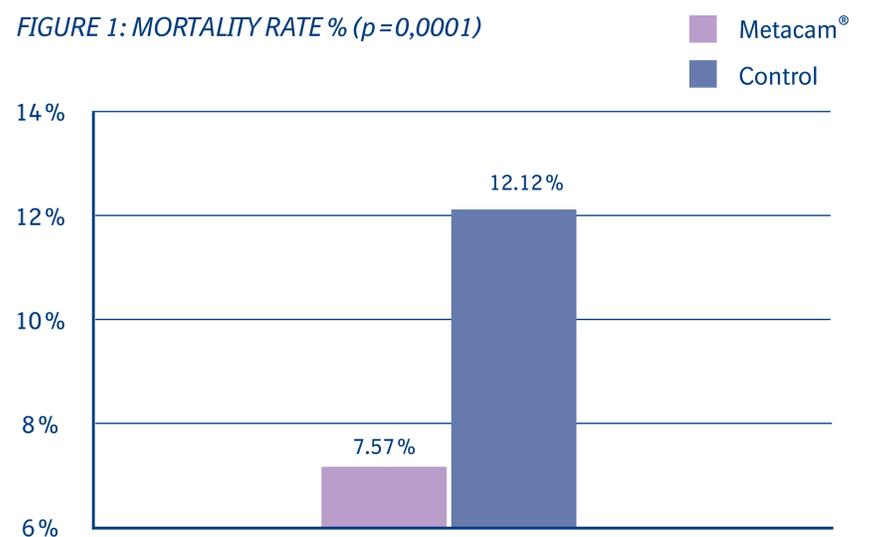
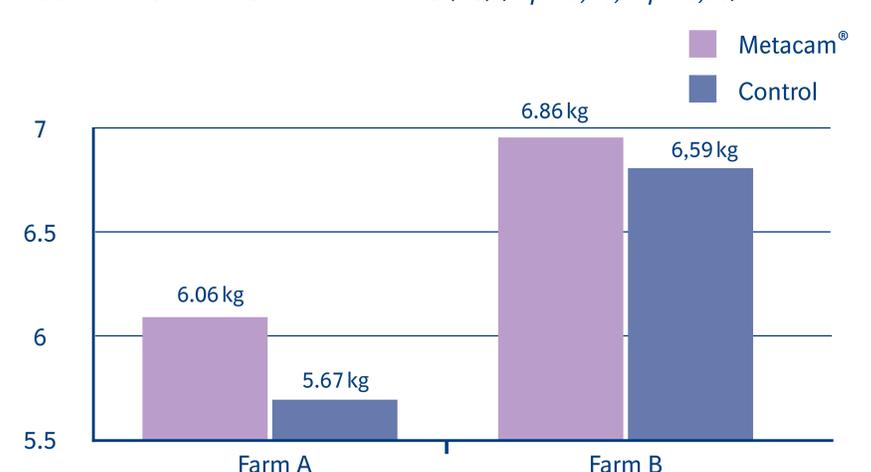


FIGURE 2: BODY WEIGHT AT WEANING (KG) (A $p < 0,05$; B $p > 0,05$)



DISCUSSION AND CONCLUSION

Not all sows exhibit the same range of intensity of PPDS clinical signs and number of affected sows may vary².

Is reported that with a 1% improvement in piglet mortality assumed from the treatment, the benefits outweigh the treatment cost³.

In this trial, in presence of different PPDS incidence, routine administration of Metacam® in sows at farrowing, significantly decreased piglet mortality rate and increased piglets weight at weaning .

REFERENCES

1. Alonso-Spilsbury et al. (2007) J. An. Vet. Adv. 6, 76-86.
2. Martineau et al. (2012) Disease of swine 10th 18, 270-293
3. Hirsch et al. (2003). J. Vet. Phar. Ther. 26, 355-360.