



## HERD HEALTH MANAGEMENT & ECONOMY

HHM-049

### **A STUDY OF TILMICOSIN SUPPLEMENTATION IN FEED AND IT'S EFFECT ON LACTATION PERFORMANCE IN SOWS**

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#### **Introduction**

Porcine Reproductive and Respiratory Syndrome (PRRS) is considered as the most economically important diseases in pig industry worldwide. Active infection during farrowing period cause vertical transmission of PRRSv from sow to piglets. Umbilical blood testing can be used to identify such transmission. Tilmicosin, a macrolide antibiotic has been reported to reduce the severity of PRRSv infection in nursery pigs. Moreover, tilmicosin provides activity against PRRSv. The objective of this study was to investigate the effect of tilmicosin (Pulmotil®) supplementation in sows feed prior to farrow and during lactation on lactation performance parameters in a farm with PRRSv infection.

#### **Materials and Methods**

Total of 64 sows were selected from a farm with history of PRRSv. Sows were divided into two groups, control (C) group (32 Sows) was fed conventional feed and treatment (T) group (32 Sows) was fed supplemented feed with Pulmotil® 400 ppm during pre-farrowing period and 200 ppm during lactation period. Blood was collected from umbilical vein of piglets born from each sow (15 sows from each group) for PRRS RT-PCR assay. Sow and piglet performance and also the estimated costs associated with treatment and control were recorded and calculated.

#### **Results and Discussion**

Results are showing an increase in litter size (14.16 vs. 14.63), number piglets born alive (11.59 vs. 12.22), post weaning litter size (10.06 vs. 10.32) and a reduction in the percentage still birth (-1.8%) and mummified pigs (-0.76%) in the treatment group. Treated Pigs showed a significant increase ( $p < 0.05$ ) in weaning weight (+13.8%) and litter weight gain (+21.6%). Analysis of cost-effectiveness showed that, at costs of 10.30\$ per sow for Pulmotil, the total benefit of litter per sow was 15.33\$, resulting in a return on investment of 48.8% In conclusion, use of Pulmotil reduced clinical expression of PRRSv infection with positive performance effects.