



## IMMUNOLOGY & VACCINOLOGY

IMM-039

### EVALUATION OF THE EFFECT OF UNISTRAIN VACCINATION BY SERUMPROFILING AND ANTIBIOTIC USAGE

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#### Introduction

At a Dutch farm a recurrent respiratory problem appeared in the weaned piglets of 6 - 8 weeks. Clinical signs were coughing and diminished growth. Antibiotics were used to relieve clinical signs. Diagnosis was made by a serumprofile, collecting blood in various age groups. The result of the serumprofile made the farmer change his PRRS vaccination strategy. Evaluation of this strategy was executed by serumprofiling every 6 months.

#### Material & Methods

The serumprofiles consisted of bloodsamples from 6 gilts of 5 and 8 months, 1-st, 3-rd, 5-th and 7-th parity sows and also in piglets of 4, 7 and 10 weeks of age. The pathogens monitored were PRRS, App, Mycoplasma hyopneumoniae, Erysipelas, Parvo and Influenza. Collection data were Oktober 2016, March 2017 and Oktober 2017.

#### Results

In serumprofile Oktober '16 sows of different parities had high PRRS titers indicating a field infection, although mass vaccinated 4 times a year. Piglets were not vaccinated and titers were PRRS positive at 10 weeks. The vaccination strategy changed per November '16 towards 4 times a year mass vaccination of the sows and vaccination of the piglets with Hipra Unistrain Intradermal. Follow up with serumprofiles at March '17 and Oktober '17 showed lower average titers in the sows at various parities. In piglets, 10 weeks, average titers were negative (Graph 1). The clinical signs were diminished and also antibiotic use evaluated with 'Animal Daily Dosages' decreased since 1-12-16 (Table 1).

#### Discussion & Conclusions

Serumprofiles are usefull in the diagnosing process and in evaluating vaccination strategies. Important is to sample a large number of age groups with a reasonable number of samples. Than it gives an indication when a disease starts in a herd and the preferred vaccination moment. Also evaluation of antibiotic usage can show the effect of a change in vaccination strategy.