



## IMMUNOLOGY & VACCINOLOGY

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### **SIGNIFICANT REDUCTION OF PCV2-VIRAEMIA AND IMPROVEMENT OF PRODUCTION PARAMETERS DURING FATTENING FOLLOWING VACCINATION WITH A READY-TO-USE PCV MHYO VACCINE**

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#### **Introduction**

In order to improve animal welfare and production processes, one-shot vaccines that are as effective as separate vaccination schemes, have been developed. The aim of the field trial was to compare efficacy of a combination PCV-Mhyo vaccine against another conventional PCV / Mhyo vaccine by measuring PCV2-virus reduction and production parameters under field conditions.

#### **Material & Method**

The study was done in a farrow-to-finish farm in Southern Germany. Piglets from 3 farrowing groups were randomly assigned to three groups: 142 piglets in group A were vaccinated with Porcilis® PCV M Hyo, 142 piglets in group B received CircoFLEX®/MycoFLEX® and 143 piglets in group C were left untreated. All piglets were weighed 3 times in regular intervals and blood samples were collected from 10 % of the animals before vaccination (T0) and in the middle of finishing (T1) to assess PCV2 viremia.

#### **Results**

PCV2-viraemia was significantly reduced in both vaccinated groups compared to the control group. At time T0, no PCV2 DNA could be detected. The average PCV2 antigen levels in group A at time T1 were significantly lower compared to the control group ( $p > 0.0001$ ) and numerically lower than group B (not significant  $p = 0.1979$ ). Average daily weight gain during the finishing period was significantly higher in group A (724g) compared to group C (692g;  $p = 0.028$ ) and group B (713g;  $p = 0.0311$ ). The Group A animals grew more uniformly than Group B and C animals, resulting in fewer fattening days.

#### **Discussion and Conclusion**

The results supported an acute PCV2-field infection during the study. Vaccination with a PCV Mhyo RTU vaccine effectively reduced PCV2-viremia and improved ADWG under field conditions. Since introduction of the vaccine, the animals are growing more uniformly and have improved health status.