

## **VVD-PP-17**

### **TITLE**

DETECTION OF PORCINE CIRCOVIRUS TYPE 2 (PCV2) IN DIFFERENT DIAGNOSTIC MATERIALS

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### **CONTENT**

Background&Objectives

The aim of the study was to compare the presence of PCV2 DNA in serum, feces and oral fluid from pigs from 10 Polish farms vaccinated against PCV2.

Material&Methods

Serum, feces and oral fluid samples from piglets, weaners and fatteners were obtained from 10 farms using different vaccines and vaccination protocols. Samples were analyzed with in house Real Time PCR for PCV2. Ct>37 was considered negative.

Results

PCV2 was detected in oral fluid from 9 out of 10 farms. On average 56.8% of tested oral fluid samples were positive for PCV2, but the prevalence ranged from 0% in farm 3 to 100% in farms 2 and 5. The mean PCV2 genome equivalent in oral fluid was  $1.6 \times 10^6$  (min.= $1.2 \times 10^4$ ; max.= $1.9 \times 10^7$ ) copies/ml. The virus was found in feces from 8 out of 10 farms. 37.9% of fecal samples reacted positive for PCV2 and the prevalence ranged from 0% in farms 1 and 3 to 75.0% in farms 2 and 4. Mean PCV2 genome equivalent was  $1.2 \times 10^5$  (min.= $1.2 \times 10^4$ ; max.= $4.0 \times 10^6$ ) copies/ml. PCV2 was detected in serum from 4 out of 10 farms. In farms 2, 4 and 7 viremia was detected in fatteners. In farm 6 it was detected only in 17-week-old pigs. On average PCV2 was detected only in 16.4% of serum samples and mean PCV2 genome equivalent was  $3.7 \times 10^6$  (min.= $1.1 \times 10^4$ ; max.= $7.5 \times 10^7$ ) copies/ml.

Discussion&Conclusion

Populations of pigs vaccinated against PCV2 can exhibit different patterns of the presence of PCV2 DNA in serum, feces and oral fluid. Even non-viremic pigs can shed PCV2 with feces. Oral fluid can be recommended for monitoring of PCV2 elimination from farms.

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