

## **VVD-PP-03**

### **TITLE**

**CLINICAL AND VIRAL CHARACTERISTICS OF RECENT PRRS OUTBREAKS ON SOW FARMS IN THE NETHERLANDS**

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### **CONTENT**

#### **Background and objectives**

Since its introduction in the Netherlands in 1991 PRRSv still causes clinical outbreaks and subsequent economic damage on swine farms. In this study a description is given of farm characteristics, clinical picture and sequence results of the found PRRSv strains on 27 sow farms with a recent laboratory confirmed clinical PRRS outbreak in the period of 2015 to 2018.

#### **Material & Methods**

PRRS outbreaks on sow farms in the period of 2015 to 2018 were investigated. Farm size varied from 200 to 3000 sows, including farrow to finish farms. Five farms did not vaccinate the sows, 19 used modified live vaccines and one farm used a killed vaccine.

#### **Results**

The distribution of outbreaks over the seasons was: 13 outbreaks in the fourth quarter, 7 outbreaks in the first, 5 in the second, and 2 in the third quarter. First clinical signs were seen in sows (26 farms), or in weaners, finishers or breeding stock (5 farms). Typing of isolated PRRSv strains was done in 22 farms, this resulted in 21 field strains and one vaccine strain. Phylogenetical analysis based on ORF5 sequencing showed no indication for the circulation of Acro-, Lena- or Flanders-13-virus strains.

#### **Discussion and conclusion**

This study confirms that even accurately applied vaccination schemes, in sows and piglets together, are no guarantee for prevention of PRRS outbreaks. Based on the sequence results farm owners concluded that either a new virus introduction had occurred, or a known virus was still circulating on the farm. This has led to adjustments in internal or external biosecurity procedures. Typing of PRRSv strains is a useful tool for farm owners and veterinarians to assess and adjust existing biosecurity protocols.