

**TITLE**

**AVERAGE DAILY GAIN IN FINISHING HERDS INCREASED 34 G FOLLOWING PORCILIS® PCV M HYO VACCINATION**

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**CONTENT**

**Background and Objectives**

In practice, evaluation of vaccine efficacy is often based on development in production parameters following implementation of a vaccination program. The study objective was to evaluate mortality, average daily gain and feed conversion rate in commercial Danish finishing herds following Porcilis® PCV M Hyo vaccination.

**Material and Methods**

In 23 Danish finishing herds initiating Porcilis® PCV M Hyo vaccination in 2015 or 2016, production data from one year before and one year after fully implemented vaccination (whole herd vaccinated) were compared. Out of the 23 herds, 18 also previously vaccinated against PCV2 and *M. hyopneumoniae*. The development in production data was calculated by subtracting the 'before' from the 'after' data and Student's one-sample t-tests were used to determine if the developments significantly differed from zero. To account for previous vaccination strategies, year of initiated vaccination, difference in start weights between the periods and shared ownership for some herds, a linear mixed model was built for each production parameter.

**Results**

On average, mortality was reduced by 0.5% point ( $p=0.002$ ), average daily gain increased 36 g ( $p=0.001$ ) and feed conversion rate decreased 0.03 FU/kg ( $p=0.095$ ). When shared ownership (all parameters) and difference in start weights (average daily gain) were controlled for, the improvements following Porcilis® PCV M Hyo vaccination were -0.5% point mortality ( $p=0.01$ ), +34 g average daily gain ( $p<0.001$ ) and -0.04 FU/kg ( $p=0.13$ ). Previous vaccination strategy and year of vaccination were not significant in any of the models.

**Discussion and Conclusion**

In these 23 finishing herds, mortality and average daily gain significantly improved following Porcilis® PCV M Hyo vaccination. Totally, the enhanced productivity corresponded to ~€1.5 per finisher produced, regardless of whether a previous vaccination strategy against PCV2 and/or *M. hyopneumoniae* existed.