



# Productivity improvements following Porcilis® PCV M Hyo vaccination

Gitte Blach Nielsen, Carsten Gade & John Haugegaard  
MSD Animal Health Nordic, Havneholmen 25, 1561 Copenhagen V, Denmark

## INTRODUCTION

Although the efficacy of a new vaccine is thoroughly proven prior to being marketed, follow-up on efficacy after large-scale use in the field is important. The aim of this Danish historical study was to evaluate the effect of Porcilis® PCV M Hyo during the weaning period.

## MATERIALS & METHODS

Retrospectively, production data like mortality, feed conversion rate (FCR) and average daily gain (ADG) were collected from Danish weaning herds vaccinated with Porcilis® PCV M Hyo. Data from one year prior to initiation of vaccination was compared to data from one year after fully-implemented vaccination. The intermediate period (six months), where the herds contained both vaccinated and non-vaccinated pigs, was omitted from the dataset. Also, herds that experienced severe disease outbreaks with other pathogens or disease clearances (mainly with PRRS) during the study period (2½ years) were excluded. Pairwise statistical comparisons were performed by Student's t-test for mortality and FCR and by Wilcoxon's test for ADG due to a non-normal distribution of data.

## RESULTS

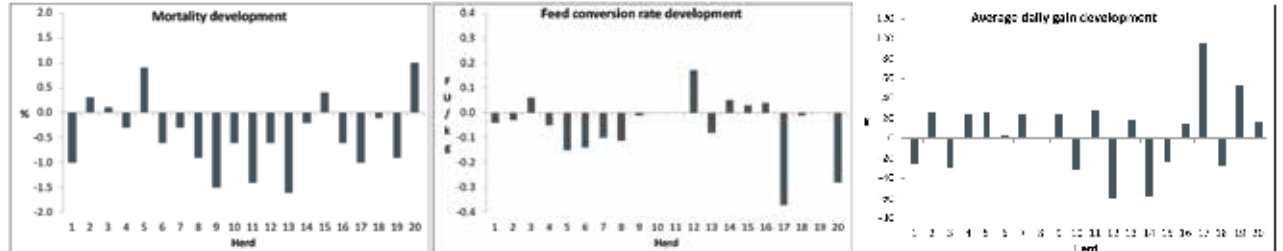
Twenty Danish herds totally producing 650,000 pigs per year were included in the data set. Figure 1 shows the development in production data comparing pre- and post-vaccination periods. On average during the weaning period, mortality decreased by 0.4% (p=0.01), FCR decreased by 0.06 feeding units/kg (p=0.07) and ADG increased by 5 g (p=0.83). This improved productivity has a value of €0.5.

Of the 20 herds, 12 herds previously used another PCV2 vaccine, whereas 8 herds did not previously vaccinate against PCV2 (Figure 2). For these two sub-groups, the improvements in productivity corresponded to €0.3 and €1, respectively.

## DISCUSSION AND CONCLUSION

The historical study design does not allow for distinguishing the effect of vaccination from the effect of time. Opposed to most parallel studies, however, a historical design allows for the inclusion of a large number of observations, adding power to the study at a different level. The improved productivity following vaccination, coinciding with an unchanged productivity during the same period at a national level, supports an economical benefit of Porcilis® PCV M Hyo already in the weaning period.

**Figure 1.** Development in productivity data for each of all the 20 weaning herds (Difference between post- and pre-vaccination periods).



**Figure 2.** Development in productivity data for each of the 8 weaning herds not previously vaccinating against PCV2 (Difference between post- and pre-vaccination periods).

