



# **HERD HEALTH MANAGEMENT & ECONOMY**

HHM-023

EVALUATION OF THE EFFICACY OF A SINGLE SHOT VACCINE, HYOGEN®, IN COMPARISON WITH A TWO SHOT VACCINE, ON PROTECTION AGAINST SWINE ENZOOTIC PNEUMONIA IN THE PARMA HAM - PIGS IN ITALY

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#### Introduction

Pigs raised for the Parma ham production in Italy are slaughtered at approximately 170kg body weight. Typical late infections like *M.hyopneumoniae* represent a severe challenge in those farms. The efficient prevention of infection and its impact on growth performance requires a long lasting immunity and protection, which can be evaluated by scoring lungs at slaughter and by recording pigs' growth rate. Therefore, the aim of this trial was to evaluate the efficacy of a single shot vaccine, Hyogen®, in comparison with a two shot vaccine (A), on protection against Enzootic Pneumonia (EP) in Parma ham-pigs.

### **Material and methods**

A commercial multisite farm with 2200 sows was selected for the trial. In total 1190 pigs of 9 batches were vaccinated with Hyogen® at 3 WOA (group G1) and 405 pigs from 3 batches vaccinated with vaccine A at 1 and 3WOA (group G2). Pigs' growth performance was recorded and the relevant economic impact was calculated by using Respinomics<sup>TM</sup>. Lung scoring was performed at slaughterhouse according to the Ceva Lung Program.

## Results

G1 had on average 60 gr higher ADG (p>0.05) compared to G2. The EP-Index (calculated from the frequency and severity of EP-like lesions) was on average by 0.4 lower (p<0.05) for animals which were vaccinated with Hyogen® compared to those vaccinated with Vaccine A, whereas the percentage of scars did not differ significantly (p>0.05) between the two groups (G1=0.44, G2=1.0). The economic benefit due to higher ADG in G1 was 4.17€ per pig.

### **Conclusions**

The single dose vaccination with Hyogen® improved pigs' lung health and farm's profitability due to better growth performance. Moreover, it was more convenient for the personnel and less stressful for the pigs compared to the double shot vaccination, suggesting an easily applicable and rewarding measure for long lasting protection against EP.