



HHM-006

## **ANALYSIS OF THE ECONOMIC IMPACT OF LUNG LESIONS THANKS TO THE CEVA LUNG PROGRAM (CLP) AFTER SETTING UP A NEW VACCINE AGAINST ENZOOTIC PNEUMONIA (HYOGEN®)**

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### **Introduction**

Natural infection of growing pigs in farms due to *Mycoplasma hyopneumoniae* can result in substantial losses in the growth performance. It is possible to evaluate the incidence and severity of those infections by scoring bronchopneumonia lesions in slaughter pigs. Ceva Lung Program (CLP) is an efficient tool to follow the evolution and the prevalence of enzootic pneumonia.

### **Material and methods**

The aim of the study was to validate the change of the vaccine plan with a new *Mycoplasma* vaccine, Hyogen® by measuring the consequences in reducing the lung lesions and the potential economic benefit.

The study has been set up in 27 farms from the west part of France between 2015 and 2017. These farms, for which lung controls before and after the new vaccine protocol with Hyogen® were available in the CLP database, were selected. All the farms were using a *Mycoplasma* vaccine before Hyogen. A 6-month period for each protocol was considered. Lung lesion scoring (Madec) and the percentage of healthy lungs were analysed. The economic impact was calculated taking into account the link between the weight loss, the increase of FCR and mortality (= cost) with the lung score and the percentage of pleurisy seen at the slaughter house.

### **Results**

More than 110 lung controls have been done before and after changing the vaccine protocol (16000 lungs scored). The Madec index average have been improved in 85 % of farms and the economic impact have been positive in 70%. Using Hyogen increased the proportion of healthy lung about 12 points, divided the lung score by two to reach 1.13 and consequently decreased the economic impact of 1.16 euros.

### **Conclusion**

This study enables to validate the value measured in farms using Hyogen, thanks to the evaluation of the lung lesions at the slaughterhouse and their economic impact.