



## **BACTERIAL DISEASES**

BBD-032

# A FIELD TRIAL COMPARING THE EFFICACY OF TWO VACCINES AGAINST MYCOPLASMA HYOPNEUMONIAE IN TERMS OF LUNG LESIONS AND GROWTH PERFORMANCE

M. Lisgara<sup>1</sup>, K. Poulaki<sup>2</sup>, L. Kalogeropoulos<sup>1</sup>, <u>R. Krejci</u><sup>3</sup>.

<sup>1</sup>Ceva Hellas, Athens, Greece; <sup>2</sup>Tsikakis-Giannopoulos SA, Sparta, Greece; <sup>3</sup>Ceva, Libourne, France.

#### Introduction

Mycoplasma hyopneumoniae is the primary pathogen of Enzootic Pneumonia and can predispose to the porcine respiratory disease complex. Vaccination is commonly used to reduce coughing, lung lesions and performance losses due to Mycoplasma hyopneumoniae infection. In the present study, the effect of a novel vaccine against swine Enzootic Pneumonia on lung lesions and pigs' carcass weight was investigated in comparison with another commercial vaccine, in a Greek swine farm.

#### **Materials and Methods**

The study took place in a Greek farrow to finish herd with 1000 sows. The study began in June 2016, when 500 piglets were vaccinated with Hyogen® (group 1) and 500 piglets with Vaccine A (group 2). Per request of the farmer in both groups one shot of the vaccines was administered in 7<sup>th</sup> and 21<sup>st</sup> day of life, with 1 and 2ml per injection for groups 1 and 2, respectively. Pig' lungs were examined at slaughter for EP-like lesions by using a Ceva Lung Program methodology and their carcasses were weighed separately.

### **Results**

In total 670 lungs and carcasses were evaluated and weighed, respectively (group 1: 306 and group 2: 364). Lungs from animals belonging to group 1 were 0.66 times less likely (P=0.024) to have any EP-like lesions compared to lungs from animals belonging to group 2. Also, the percentage of affected lung parenchyma was on average 1.98 less (P < 0.001) for animals vaccinated with Hyogen® compared to Vaccine A. Regarding carcass weight, animals from group 1 weighed on average 810 gr more compared to animals from group 2, however, this difference was not statistically significant (P=0.37). All results were adjusted for slaughter age-effect.

## **Conclusions**

Under the conditions of the present study, animals vaccinated with Hyogen® had lower frequency and severity of EP-like lesions and better growth performance compared to animals vaccinated with Vaccine A.