

# PRV vaccine AUSKIPRA® GN (A3 solvent; Bartha k61 strain) provide quick and strong protection against Chinese PRV variant

Zeng R <sup>1</sup>, Wang J <sup>2</sup>, Torrents D<sup>3</sup>, Martinez C <sup>3</sup>, Pedrazuela R<sup>3</sup>, Galé I<sup>3</sup>.

<sup>1</sup> Hipra China, Beijing (PRC)

<sup>2</sup> Jiangsu Academy of Agricultural Science, Nanjing, China

<sup>3</sup> Swine Business Unit, HIPRA, Amer , Spain

[zeng.rongyu@hipra.com](mailto:zeng.rongyu@hipra.com)

## INTRODUCTION

Since 2011 several Pseudorabies (PR) outbreaks have damaged Chinese swine industry<sup>1</sup>. The aim of this study was to asses clinical protection of PRV MLV (AUSKIPRA®GN, HIPRA) in piglets infected with new Chinese PRV variant (AH02 strain)

## MATERIALS AND METHODS

Fifteen healthy and free PRV, 4 to 6 weeks old piglets, were randomly separated into 3 groups: Group A: Treated intramuscularly (IM) with 2ml AUSKIPRA®GN (Bartha k61 strain) reconstituted in A3 solvent and challenge intranasaly (IN) with AH02 strain (n=5), Group B: Treated IM with 2ml PBS solution and challenge IN with AH02 strain (n=5) and Group C: Treated IM with 2 ml PBS no challenge (n=5). Piglets were treated at D0 and challenged at D7. Clinical signs and increase in body temperature of all animals were recorded from three days before vaccination until 14 days post challenge.

## RESULTS

All animals in groups A and C remained healthy throughout the study. All animals in group B suffered from clinical sings and moreover, 3 piglets died after challenge (60% mortality) (*Table 1*). Clinical sings of depression, loss of appetite, difficulty of breathing due to cough, sneeze and purulent nasal discharge were observed. Convulsion and ataxia were also observed from D5 post challenge in group B (*Table 1*).

**Table 1.** Clinical signs of piglets before and post challenge. Morbidity and mortality records.

| Group | Before challenge | Post challenge | Morbidity | Mortality |
|-------|------------------|----------------|-----------|-----------|
| A     | -                | -              | 0/5       | 0/5       |
| B     | -                | +              | 5/5       | 3/5       |
| C     | -                | -              | 0/5       | 0/5       |

Note: “-” indicates no clinical signs. “+” indicates clinical signs.

No increase in body temperature was seen in groups A and C during the study. All animals in group B showed fever between 4 to 7 days (≥40,5°C) (*Table 2*).

**Table 2.** Incidence and duration of fever.

| Group | Fever(≥40.5°C) frequency |                     |
|-------|--------------------------|---------------------|
|       | Number of piglets (a/b)  | Lasting time (days) |
| A     | 0/5                      | /                   |
| B     | 5/5                      | 4~7                 |
| C     | 0/5                      | 0                   |

Note: “a” piglets that showed fever. “b” number of piglets of the group.

## DISCUSSION

In this study, PRV vaccine AUSKIPRA®GN reconstituted in A3 solvent, showed clinical protection after challenge with new Chinese pathogenic PRV strain. Therefore, AUSKIPRA®GN can be a useful tool to control PRV infection in Chinese farms.

## REFERENCES

[1] Yu X., et al. Emerg Infect Dis. 2014. 20:102–104.



Laboratorios Hipra, S.A.  
Avda. la Selva, 135  
17170 Amer (Girona)  
Spain  
  
Tel (34) 972 43 06 60  
Fax (34) 972 43 06 61  
[hipra@hipra.com](mailto:hipra@hipra.com)  
[www.hipra.com](http://www.hipra.com)