

**Effect of vaccination of Ingelvac® PRRSMLV in a 860-sow farm in East China**

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**Introduction**

Porcine reproductive and respiratory syndrome (PRRS), is economically the most important disease in swine, affecting the pig industry worldwide<sup>(1)</sup>. Epidemiologic studies show that PRRS is endemic in most pig farms in China and causing high losses. Vaccination has been proven to be an effective measure to control the disease<sup>(2)</sup>. In this study, the effect of Ingelvac® PRRS MLV vaccination on production parameters in nursery in a Chinese pig farm affected by PRRS was evaluated.

**Materials and Methods**

A single-site farm with 860 sows in Anhui province of East China had been suffering from high mortality in nursery since 2009. Piglet vaccination for PCV2 (CircoFLEX®, 1ml) and M.hyo (from a local company) were implemented in order to reduce the loss in February 2010. The mortality was reduced from about 20% to about 10%. However, the respiratory symptoms like coughing and abdominal breathing were still present as well as fever and anorexia. Nursery pigs at 5-8 weeks of age were affected most. Samples from lungs, tonsil, kidney and lymph nodes and other organs were collected from 10 sick pigs for PCR analysis. Blood samples were tested for CSFv, PRRSv and PCV2 and the result showed that 7 of the 10 samples were positive for PRRSV while for classical swine fever and PCV2 all samples were negative.

In June 2011, a side-by-side, double-blinded trial was conducted in two farrowing batches of piglets. For each batch one group (Vac) at the age of 10 days was vaccinated with Ingelvac® PRRS MLV (2ml.), while the other group (Control) was injected with saline (2ml). The 2 groups were kept in separated houses and similar management like feeding, temperature and medication was applied to both groups. For both groups, CircoFLEX® was injected at 14 days of age; M.hyo vaccine was injected at 21 days of age; CSF vaccine as injected at 28 and 60 days of age. Morbidity, mortality, and average daily weight gain (ADWG) were recorded from 35 days of age up to 70 days of age.

**Results**

The performance of the two treatment groups is shown in Table 1.

**Table 1.** Production performance (from 35 to 70 days of age)

	Vac	Control	Diff.
Pigs (n)	456	456	0
Morbidity (%)	4.17	15.57	-11.40
Mortality (%)	1.97	8.55	-6.58
ADWG (g/d)	435.5	390.5	+45

**Discussion**

Like many pig farms in China, this farm in Anhui province had high losses in the nursery phase and tried to resolve the problem by introducing PCV2 and M.hyo vaccines. Those two vaccines had an impact on performance already but PRRS was still causing huge losses. In this case Ingelvac® PRRS MLV vaccination has shown (on top of the regular vaccination program) to be an effective tool in PRRS control and successfully reduced the loss in nursery. After the evaluation of the trial the farm started to use Ingelvac® PRRS MLV in sows (mass vaccination of all breeding animals every 3 month) and pigs (vaccination at 10 days of age) as a tool to control PRRS.

**References**

1. Zimmermann, J. (2006) Proc.19th IPVS, Copenhagen, 1:18-25
2. Voglmayer, T et al.; PRRSV eradication in a closed breeding unit without interruption of production by means of application of a MLV vaccine and herd closure; Tierarztl Prax 2006; 34: 241-8