

A field case vaccinating with Ingelvac® PRRS MLV to control PRRS NADC30-like strain in China

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INTRODUCTION

Porcine reproductive and respiratory syndrome virus (PRRSV) continues to cause a very high economic impact on swine industry. Since Highly pathogenic PRRSV outbreak and HP PRRSV vaccine widely been used in China, PRRSV is mutating fast and recombinant in field condition, bringing more newly mutant strains. These years, NADC30-like is prevalent and isolated in some farms, which caused severe clinical symptoms. This field study demonstrates the efficacy of Ingelvac® PRRS MLV against NADC30-like in a Chinese farm.

MATERIALS AND METHODS

The pig farm has 1200 sows located in mid China, two-site design and weekly batch production. Pigs are moved to nursery site after weaning. It is a PRV negative, PRRSV positive stable farm without any PRRS vaccine. Before the 10th week of 2017, production parameters are very normal. But since 11th week of 2017, some sows showed anorexia, fever and abortion signs with more still borns and higher pre-wean mortality. Diagnostic results showed HPPRRSV positive, and sequenced as NADC 30-like strain. Preventions after diagnostics: close sow herd and no new gilts entry within 8 months. All the sows were mass vaccinated with Ingelvac® PRRS MLV at 12th week and 16th week, one sow one needle, and vaccinated sows every 3 months. Piglets in farrowing room were managed with McRebel rule. Conduct strict biosecurity to prevent new virus introduction. After that the production index were steadily recovering. Collect 30 week or sick piglets at 27th and 31th week and test with 5 in 1 pool for PCR, the results showed PRRSV negative.

RESULTS

After twice vaccination, the abortions steadily declined and were back to normal production level. Although there is a transition period for vaccines showing efficacy, stillborns and pre-wean mortality were still improved significantly after second mass vaccination. Piglets in farrowing room were tested PRRS PCR negative, so production performance steadily recover back to PRRS stable.

Figure 1. SPC chart of abortions pre/post outbreak

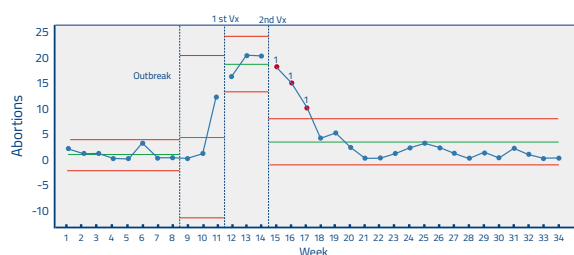


Figure 2. SPC chart of pre-wean mortality

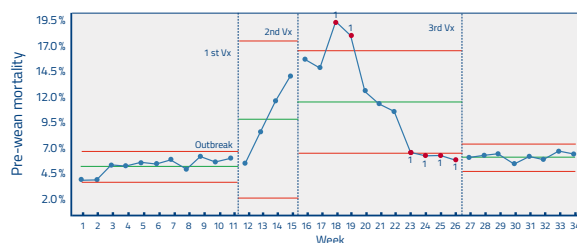
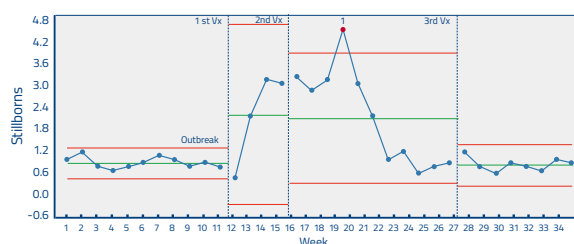


Figure 3. SPC chart of stillborns per litter



DISCUSSION

NADC 30-like infection can cause severe reproductive performance decline and high pre-weaning mortality. Vaccinating with Ingelvac® PRRS MLV and other management can efficiently control clinical signs in a NADC30-like positive farm, improve performance and reduce virus circulation in herds. Further study need to be continued to see NADC30-like impact on growing pigs and the protection of other vaccine strain.

