

SAFETY OF SUISENG® AND RHINISENG® WHEN COMBINED IN A SINGLE INJECTION IN GILTS

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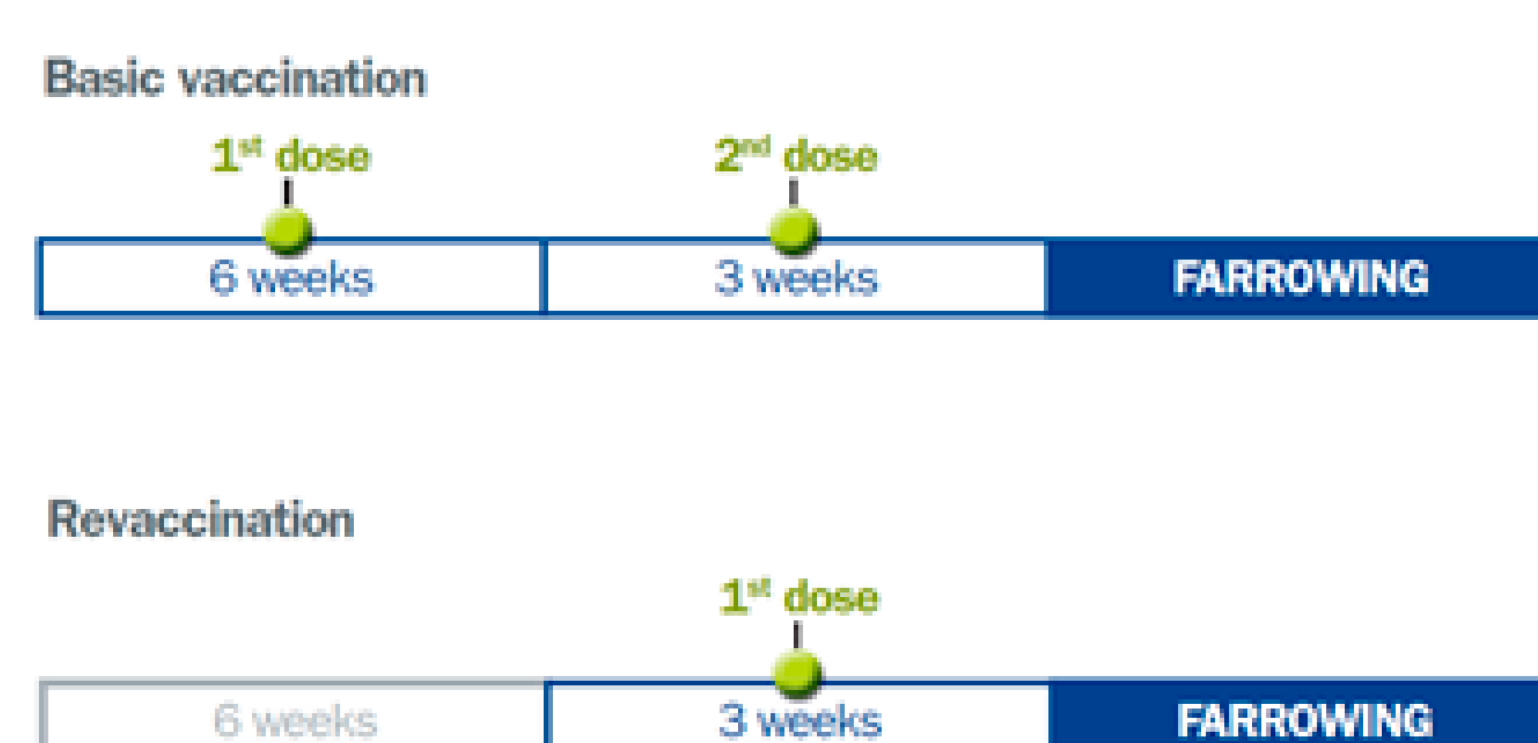
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INTRODUCTION

The combination of vaccines is a common practice in the field, with the aim of facilitating the management of a farm and reducing the number of injections applied to pigs.

SUISENG® is a vaccine against neonatal diarrhoea in piglets and sudden death in sows, and RHINISENG® vaccine for preventing progressive and non-progressive atrophic rhinitis of swine. Both vaccines contain a similar adjuvant, Hipramune-G, and are administered, following the same vaccination schedule, to pregnant sows and gilts to passively protect their offspring:



SUISENG® contains purified adhesion factors (F4ab, F4ac, F5 and F6) and the heat labile toxin (LT) of *Escherichia coli*, the β toxin of *Clostridium perfringens* type C and the α toxin of *Clostridium novyi*. RHINISENG® contains the recombinant toxin of *Pasteurella multocida* type D and inactivated *Bordetella bronchiseptica*.

The objective of this study is to assess local and systemic safety of SUISENG® and RHINISENG® when they are mixed and injected in gilts.

MATERIALS AND METHODS

Twenty-four eight-month-old gilts, clinically healthy and free from antibodies against *P. multocida* toxin (PMT), *B. bronchiseptica* (Bb) and the main pathogenicity factors of *E. coli* were randomly assigned to 4 groups of 6 animals each.

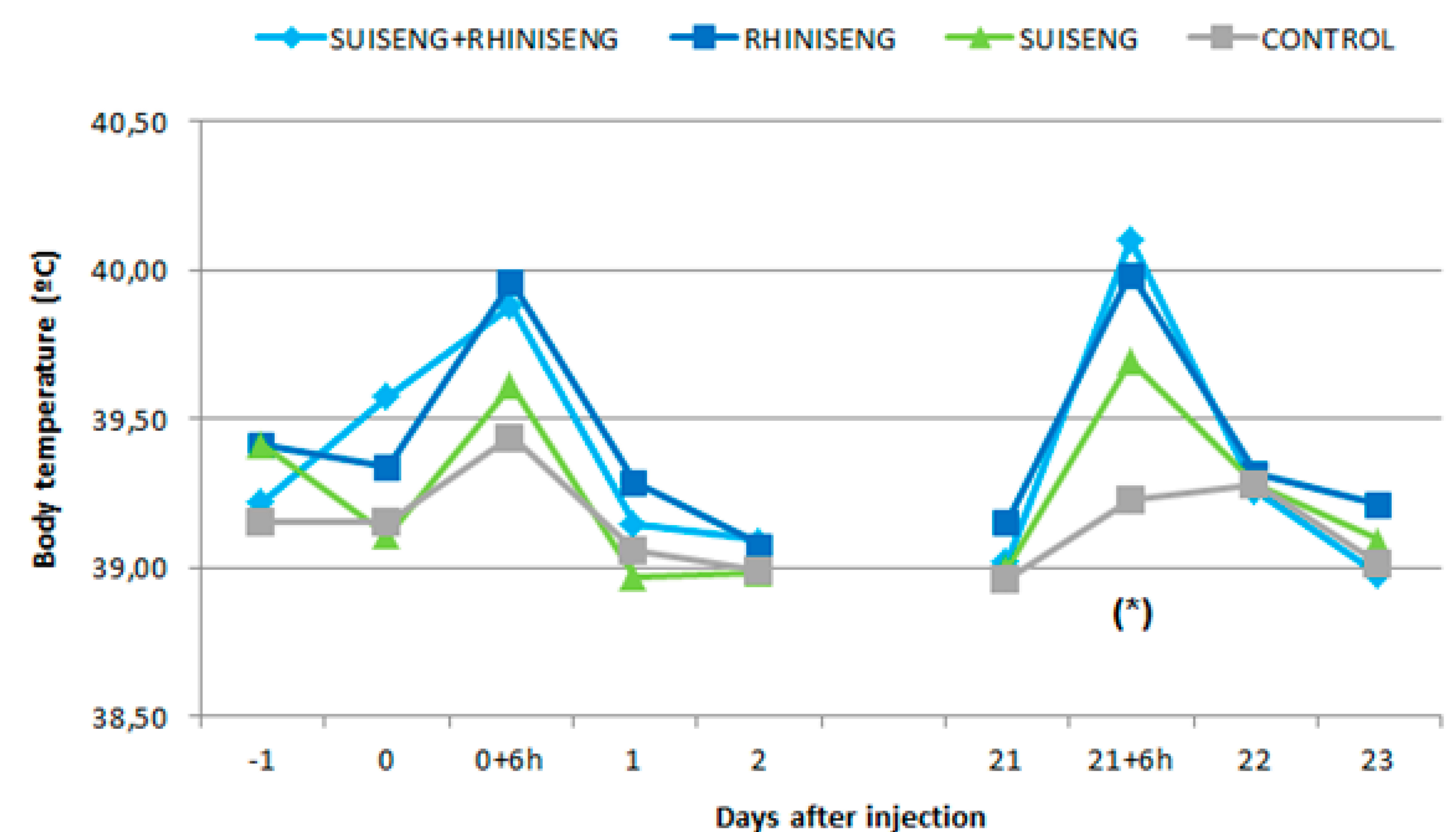
	Vaccine	Dose
	SUISENG®+RHINISENG®	4ml
	RHINISENG®	2ml
	SUISENG®	2ml
	CONTROL	2ml

The groups were vaccinated twice intramuscularly 3 weeks apart with a mixture of SUISENG®+RHINISENG® (4ml), or with SUISENG® alone (2ml) or with RHINISENG® alone (2ml). The control group received a 2ml dose of PBS twice as a placebo.

Body temperatures and local and systemic reactions to vaccination were evaluated.

RESULTS

Figure 1. Mean rectal temperature (°C) after vaccinating and revaccinating the animals.



* Indicates significant differences between the Suiseng+Rhiniseng group and the control group ($p=0.043$)

Neither of the two vaccines administered alone or in combination caused abnormal reactions at the inoculation site. Similarly, no systemic reactions were observed in any of the vaccinated animals.

CONCLUSIONS AND DISCUSSION

Although SUISENG® and RHINISENG® are products with safety parameters that fulfil the requirements for separate administration in adult pigs, both vaccines have the same vaccination scheme and similar adjuvants. Therefore, there is a need to evaluate the feasibility of combined administration in the event that it takes place in practice.

The results obtained in the present trial demonstrate optimal safety for this combination under field conditions in gilts. Consequently, although this indication is entirely under the responsibility of the veterinarian, there are no safety concerns that may prevent this practice.



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