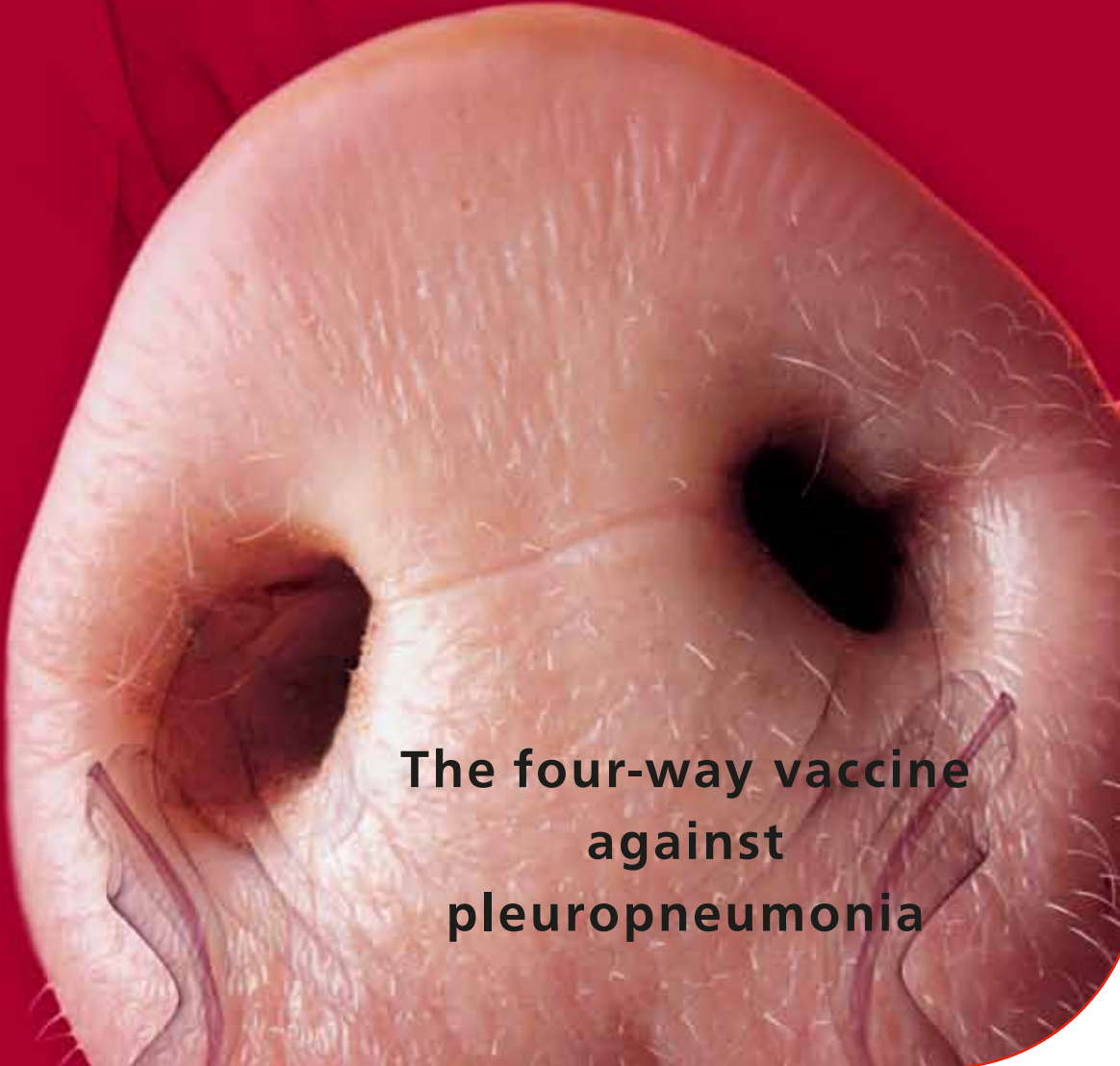


Porcilis[®] APP

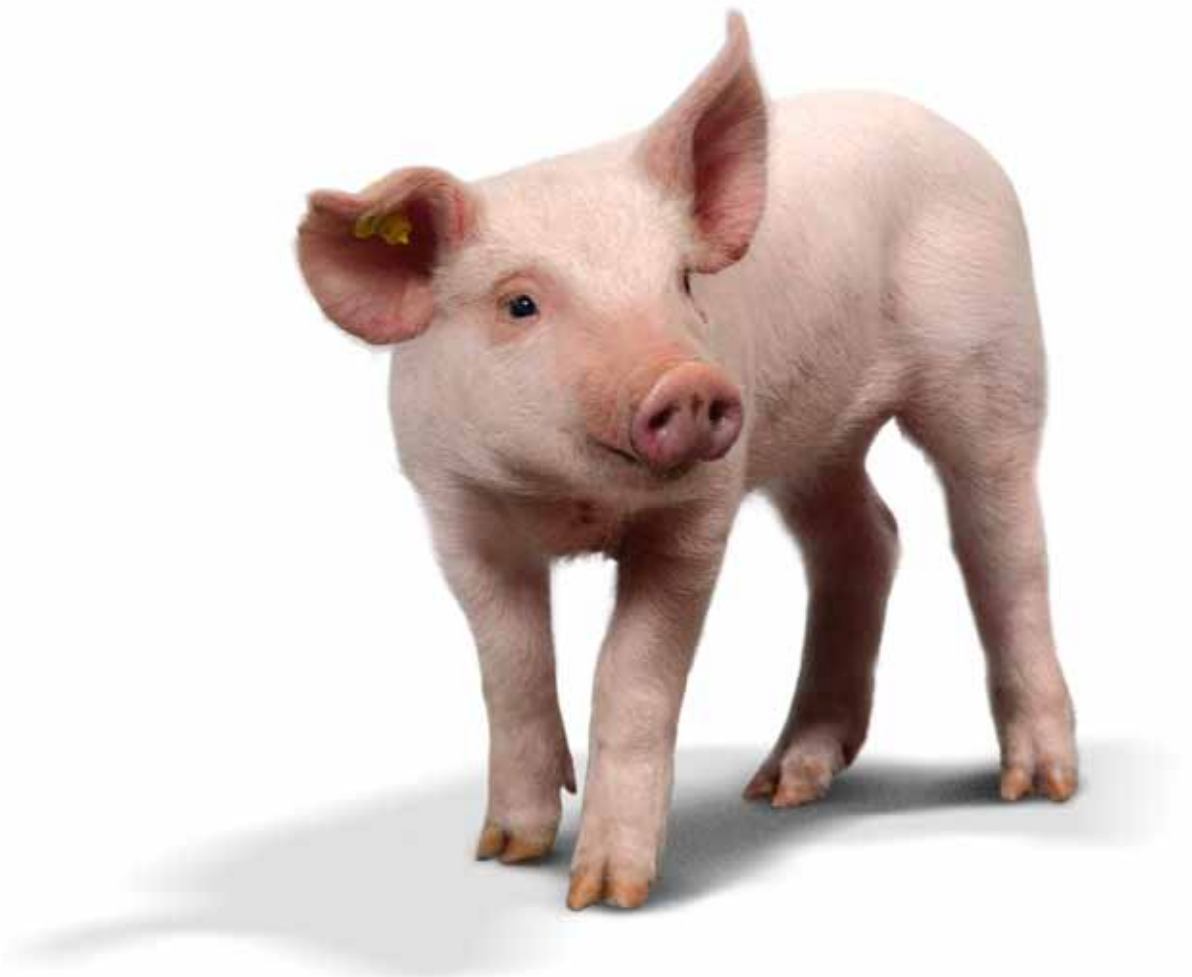
The scent of best performance

A close-up, high-angle photograph of a pig's snout, showing the texture of its skin and the two nostrils. The pig is positioned in the lower half of the frame, with its snout facing towards the right. The background is a solid, vibrant red color.

The four-way vaccine
against
pleuropneumonia

Porcilis[®] APP

Pleuropneumonia in pigs is spread rapidly by airborne route or by direct contact, leading to considerable economic losses due to mortality and growth retardation. Vaccination with Porcilis APP protects against all known serotypes, as well as financial disaster.



Actinobacillus pleuropneumoniae infection

Porcine pleuropneumonia

- Rapid transmission by airborne spread of droplets and direct contact
- 15 serotypes of *Actinobacillus pleuropneumoniae* bacteria have been described
- The prevalence varies from country to country and may alter from time to time
- Mortality and growth retardation cause considerable economic losses
- Increased need for medication with antibiotics

Clinical signs of pleuropneumonia

Acute form:

- Acute to peracute illness, with sudden deaths
- High fever
- Severe dyspnoea and gasping in sitting position
- Foamy, bloodstained exudate from mouth and nostrils

Chronic form:

- Coughing
- Growth retardation
- Loss of appetite

Subclinical pleuropneumonia

- Growth retardation
- Increased feed conversion index

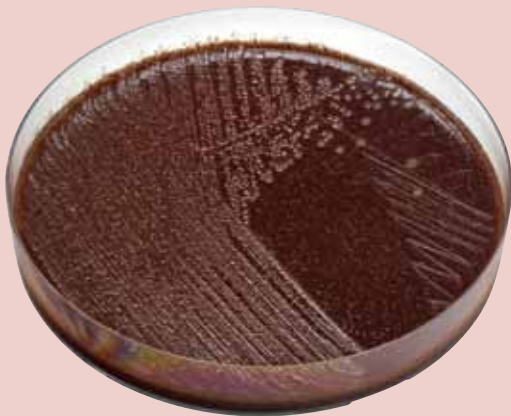


Porcilis APP Protection

Effective against all 15 serotypes¹

Porcilis APP is a sub-unit vaccine based on 4 antigens covering all 15 serotypes

- Little or no cross protection between toxin pattern groups
- National reports need updating regularly²



The 15 Serotypes



The 4-way vaccine
against
pleuropneumonia

Slaughterhouse Pleuritis Evaluation System "SPES"



0



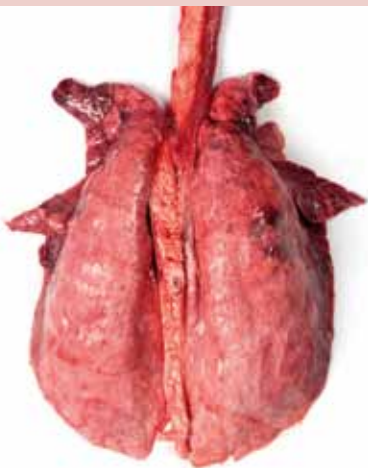
1

Score Lesion

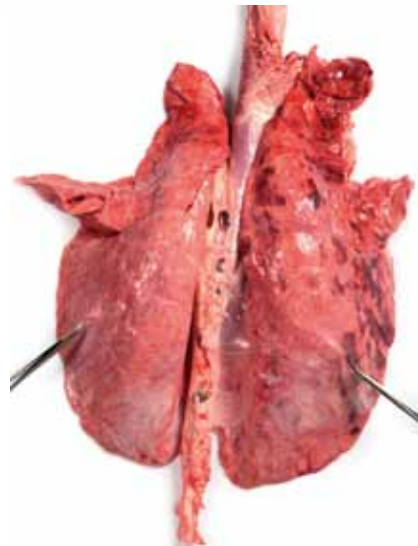
- | | |
|---|---|
| 0 | No lesion |
| 1 | Ventro-cranial lesion: pleural adherence between lobes or at ventral border of lobes |
| 2 | Dorso-caudal monolateral focal (not diffused) lesion |
| 3 | Bilateral lesion of type 2 or extended monolateral lesion ($\geq 1/3$ of one diaphragmatic lobe) |
| 4 | Severely extended bilateral lesion ($\geq 1/3$ of both diaphragmatic lobes) |



2



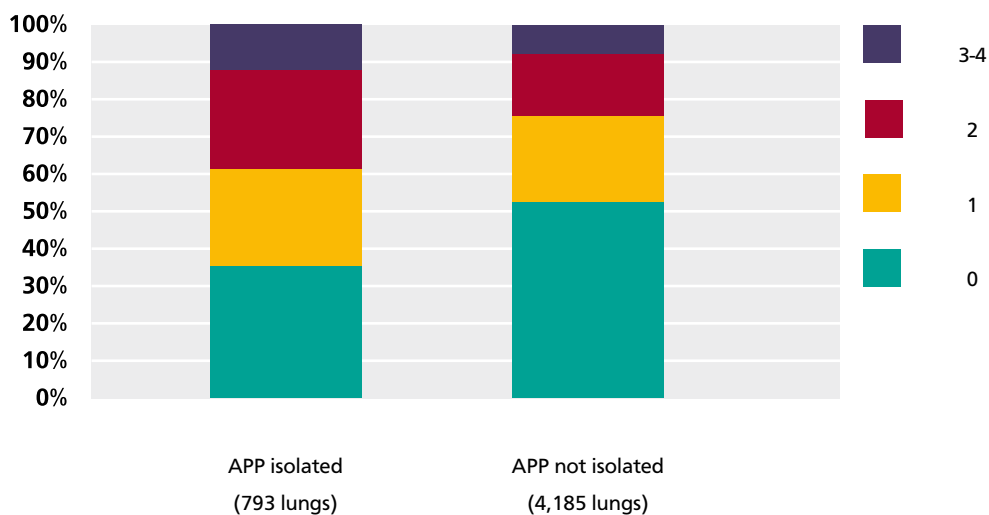
4



3

Free your pigs from APP, let them grow faster with cleaner lungs³

SPES Application in a farm with previous APP isolation versus no isolation⁵



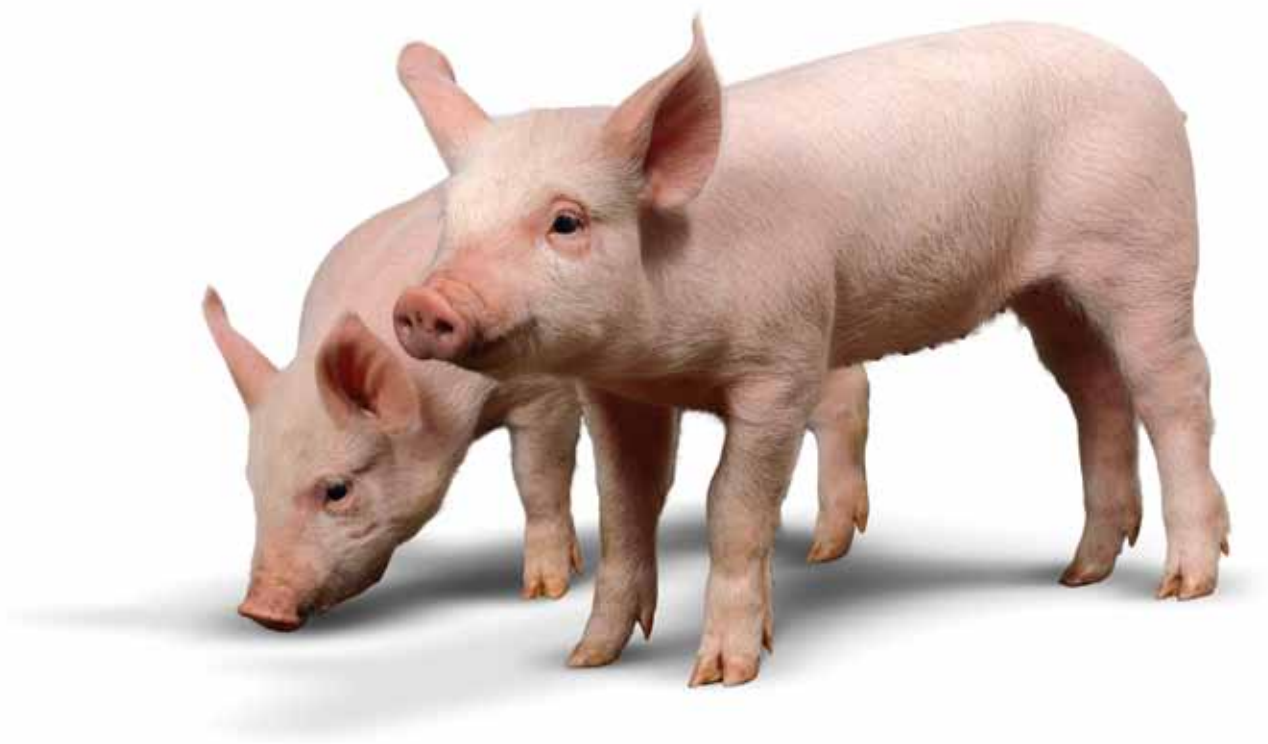
Porcilis APP vaccination, experience from the field

- Protection against all known serotypes, so serotyping is not necessary¹
- Highly significant reduction in the cost of App medication⁴
- Prevention of growth retardation due to App infections⁴

Reduction in cost of medication⁶

Results for 116 pens 4144 vaccinated vs 6042 non vaccinated pigs
(chronic and acute infections)

	NON Vacc Rate (N)	Vaccinated Rate (N)	Difference	p-value
Parenteral treatments (in %)	66.5 (53)	8.9 (42)	57.6	< 0.001
Feed medication (in days)	7.2 (40)	2.5 (33)	4.7	< 0.001



Prevention of growth retardation⁷

Herd Data	360 vaccinated	360 control	Calculated Benefit per pig
ADG (growing) (g/d)	812*	739*	€ 1.90a
Average Rearing period (d)	199.6*	212.1*	
ADG (grower to finish) (g/d)	687*	661*	
Medicated Feed treatment (days)	29*	43*	
Antibiotic treatment cost for PRDC (€/pig)	3.49*	6.68*	€ 3.19
Mortality - PRDC (%)	1.39*	4.17*	€ 1.65b
		Total	€ 6.74 per pig

*p < 0.05

- a) 0.152 EUR per fattening space per day
- b) 0.5932 EUR per 1% mortality

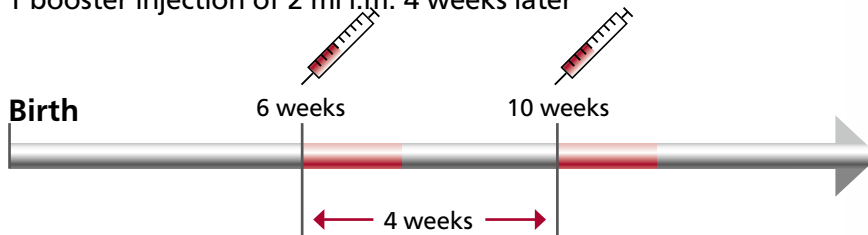
The four-way pleuropneumonia protection

Indication

Protection of pigs against infection with *Actinobacillus pleuropneumoniae*

Vaccination scheme

1 injection of 2 ml i.m. from 6 weeks of age onwards
1 booster injection of 2 ml i.m. 4 weeks later



Dosage and administration

2 ml deep i.m. injection behind the ear. To reduce possible vomiting, withhold feed prior to vaccination

Presentation

Vials of 20 ml (10 doses), 100 ml (50 doses) and 200 ml (100 doses)

Precaution

Shortly after vaccination, transient lethargy, anorexia and rise in body temperature may occur. Like the light swelling at the injection site, these symptoms will resolve within 24 hours and do not cause growth retardation.



PORCILIS® APP. Suspension containing per dose of 2 ml: 600 mg antigen concentrate (containing 50 units Apx I, 50 units Apx II, 50 units Apx III and 50 units OMP) in a dl- α -tocopherol based adjuvant. **Indications for use, specifying the target species** Active immunization of weanling pigs as an aid in the control of pleuropneumonia caused by *Actinobacillus pleuropneumoniae*. **Contra-indications** Vaccinate healthy pigs only. **Undesirable effects (frequency and seriousness)** After vaccination pigs show a mild systemic reaction with fever, dullness and anorexia. If they have a full stomach at the time of vaccination, vomiting may sometimes occur. Temporary mild swelling at the injection site may occur in part of the pigs. These reactions disappear within 24 hours post vaccination. **Special precaution(s)** for use Before using the vaccin allow it to reach room temperature (15-25°C). Use sterile syringes and needles. Shake the vaccine before and during use. **Posology and method of administration** The vaccine should be administered deep intramuscularly behind the ear. Maximum protection should be achieved before the start of the fattening period. Pigs can be vaccinated from an age of 6 weeks. Two vaccinations at a minimum interval of 4 weeks are required. It is advised to give these at 6 and 10 weeks of age. **Withdrawal period** Zero days **Special precautions for storage** Store in the dark at 2-8°C. Do not freeze. **Nature and contents of container** Vials of glass Type I (Ph.Eur) or PET, closed with a halogenobutyl rubber stopper (Ph. Eur.) and sealed with a coded aluminium cap. The vials contain 20, 50, 100 (or 250 ml) of vaccine. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER Intervet International B.V. Represented by: [local company] Wim de Körverstraat 35, 5831 AN Boxmeer, The Netherlands.

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References

- 1 Bosch v.c., 1994
- 2 Cromwijk, 1992
- 3 Kobisch et al, 1992
- 4 Ridremont, IPVS 2000
- 5 P. Martelli 7 al., 2008. Report on "Application on the SPES grid on pleuritis scoring in Italian slaughter pigs", graph 7, page 7

- 6 Valks & al., 14th IPVS Congress, Bologna, 1996
- 7 Gozio & al., 19th IPVS Congress, Copenhagen, 2006