

The highest protection against atrophic rhinitis

A DEEP BREATH INTO WELLBEING



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PIGLETS ARE BORN WITH NO PROTECTION

Passively acquired immunity

- Piglets don't acquire antibodies from the sow through the placenta, so they are naturally born in a very vulnerable state.
- Piglets acquire protection by drinking colostrum, which is secreted by sows during the first hours of life and transports antibodies into the piglets. The antibodies represent the sow's own circulating antibodies.
- During the first hours of life, the piglet's intestine has the ability to absorb colostrum antibodies before they are digested by enzymes, allowing for them to be carried to the blood soon after the first suck.⁶

of passive immunity,

- Happens during the first 24 hours of sucking.
- Immunoglobulin G (IgG), and Immunoglobulin A (IgA) from colostrum.

THE ROAD TO **A HEALTHIER PIGLET STARTS WITH** Porcilis®

LET YOUR PIGLETS BREATH BETTER **SO THEY CAN GROW BETTER**

Porcilis® a high level of protection against atrophic rhinitis in pigs that never compromises productivity.

Piglets are at risk of infection early on, thus passive immunization through colostrum is an optimal way to protect them. Since piglets can still be suckling, it precludes the ability to use water or feed antibiotics.¹

These passively acquired colostral antibodies gradually begin to disappear and by the first

doesn't contain enough antibodies, piglets will be at a higher risk of infection.



Secretory IgA									
18 Weeks	17	6	•	15	14	13	12	11	10
					D				



DRINKING COLOSTRUM





of atrophy of the turbinate bones¹

SUSCEPTIBLE TO SEVERAL DISEASES

Atrophic rhinitis is an infectious disease of swine which occurs enzootic or sporadically, depending on the herd immunity and various environmental conditions.



Progressive form

Bordetella bronchiseptica and more serious form toxin-producing strains of Pasteurella multocida are the main

P. multocida produces a toxin that causes a progressive inflammation of the tissues. This can progress to the turbinate bones, which will lead

 The turbinate bones are essential as they act as the piglet's first line of defense against infections acquired through the respiratory route.²

Porcilis® AR-T DF PROTECTS PIGLETS **BY VACCINATING SOWS**

Porcilis® (AR-T DF can help reduce clinical signs of atrophic rhinitis in your piglets thanks to its two base components:

Protein dO (non-toxic deletion derivate of P. multocida dermo-necrotic toxin)

he Diluvac Forte adjuvant bs enhance the immunitary response.

Inactivated B. bronchiseptica cells

Porcilis® (AR-T DF

can protect your piglets by passively immunizing them, by giving the colostrum a higher antibody count versus colostrum from a non-vaccinated sow.

Higher Antibody Titer Part 1

- Farrow to finish farm
- 2,000 sows
- No clinical signs attributable to AR
- Treatment groups:
 - Four groups of 20 gilts, each vaccinated with a different commercially available vaccine



Seroconversion was considered to have occurred when the dermo-nectrotic toxins of *P. multocida* (SN-DNT) and the toxin of *B. bronchoseptica* (MAT-BbT+) titers of the T2 samples were at least double to those of the T0 sample.

Higher Antibody Titer Part 2

- Two-phase production system
- 3.000 sows
- Northwest Spain
- Treatment groups (group size was 10):
- Vaccine A: mineral oil adjuvant
- Vaccine B: mineral oil adjuvant
- Vaccine C: Ginseng adjuvant
- Porcilis[®] AR-T DF
- Control (non-vaccinated)⁷

Results

Porcilis® AR-T DF was shown to induce high titers against both antigens. Overall high antibody production towards both Bb and PTM shows that Porcilis® (AR-T DF is the vaccine of choice to prevent atrophy of the turbinate bones and ensures better growth rates in piglets.7

Mean antibody titers (\log_2)



WHEN PROTECTED FROM INFECTION, **PIGLETS CAN GROW FASTER AND HEALTHIER**

Economic Impact \bigcirc

• Economic effects associated with the depressed growth and taking longer to reach market weight is significant. Cost of feed alone would hurt profit margins per each pig.

mm

• As the turbinate bones become more damaged, it leads to a greater predisposition for other deeper-seated respiratory disease to take place.^{1,4}

Snout Scores Mean turbinate atrophy: 1 -18

A high score represents a high level of atrophy in the snout due to atrophic rhinitis infection.9



The positive impact of AR and PAR comes from two main factors:

There is a direct correlation between anatomical damage and growth retardation.

As the following figure shows, up to 22% reduce growth rate.1,4



If the pigs are experiencing problems eating, it will take them longer to reach market size and as a result there will be more carcass variation as well as higher operation costs.

These problems can be avoided by vaccinating sows with Porcilis® (AR-T DF



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Vaccination scheme

Primary vaccination

- A single IM vaccination of 1 dose (2 ml) followed, after an interval of 4 weeks, by a second single vaccination.
- The second vaccination should be given 2 to 4 weeks prior to farrowing.



Booster vaccination

 A single IM dose (2 ml) should be given 2 to 4 weeks prior to each subsequent farrowing

(8)

Weeks before farrowing

(6)

VET YOUR PIGLETS BREATH BETTER SO THEY CAN GROW BETTER





Vaccination





The highest protection against atrophic rhinitis

For high and uniform colostrum titers for the best protection

For the reduction of clinical signs of progressive atrophic rhinitis in piglets by passive oral immunization with colostrum from sows actively immunized with the vaccine.⁸

References:

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