

# The right choice for superior performance, productivity and profitability

▶ **Treats mixed respiratory disease (PRDC)**

*Mycoplasma hyopneumoniae, Actinobacillus pleuropneumoniae, Haemophilus parasuis, Pasteurella multocida, Bordetella bronchiseptica, Streptococcus suis*

▶ **Treats mixed enteric disease**

*Lawsonia intracellularis, Brachyspira hyodysenteriae, Brachyspira pilosicoli*

▶ **Treats mixed respiratory and enteric disease**

*Mycoplasma spp., Actinobacillus pleuropneumoniae, Haemophilus parasuis, Pasteurella multocida, Bordetella bronchiseptica, Streptococcus suis, Lawsonia intracellularis, Brachyspira spp.*

▶ **Treats infections complicated by PRRSV, PCV-2, PMWS**

*Mycoplasma hyopneumoniae, Actinobacillus pleuropneumoniae, Lawsonia intracellularis, Brachyspira hyodysenteriae, Brachyspira pilosicoli, Streptococcus suis, PRDC*

▶ **Greater profit per pig**

Denagard gives up to €23.60 per pig more profit than Lincomycin<sup>1</sup>

See the difference



**Denagard**<sup>®</sup>  
tiamulin

## Backed by Novartis

**Novartis Animal Health is one of the world's principal manufacturers of antibiotics for use in pig production. Based in the Tyrol region of Austria, our specialist manufacturing arm is the international leader in the production of pleuromutilins including Denagard.**

**Around the world, pig producers and their feed suppliers depend on Denagard as the guarantee of quality they need to keep pigs and profits healthy.**

### ▶ **Quality manufacture**

World-class manufacture delivers a dependable performance product that is consistently potent, stable against degradation; easy to store, mix and administer.

### ▶ **Worldwide support**

Novartis has technical and sales teams around the world providing first class customer service; the company also funds a variety of research projects to help improve animal health practice.

### ▶ **Specialist animal only medicine**

Developed by Novartis and dedicated solely and specifically to use in animal healthcare.

*Lincomix is a registered trademark of  
Pharmacia & Upjohn Company LLC*

*Linco-Spectin is a registered trademark of  
Pharmacia & Upjohn Company LLC*

*Tylan is a registered trademark of Eli Lilly and Company*

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*See the difference*



**Denagard<sup>®</sup>**  
tiamulin

***The right choice***

The proof.  
**more profit**  
per pig



*See the difference*



**Denagard<sup>®</sup>**  
tiamulin

*The right choice*

# The right choice for extra profit

In 2005/2006 a series of cost benefit studies from all around the world has confirmed that **Denagard® consistently delivers superior cost benefit profit returns** compared to other treatments for the major economic diseases of swine.

## ▶ Better for ileitis<sup>1,2</sup>

A trial in Japan on a farm infected with *Lawsonia intracellularis* confirms Denagard's superior production and profit performance over Lincomix®.

**FACT**

AN EXTRA  
**€23.60**  
PROFIT PER PIG

	Denagard advantage vs. Lincomix
ADG improvement	+ 4.5%
Reduced fattening period	- 5.1 days
Reduced mortality	- 3.0%
Reduction in lightweight pigs	- 6.6%
<b>Extra profit margin/pig (€)</b>	<b>+ €23.60</b>

1. M.Shimaoka & others, 19th IPVS Congress, Copenhagen, Denmark 2006

A trial in Germany on a commercial grower unit infected with *Lawsonia intracellularis*, but free from *Salmonella spp.* confirms Denagard's superior production and profit performance over Tylan®.

**FACT**

AN EXTRA  
**€4.79**  
PROFIT PER PIG

	Denagard advantage vs. Tylan
ADG improvement	+ 7.2%
Reduced fattening period	- 7.3 days
Higher average slaughter weight	+ 9.6%
<b>Extra profit margin/pig (€)</b>	<b>+ €4.79</b>

2. U. Klein & others, 19th IPVS Congress, Copenhagen, Denmark 2006

## ▶ Better for mixed enteric infections with PRRSV co-infection<sup>3</sup>

A trial on a Thai farrow-finish farm positive for *Lawsonia intracellularis*, *Brachyspira spp.* and PRRSV (free from *Salmonella spp.*) confirms Denagard's superior profit performance over Tylan.

**FACT**

AN EXTRA  
**€1.33**  
PROFIT PER PIG

	Denagard advantage vs. Tylan
ADG improvement	+ 2.3%
FCR	- 3.8%
Improvement in ROI	+ 3.0%
<b>Extra profit margin/pig (€)</b>	<b>+ €1.33</b>

3. P. Poolperm & others, 19th IPVS Congress, Copenhagen, Denmark 2006

## ▶ Better for PRDC and mixed enteric infections concurrent with PRRSV and PMWS<sup>4</sup>

A UK trial on a farm positive for *Lawsonia intracellularis*, *Brachyspira spp.*, *Mycoplasma spp.*, APP, PRRSV and PMWS (free from *Salmonella spp.*) confirms Denagard's superior profit performance over Linco-Spectin®.

**FACT**

AN EXTRA  
**€2.25**  
PROFIT PER PIG

	Denagard advantage vs. Linco-Spectin
Weight gain improvement	+ 1.8%
FCR	- 2.1%
Improvement in ROI	+ 37.4%
<b>Extra profit margin/pig (€)</b>	<b>+ €2.25</b>

4. D. Burch & others, 19th IPVS Congress, Copenhagen, Denmark 2006

## ▶ Better for PRDC concurrent with PRRSV infection<sup>5</sup>

A trial on a Thai farm positive for *Actinobacillus pleuropneumoniae*, *Mycoplasma hyopneumoniae*, *Streptococcus suis*, and PRRSV (free from *Salmonella spp.*) confirms Denagard's superior profit performance over Linco-Spectin.

**FACT**

**SUPERIOR  
PRODUCTION  
AND  
PERFORMANCE**

	Denagard advantage vs. Linco-Spectin
ADG improvement	+ 12.0%
FCR	- 15.4%
<i>This trial did not record all data relating to costs and income, therefore no specific financial benefit per pig can be given for Denagard's improvement in the production parameters</i>	

5. R. Thanawongnuwech & others, 19th IPVS Congress, Copenhagen, Denmark 2006

## ▶ Denagard/CTC better for PRDC and *Lawsonia intracellularis* co-infection<sup>6</sup>

A trial on a Brazilian farm positive for *Actinobacillus pleuropneumoniae*, *Mycoplasma hyopneumoniae*, *Pasteurella multocida*, *Haemophilus parasuis*, *Bordetella bronchiseptica* and *Lawsonia intracellularis* (free from *Salmonella spp.*) confirms Denagard's superior profit performance over lincomycin/CTC.

**FACT**

**AN EXTRA  
€1.20  
PROFIT PER PIG**

	<b>Denagard/CTC vs. Lincomycin/CTC</b>
ADG improvement*	+ 5.4%
FCR*	- 1.0%
Improvement in ROI*	+ 356%
<b>Extra profit margin/pig (€)†</b>	<b>+ €1.20</b>

6. Prof. Roberto M.C. Guedes & others, 2006 (data on file)

\* recorded for the duration of the pulse treatment period 70-112 days

† recorded from commencement of trial until slaughter date 70-148 days

## ▶ Denagard/CTC/amoxycillin better for mixed respiratory and enteric disease with PRRSV and PCV-2 infection<sup>7</sup>

A trial on a Chinese AIAO finishing farm which was confirmed positive for PRRSV, PCV-2, *Mycoplasma hyopneumoniae*, *Haemophilus parasuis* and *Lawsonia intracellularis* (free from *Salmonella spp.*) confirms Denagard's superior production and profit performance over Linco-Spectin and Aivlosin/CTC/amoxycillin.

**FACT**

**AN EXTRA  
€5.22  
PROFIT PER PIG**

	<b>Denagard/CTC/amoxycillin vs. Aivlosin/CTC/amoxycillin</b>
ADG improvement	+ 8.8%
FCR	- 6.3%
Higher carcass weights	+ 6.5%
Improvement in ROI	+ 47.3%
Reduction in lung lesions (slaughtered pigs)	- 36.4%
<b>Extra profit margin/pig (€)</b>	<b>+ €5.22</b>

**FACT**

**AN EXTRA  
€2.70  
PROFIT PER PIG**

	<b>Denagard/CTC/amoxycillin vs. Linco-Spectin</b>
ADG improvement	+ 3.6%
FCR	- 4.4%
Higher carcass weights	+ 5.1%
Improvement in ROI	+ 26.2%
Reduction in lung lesions (slaughtered pigs)	- 46.6%
<b>Extra profit margin/pig (€)</b>	<b>+ €2.70</b>

7. Ping, J. & others (2006). Cost benefit study on the control of pneumo-enteric infections in a commercial grower/finisher unit in China. Proceedings of NAH Asian Conference on Respiratory and Enteric Diseases in Pigs. Dalian, China, November 4 to 5, 2006, p45-47