HQP23 LATAM

Porcilis ® Lawsonia ID – One More Tool To Prevent Ileitis

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MSD Animal Health





Lawsonia intracellularis



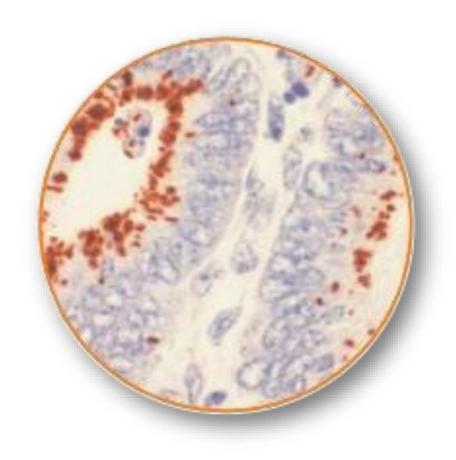


 Cause of ileitis in pigs, also called PPE (acute form) or PIA (chronic form)

PPE = Porcine Proliferative Enteropathy

PIA = Porcine Intestinal Adenomatosis

- Obligate intracellular bacterium
- Needs other cells to grow and multiply; like a virus









lleitis

~ \$22/marketed pig

¥ ADG 11%

*FCR 7%

★ Mortality – up to 24%





Porcilis ® Lawsonia ID

Intradermal using IDAL

Intestinal lesions

Bacterial shedding

Weight loss











Flexible use



Porcilis Lawsonia ID in ID Solvent



Porcilis Lawsonia ID in Porcilis PCV ID







Porcilis® Lawsonia ID

Onset of immunity: 4 weeks pv



Duration of Immunity: 21 weeks pv

Not impacted by antibiotic treatment programs



RESEARCH Open Access

Efficacy of a novel intradermal *Lawsonia* intracellularis vaccine in pigs against experimental infection and under field conditions



A. A. C. Jacobs * D, F. Harks, R. Pauwels, Q. Cao, H. Holtslag, S. Pel and R. P. A. M. Segers



Onset of immunity (OOI)





ADWG





Vaccine	n	Diarrhea score (d 13-21)	ADWG g/day (d 13-20)	PCR Faeces (d 21)	PCR ileum mucosa (d 21)	Macroscopic Ileum lesion score (d 21)	Microscopic IHC score (d21)
Porcilis Lawsonia ID	25	0.3	956* ^{,&}	0*,&	0.03*,&	0.6*,&	0.1*,&
Live vaccine#	25	0.2	812	0.77	0.50	61	3.4*
Controls	25	0.5	674	0.73	0.66	68	5.7



[#] commercially available live attenuated vaccine

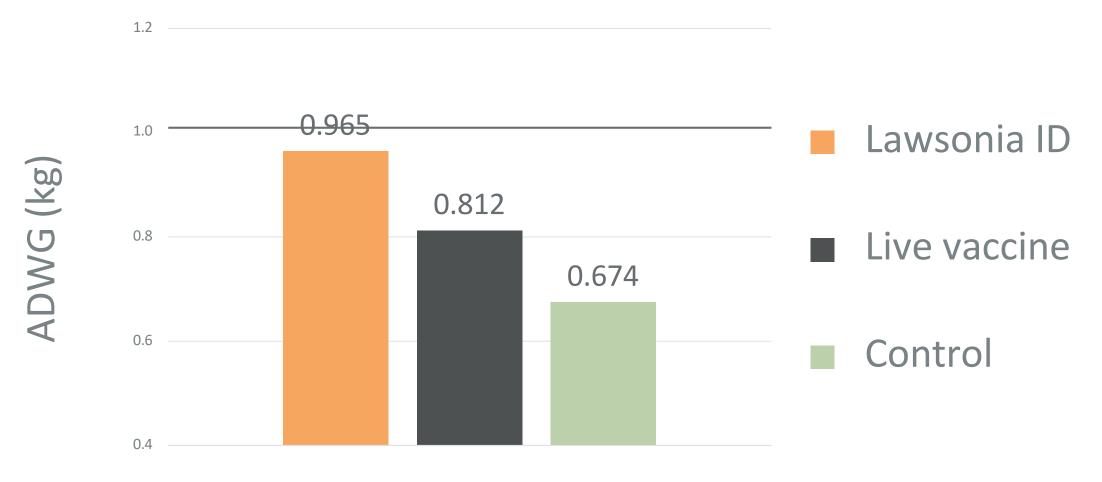
^{*} p<0.05 compared to control group

[&]amp; p<0.05 compared to live attenuated vaccine

Onset of immunity (OOI)



ADWG 13-20 post-challenge







Onset of immunity











Duration of immunity (DOI)





age 3w: Intradermal vaccination age 24w: Lawsonia challenge

ADWG +



Vaccine	n	Diarrhea score (d 13-21)	ADWG g/day (d 13-20)	PCR Faeces (d 21)	PCR ileum mucosa (d 21)	Macroscopic Ileum lesion score (d 21)	Microscopic IHC score (d21)
Lawsonia + PCV ID	25	1.3*	1001*	0.71*	0.19*	129*	2.9*
Controls	25	3.8	-139	1.90	0.54	241	7.7

*p<0.05 compared to control group

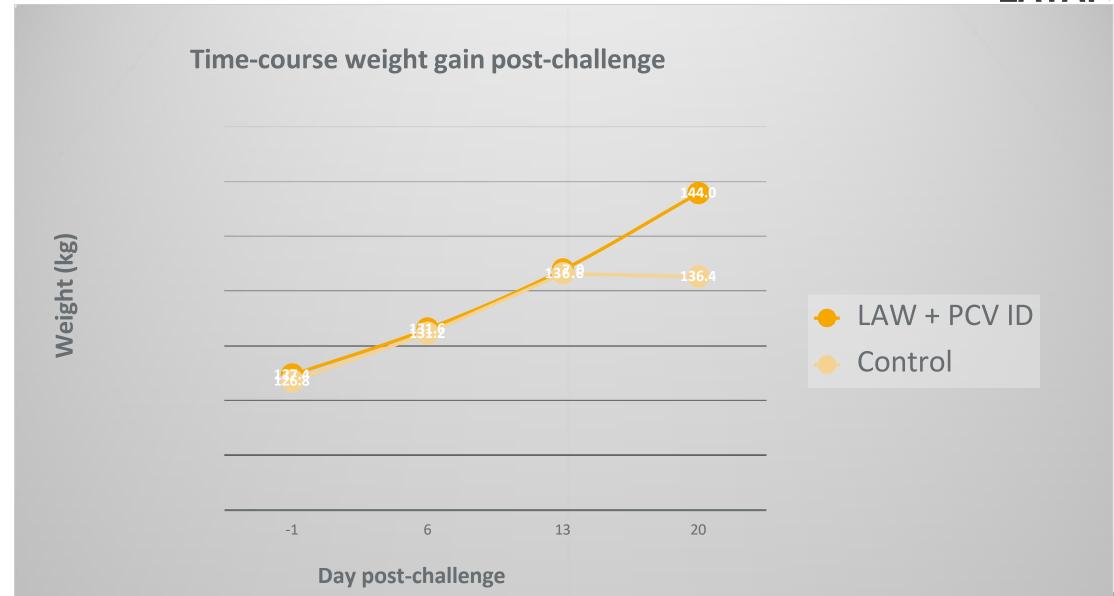
Source: Jacobs et al., Porcine Health Management, (2020) 6:25





Duration of immunity (DOI)









Field Study

(Feb 2018 – Jan 2019)

% mortality: Lawsonia associated and total

Vaccine	Lawsonia associated mortality (%)	Total mortality (%)		
Porcilis [®] <i>Lawsonia</i> ID	0.45*	1.43*		
Controls	1.65	2.63		

*p<0.05 compared to control group

Historic comparison is underestimation as only half of the piglets were vaccinated

Historic comparison before and after vaccination

Parameter	Before vaccination	After vaccination
ADWG (gram/day)	843	859
FCR (kg feed/kg body weight)	2.41	2.31

Source: Jacobs et al., Porcine Health Management, (2020) 6:25

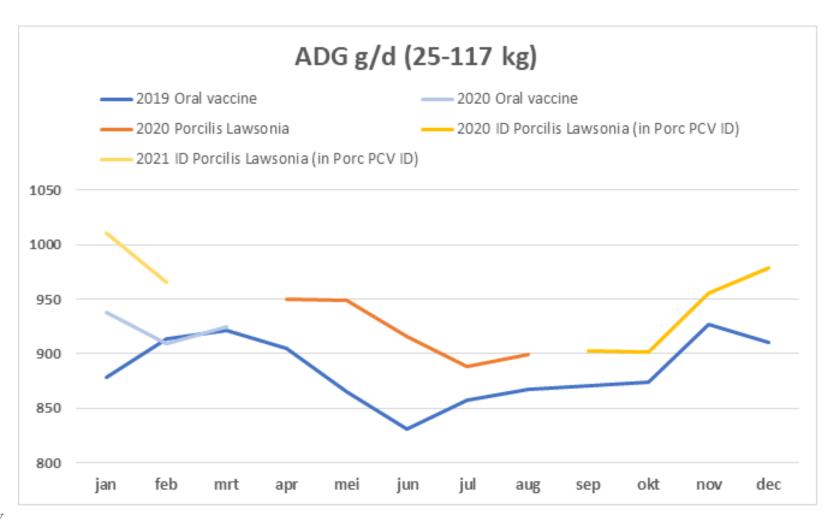




















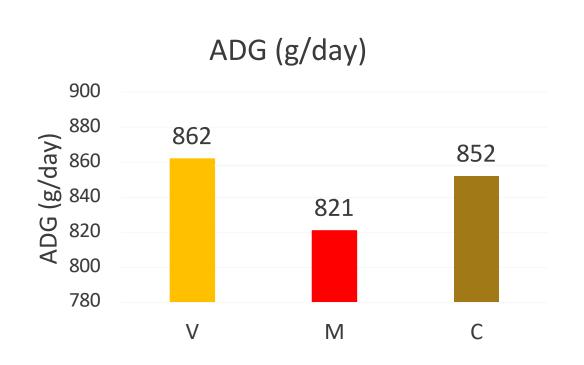
	Apr19-Aug19 Drinking water	Apr20-Aug20 Porcilis Law IM	Difference		Sep19-Feb20 Drinking water	Sep20-Feb21 Porcilis Law ID	Difference
ADWG	865	920	+55	ADWG	908	956	+48
FCR	2,75	2,68	-0,07	FCR	2,79	2,70	-0,09
Mortality %	2,3	1,9	-0,4	Mortality %	2,1	1,7	-0,4

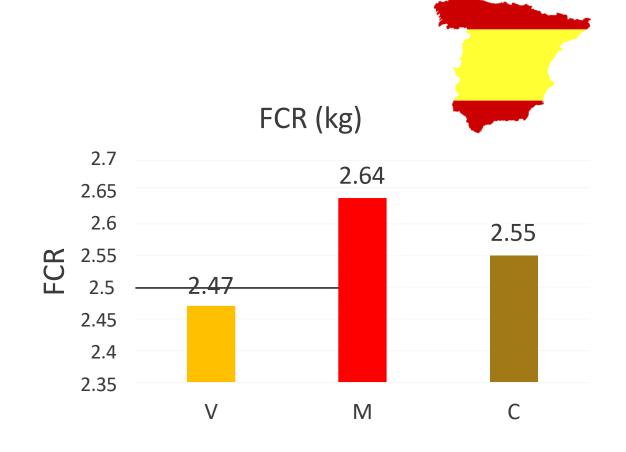
 2020: Lower veterinary and treatment costs compared to 2019; antibiotic use reduced by 90%.











V = VaccinatedM = MedicatedC = Control





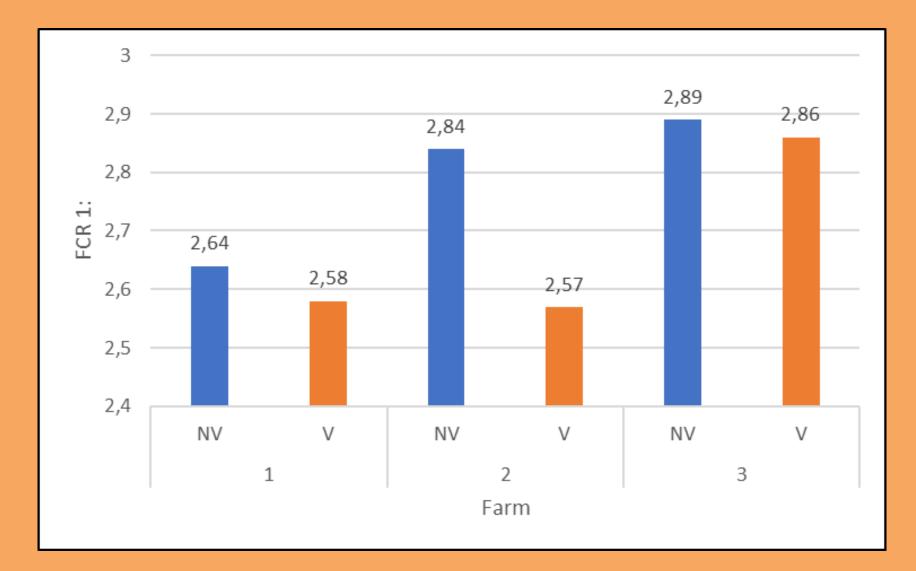


	Farm 1	Farm 2	Farm 3					
Feed costs (€/100 kg)	26.02	27.66	28.88					
Financial benefit (€/pig) betw	Financial benefit (€/pig) between non vaccinated and intradermally vaccinated pigs due to							
feed costs	-1.53	-7.35	-0.82					
antibiotic treatment	-0.41	+0.30	-0.13					
animal losses	-0.45	+0.44	+0.15					
Total benefit per pig	-2.38	-6.60	-0.80					



















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Porcilis® Lawsonia ID

= +\$/marketed pig

↓ FCR

1 ADG

↓ Mortality

IDAL Way benefits





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Thank you!



