

Producing market pigs free of antibiotics

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- Is antibiotic production really better?

Natural pig



Different labels, different definitions



Non-medicated
from 10 to 26
wks of age

- Two barns per site
- No antibiotic feed medication
- No injectable antibiotics
- No water soluble antibiotics



100% of the output cannot be committed to antibiotic free claim



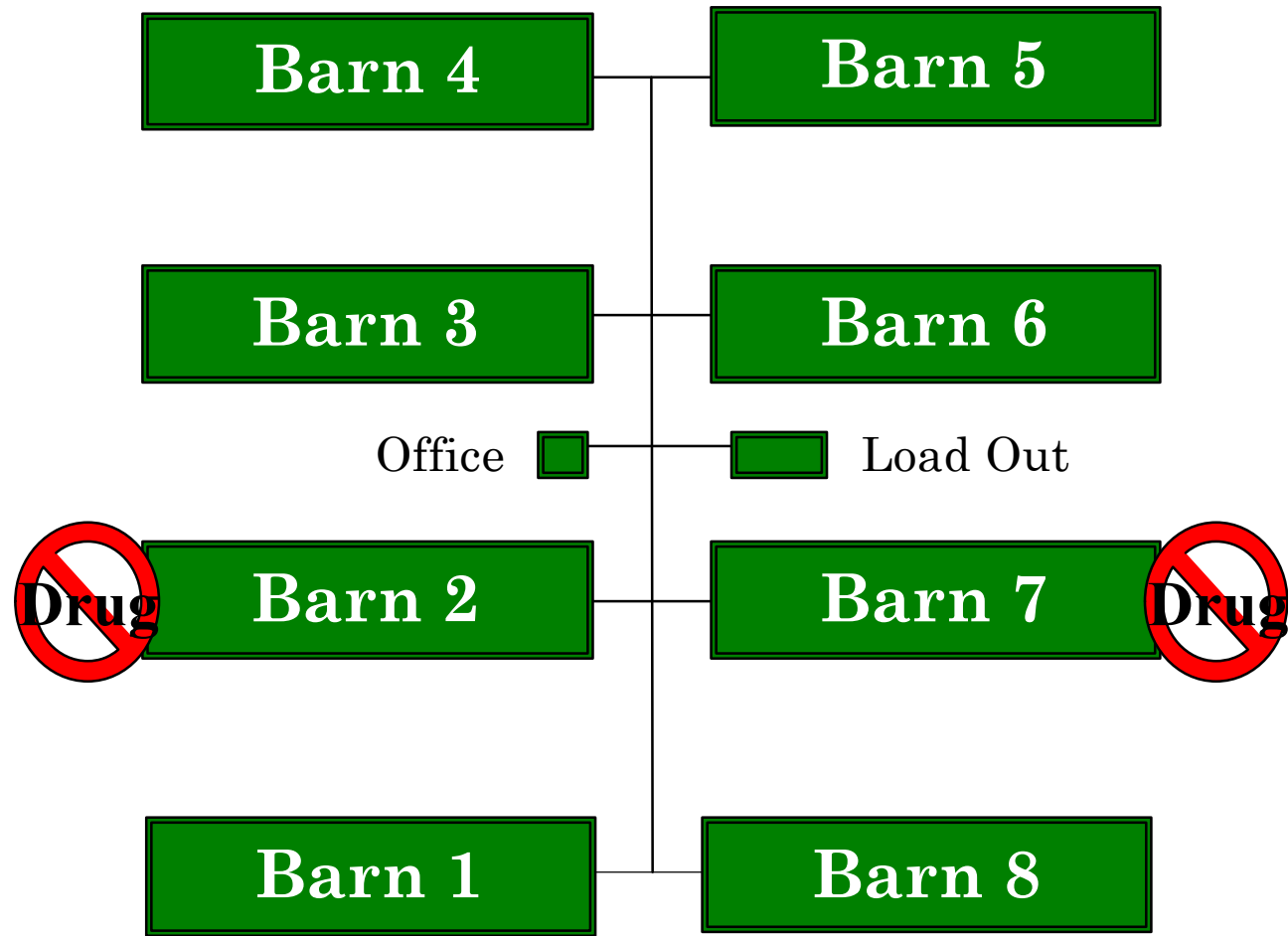
- Sick pigs treated and removed from natural production
- Water medication to about 15% of the batch
- Individually treat 5%

The laboratory ...

- Design and management of Finisher barns are homogenous
- Health status representative of large mid western producer



Finishing system under study



Growth performances and difference in revenue if sold at \$0.45/lb

	Standard	Natural
ADG	1.97	1.93
FE	2.56	2.63
Mort	4.7	5.91
Subs. pigs	4.8	5.31
Med cost	2.69	0
	\$/pig 3.48	

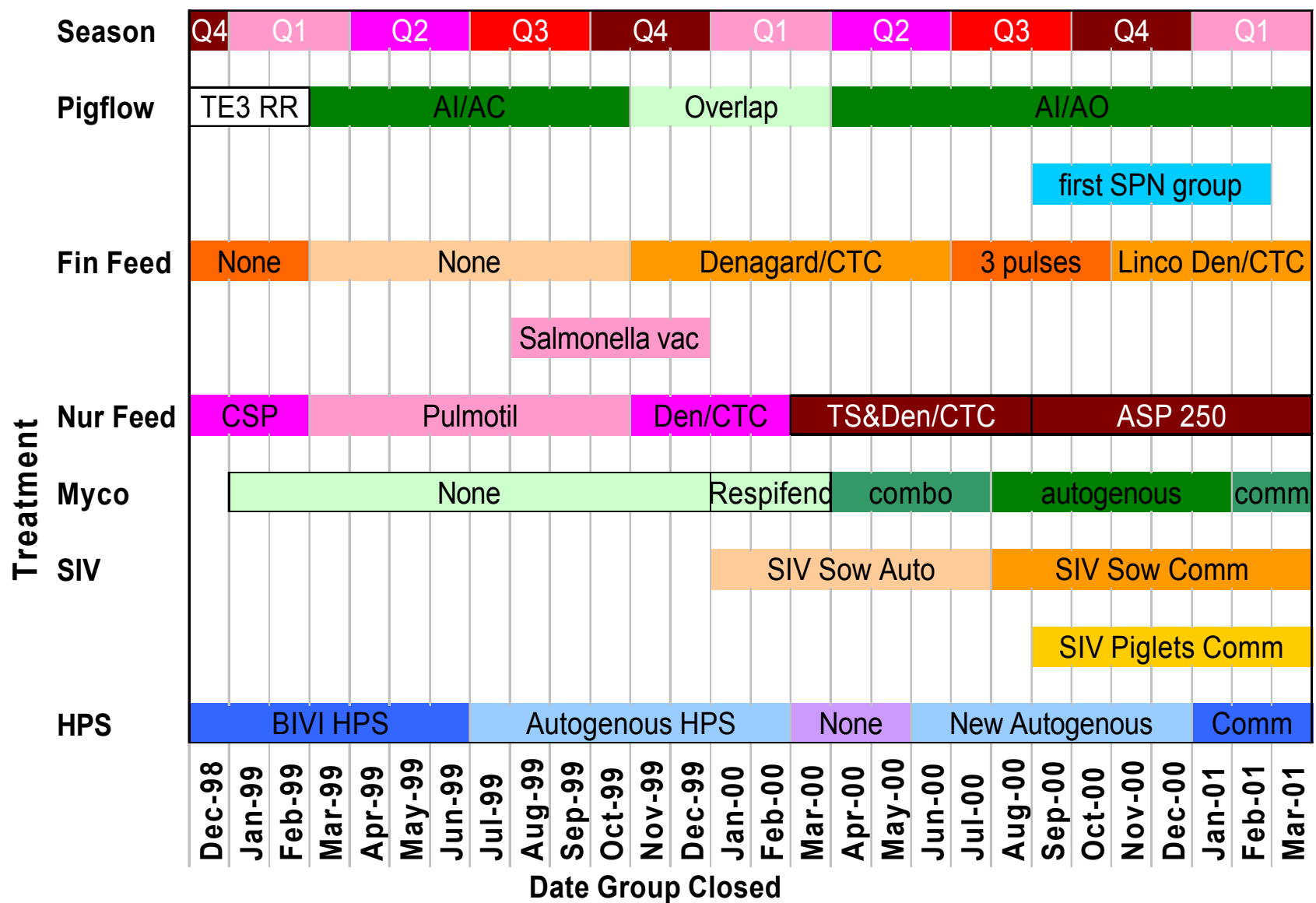
- Can cost to produce antimicrobial free pigs be reduced?

Nuts and bolts

- Vaccination program
- Nursery medication program
- relative risk of barrows to die over gilts

Timeline of Treatment vs. Performance Hanor OK

Darker = Better Performance



Do feed antimicrobials in nursery affect finishing performances?

- Design:
- Used 4 barns from 3 production sites
- 2 barns received antimicrobial targeting respiratory diseases
- 2 barns received antimicrobial targeting intestinal diseases

Finishing performance based on nursery feed medication

	Resp.	Intest.	P-value
Weight at 21 wks	223.3	215.9	< 0.001

FE

Mortality (%)	8.1	9.5	0.47
Substandard (%)	4.6	17.0	0.02

Should we place certain pigs on antimicrobial free production?

- Design:
- 468 closeouts
- modeled in ANOVA for the effect of sex, quarter and year

Average finishing mortality rate based on sex

	Barrows	Females	P-value
Mortality (%)	8.0	6.7	< 0.001

Still a lot of work to do to reduce the difference in cost of production between standard pig and antimicrobial free pigs

Dr. Isabelle Moreau

Isabelle graduated from the Vet school in St-Hyacinthe in 1995. She then work for PIC and later for The HANOR Company, one of the largest five largest US swine integration, as the director of Health Management. She completed a Master in Science in 2002 at the University of Illinois where she studied the effect of Mycoplasma vaccine in commercial farms also infected with PRRS. Dr. Moreau currently works as Technical Service Manager for the diagnostic laboratory Biovet.

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