



484 Research paper

A randomized controlled trial to evaluate performance of pigs raised in antibiotic-free or conventional production systems

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In Significant Impact Groups:

AMU reduction strategies \ None Pathogen management

Species targeted: Pigs;

Age: Adult;

Summary:

There is growing advocacy for antibiotic-free (ABF) livestock production to minimize the emergence of antibiotic-resistant food-borne pathogens and subsequent human exposure to these treatment-refractory organisms. This trend has been driven by the escalating presence of antibiotic resistance, including multi-drug resistance, among a variety of important bacterial pathogens that infect both animals and humans. In food-animal settings, resistant pathogens include methicillin-resistant *Staphylococcus aureus* (MRSA), multi-drug resistant non-typhoidal *Salmonella*, ciprofloxacin-resistant *Campylobacter* spp, multi-drug resistant *E. coli*, and vancomycin-resistant enterococci.

Under the conditions of this study, these results indicate that in a PRRSV-endemic setting involving bacterial co-infections, an ABF production strategy may leave pigs at considerable risk of exposure to severe clinical disease and that judicious use of antibiotics can significantly improve animal health.

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Where to find the original material:

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