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Modelling the economic efficiency of using different strategies to control Porcine Reproductive & Respiratory Syndrome at herd level

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Abstract

PRRS is among the diseases with the highest economic impact in pig production worldwide. Different strategies have been developed and applied to combat PRRS at farm level. The broad variety of available intervention strategies makes it difficult to decide on the most cost-efficient strategy for a given farm situation, as it depends on many farm-individual factors like disease severity, prices or farm structure. Aim of this study was to create a simulation tool to estimate the cost-efficiency of different control strategies at individual farm level. Baseline is a model that estimates the costs of PRRS, based on changes in health and productivity, in a specific farm setting (e.g. farm type, herd size, type of batch farrowing).

The model evaluates different intervention scenarios: depopulation/repopulation (D/R), close & roll-over (C&R), mass vaccination of sows (MS), mass vaccination of sows and vaccination of piglets

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