DTU Vet
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MRSA CC398 occurrence in Danish swine herds - analyses of potential risk factors

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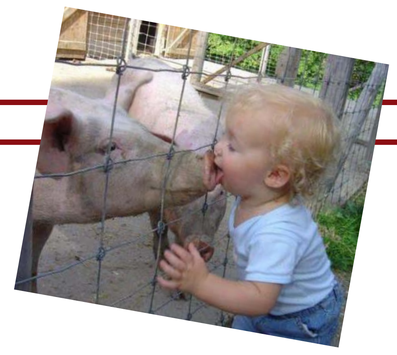
Background

- Livestock-associated methicillin-resistant *Staphylococcus aureus* (LA-MRSA) is an opportunistic human pathogen.
- Main reservoir in pigs, but also isolated from other species and the environment.



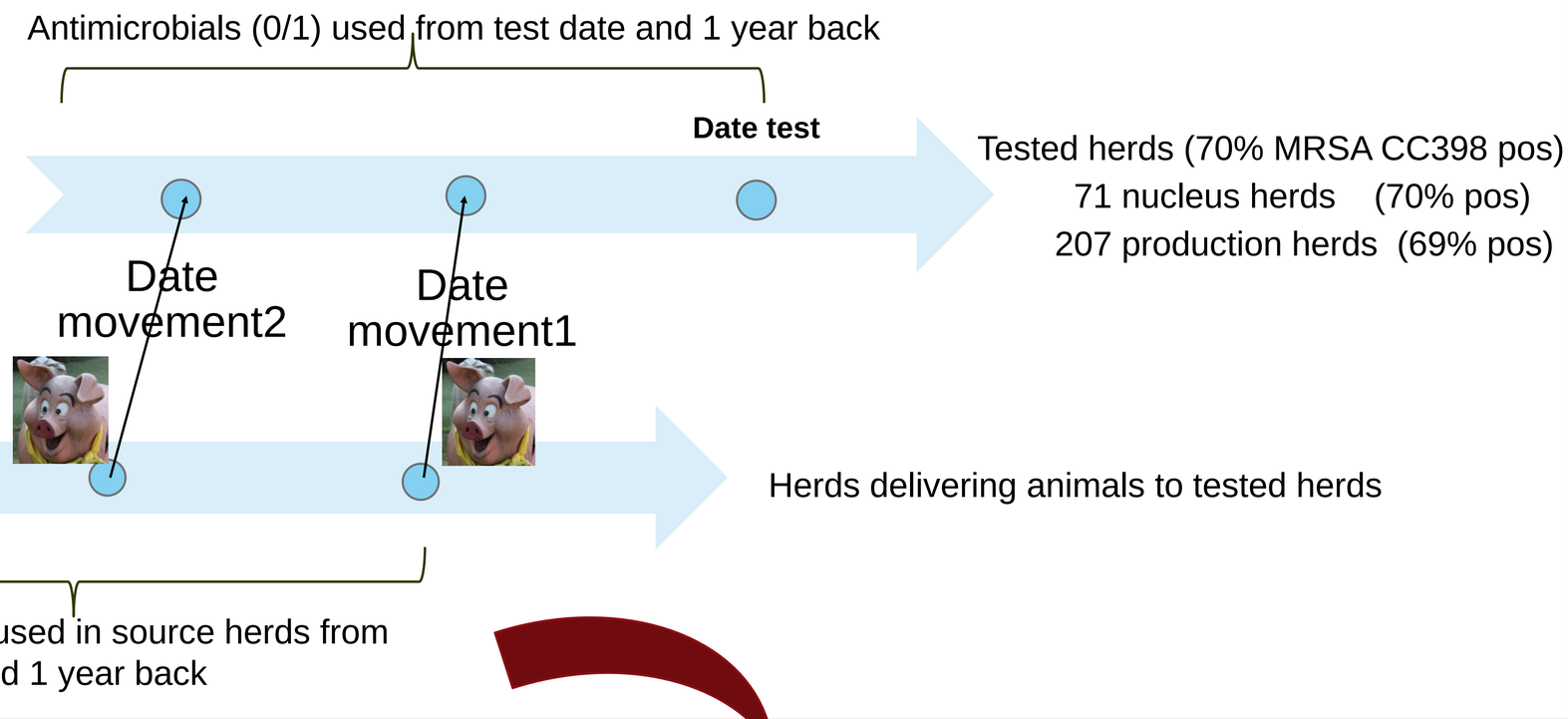
Objectives

- Identify potential risk factors for MRSA CC398 based on register data
- Explanatory variables: *herd size, #source herds, #purchase dates, #purchased animals, use of 5 groups of antimicrobials and zink (yes/no)*

Materials and methods

- Logistic regression analyses (R)

Antimicrobials grouped as
- LincoSpectins
- Macrolides
- Simple penicillins
  - β-lactamase sensitive penicillins
- Other penicillins
  - Aminopenicillins
- Tetracyclins
- Zink



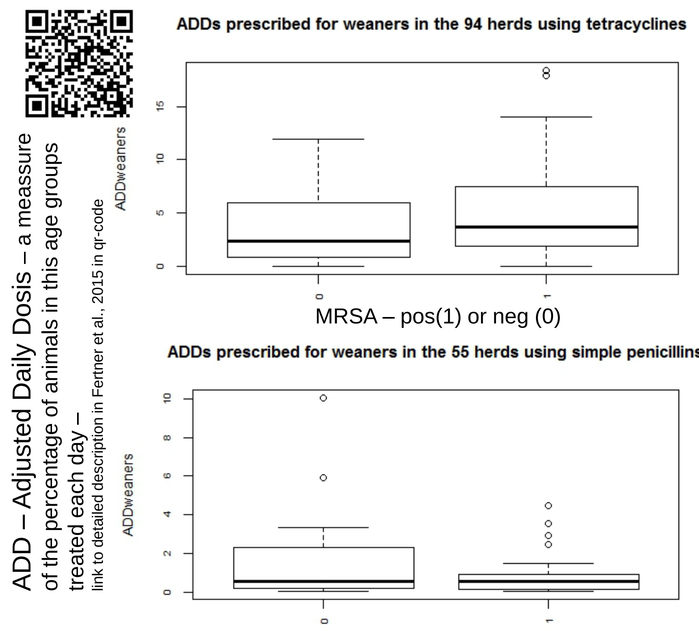
Results

Weaners

Tetracyclines →  → OR_{MRSA} – 2.66 (1.34-5.65)

Simple penicillins →  → OR_{MRSA} – 0.31 (0.14-0.67)

No significant effect of used antibiotics in source herds!



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