A longitudinal study of infectious lesions in nursery pigs

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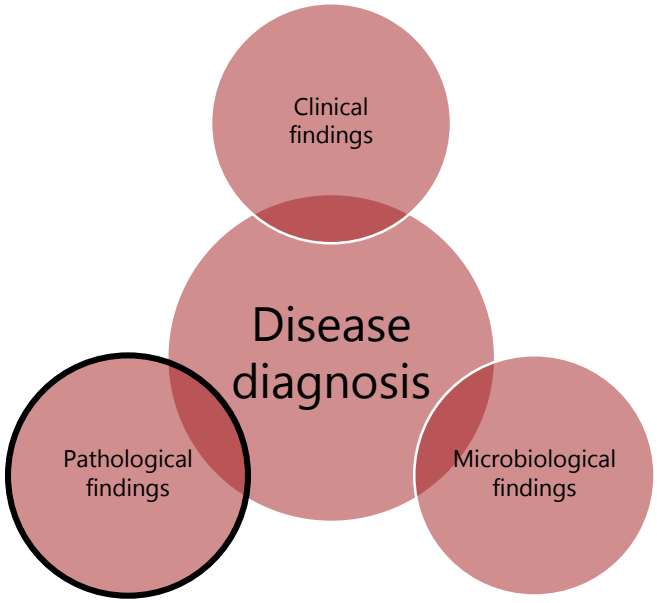
Introduction

Background

- Part of 'Veterinærforlig III'
- Health monitoring and diagnostics
- Disease dynamics within a herd may change between batches → potential need for frequent diagnostic examinations



Aim

- Investigate if an ongoing and systematic diagnostic approach including pathological examinations of dead and euthanized pigs (nursery pigs) can be used to optimize and/or reduce the use of antimicrobials.

Objectives (selected)

- Describe pathological diagnoses for dead and euthanized nursery pigs.
- Evaluate agreement between pathological findings and clinical findings (sock samples, oral fluid samples , cause of treatment etc.)

Study design

- 5 herds
- 5 batches of pigs are followed in each herd (25 in total) from weaning to 30 kg bodyweight.

Clinical data

- n pigs inserted at weaning
- n pigs moved (date, reason)
- Treatments (date, n pigs, diagnoses, medication)
- Dead pigs (date, suspected diagnoses/reason for euthanasia)
- Sock sampling
- Oral fluid sampling (rope based)

Pathological examinations

- All dead and euthanized pigs
- Full necropsies
- Samples for histopathology
- Samples for microbiology

Study design

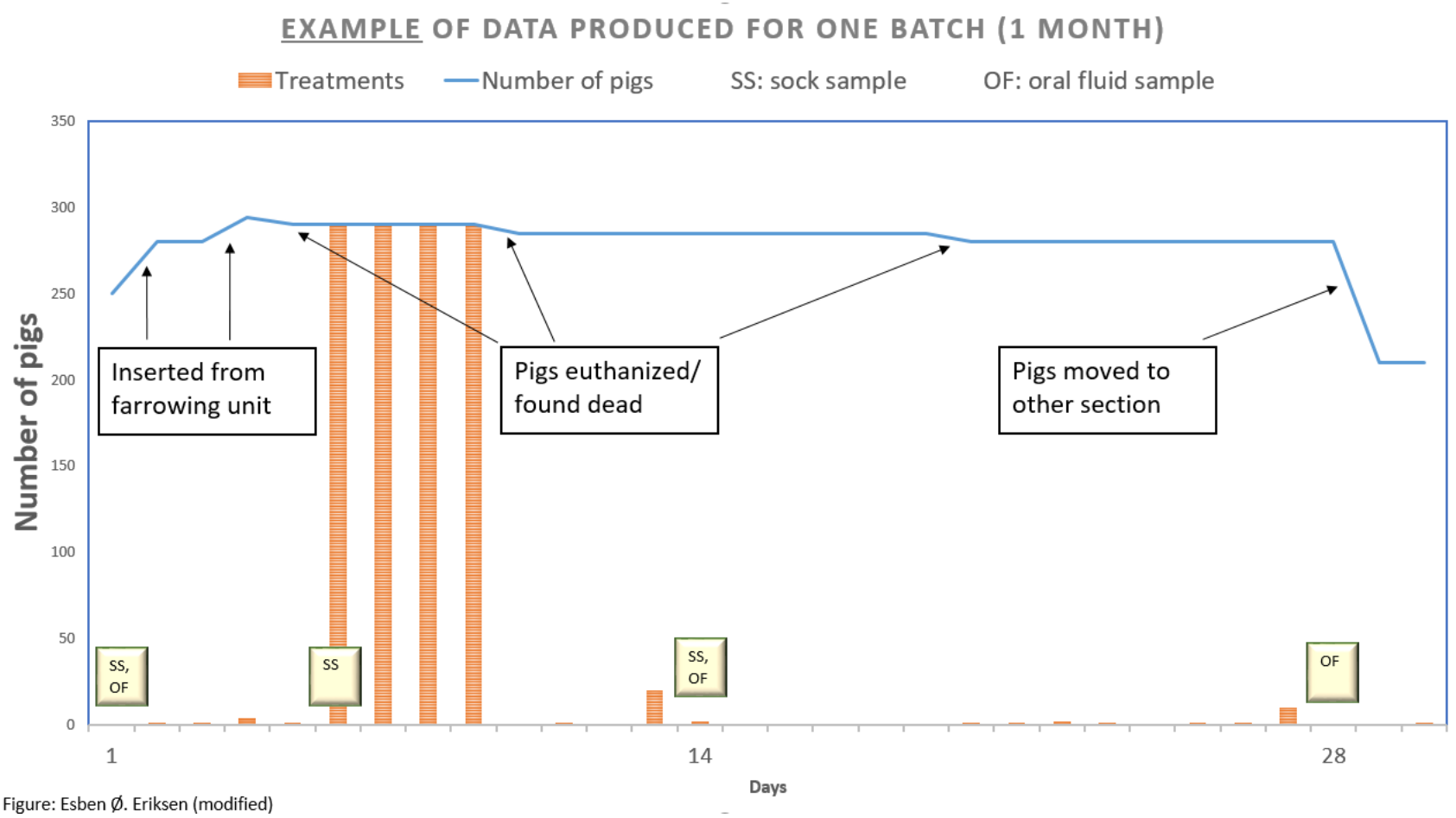


Figure: Esben Ø. Eriksen (modified)

Preliminary findings from necropsies

- Pigs collected from 3 herds
- Full necropsies of 122 pigs
- Gross lesions

Will be presented at CPH Pig seminar

Sum up and future work

- Wide range of pathological findings
- Lung lesions and intestinal lesions account for the majority
- High prevalence of gastric changes and skin lesions

- Data collection continues – three herds this year
- Histopathology, immunohistochemistry, in situ hybridization
- Combine pathological findings with microbiology and clinical findings

Thank you for your attention