

Effect of pullet vaccination on development and longevity of immunity

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Vaccination timing and protection

Does vaccination with multiple live attenuated vaccines affect development of protective immunity?

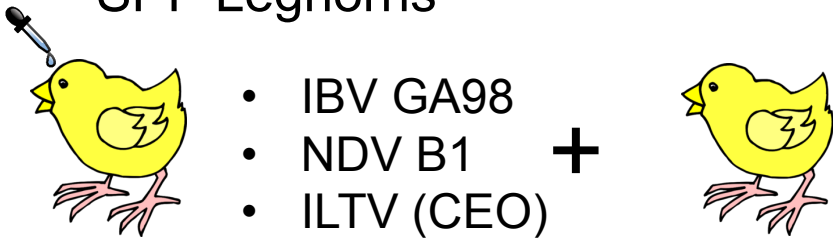


Experimental Design

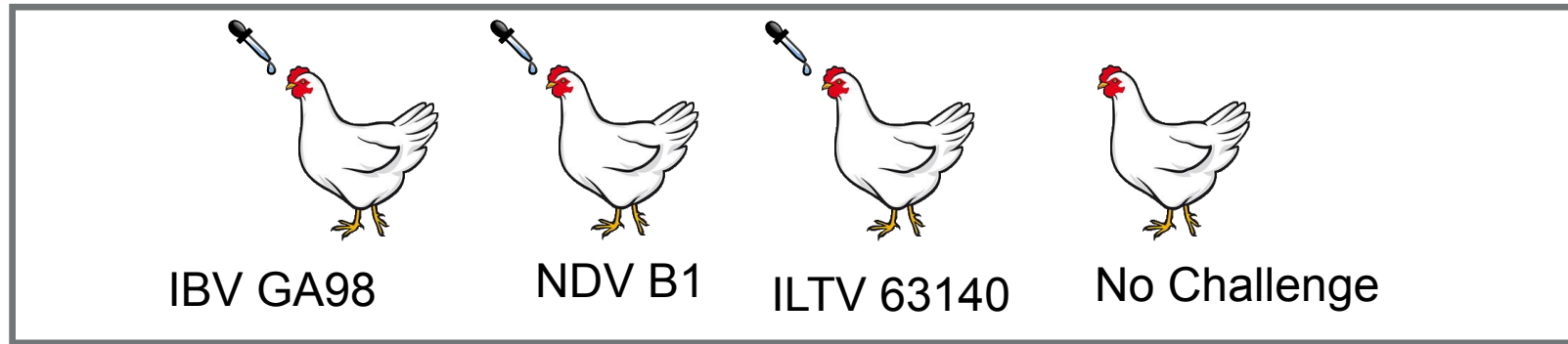
SPF Leghorns

- IBV GA98
- NDV B1
- ILTV (CEO)

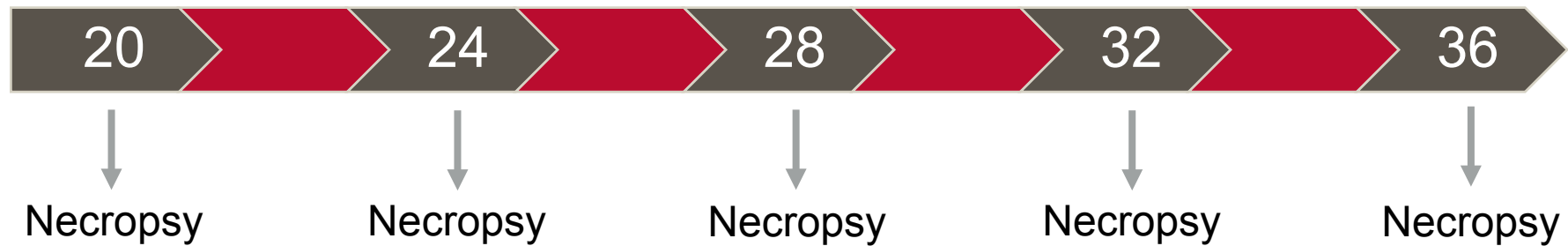
+ No Vaccine



Vaccination
(weeks)



Challenge
(weeks)



IBV Summary

Clinical Signs

- Vx/Ch birds had significantly reduced scores compared to positive controls

Virus Detection

- Vx/Ch birds had significantly reduced viral loads compared to positive controls
- Vaccine virus in cecal tonsils was detectable in Vx/NCh birds until 28 weeks

IBV-Specific IgA Antibody Titers in Tears

- No clear trends were apparent

NDV Summary

Clinical Signs

- Vx/Ch birds had significantly lower scores (week 20) compared to positive controls
- Clinical signs were non-existent in vaccinated birds older than 20 weeks
- Clinical signs diminished in positive controls over time

Virus Detection

- Vaccinated birds challenged with NDV had undetectable or significantly reduced viral loads compared to positive controls
- Positive controls showed high viral loads, indicating that the birds were challenged

ILTV Summary

Clinical Signs

- Vx/Ch birds had significantly reduced scores compared to positive controls
- Vx/Ch bird scores trended upward over time
- Positive control scores trended downward over time

Virus Detection

- Vaccinated birds challenged with ILTV had undetectable or significantly reduced viral loads compared to positive controls

Summary

SPF leghorns serially vaccinated with live IBV, NDV and ILTV vaccines at least 2 weeks or more apart were protected to 36 weeks of age

The results are based on:

Immune response (antibodies in serum and in tears)

No clinical signs following homologous challenge

Little or no challenge virus detection



Response to vaccination with multiple IBV types

Do birds respond to 3 or 4 types of IBV vaccine given simultaneously



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Experimental design

Vaccines given at day of hatch

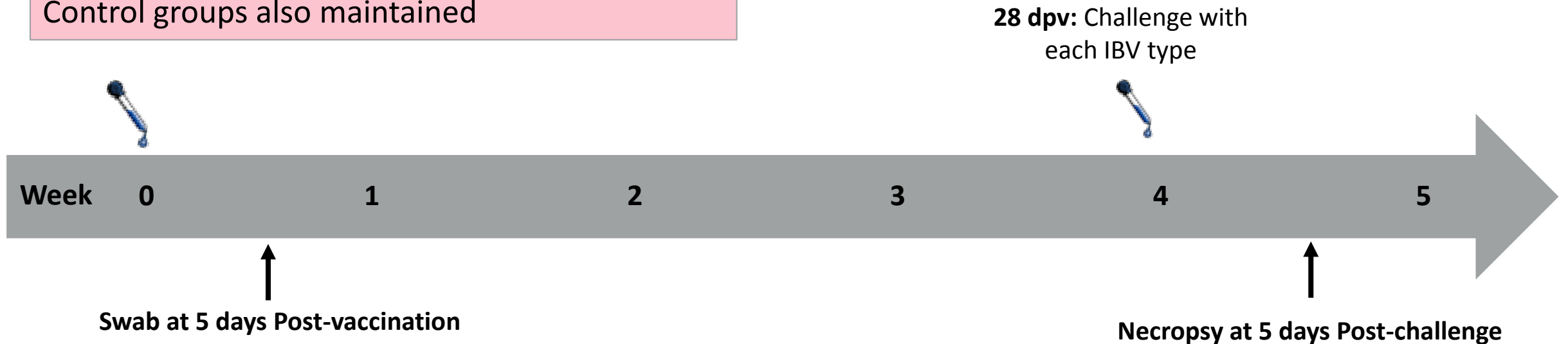
Group I= Mass/Ark/GA98

Group II= Mass/Ark/GA98/GA08

Control groups also maintained

Procedures:

- Virus detection (choanal swabs) type specific real time RT-PCR
- Clinical signs, histopathology, ciliostasis
- ELISA (IgG – serum)



Results

Stay tuned!



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