

# Patogenese for pandemisk influenza virus varianter

To veterinære specialer

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KØBENHAVNS UNIVERSITET



# FluZooMark

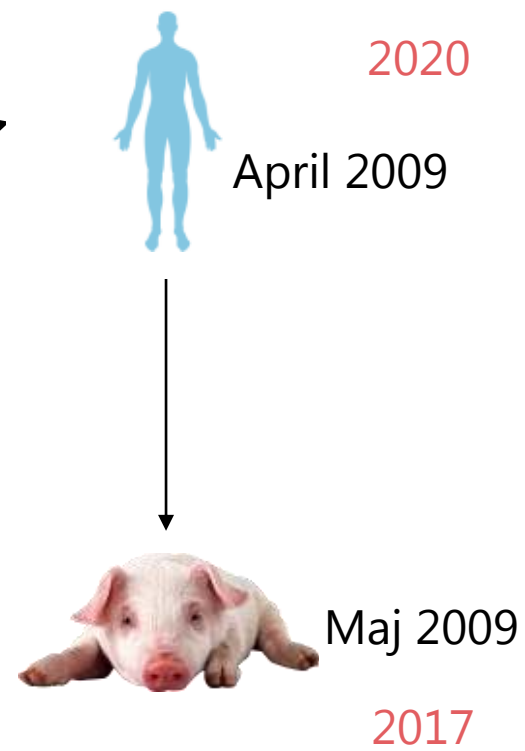
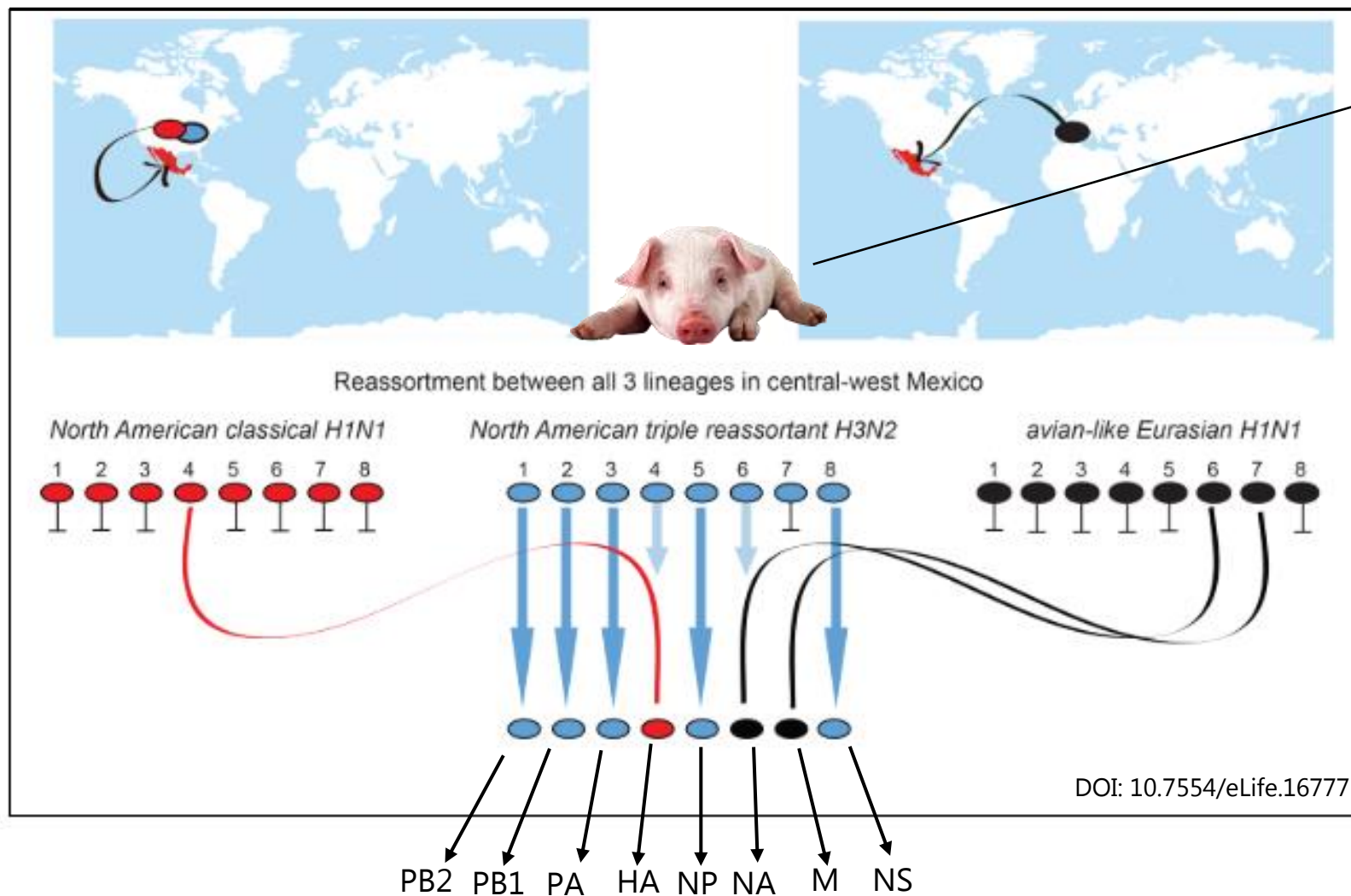
- Samarbejde mellem KU, SSI, DTU og St. Jude Children's Research Hospital
- Overordnet formål
  - Molekylære markører
  - Eksperimentielle dyreforsøg

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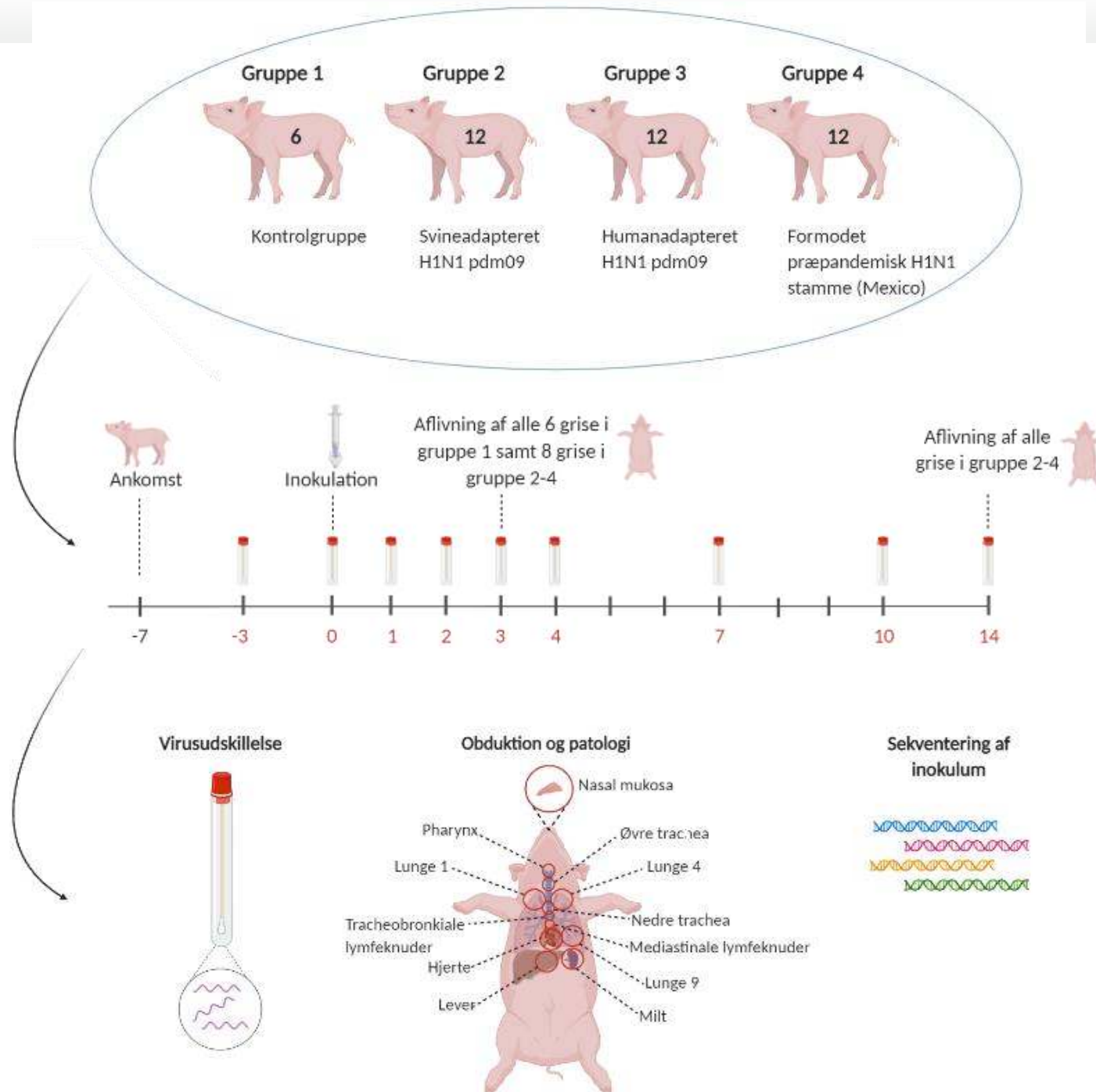
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# H1N1 pandemic 2009 (H1N1pdm09)

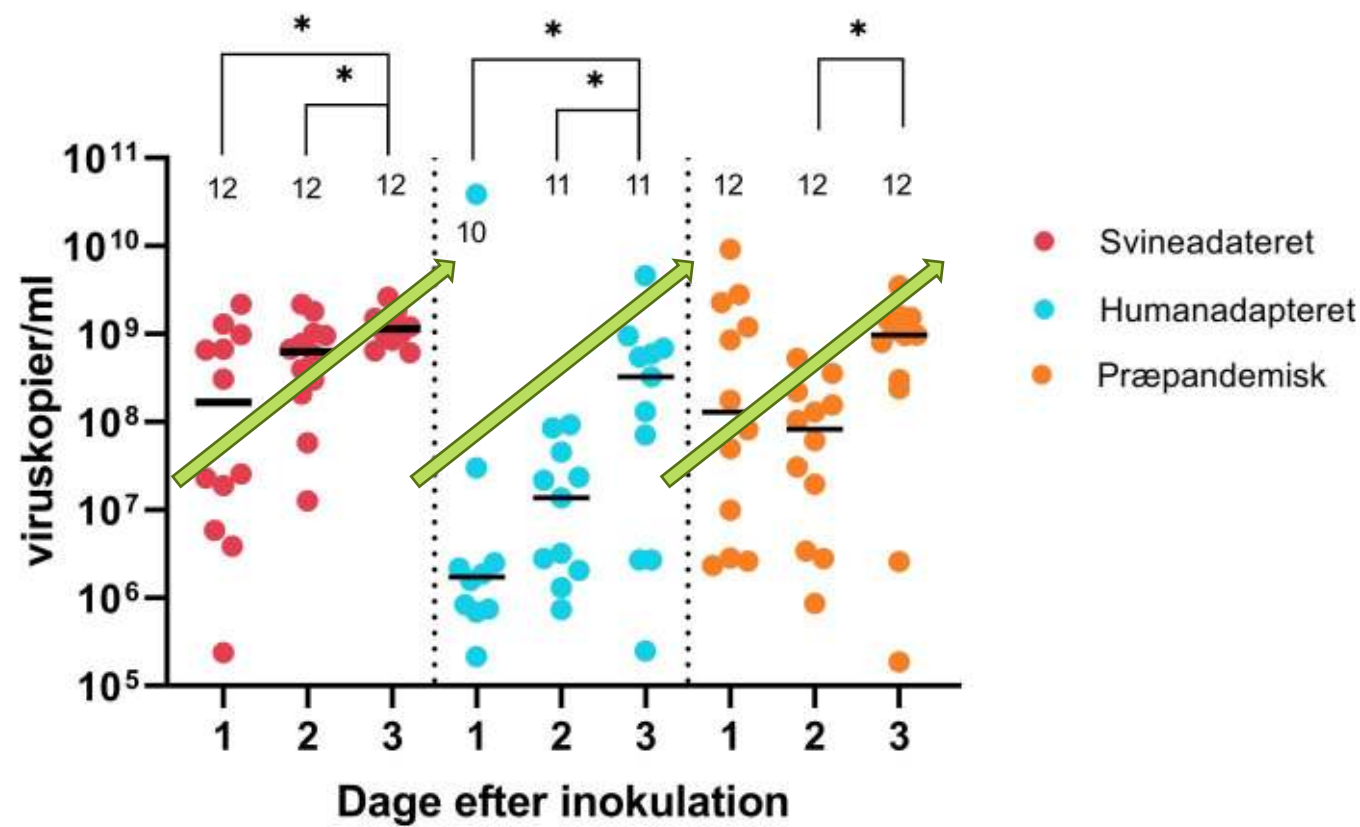


# Forsøgsdesign

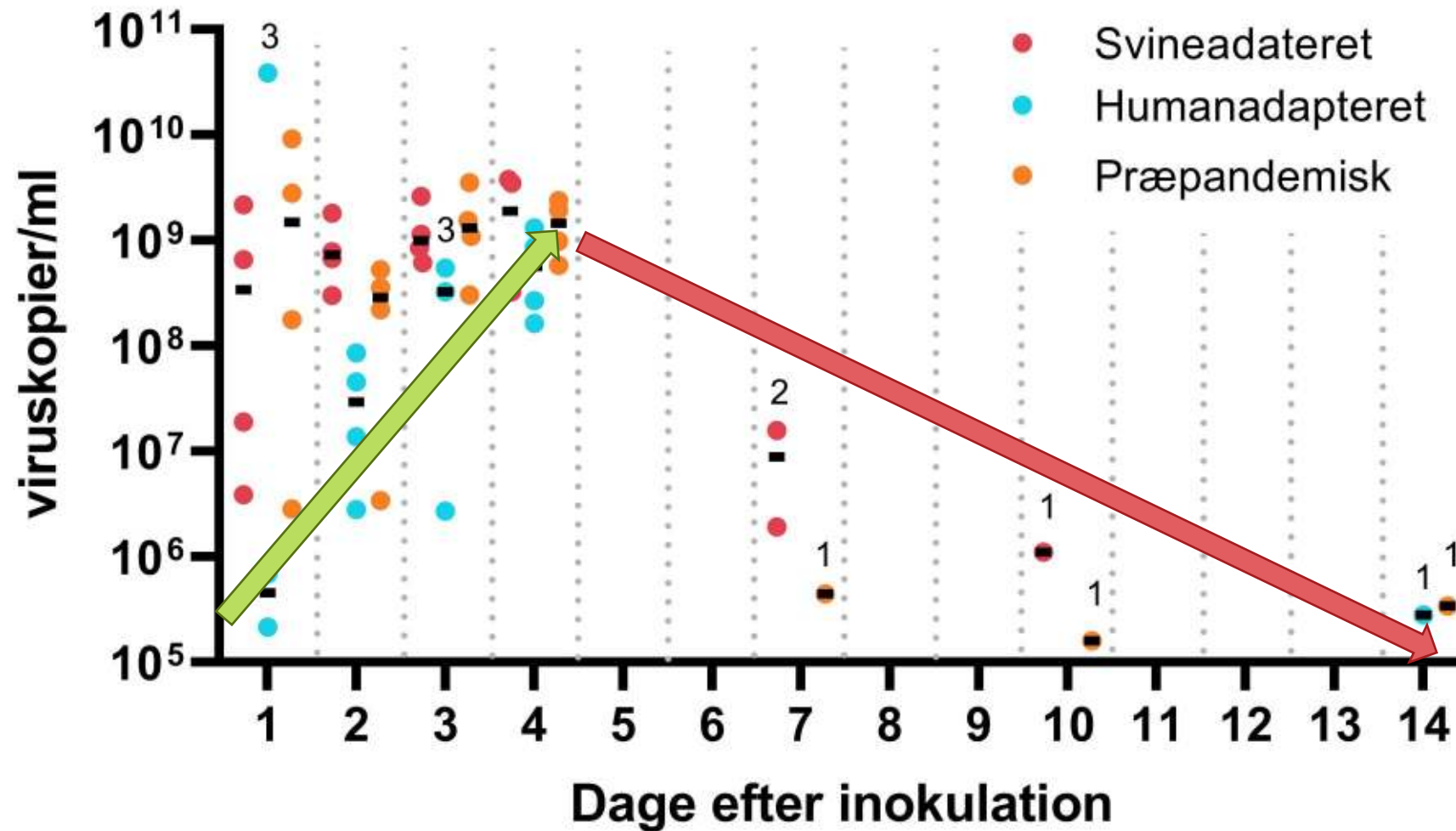


# Virusudskillelse dag 1-3

Forskel mellem dage



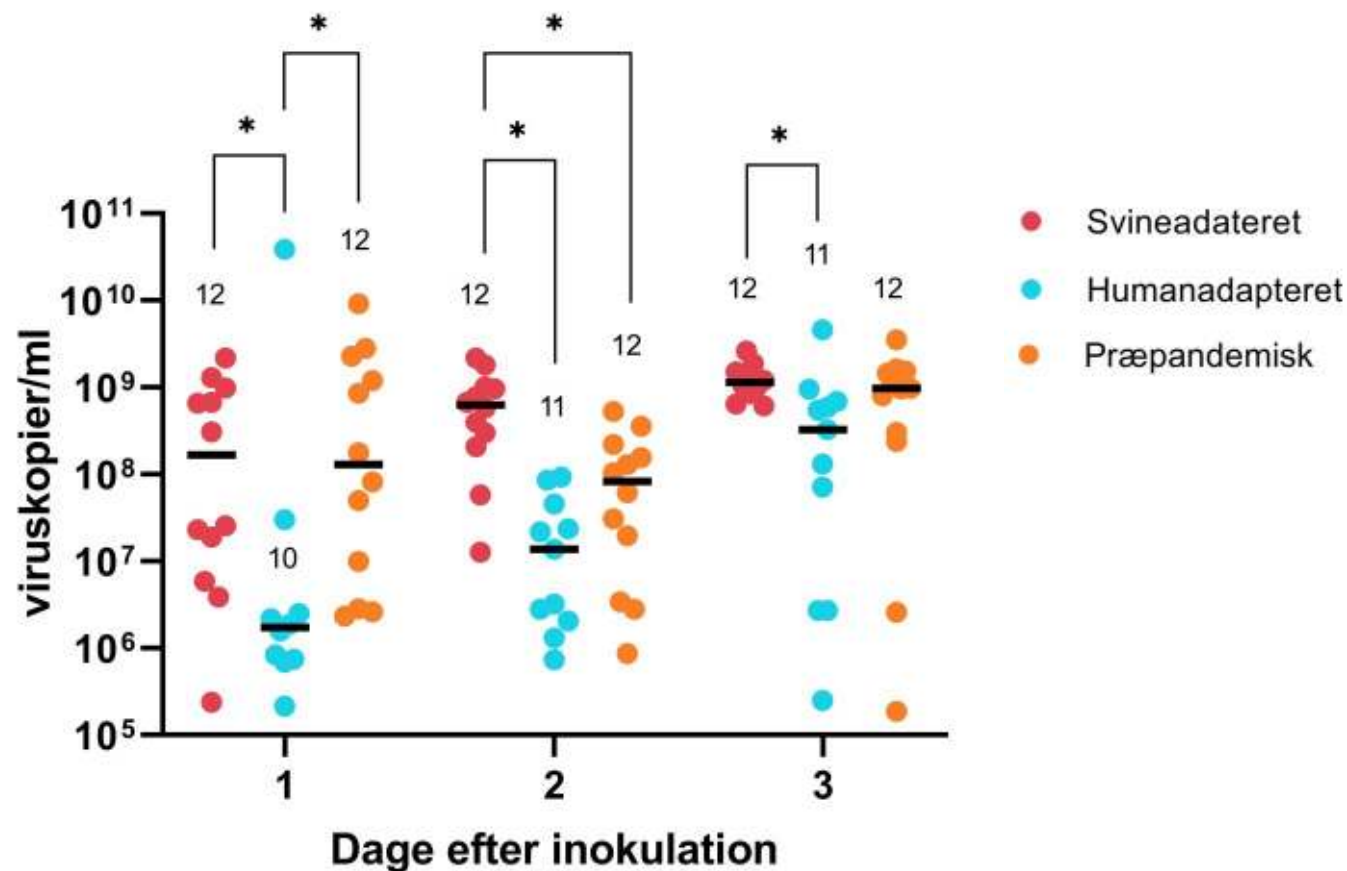
# Virusudskillelse dag 1-14



# Virusudskillelse dag 1-3

Forskel mellem grupper

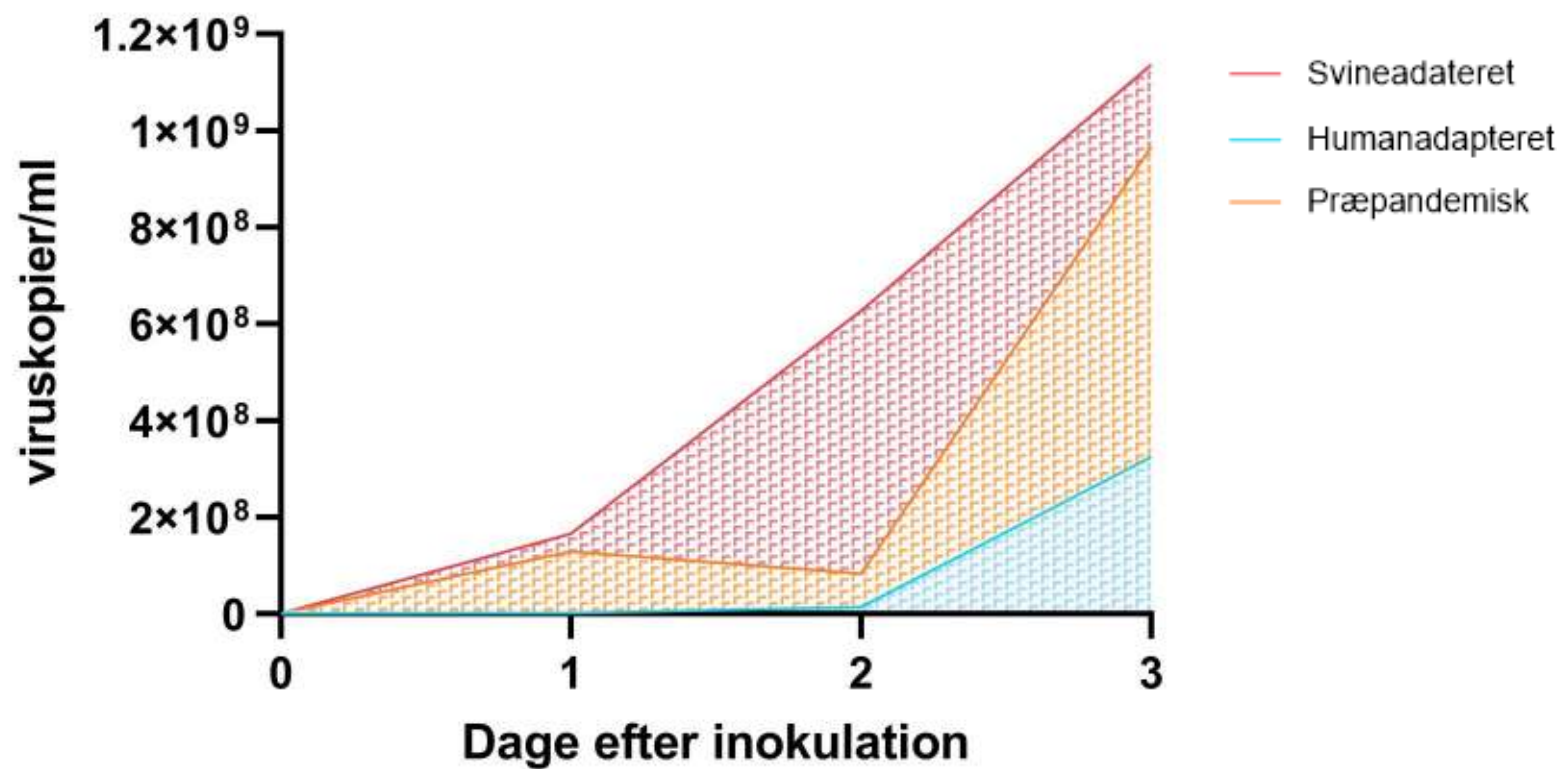
**Svineadapteret > Præpandemisk > Humanadapteret**



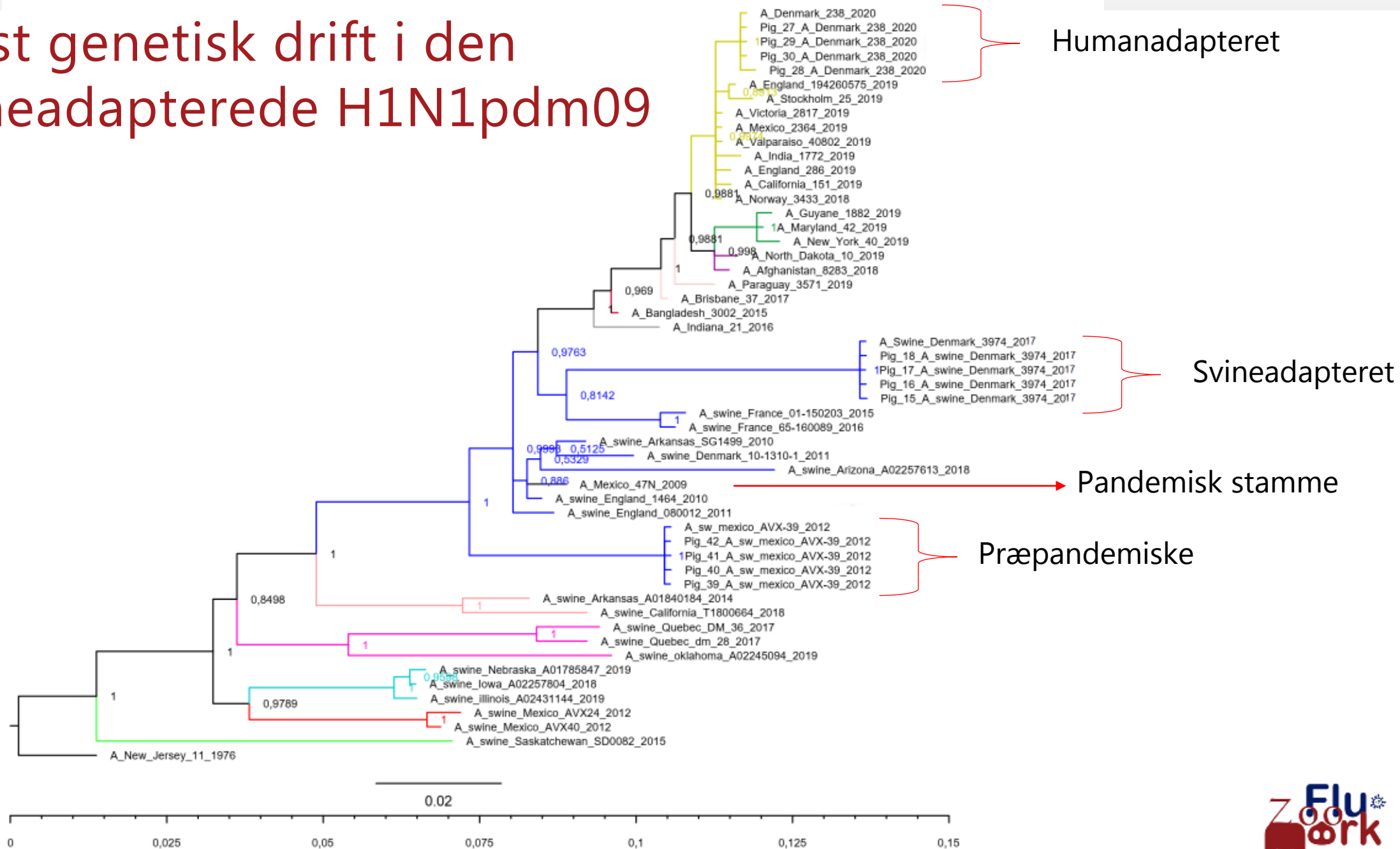


# Total virusudskillelse dag 1-3

Svineadapteret > Præpandemisk > Humanadapteret

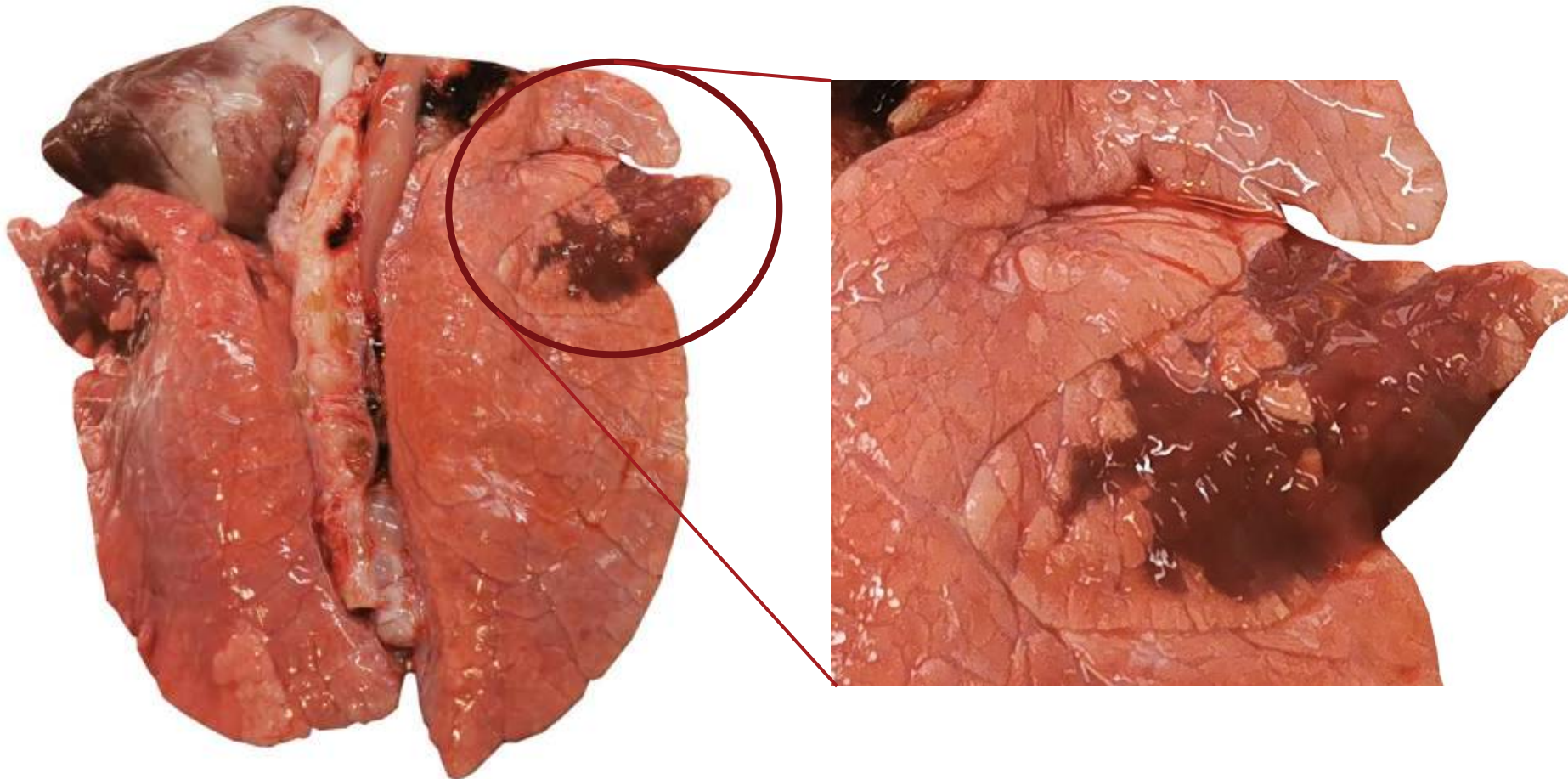


# Mest genetisk drift i den svineadapterede H1N1pdm09



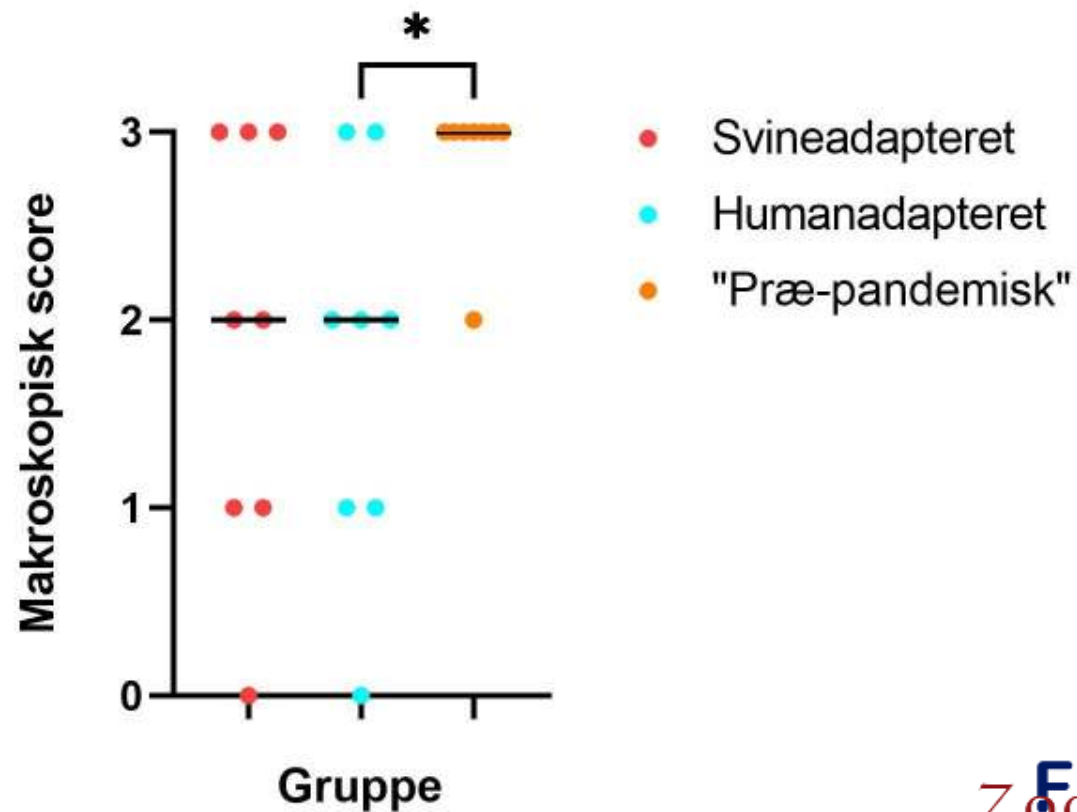
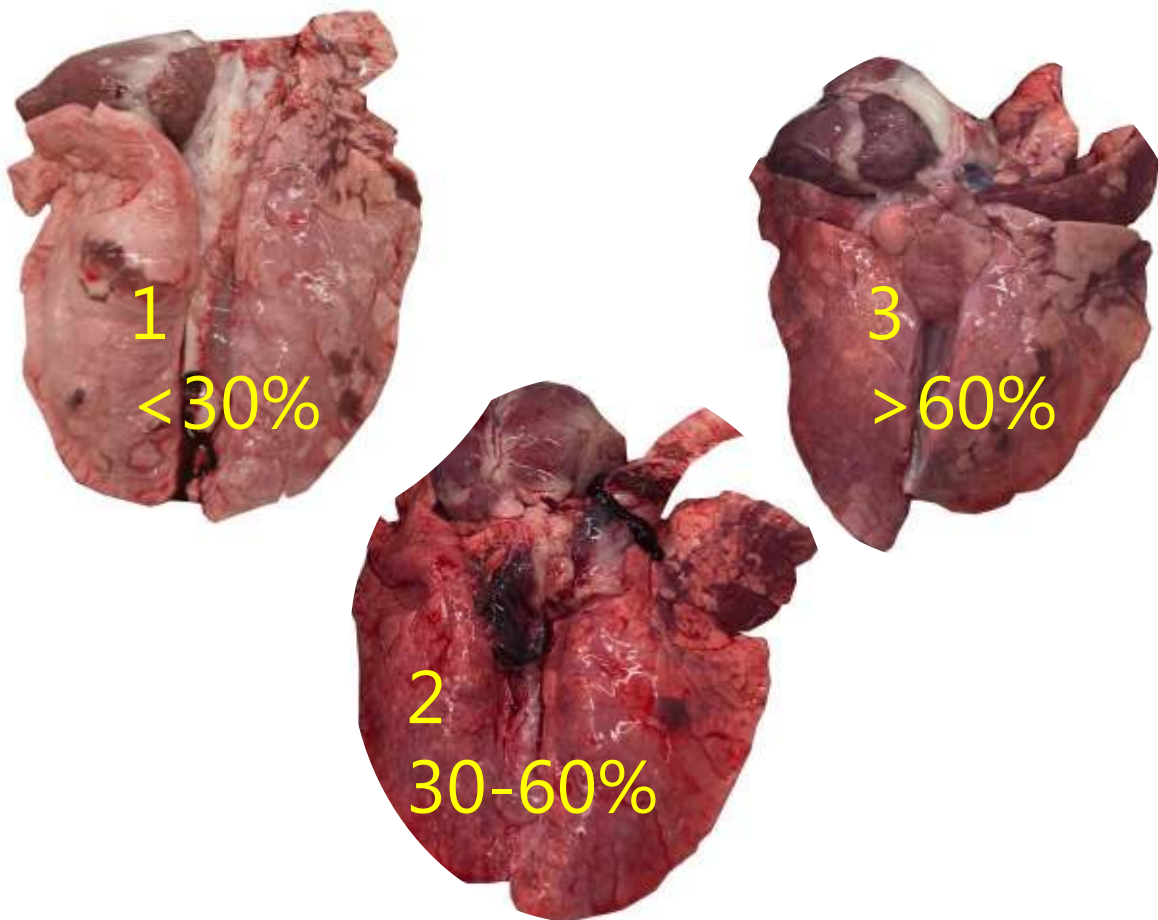
## Makroskopiske læsioner 3 DPI

- Røde, lobulære, afgrænsede/sammenflydende områder med atelektase

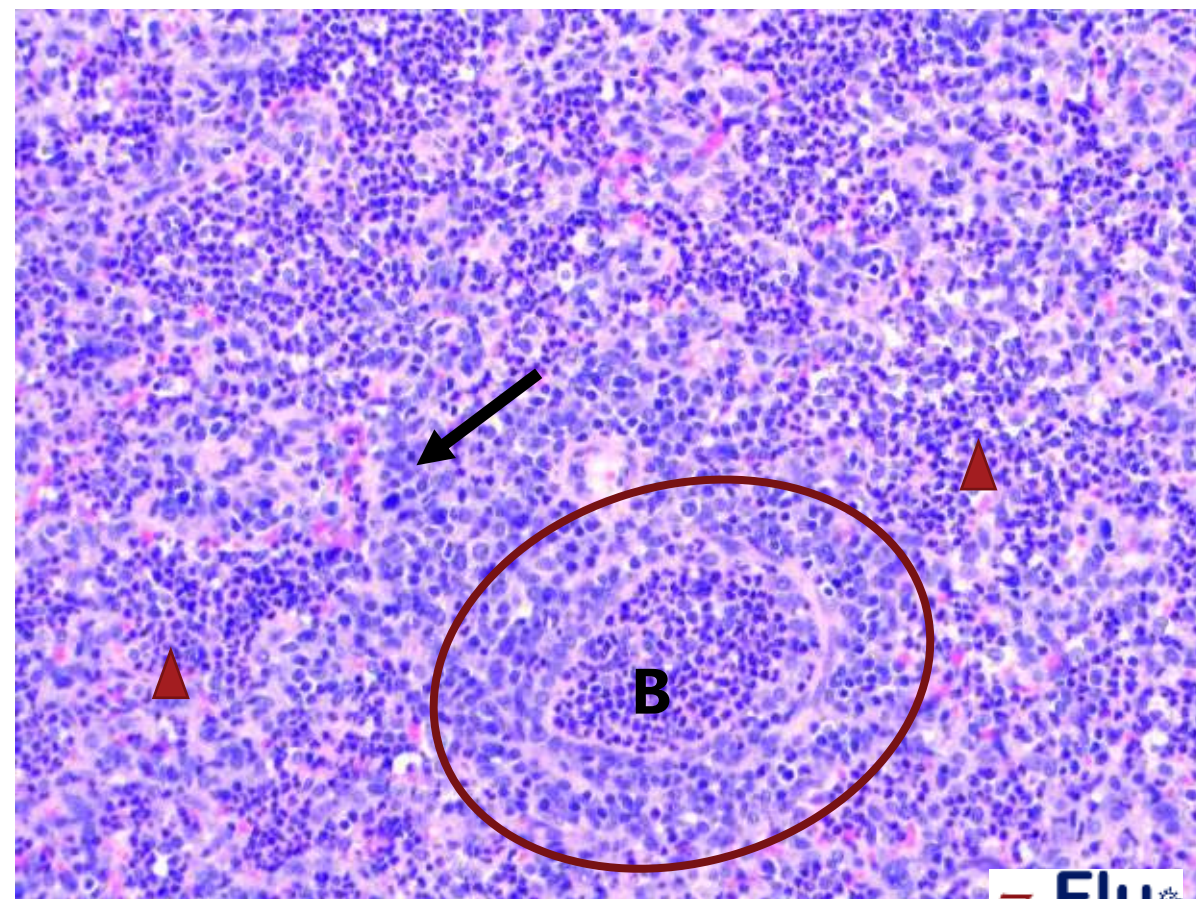
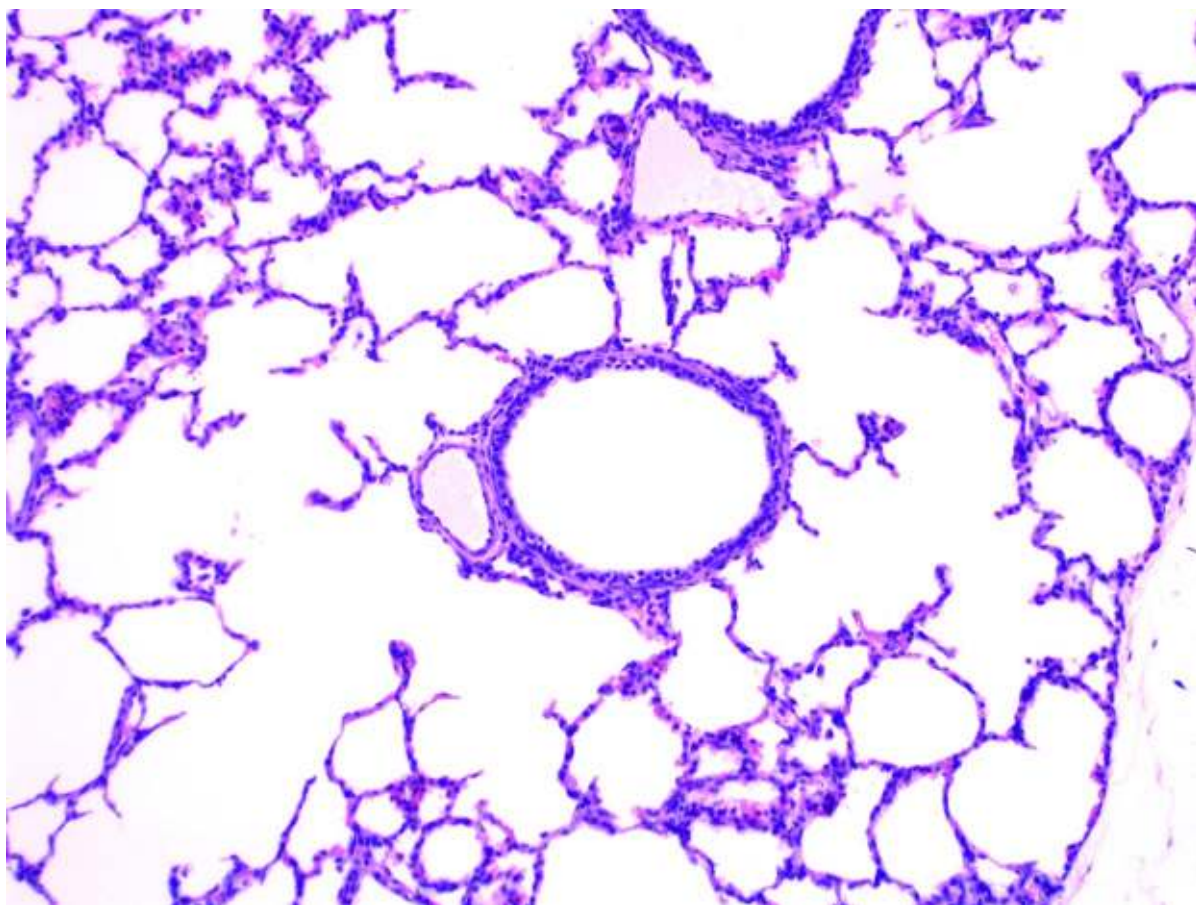


# Makroskopiske læsioner 3 DPI

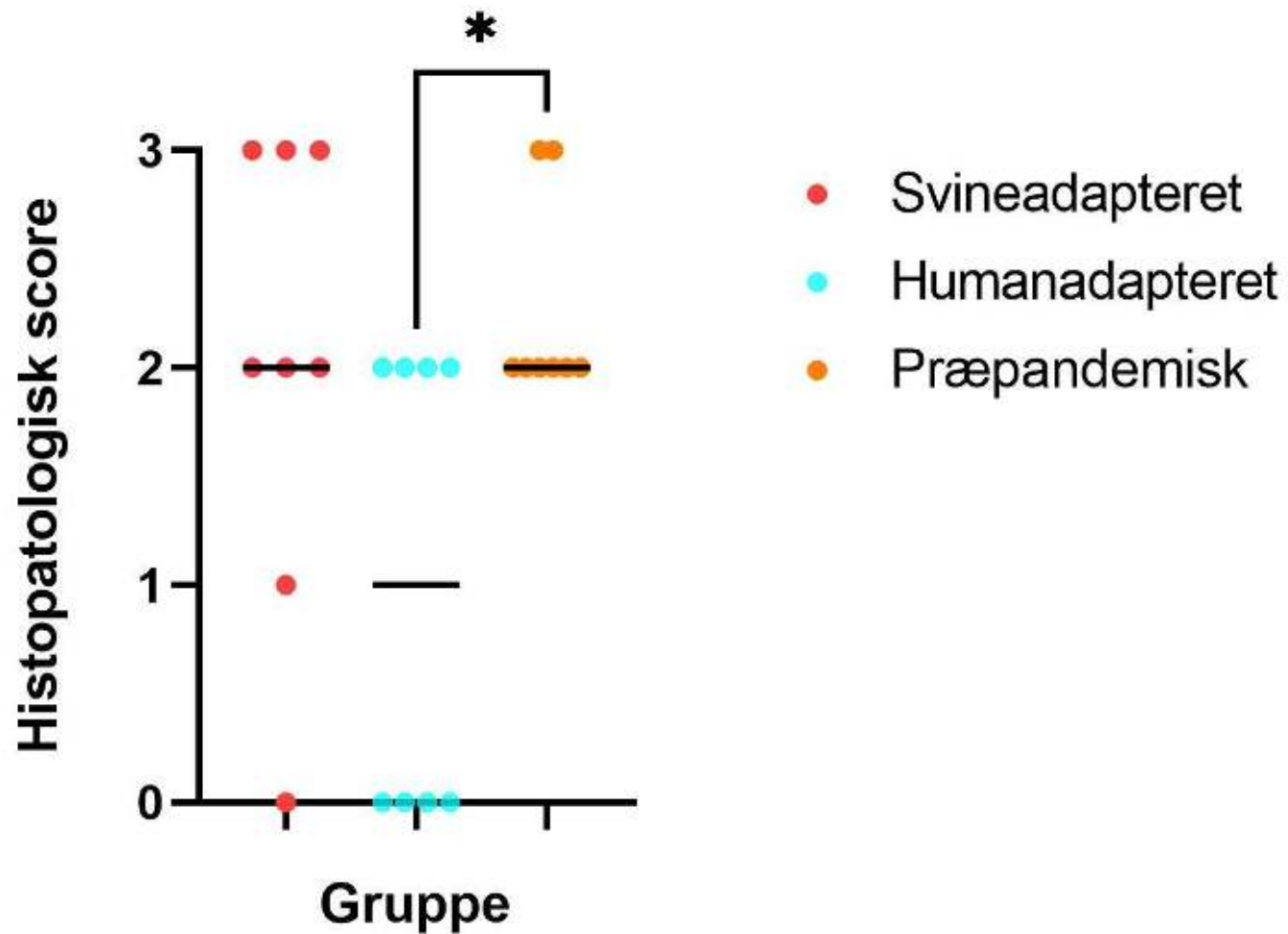
- Røde, lobulære, afgrænsede/sammenflydende områder med atelektase



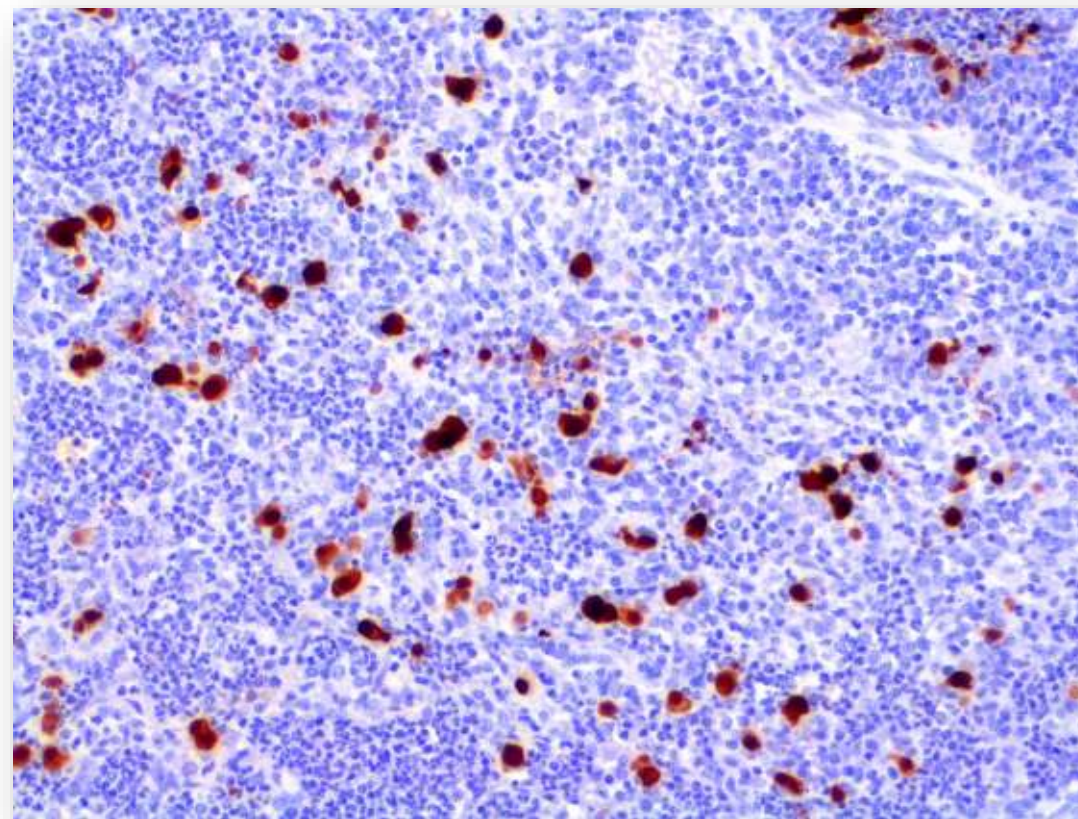
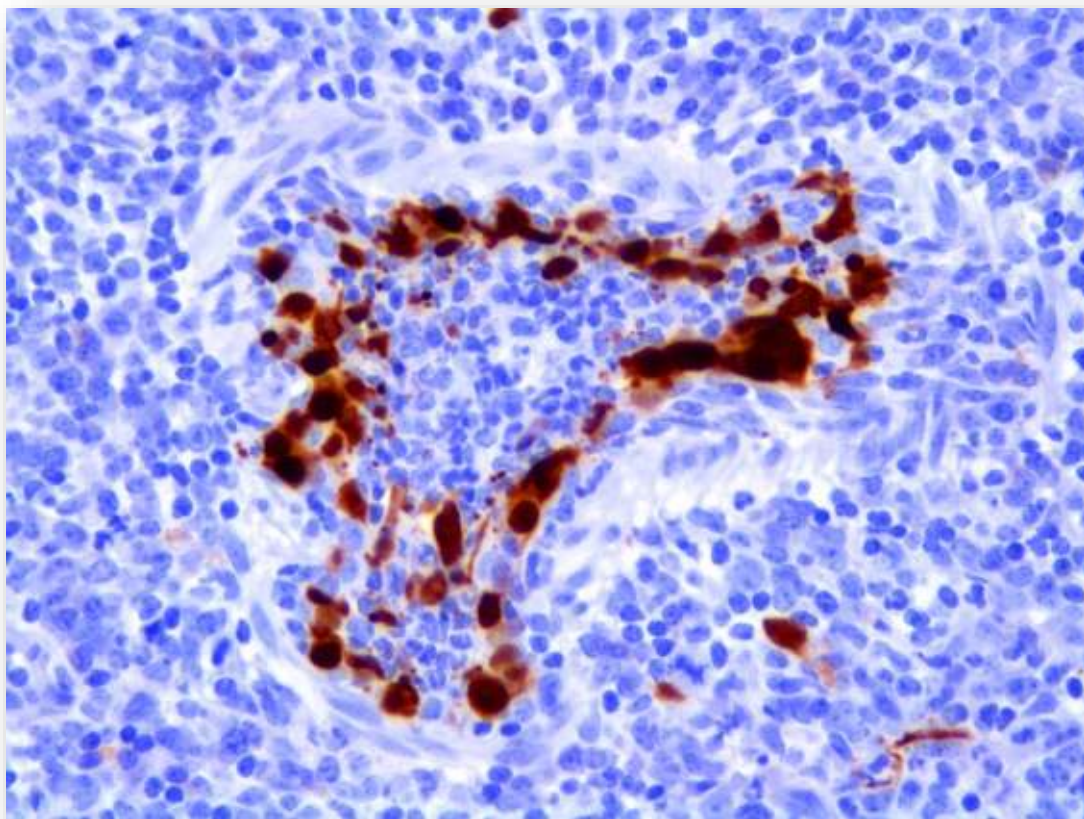
# Kontrol lunge vs. svær bronchointerstitiel pneumoni



# Histologiske læsioner 3 DPI

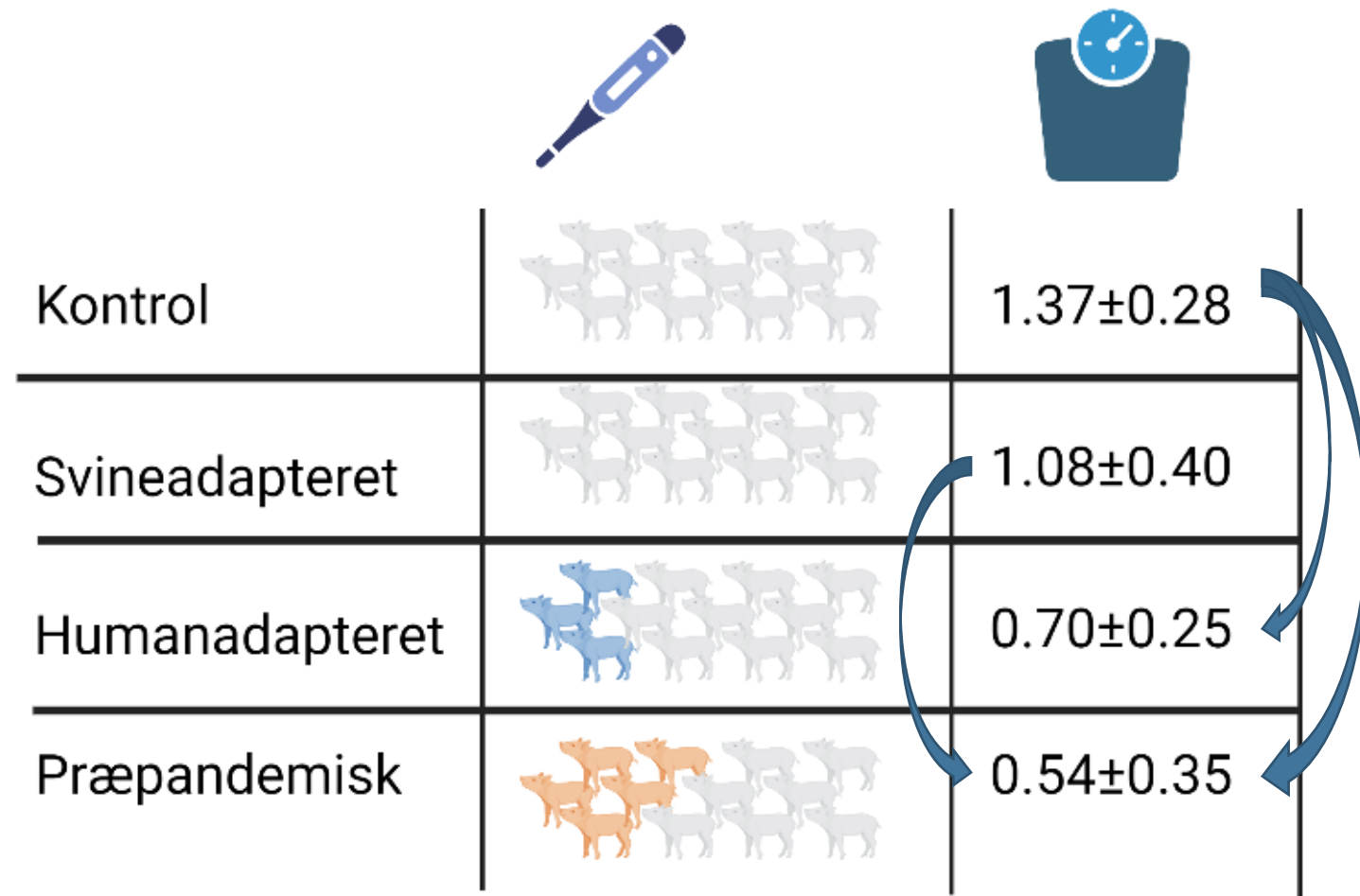


# Influenza virus immunhistokemi



# Kliniske tegn

- Få kliniske tegn observeret





# Opsummering

Virusudskillelse dag 1-3:

**Svineadapteret** > **Præpandemisk** > **Humanadapteret**

Kliniske tegn:

**Præpandemisk** > **Humanadapteret** > **Svineadapteret**

Patologi og histopatologi:

**Præpandemisk** > **Svineadapteret** > **Humanadapteret**

## Take-home message

- Kliniske tegn er ikke indikator for lungepatologi og virusudskillelse
- Adaptation har stor betydning for sygdomsbilledet
- Selvom humanadapteret og svineadapteret H1N1 er 93% identiske, er de meget forskellige
- Krydsreaktivitet?

# Tak for jeres opmærksomhed!

Og tusind tak til:

- Lars E. Larsen
- Henrik E. Jensen
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- Lise Kvisgaard
- Nina Dam Grønnegaard
- Hue Thi Thanh Tran
- Yuan Liang
- Sophie George
- Pia Ryt-Hansen
- Simon Welner
- Kerstin Skovgaard
- Helena Aagaard Glud
- Kasper Pedersen
- Maja Rosendahl
- Alle dyrepasserne

# Spørgsmål?