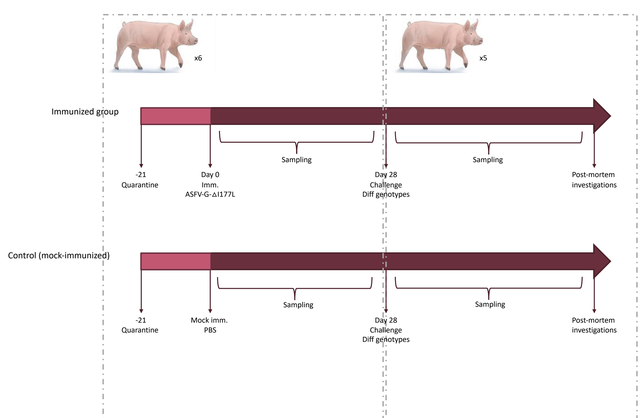
The challenge

- Live attenuated vaccines developed by many research groups are based on Genotype-II of African swine fever virus, predominantly present in Europe and Asia.
- Presence of 24 different genotypes in Africa, some genetically very distant.
- There is no testing on the impact (potential risk or benefit) the developed ASF vaccines will have in the African context. Protection or damage.

Our innovative approach

- Is the NAVETCO vaccine going to protect against African swine fever virus strains present in Africa? Systematic *in vivo* testing of the Vietnam ASF licensed vaccine (ASFV-G-ΔI177L) efficacy against African swine fever virus genotypes circulating in Africa (genotype-I, -II, -IX, -X, -VIII and –XX).
- Can we predict if animals will survive only vaccinating? Finding correlates of protection to avoid the need to challenge animals in future.



Do African swine fever (ASF) vaccines designed for the European and Asian markets work for Africa?

- First time a systematic evaluation of licensed live attenuated ASF vaccine (NAVETCO) is performed against African isolates.
- Are vaccines designed against Genotype-II African swine fever virus (predominant in Europe and Asia) protective against the African circulating strains?
- The data generated will inform on the need to have specific LAV for Africa.
- The data will inform on the risk of introducing a non-optimal vaccine in a region with the presence of different strains. Risk of generating a new hybrid strain.

Pictures from left to right: The Guardian / Pig Progress / Pork Business / Wikipedia

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If you want to know more

Outcomes

- Data on the efficacy of the NAVETCO vaccine to protect against African swine fever virus (ASFV) isolates circulating in Africa (confidential until publication).
- Data on the risk of introduction of a new genotype (vaccine) in an area (Africa) (confidential until publication)
- Tools to predict vaccine efficacy without the need for challenge (infection).

Next steps

- Finalise *in vivo* experiments, *ex vivo* analysis and data analysis.
- Peer review publication and report to stakeholders.
- Tools were established to evaluate any LAV for ASFV in the ILRI facilities. Expand the vaccine candidate evaluation (collaboration with the ILRI farm facilities).

Partners

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