

**HIPRA**



# Working together with pig producers: new tools to improve efficiency

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# Main Biological Products for Swine



## SENG RANGE

### SUISENG® Coli/C

The only vaccine with triple protection against neonatal colibacillosis, necrotic enteritis and sow sudden death.

### SUISENG® Diff/A

LATEST LAUNCH

The first and only vaccine against recurrent neonatal diarrhoea caused by *C. difficile* and *C. perfringens* type A.

### RHINISENG®

The only vaccine with double protection against non-progressive and progressive atrophic rhinitis.

### ERYSENG® PARVO

The bivalent vaccine against Swine Erysipelas and Porcine Parvovirus

### ERYSENG® PARVO/LEPTO

The safest trivalent vaccine against Swine Erysipelas, Porcine Parvovirus and Leptospirosis.

## DIGESTIVE

### VEPURED®

Purified recombinant Verotoxin 2e, the only vaccine with prevention of mortality against Edema Disease.

## RESPIRATORY

### AUSKIPRA® GN

Live vaccine against Aujeszky's Disease, gE negative strain suitable for eradication programs.

### HIPRASUIS® GLÄSSER

Inactivated vaccine against Glässer's Disease with heterologous protection.

## PRRS

### UNI STRAIN® PRRS

Complete live PRRS vaccine indicated for piglets, gilts and sows, administered either via ID or IM route.

## PCV ID

### MHYOSPHERE® PCV ID

LATEST LAUNCH

The one and only, intradermal needle-free vaccine against *Mycoplasma hyopneumoniae* and PCV2, all in one.



## EMA recommends approval of Bimervax as a COVID-19 booster vaccine [Share](#)

News 30/03/2023

EMA's human medicines committee (CHMP) has recommended authorising the COVID-19 vaccine Bimervax (previously COVID-19 Vaccine HIPRA) as a booster in people aged 16 years and above who have been vaccinated with an mRNA COVID-19 vaccine.

Bimervax, developed by HIPRA Human Health S.L.U., contains a protein produced in the laboratory that consists of part of the SARS-CoV-2 spike protein from the Alpha and Beta virus variants.

The CHMP concluded that sufficiently robust data on the quality, safety and immunogenicity of the vaccine are now available to recommend its [marketing authorisation](#) in the EU.

The main study carried out with Bimervax is an immunobridging trial, which compared the immune response triggered by this new vaccine with that triggered by the authorised mRNA vaccine Comirnaty that targets the original (Wuhan) SARS-CoV-2 spike protein.

The study involved 765 adults who had previously completed primary vaccination with 2 doses of Comirnaty and who were subsequently given a booster dose of either Bimervax or Comirnaty. Although Bimervax triggered the production of lower levels of antibodies against the original strain of SARS-CoV-2 than Comirnaty, it led to higher levels of antibodies against the Beta and Omicron variants and comparable levels against the Delta variant.



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## Miñones: The HIPRA vaccine is an unprecedented scientific and health milestone that shows Spain's commitment to improving people's health

News - 2023.3.30

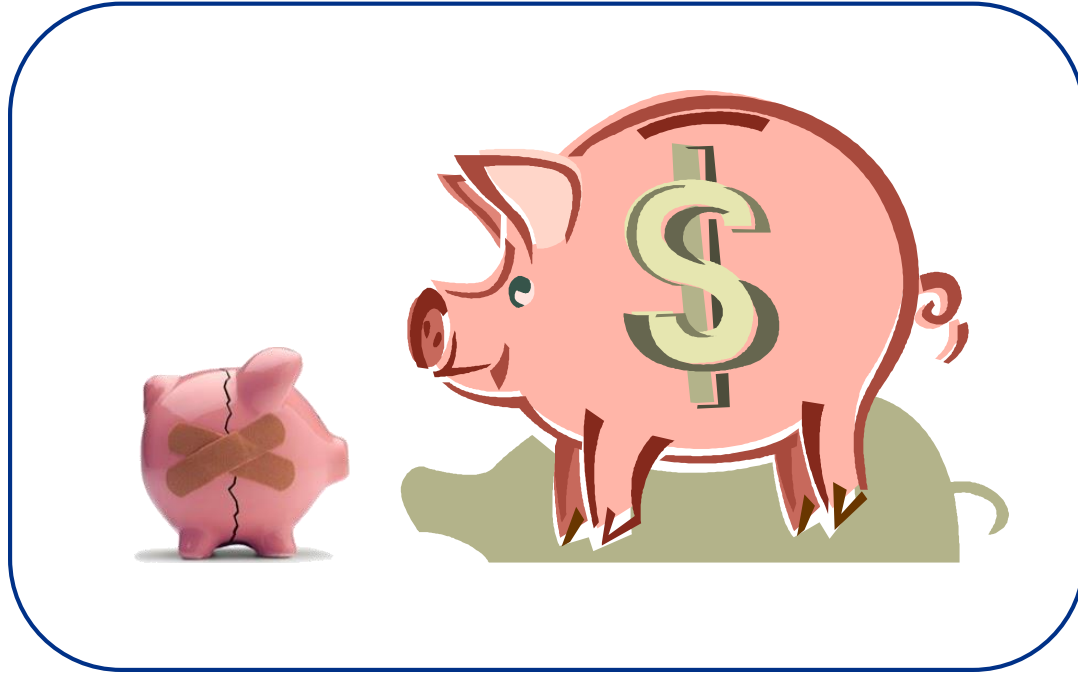
The Minister for Health, José Miñones, has valued the recent approval of the recommendation of the Spanish HIPRA vaccine against COVID-19 as an unprecedented scientific and health milestone that shows our country's commitment to improving people's health, leaving no one behind.

The European Medicines Agency (EMA) has recommended that a conditional marketing authorisation be granted for HIPRA's COVID-19 vaccine Bimervax, the booster dose for those aged 16 years and older who have received a primary vaccination with an mRNA vaccine at least 6 months after the last vaccine dose.

José Miñones thanked all the professionals of the Ministry of Health and the Spanish Agency for Medicines and Health Products (AEMPS) for their work and regulatory and scientific advice to ensure that the vaccine meets the guarantees of quality, safety and efficacy required by the EU.



The Minister for Health, José Miñones (Pool Moncloa)



Constantly forced to keep improving **cost efficiency**

# A farm is a mirror of owner's mentality



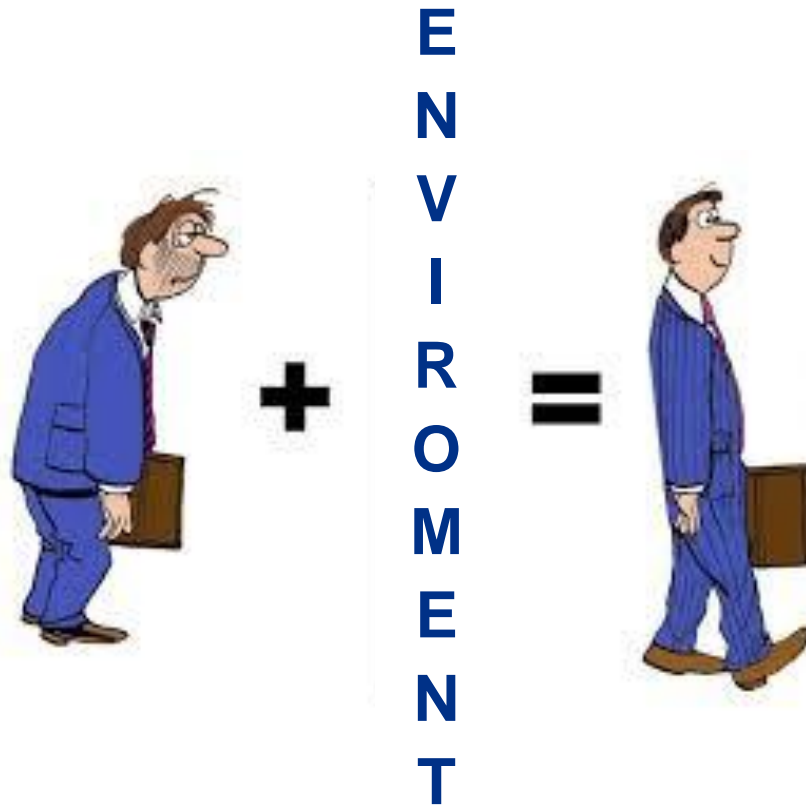
Visit the toilet and look at the outside garden

## Who wants to work on a piggery?



**Youngsters do not want to follow parents jobs**

# Dignify people's job to retent talent



## The era of FINE TUNING



**qualified workers & data is needed**



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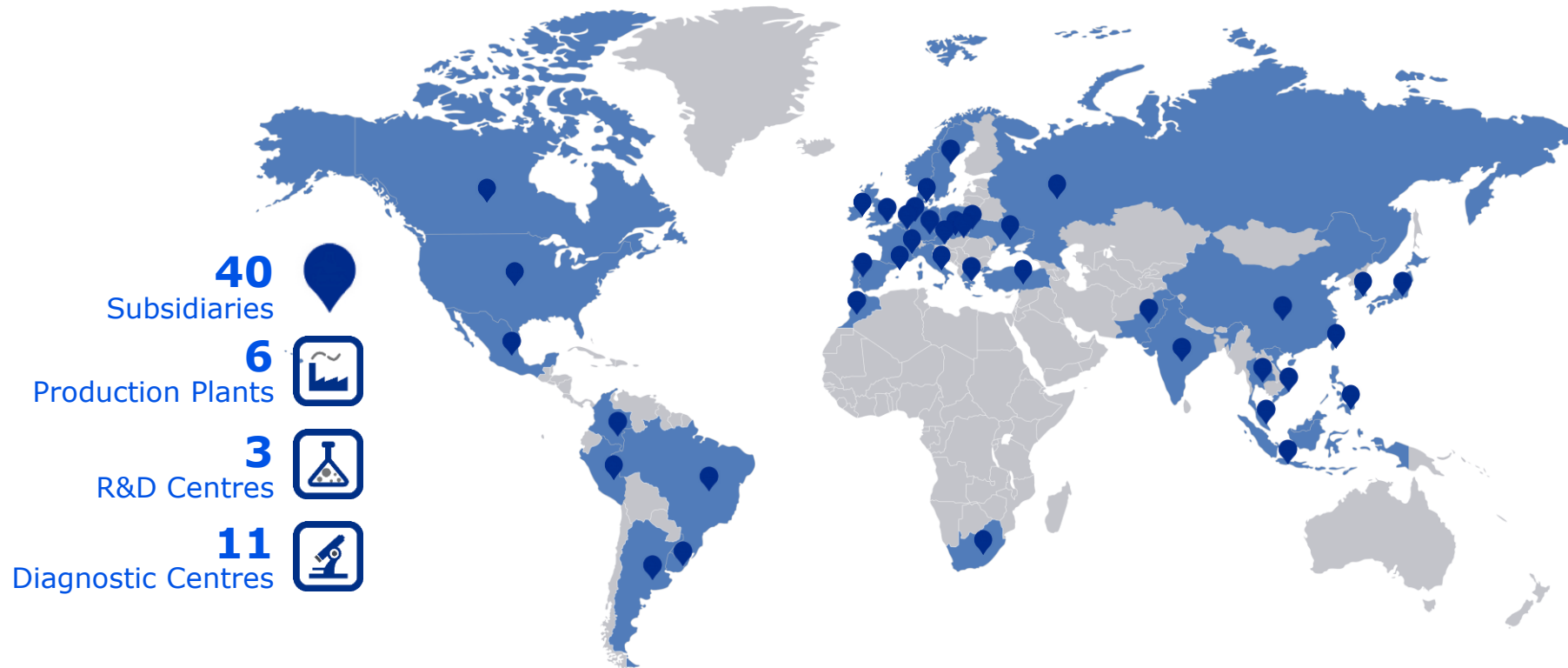
# Working together with pig farmers

# **HIPRA DIAGNOS**



# HIPRA around the world

## Global blueprint





New system to monitor colostrum uptake

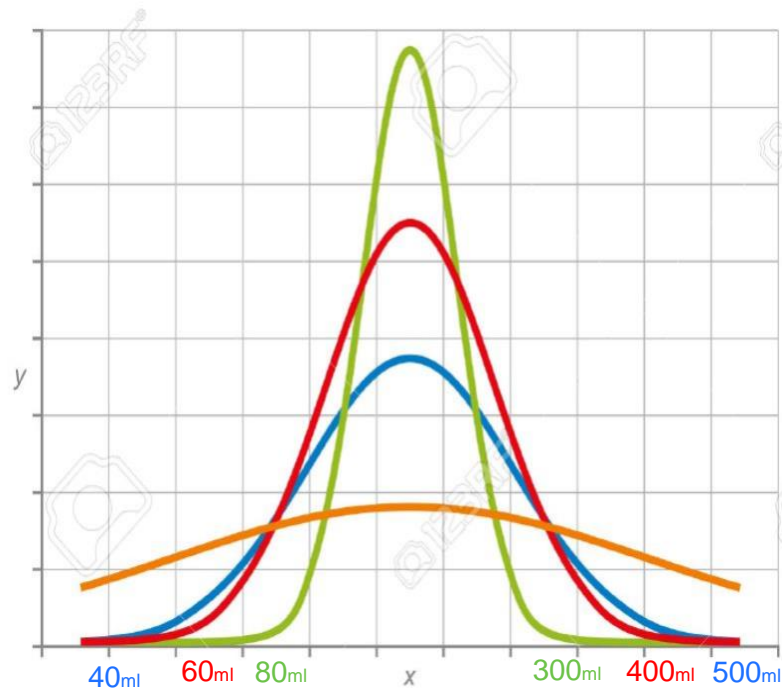
## Colostrum production can be modified



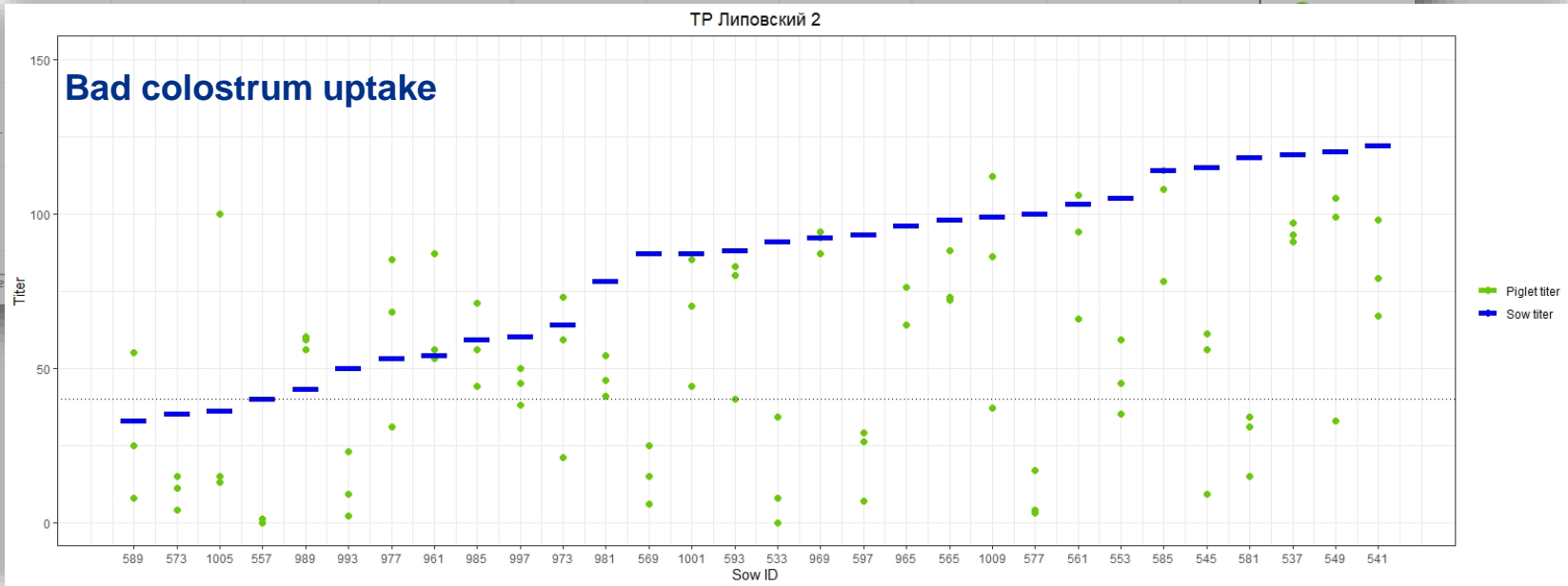
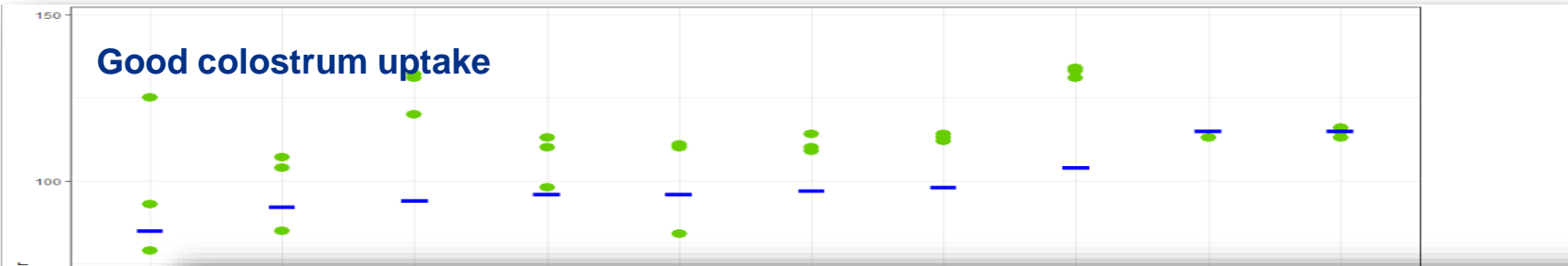
**Mean: 2,5 – 3,5 kg/sow**

1,1 kg to 4,7 kg (Foisnet *et al.*, 2010)

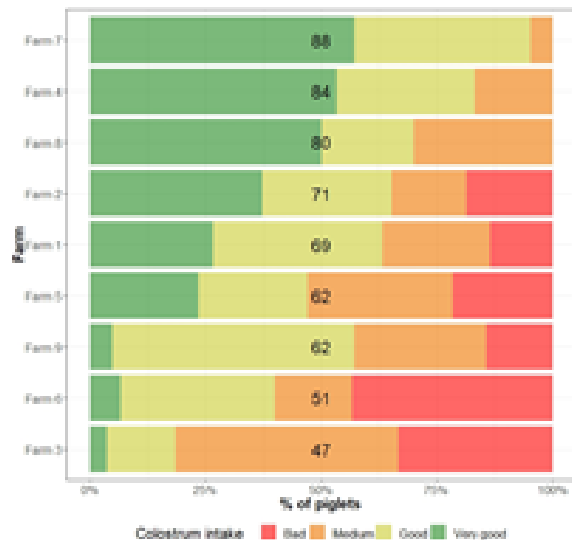
# Piglet colostrum uptake between farms



subpopulations will **always** exist

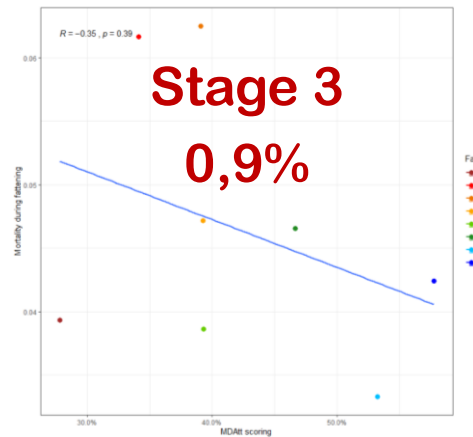
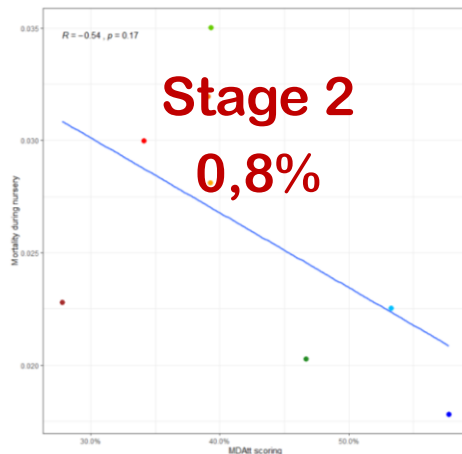
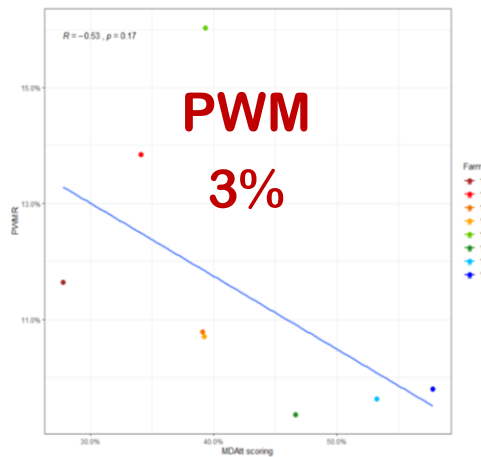
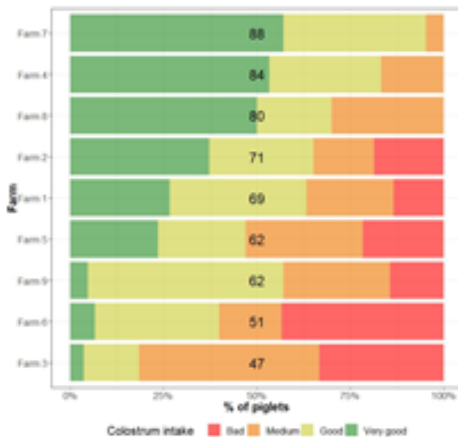


# Benchmarking between farms of the same company



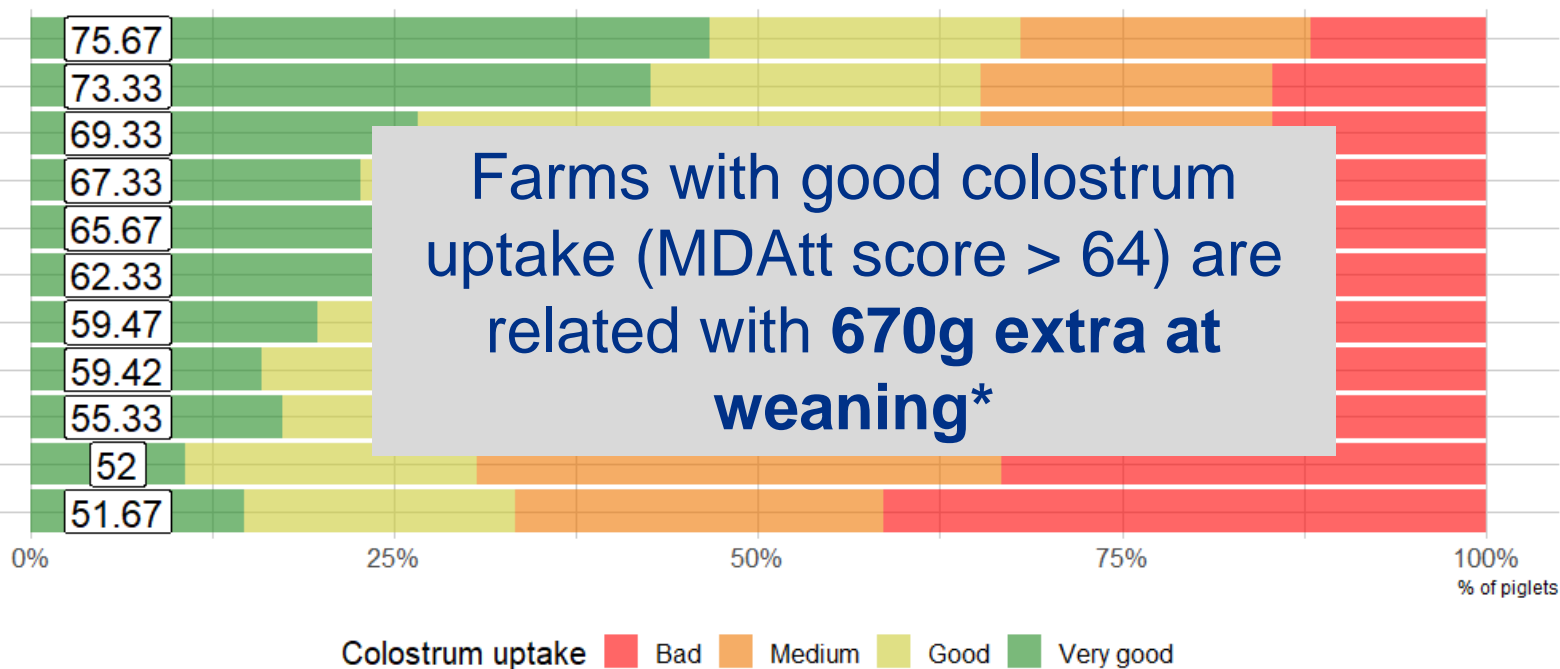


# Farm scoring correlates with mortality



# A case from last week

## Benchmarking of farms



**2**

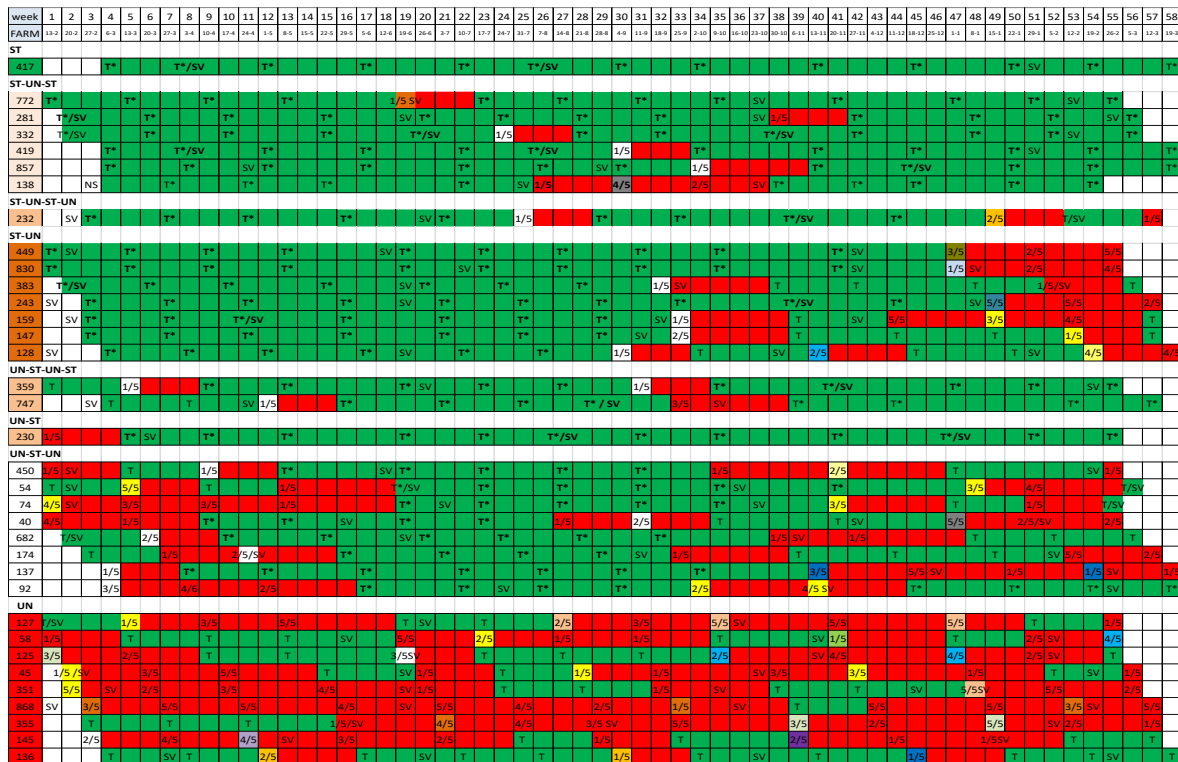
Going further on diagnosis

Invest in ROUTINE PRRS diagnostic!!

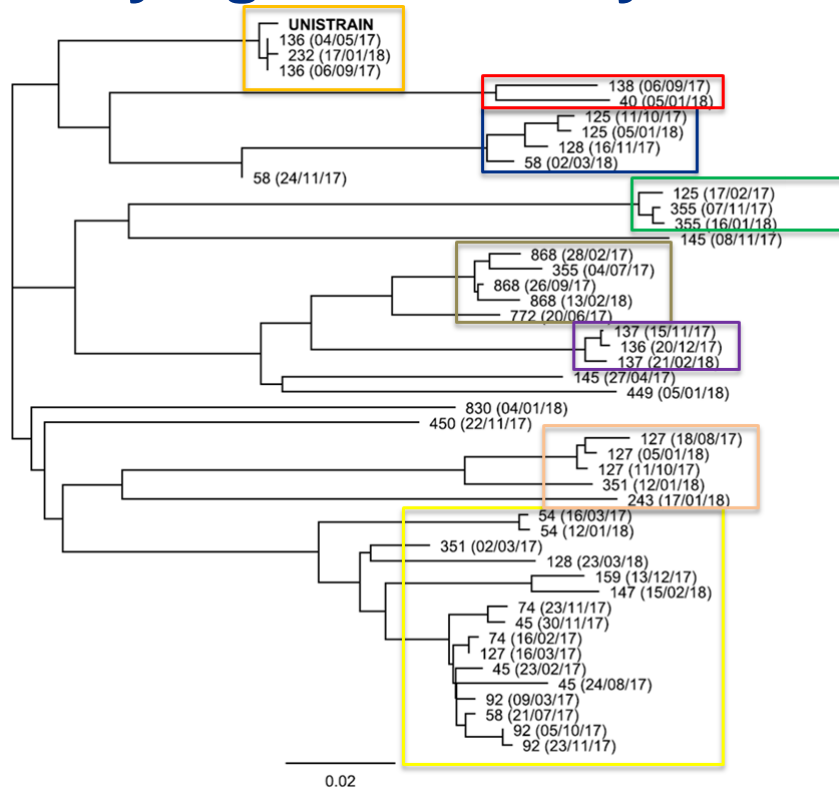


ELISA + PCR + Sequencing

## Put routine PCR results into a heat map



# ORF5 Phylogenetic study



## Transform sequencing into a “strains colour map”

[illegible]

**3**

Applying artificial intelligence

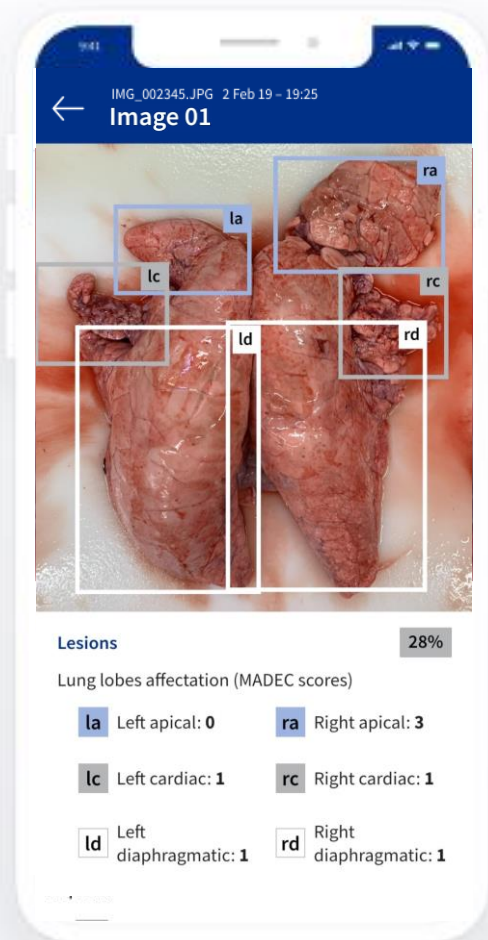


# HIPRA DIAGNOS

## ARTIFICIAL INTELLIGENCE DIAGNOS

HIPRA has developed the first artificial intelligence diagnostic service for swine.

Image analysis from llungs and snouts using Artificial Intelligence (AI) to evaluate lesions from Enzootic Pneumonia and Atrophic Rhinitis.



**HIPRA**  
**SMART**  
**VACCINATION®**



Technology solutions for ANIMAL HEALTH  
**SMART VACCINATION**



**Hipradermic®**

**Hipradermic®**,  
the lightest and first IoT **needle-free**  
device for the **intradermal**  
**vaccination** of pigs



HIPRA



COMFORT

The **lightest intradermal needle-free** device.



**Automatic injection without a trigger,**  
so reduces user muscle fatigue and administration time.



**Hands-free** option available  
for an even easier piglet's  
vaccination.



**00:00**



**INTRAMUSCULAR  
00 PIGLETS**

**00:00**



**HIPRADERMIC®  
00 PIGLETS**



# HIPRA SMART VACCINATION

A smart vaccine including **RFID technology** in its label, a **vaccination device (Hlpradermic®)** which ensures precision and efficiency, and a new world of **digital solutions** in HIPRALink® Vaccination.



**HIPRA**

**HIPRA**

Building Immunity  
for a Healthier World