



Data-driven control and prioritisation of non-EU-regulated contagious animal diseases

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DR. BRITT BANG JENSEN

CO-LEADER WP3 AND DATA LEAD SALMON, NVI, NORWAY

WWW.DECIDEPROJECT.EU

BRITT-BANG.JENSEN@VETINST.NO





Aim:

Develop data-driven decision support tools for:

- Farmers
- Veterinarians
- Other animal health managers

Improved decisions on controlling animal diseases

- Better awareness
- Control options
- Disease burden
- Early detection & timely warning

DECIDE

19 partners

11 countries

10 million euro

5 year

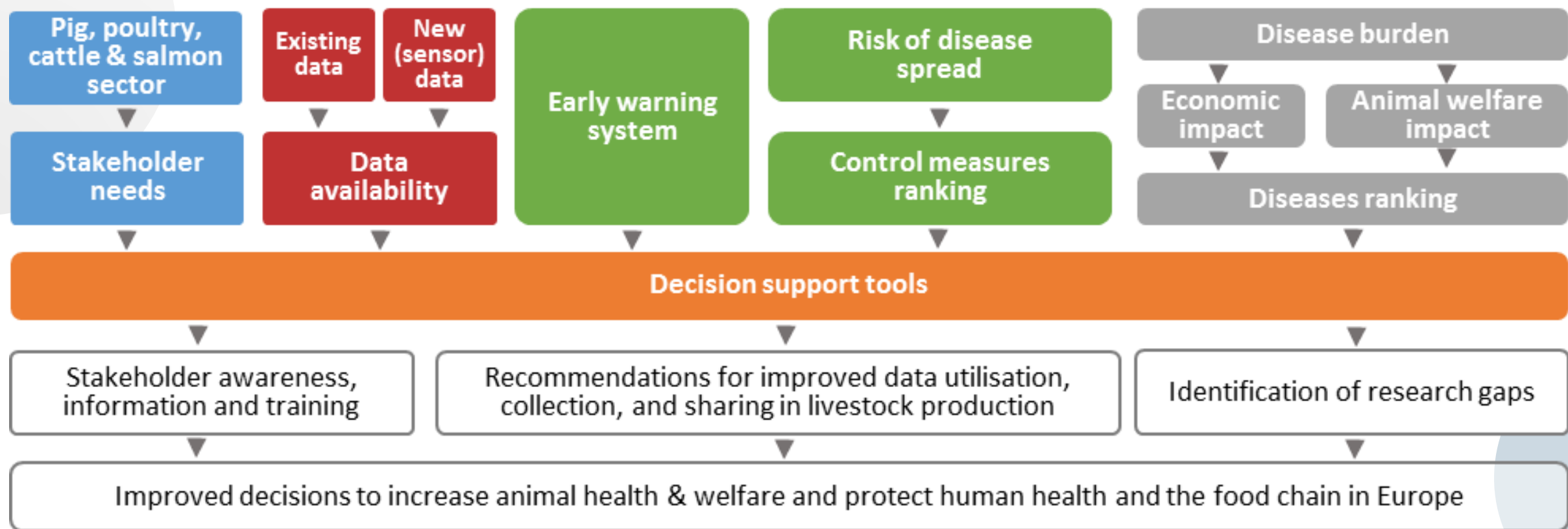
Started 1. July 2021











Competence

A top-down view of several people's hands stacked together in a circle, symbolizing teamwork and collaboration. The hands are of various skin tones and are wearing different types of clothing, including plaid shirts and dark sleeves. The background is a dark, textured surface.

Veterinary epidemiology and diagnostics,
Social sciences,
Economics,
Animal welfare,
Information technology,
Artificial intelligence,
Data sciences, and
Mechanistic and predictive modelling



Pilot studies

	Gastro-intestinal infections	Respiratory infections	Reduced growth	Mortality
Calves				
Piglets				
Broilers				
Salmon				



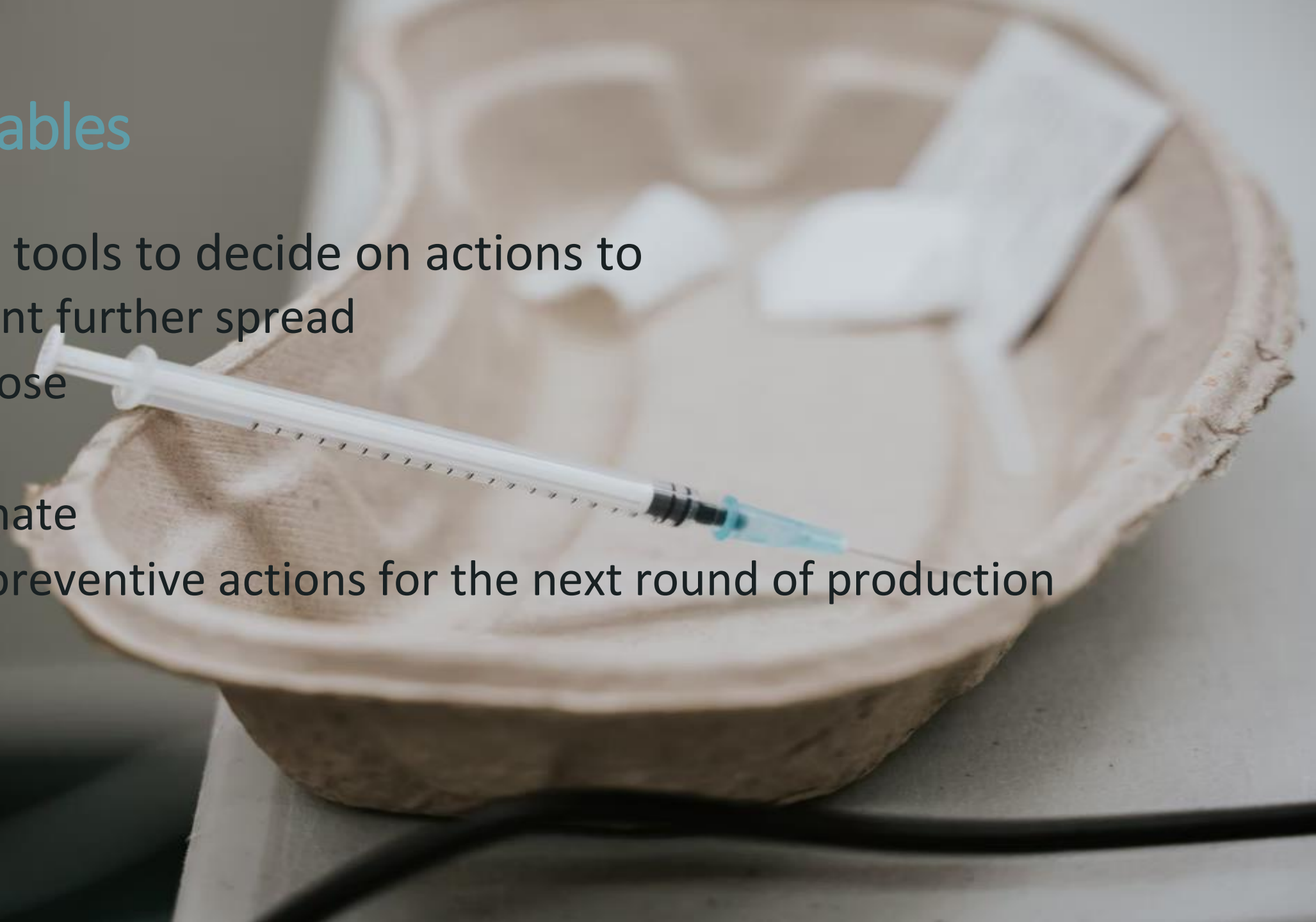
Non-EU regulated diseases that...

1. may spread within and between herds, flocks or fish farms
2. have the highest impact on animal health, animal welfare and the sustainability of the production
3. lead directly or indirectly to antimicrobial usage
4. negatively influence the quality and quantity of animal products, impacting the efficiency of the value chain.

Deliverables

Practical tools to decide on actions to

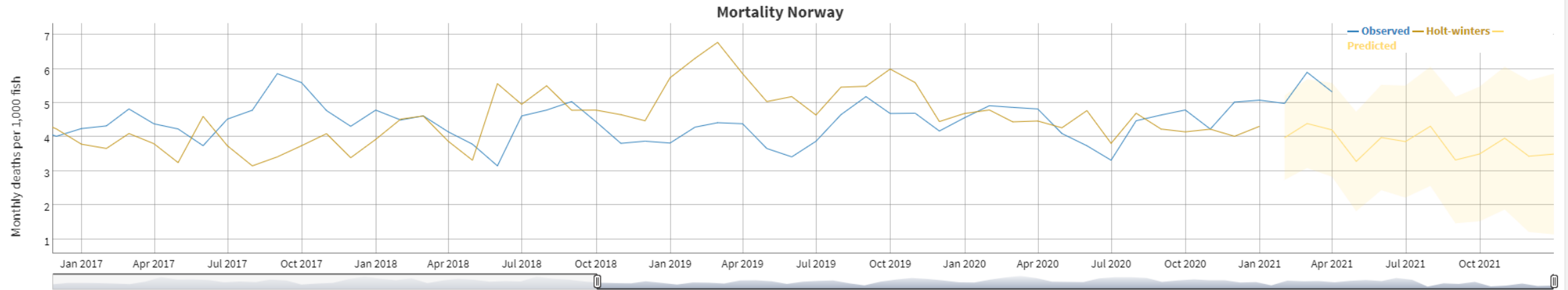
- prevent further spread
- diagnose
- treat
- vaccinate
- take preventive actions for the next round of production



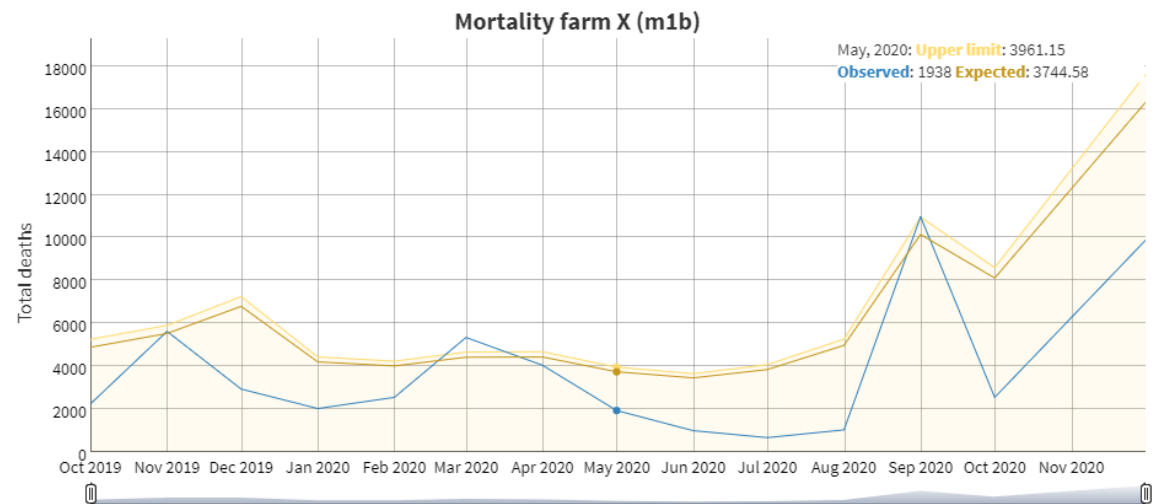
Tools –examples:

- Dashboard
- Early warning system
- Purchase assistant –live animals
- Intervention ranker

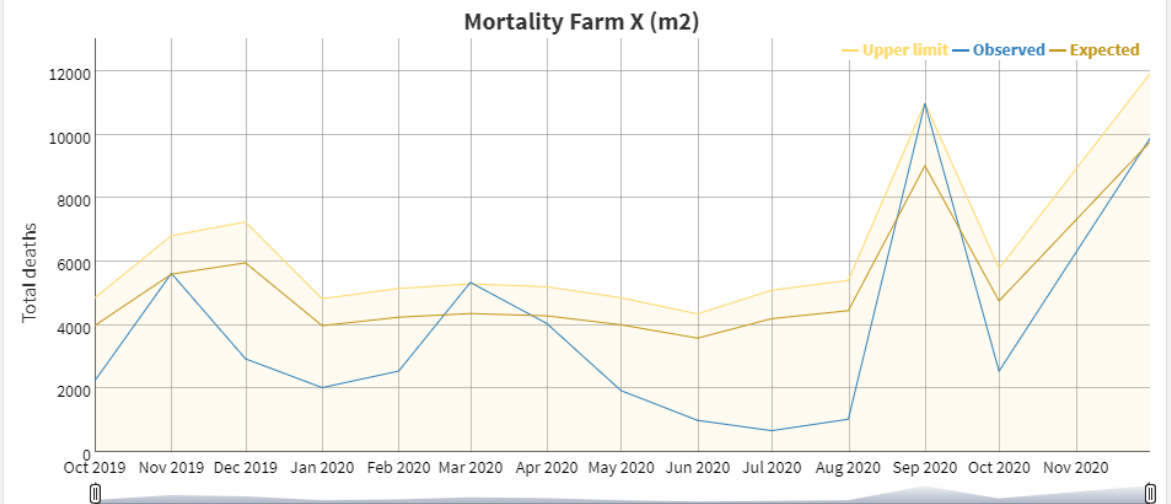
Holt-Winters forecasting for Norway



Model 1b forecasting for currently active farm



Model 2 forecasting for currently active farm





Stakeholder needs

Why, how and when stakeholders decide to take action (the drivers) and why they do not (barriers)

Social scientists ><Epidemiologists

Integrating stakeholders in project

Data

Access

GDPR, FAIR ++

Ontologies

Data streams

Health, sensors, population, contacts, meteorology etc.

Sharing /federated access / federated learning

Multidimensional burden of animal diseases

Production losses

Control costs

Welfare

Medicine use



DE CIDE

brings together 19 partners from 11 countries

