

Research needs to stay ahead of emerging animal diseases



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DISCONTTOOLS database

- 1) **Disease database – 57 diseases**
- 2) **Gap analysis – diagnostics, vaccines, pharmaceuticals**
- 3) **Prioritisation model**



Development of research
agendas by public and
private institutions



Development and
evaluation of research
proposals



Veterinary education
programmes



DISCONTTOOLS

Research gaps for improving infectious disease control in animals

[MORE ABOUT DISCONTTOOLS >>](#)

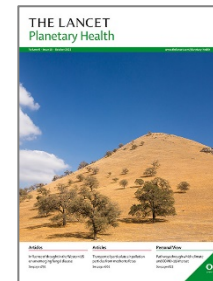
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FIND OUT MORE ABOUT THE DISEASES

[VIEW REPORT FOR A SPECIFIC DISEASE](#)

[BUILD REPORT FOR SEVERAL DISEASES](#)



REVIEW | [VOLUME 6, ISSUE 10, E812-E824, OCTOBER 01, 2022](#)

Disease control tools to secure animal and public health in a densely populated world

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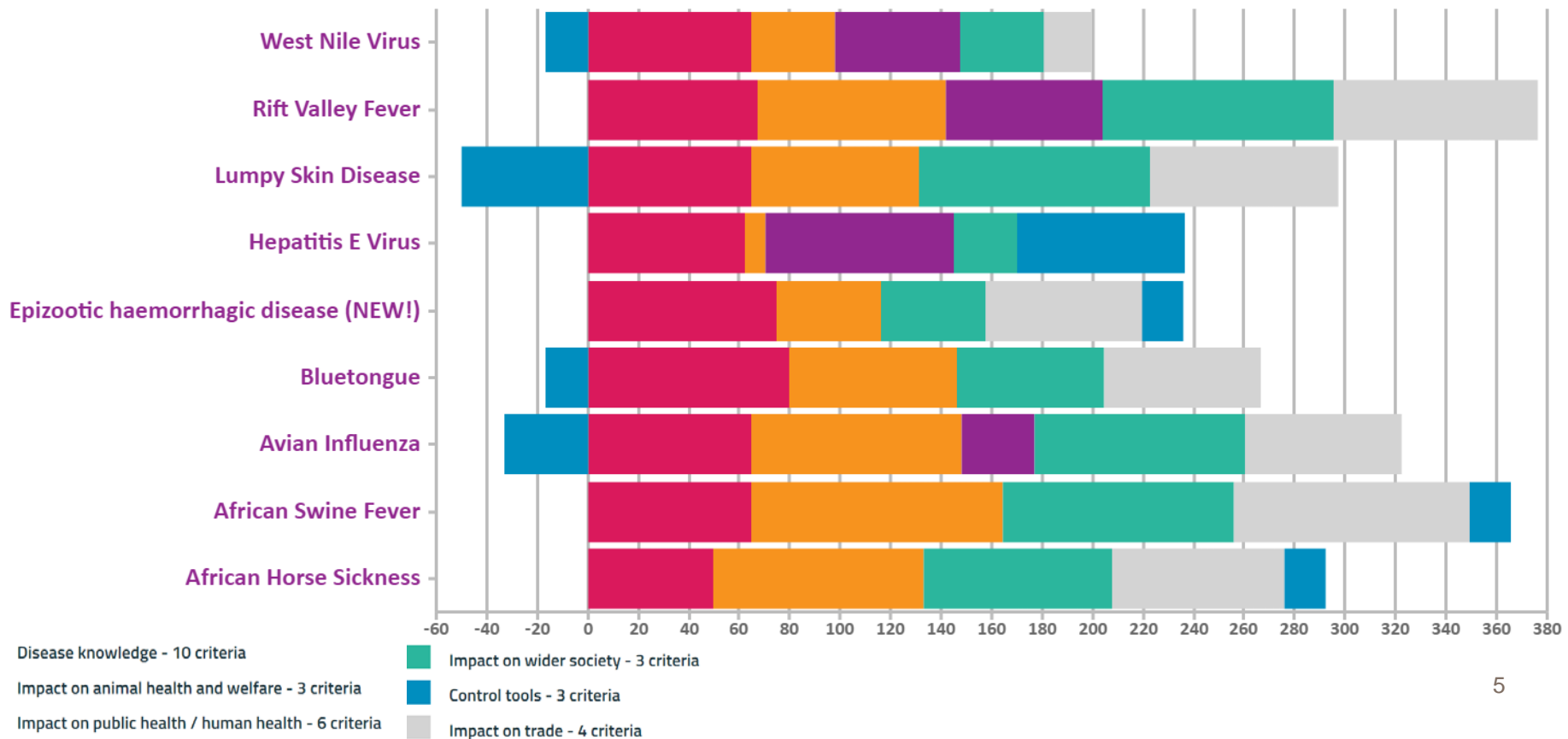
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[Open Access](#) • Published: October, 2022 • DOI: [https://doi.org/10.1016/S2542-5196\(22\)00147-4](https://doi.org/10.1016/S2542-5196(22)00147-4) •





Which emerging diseases?



Priority diseases?

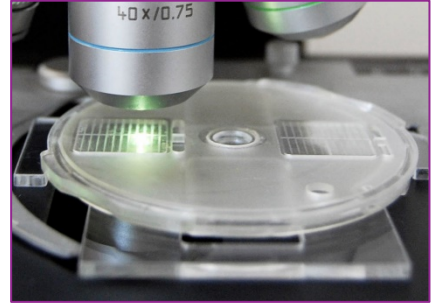


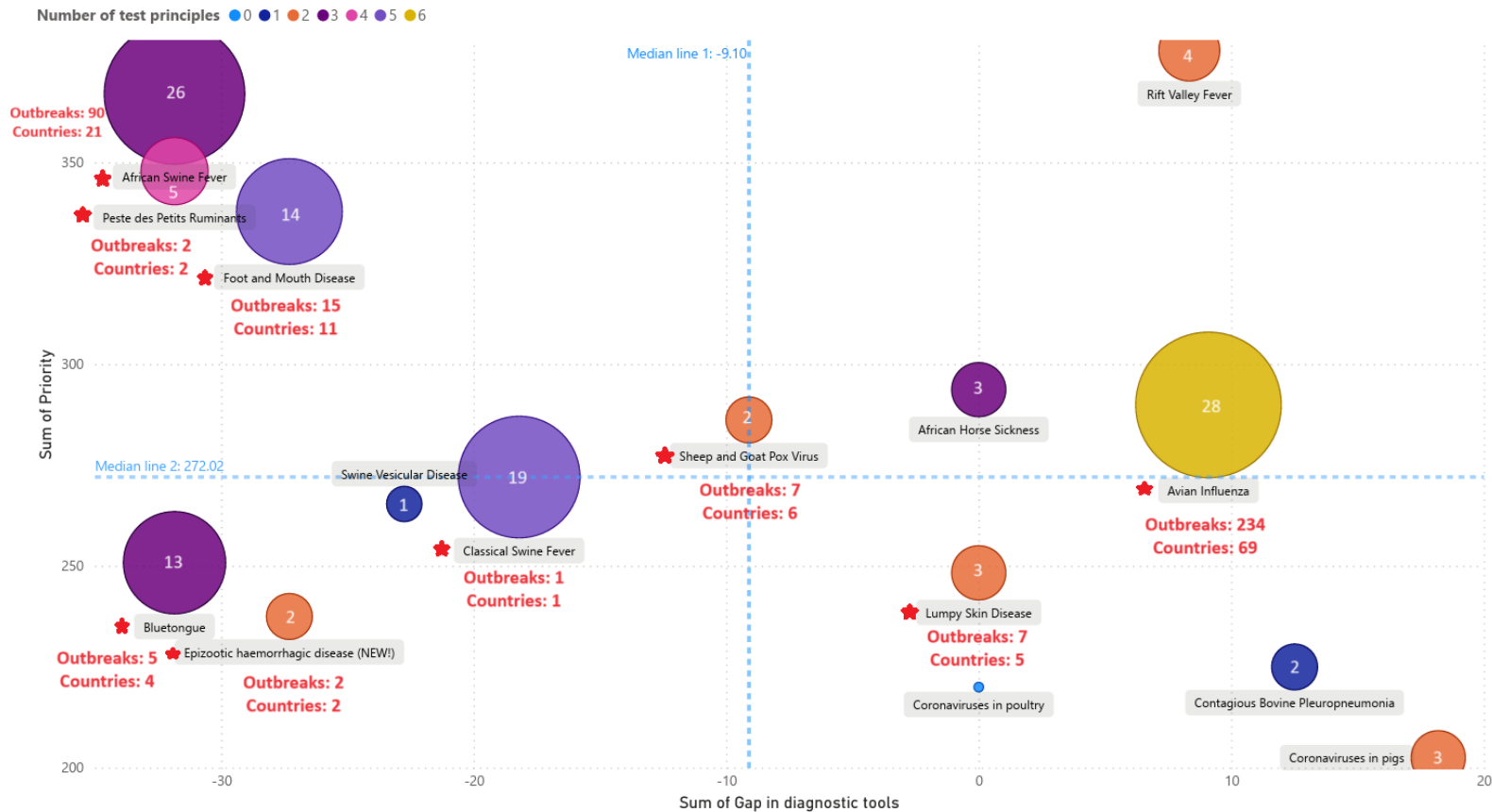
- Henipah viruses
- ASF
- CBPP
- PPR
- Avian Influenza
- RVF



Diagnostic gaps

- Harmonisation, validation and reference panels
- Active surveillance
- DIVA tests
- Going beyond detection of infection
- Exploit rapid technological advances
- Availability in resource-constrained settings





Vaccine gaps



- No vaccines (EHD)
- Live / inactivated vaccines
- Side effects
- Duration of protection
- Prevention of transmission – freedom of infection
- Fundamental knowledge of immunity and pathogenesis



Therapeutic gaps

- No antiviral drugs available/allowed
- Increasing need
 - Patient care (horses)
 - Support control strategies
- Repurposing potential from human medicine



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Biosecurity

- **Booklet with summary information for 30 diseases**
 - Prevalence and relevance for the European context
 - Risk of introduction to Europe
 - Risk factors and transmission routes
 - Biosecurity and control measures
 - Availability of transmission modelling data





Preparedness

- One Health approaches
- Early detection and identification
- Sustained investment in capacity



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Advance on “controlled” diseases

- **FMD**
 - Diagnostics standardisation and reference panels
 - Antivirals and IFN
 - Vaccines
- **CSF**
 - Improvement of early detection
 - Control in wild board
 - Lack of continuous funding to improve CSF vaccines and diagnostics
- **BSE**
 - Multiple areas of uncertainty in understanding of BSE
 - No diagnostic for live animal

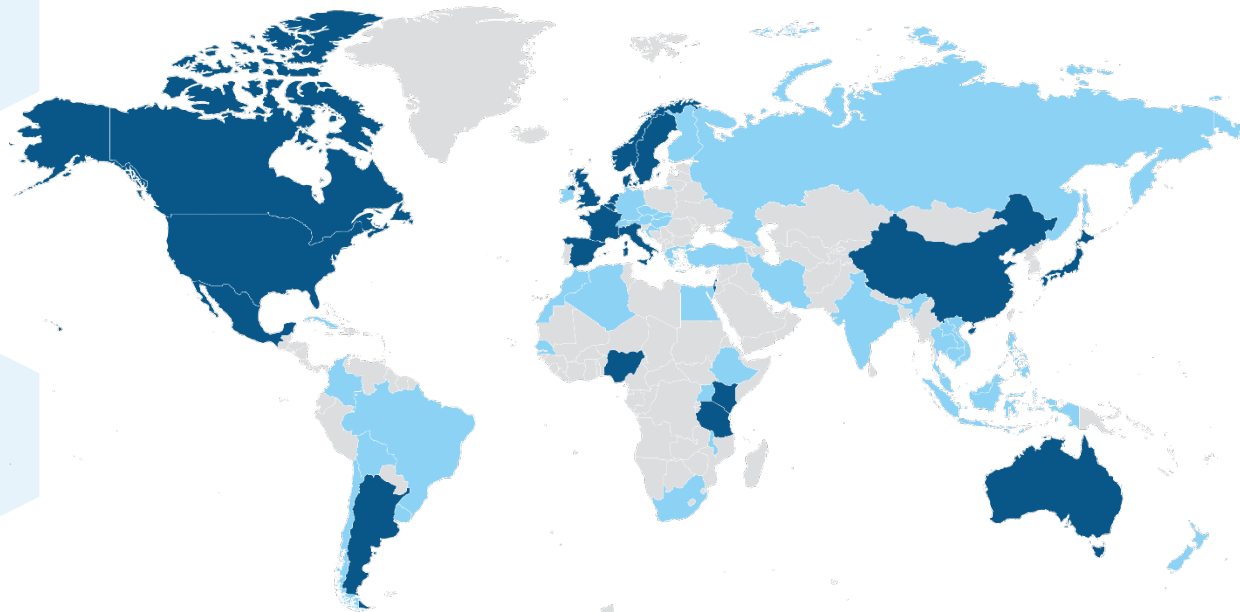


European Partnership on Animal Health and Welfare

- 90 partners
- 56 Research Performing Organizations (RPO)
- 30 Funding Organizations (FO)
- Some other entities EFSA, EMA, Authorities
- From 24 EU and non-EU countries
- Duration 7 years (+3)
- Expected total budget: 360 MEUR
- Coordinated by



Advancing Animal Health Research



34 Partner organisations
23 Countries
55 Associated countries
+\$2.5B Research investment

Americas

Europe

Africa & Middle
East

Asia &
Australasia

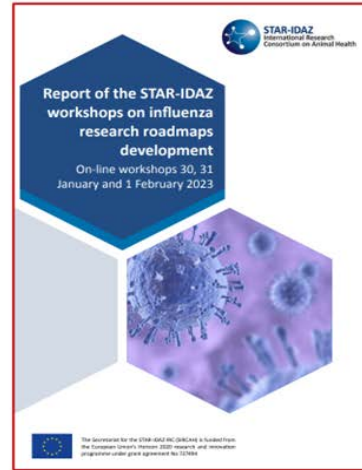
Improve coordination of research activities on the major infectious diseases of livestock and zoonoses to speed up the delivery of improved control methods

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STAR-IDAZ
International Research
Consortium on Animal Health

Influenza



Thanks to:

- > 400 experts
- Stakeholders
- Funders

Country	Funder of DISCONTTOOLS
Austria	University of Veterinary Medicine Vienna
Belgium	Federal Public Service Health, Food Chain Safety and Environment
Greece	Hellenic Agricultural Organization (Ellinikos Georgikos Organismos) - DIMITRA, Veterinary Research Institute
Italy	Ministero della Salute
The Netherlands	Ministry of Agriculture, Nature and Food Quality
Spain	Agencia Estatal Consejo Superior de Investigaciones Científicas (INIA-CSIC)
Switzerland	Federal Department of Home Affairs, Federal Food Safety and Veterinary Office, Division of Innovation
UK	Department for the Environment, Food and Rural Affairs (DEFRA)
UK	Biotechnology and Biological Sciences Research Council (UKRI-BBSRC)



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Thank you!

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