World Organisation for Animal Health

Giovanni Savini - - ITALY

WOAH Reference Laboratory Reports Activities 2024

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LABORATORY INFORMATION

***Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:**	Bluetongue
***Address of laboratory:**	Istituto Zooprofilattico Sperimentale dell' Abruzzo e del Molise
***Tel:**	+39-0861 33 24 40
***E-mail address:**	g.savini@izs.it
Website:	www.izs.it
***Name (including Title) of Head of Laboratory (Responsible Official):**	Nicola D'Alterio, DVM, General Director, Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise
***Name (including Title and Position) of WOAH Reference Expert:**	Giovanni Savini , DVM, PhD, head of the Public Health Department, Istituto Zooprofilattico Sperimentale dell' Abruzzo e del Molise
***Which of the following defines your laboratory? Check all that apply:**	Governmental

TOR1: DIAGNOSTIC METHODS

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.? (Not for quality control, proficiency testing or staff training)

Yes

Diagnostic Test	Indicated in WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
C-ELISA (serogroup specific) for Ab vs BTV	Yes	7822	153
VN (serotype specific) for Ab vs BTV	Yes	24884	765
C-ELISA (serogroup specific) for Ab vs EHDV	Yes	358	295

VN (serotype specific) for Ab vs EHDV	Yes	16	207
ELISA (serogroup specific based on VP7) for Ab vs AHSV	Yes	16	0
Direct diagnostic tests		Nationally	Internationally
Serogroup specific Real-time RT-PCR for BTV and EHDV	Yes	11675	20
Serotype specific PCR real time for BTV	Yes	38396	4
Serotype specific PCR real time for EHDV	Yes	3	20
Isolation on cell culture for BTV	No	906	1
Isolation on cell culture for EHDV	No	1	11
Serogroup specific Real-time RT-PCR for AHSV	No	12	0
Microscopic examination Culicoides imicola identification	No	331	0
Microscopic examination Culicoides spp.	No	2764	0

TOR2: REFERENCE MATERIAL

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOAH?

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOAH Members?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient WOAH Member Countries	Country of recipients
BTV Antibody Test Kit c- ELISA rec VP7	c- ELISA	Produced	423 packages	0	1	ITALY,
BTV Antibody Test Kit c- ELISA rec VP7	c- ELISA	Provide	429 packages	0	1	ITALY,
c-ELISA BTV antigen for 423 tests	c- ELISA	Produced	56.8 ml	0	1	ITALY,
BTV VP7 monoclonal antibody	c- ELISA	Produced	18000 ml	0	1	ITALY,
BTV inactivated reference strain	RT Real Time PCR	Produced	80 ml	0	1	ITALY,
BTV inactivated	RT Real Time PCR	Provide	7 ml	0	1	ITALY,

reference strain						
c-ELISA EHDV antigen	c- ELISA	Produced	7.5 ml	0	1	ITALY,
EHDV VP7 monoclonal antibody	c- ELISA	Produced	2400 ml	0	1	ITALY,
EHDV inactivated reference strain	RT Real Time PCR	Provide	2 ml	0	1	ITALY,
c-ELISA AHSV antigen	c- ELISA	Produced	6 ml	0	1	ITALY,
AHSV VP7 monoclonal antibody	c- ELISA	Produced	190 ml	0	1	ITALY,

4. Did your laboratory produce vaccines?

Yes

5. Did your laboratory supply vaccines to WOAH Members?

No

TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

Yes

7. Did your laboratory validate diagnostic methods according to WOAH Standards for the designated pathogen or disease?

Yes

Name of the new test or diagnostic method developed	Description and References (Publication, website, etc.)
Validation of a molecular multiplex assay for the simultaneous detection and differentiation of bluetongue virus and epizootic haemorrhagic disease virus in biological samples	Ottavio Portanti, Eugenia Ciarrocchi, Roberta Irelli, Andrea Palombieri, Romolo Salini, Irene Melegari, Maura Pisciella, Simone Pulsoni, Daria Di Sabatino, Massimo Spedicato, Giovanni Savini, Alessio Lorusso. "Validation of a molecular multiplex assay for the simultaneous detection and differentiation of bluetongue virus and epizootic haemorrhagic disease virus in biological samples." https://doi.org/10.1016/j.jviromet.2024.115064

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

Yes

9. Did your laboratory validate vaccines according to WOAH Standards for the designated pathogen or disease?

Yes

Name of the new vaccine developed	Description and References (Publication, website, etc)
EHDV8 inactivated vaccine	Spedicato M., Ronchi, G. F., Profeta, F., Traini, S., Capista, S., Leone, A., Iorio, M., Portanti, O., Palucci, C., Pulsoni, S., Testa, L., Serroni, A., Rossi, E., Armillotta, G., Laguardia, C., D'Alterio, N., Savini, G., Di Ventura, M., Lorusso, A. & Mercante, M. T. 2024. Efficacy of an inactivated EHDV-8 vaccine in preventing viraemia and clinical signs in experimentally infected cattle. Virus Research, 347 doi:10.1016/j.virusres.2024.199416

TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOAH Members?

Yes

Name of WOAH Member Country seeking assistance	Date	Which diagnostic test used	No. samples received for provision of diagnostic support	No. samples received for provision of confirmatory diagnoses
MALTA	2024-06-01	RT Real Time PCR	0	1
MALTA	2024-07-11	RT Real Time PCR	0	1
MALTA	2024-11-17	RT Real Time PCR	0	7
SPAIN	2024-11-19	RT Real Time PCR/Isolation on cell culture	0	11
MALTA	2024-01-09	c- ELISA	0	53
MALTA	2024-01-09	VNT	0	265
MALTA	2024-02-05	c- ELISA	0	8
MALTA	2024-02-05	VNT	0	40
MALTA	2024-02-29	c- ELISA	0	3
MALTA	2024-02-29	VNT	0	15
MALTA	2024-03-28	c- ELISA	0	16
MALTA	2024-03-28	VNT	0	80
MALTA	2024-05-01	c- ELISA	0	26
MALTA	2024-05-04	VNT	0	130
MALTA	2024-06-18	c- ELISA	0	4
MALTA	2024-06-18	VNT	0	20
MALTA	2024-07-18	c- ELISA	0	1
MALTA	2024-07-18	VNT	0	5
MALTA	2024-08-27	c- ELISA	0	35
MALTA	2024-08-27	VNT	0	125
MALTA	2024-09-11	c- ELISA	0	7
MALTA	2024-09-11	VNT	0	35
SPAIN	2024-11-19	c- ELISA	295	0
SPAIN	2024-11-19	VNT	207	0

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAH Member?

Yes

Name of the WOAH Member Country receiving a technical consultancy	Purpose	How the advice was provided
SPAIN	Diagnostic assistance	Internship
MALTA	Diagnostic assistance	Remote

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOAH Members other than the own?

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	WOAH Member Countries involved other than your country
ECDC- EFSA Vectornet. European network of medical and veterinary entomology	5 years (2019-2024)	To create a sense of connection between medical and veterinary entomologists and professionals interested in vector-borne diseases in the Public and Veterinary Health sector. The VectorNet Entomological Network aims to better embed entomological monitoring and knowledge in national and international vector-borne disease surveillance systems.	International Development, Haceteppe University, PHE – Public Heath England, RIVM – Dutch Institute for Public Health and the Environment, CUNI, Charles University, Czech Republic, CIISA - Centro de Investigaçao Interdisciplinar em Sanidade Animal,Portugal, CReSA - Centre de Recerca en Sanitat Animal, Spain, DTU - Danmarks Tekniske Universitet, Denmark, EBC, evolutionary Biology Centre, Uppsala University, Sweden, FLI - Friederich-Loeffler- Institut, Germany, IAH, Institute of Animal Health, Pirbright Institute, UK, IRD – Institut de Recherche pour le Développement, France, IVB – Institute of Vertebrate Biology, KAU, Kafkas University, Turkey, NoviSad University, Serbia, Primarska University, Slovenia, VECPAR – Transmision Vectorielle et épidemiosurveillance des Maladies Parasitaires, Reims University, Zaragosa University, Spain	CZECH REPUBLIC DENMARK FRANCE GERMANY PORTUGAL SLOVENIA SPAIN SWEDEN TURKEY UNITED KINGDOM
Point-of-incidence toolbox for emerging virus threats (TELE-Vir)	4 years (2020-2024)	To develop a very fast point-ofincidence (poi) toolbox for identification and characterization of emerging virus threats for humans and/or domestic	INSA , Portugal, Sciensano, Belgium, INIA-CISA , Spain, PIWET, Poland VRI, Czech Republic, SVA , Sweden, ANSES, France, UoS, UK, NVI, Norway,	BELGIUM CZECH REPUBLIC DENMARK FRANCE ITALY NORWAY POLAND PORTUGAL SPAIN SWEDEN UNITED KINGDOM

		and wildlife animals.	IZSLER, Italy, SSI, Denmark	
Partnership for Research and Innovation in the Mediterranean Area (PRIMA) European Commission Project "A novel integrated and sustainable approach to monitor and control Bluetongue spread in the Mediterranean Basin" (BlueMed)	5 years (2019-2024)	Setting up a comprehensive and flexible operating model capable to detect new incursions or circulation of BTV strains and prevent and/or control their spread in the Mediterranean region. To refine current diagnostic systems and explore the basis for improved control strategies.	National School of Veterinary Medicine of Sidi Thabet (ENMV)/ National Institute of Veterinary Research of Tunisia (IRVT) Tunisia,National Research Centre (NRC) Egypt, ANSES France	EGYPT FRANCE TUNISIA
OIE Twinning contract for Bluetongue between Istituto Zooprofilattico Sperimentale dell' Abruzzo e del Molise and Istituto Biologico of San Paolo	7 years (2017-2024)	To enhance capacity and improve scientific capabilities in relation to diagnosis and surveillance of Bluetongue.	Instituto Biológico of São Paulo	BRAZIL
Ecology of Wild-life, Livestock, huMan and Infectious Diseases in changing environments — WiLiMan-ID	5 years (2024-2028)	The main objective of WiLiMan- ID is to identify key factors allowing five animal infectious diseases to spread and persist, in changing environments. The five diseases are: Avian influenza African swine fever West-Nile fever African horse sickness Chronic wasting disease	Austria-Biofaction Belgium- Sciensano Denmark-The University of Copenhagen France-ANSES France-Ecole Nationale Vétérinaire (ENVT) France-INRAE France-National Research Institute for Agriculture, Food and Environment (INRAE) Germany-Friedrich-Loeffler- Institut (FLI) Morocco-The Hassan II Agronomic and Veterinary Institute (IAV) Norway- The Norwegian Veterinary Institute (vetinst) Spain-The Central Veterinary Laboratory of the Spanish Ministry of Agriculture, Fisheries and Food. Sweden-Swedish Veterinary Agency (SVA) The Netherlands-Wageningen University & Research (WUR)	AUSTRIA BELGIUM DENMARK FRANCE GERMANY MOROCCO NORWAY SPAIN SWEDEN THE NETHERLANDS

13. In exercising your activities, have you identified any regulatory research needs* relevant for WOAH?

No

TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?

Yes

If the answer is yes, please provide details of the data collected:
-Data related to the BTV atypical serotypes outbreaks occurring in Italy in 2024 -Data related to the BTV3-BTV4 and BTV8 serotypes outbreaks occurring in Italy in 2024

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?

Yes

If the answer is yes, please provide details of the data collected:
Sequencing of BTV3-BTV4 and BTV8 strain circulating in Italy in 2024

16. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category and list the details in the box)

a) Articles published in peer-reviewed journals:

12

1. Acevedo A. M., Postic, L., Curiel, M., Gondard, M., Bréard, E., Zientara, S., Vorimore, F., Tran, M. -., Turpaud, M., Savini, G., Lorusso, A., Marcacci, M., Vitour, D., Dujardin, P., Perera, C. L., Díaz, C., Obret, Y. & Sailleau, C. 2024. Detection, Characterization and Sequencing of BTV Serotypes Circulating in Cuba in 2022. Viruses, 16(1) doi:10.3390/v16010164

2. Ben Hassine T., García-Carrasco, J. -., Sghaier, S., Thabet, S., Lorusso, A., Savini, G. & Hammami, S. 2024. Epidemiological Analyses of the First Incursion of the Epizootic Hemorrhagic Disease Virus Serotype 8 in Tunisia, 2021–2022. Viruses, 16(3) doi:10.3390/v16030362

3. Spedicato M., Ronchi, G. F., Profeta, F., Traini, S., Capista, S., Leone, A., Iorio, M., Portanti, O., Palucci, C., Pulsoni, S., Testa, L., Serroni, A., Rossi, E., Armillotta, G., Laguardia, C., D'Alterio, N., Savini, G., Di Ventura, M., Lorusso, A. & Mercante, M. T. 2024. Efficacy of an inactivated EHDV-8 vaccine in preventing viraemia and clinical signs in experimentally infected cattle. Virus Research, 347 doi:10.1016/j.virusres.2024.199416

4. Thabet S., Sghaier, S., Curini, V., Mincarelli, L. F., El Mansouri, D., Ben Osmane, R., Ben Hassan, S., Amara, A., Ben Hassine, T., Savini, G., Pulsoni, S., Sayadi, A., Krichene, A., Cammà, C., Spedicato, M., Lorusso, A., Marcacci, M. & Hammami, S. 2024. Identification and characterization of two atypical strains of bluetongue virus in sheep, Tunisia. Acta Tropica, 260 doi:10.1016/j.actatropica.2024.107416

5. Ottavio Portanti, Eugenia Ciarrocchi, Roberta Irelli, Andrea Palombieri, Romolo Salini,Irene Melegari, Maura Pisciella, Simone Pulsoni, Daria Di Sabatino, Massimo Spedicato,Giovanni Savini, Alessio Loru. "Validation of a molecular multiplex assay for the simultaneous detection
and differentiation of bluetongue virus and epizootic haemorrhagic disease virus in biological samples."
https://doi.org/10.1016/j.jviromet.2024.115064

6. Spedicato M., Profeta F., Thabet S., Teodori L., Leone A., Portanti O., Pisciella M., Bonfini B., Pulsoni S., Rosso F., Rossi E., Ripà P., De Rosa A., Ciarrocchi E., Irelli R., Cocco A., Sailleau C., Ferri N., Di Febo T., Vitour D., Bréard E., Giansante D., Sghaier S., Hassine T.B., Zientara S.,

Salini R., Hammami S., Savini G., Lorusso A. Experimental infection of cattle, sheep, and goats with the newly emerged epizootic hemorrhagic disease virus serotype 8. (2024) Veterinaria Italiana, 59 (4),
DOI: 10.12834/VetIt.3433.23112.1
7. Gondard M., Postic L., Garin E., Turpaud M., Vorimore F., Ngwa-Mbot D., Tran M.-L., Hoffmann B., Warembourg C., Savini G., Lorusso A., Marcacci M., Felten A., Roux A.L., Blanchard Y., Zientara S., Vitour D., Sailleau C., Bréard E. Exceptional Bluetongue virus (BTV) and Epizootic hemorrhagic disease virus (EHDV) circulation in France in 2023(2024) Virus Research, 350, art. no. 199489, Cited 0 times.DOI: 10.1016/j.virusres.2024.199489
8. Medrouh B., Abdelli A., Belkessa S., Ouinten Y., Brahimi M., Hakem A., Kernif T., Singer S.M., Ziam H., Tsaousis A.D., Jokelainen P., Savini G., Pasolli E. Seroprevalence and risk factors of bluetongue virus in domestic cattle, sheep, goats and camels in Africa: a systematic review and meta-analysis
(2024) Veterinary Quarterly, 44 (1), pp. 1 - 12, Cited 0 times.
DOI: 10.1080/01652176.2024.2396118
9. Herder, V., Caporale, M., MacLean, O. A., Pintus, D., Huang, X., Nomikou, K., Palmalux, N., Nichols, J., Scivoli, R., Boutell, C., Taggart, A., Allan, J., Malik, H., Ilia, G., Gu, Q., Ronchi, G. F., Furnon, W., Zientara, S., Bréard, E., Antonucci, D., Palmarini, M. (2024). Correlates of disease severity in bluetongue as a model of acute arbovirus infection. PLoS pathogens, 20(8), e1012466.
https://doi.org/10.1371/journal.ppat.1012466
10. Herder, Vanessa; Caporale, Marco; Maclean, Oscar A; Pintus, Davide; Huang, Xinyi; Nomikou, Kyriaki; Palmalux, Natasha; Nichols, Jenna; Scivoli, Rosario; Boutell, Chris; Taggart, Aislynn; Allan, Jay; Malik, Haris; Ilia, Georgios; Gu, Quan; Ronchi, Gaetano Federico; Furnon, Wilhelm; Zientara, Stephan; Bréard, Emmanuel; Antonucci, Daniela; Capista, Sara; Giansante, Daniele; Cocco, Antonio; Mercante, Maria Teresa; Di Ventura, Mauro; Filipe, Ana Da Silva; Puggioni, Giantonella; Sevilla, Noemi; Stewart, Meredith E; Ligios, Ciriaco; Palmarini, Massimo. A Machine Learning Framework to Identify the Correlates of Disease Severity in Acute Arbovirus Infection. bioRxiv 2024.02.23.581333; doi: https://doi.org/10.1101/2024.02.23.581333
11. Ottavio Portanti, Eugenia Ciarrocchi, Roberta Irelli, Andrea Palombieri, Romolo Salini, Irene Melegari, Maura Pisciella, Simone Pulsoni, Daria Di Sabatino, Massimo Spedicato, Giovanni Savini, Alessio Lorusso. "Validation of a molecular multiplex assay for the simultaneous detection and differentiation of bluetongue virus and epizootic haemorrhagic disease virus in biological samples." https://doi.org/10.1016/j.jviromet.2024.115064
12. Savini G., Bonfini B., Spedicato M. Virus Neutralization Test for Detecting and Quantifying Serum-Neutralizing Antibodies to Epizootic Hemorrhagic Disease Virus (EHDV) (Serotypes 1, 2, and 4–8). 2024. Methods in Molecular Biology, 2838, pp. 123 - 136DOI: 10.1007/978-1-0716-4035-7_7

b) International conferences:

7
1. 9th International Conference on Emerging Zoonoses. Palermo (Italy). June 9-12, 2024
2. EURL BT and AHS annual meeting. Madrid (Spain). October 22-23, 2024
3. Workshop: WiLiMan-ID project_WP1-Ex Com meeting, online. January 15, February 27, March 14, May 16 e 28, 2024
4. Node 2 INF-ACT PROJECT. Bari (Italy). March 1, 2024
5. Workshop of Orbiviruses, Woking (Great Britain), May 22-23, 2024
6. Workshop of BTV, Lyon (France).November 5-6, 2024
7. EAVLD 2024 7th Congress of the European Association of Veterinary Laboratory Diagnosticians. Padova (Italy) October 21-23, 2024

c) National conferences:

4
1. 8th national congress of the Italian Society for Virology. Bologna (Italy) July 7-9, 2024
2. Antropozoonosi. Microbiology & Infections. Pescara (Italy) October 24-26, 2024
3. Le arbovirosi: prevenzione e controllo. Teramo (Italy) October 28, 2024

4. Online webinar "Giornata di studio sulla Bluetongue", December 4, 2024

d) Other (Provide website address or link to appropriate information):

1
A public web site (www.izs.it) disseminating information and data on Bluetongue is continuously updated in order to have:
- *the latest on the Italian and European Regulations issued by the Italian Ministry of Health;*
- *the current (2024) and past (2008-2023) epidemiological situations in Italy;*
- *weekly updated maps on entomological and serological surveillance activities (bluetongue national information system);*
- *the current epidemiological situations in the Mediterranean Basin;*
- *rules and regulations*
- *an scientific documents on-line.*

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH Members?

Yes

a) Technical visit : 1

b) Seminars : 0

c) Hands-on training courses: 0

d) Internships (>1 month) 1

Type of technical training provided (a, b, c or d)	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
A	SLOVENIA	1
D	SPAIN	1

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO 17025	ACCREDIA_IZSAM	Accredia_IZSAM.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
C-ELISA (serogroup specific) for Ab vs BTV	ACCREDIA
VN (serotype specific) for Ab vs BTV	ACCREDIA
C-ELISA (serogroup specific) for Ab vs EHDV	ACCREDIA
VN (serotype specific) for Ab vs EHDV	ACCREDIA
ELISA (serogroup specific based on VP7) for Ab vs AHSV	ACCREDIA

Serogroup specific Real-time RT- PCR for BTV and EHDV	ACCREDIA
Serotype specific PCR real time for BTV	ACCREDIA
Serotype specific PCR real time for EHDV	ACCREDIA

20. Does your laboratory maintain a "biorisk management system" for the pathogen and the disease concerned?

Yes

The biosecurity policy integrates aspects related to safety, security and environment, in fact risks associated with all our activities are assessed and managed to ensure the safety of workers and of the environment in accordance with international standards. In particular, IZSAM has developed its biosecurity manual in accordance with the WHO standards " The WHO Laboratory Biosafety Manual (LBM) 4th ed.) as well as the specific procedures for safe handling and containment of infectious microorganisms and hazardous biological material. Furthermore, to reduce or eliminate the exposure of the environment (air, water, soil) to potentially infectious or hazardous agents IZSAM obtained the certification according to the ISO 14001 Lastly, a rigorous management of biologicals, chemicals and their associated waste is in place and information and communication to personnel done on a routine bases. To ensure the safety handling and movement of goods, the IZS-Teramo has developed protocols and procedures according to the World Health Organization standards (WHO/WHE/CPI/2019.20 Guidance on regulations for the Transport of infectious Substances"- 2019-2020; pag.1-29.). The laboratory is officially authorised by the Italian Ministry of Health to import biological materials and biological reagents of any origin through the airports of Rome (Fiumicino) and Milan (Malpensa and Linate) Transport by air of biological materials considered as infectious substances is done according to the international regulations guidelines developed by IATA (Infectious Substances Shipping Guidelines-1 January 2006- 7th Edition p.1-41). The IZS - Teramo also complies with ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road and Directive 2014/103/UE) regulations to guarantee the safe road transportation of dangerous goods and owns vehicles properly equipped for the purpose. Traceability of biological material for research purposes is provided by the use of MTA , and dispatch and receipt are regulated by Standard Operating procedures.

TOR9: SCIENTIFIC MEETINGS

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAH?

Yes

National/ International	Title of event	Co-organiser	Date	location	No. Participants
National	Giornata di studio sulla Bluetongue	Italian Ministry of Health	2024-12-03	online	350

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAH?

Yes

Title of event	Date	location	Role (speaker, presenting poster, short communications)	Title of the work presented
9th International Conference on Emerging Zoonoses	2024-06-08	Palermo (Italy)	Speaker	Efficacy of an inactivated EHDV-8 vaccine in preventing viremia and clinical signs in cattle

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9th International Conference on Emerging Zoonoses	2024-06-08	Palermo (Italy)	Speaker	Experimental infection of cattle, sheep, and goats with the newly emerged epizootic hemorrhagic disease virus serotype 8
Workshop on Orbiviruses	2024-05-21	Woking (Great Britain)	Speaker	La situazione della febbre catarrale degli ovini (Blue Tongue) e della malattia emorragica epizootica (EHDV-8) in Europa, con particolare attenzione al BTV-3
Workshop on BTV	2024-11-04	Lyon (France)	Speaker	BT situation in Italy
Workshop on BTV	2024-11-04	Lyon (France)	Speaker	What can we expect from several BTV serotypes (and /or EHDV) circulating in the same area
EURL BT and AHS annual meeting	2024-10-21	Madrid (Spain)	Speaker	BTV diagnosis activities in other NRLs in affected countries:Italy
8th national congress of the Italian Society for Virology.	2024-07-06	Bologna (Italy)	Poster	Marco Caporale,Gaetano Federico Ronchi, Yi Jin, Sara Traini, Eva Calvo-Pinilla, Javier Ortego, Alejandro Marín-López, Sara Capista, Anna Serroni, Antonio Cocco, Mariangela Iorio, Lilia Testa, Ivano Di Matteo, Francesca Profeta, Vanessa Herder, Andrew Shaw, Maria Teresa Mercante, Mauro Di Ventura, Meredith Stewart and Massimo Palmarini."New generation vaccine for African Horse Sickness "
EAVLD 2024 7th Congress of the European Association of Veterinary Laboratory Diagnosticians	2024-10-20	Padova (Italy)	Poster	Nogarol C, Portanti O, Trabunella E, Di Trani S.M, Listorti V, Robetto S, Miceli I.N. , Brusadore S, Ciarrocchi E, Irelli R, Savini G, Mandola M. Enhanced Arbovirus surveillance: two-year monitoring data from Piemonte, Liguria and Valle D'aosta (2022-2023).

TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES

23. Did your laboratory exchange information with other WOAH Reference Laboratories designated for the same pathogen or disease?

Yes

24. Do you network (collaborate or share information) with other WOAH Reference Laboratories designated for the same pathogen?

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOAH REF. LABS
WOAH Bluetongue reference laboratories network (WOAH-BTNet)	Organiser	1	All the WOAH BT reference laboratories

25. Did you organise or participate in inter-laboratory proficiency tests with WOAH Reference Laboratories designated for the same pathogen during the past 2 years?

Yes

Purpose of the proficiency test:	Role of your Reference Laboratory (organiser/ participant)	No. participating Laboratories	Participating WOAH Ref. Labs/ organising WOAH Ref Lab
Detection of BTV and serotyping in blood samples (Real Time RT-PCR)	Participant	0	Information not available at the moment
Detection of BTV antibody in serum samples (c-ELISA a)	Participant	0	Information not available at the moment
Detection of BTV antibody in serum samples (VNT)	Participant	0	Information not available at the moment
Detection of AHSV in blood samples (Real Time RT-PCR)	Participant	0	Information not available at the moment
Detection of AHSV antibody in serum samples (c-ELISA)	Participant	0	Information not available at the moment

26. Did your laboratory collaborate with other WOAH Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

Yes

Title of the project or contract	Scope	Name(s) of relevant WOAH Reference Laboratories
Please see ToR 5	Please see ToR 5	All the WOAH BT reference laboratories

TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOAH Reference Laboratories for the same pathogen during the past 2 years?

Yes

Purpose for inter-	Role of your reference			

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laboratory test comparisons1	laboratory (organizer/participant)	No. participating laboratories	Name of the test	WOAH Member Countries
Detection of BTV and EHDV in blood samples (Real Time RT-PCR)	Organiser	19	Circuito inter-laboratorio Bluetongue RT-PCR ed EHDV RT-PCR. Distribuzione 1/2024	ITALY,
Detection of BTV antibody in serum samples (c-ELISA)	Organiser	26	Circuito interlaboratorio Bluetongue prove sierologiche. Distribuzione 1/2024	ITALY,

TOR12: EXPERT CONSULTANTS

28. Did your laboratory place expert consultants at the disposal of WOAH?

Yes

Kind of consultancy	Location	Subject (facultative)
BTV vaccination plan consultant	online	/
ad hoc group meeting	online	Ministry of Health
BTV animal movement	online	BTV animal movement from France
Special Committe on Risk Monitoring, Integrated Surveillance and applied Research meeting.	online	FAO

29. Additional comments regarding your report:

No