

# OIE Reference Laboratory Reports Activities

## *Activities in 2019*

**This report has been submitted : 2020-01-14 14:58:56**

<b>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</b>	Bovine viral diarrhoea
<b>Address of laboratory:</b>	New Haw, Addlestone Surrey KT15 3NB Weybridge UNITED KINGDOM
<b>Tel.:</b>	+44-208 415 2102
<b>Fax:</b>	
<b>E-mail address:</b>	rebecca.strong@apha.gov.uk
<b>Website:</b>	<a href="https://www.gov.uk/government/organisations/animal-and-plant-health-agency">https://www.gov.uk/government/organisations/animal-and-plant-health-agency</a>
<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Mr C. Hadkiss, Chief Executive
<b>Name (including Title and Position) of OIE Reference Expert:</b>	Dr Rebecca Strong, Ruminant Pestivirus Research Scientist
<b>Which of the following defines your laboratory? Check all that apply:</b>	Governmental Research

**ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards**

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 OIE Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests			
Antibody ELISA (serum) TC0390	Yes	5374	63
BVD antibodies in bulk milk TC0123	Yes	107	0
BVD antibodies in individual milk TC0633	Yes	0	0
Serum neutralisation (BD) TC0292	No	364	0
Serum neutralisation (BVD) TC1165	Yes	102	0
Serum neutralisation (differential) TC1254	No	1	0
Direct diagnostic tests			
BVD virus isolation - semen TC0489	Yes	137	0
BVD virus isolation - tissues - 2 passages TC0564	Yes	0	0
Erns Antigen ELISA (BVD) TC0772	Yes	4375	23
PCR for Border disease in tissue or heparinised blood TC0755	No	600	0
RT-PCR BVD (bulk milk) TC0709	Yes	238	0
RT-PCR BVD (whole blood or tissues) TC0655	Yes	1120	0
Border disease virus in pooled sera samples TC0358	Yes	6	0
BVD virus in blood RT-PCR TC0758	Yes	271	0
BVD Ag ELISA ear notch samples TC0872	Yes	17	0

***ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards. To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.***

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

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient OIE Member Countries	Region of recipients
WB160 mAb	BVDV1/BDV detection	13	3	10	3	<input type="checkbox"/> Africa <input type="checkbox"/> Americ as <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
WB103/105 mAb	Pan pesti virus detection	31	5	26	7	<input type="checkbox"/> Africa <input type="checkbox"/> Americ as <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
WB162 mAb	BVDV1 detection	8	0	8	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americ as <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
WB210 mAb	BVDV1 detection	14	0	14	4	<input type="checkbox"/> Africa <input type="checkbox"/> Americ as <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
WB215 mAb	BVDV1 detection	9	0	9	3	<input type="checkbox"/> Africa <input type="checkbox"/> Americ as <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East

WS363 mAb	BDV detection	18	2	16	6	<input type="checkbox"/> Africa <input type="checkbox"/> Americ as <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
WS538 mAb	BVDV2 detection	1	0	1	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americ as <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East
WS433 mAb	BVDV2/BDV detection	13	0	13	3	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americ as <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
BVDV mAb WB103/112/166/214	pan BVDV detection mAbs	1	1	0	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americ as <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
WB166 mAb	BVDV1/BDV detection	2	0	2	0	<input type="checkbox"/> Africa <input type="checkbox"/> Americ as <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East
WB214 mAb	BVDV1 detection	4	0	4	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americ as <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East

WS371 mAb	BDV detection	10	0	10	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
WB103 mAb	BVDV detection	16	0	16	2	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East
WB112 mAb	BVDV detection	36	0	36	2	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East
RAB0042 BVDV positive serum	BVDV detection	2	0	2	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to OIE Member Countries?

No

***ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases***

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

***ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries***

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

No

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

Yes

Name of the OIE Member Country receiving a technical consultancy	Purpose	How the advice was provided
BELARUS	Advice on diagnostic testing	Email
SERBIA	Advice and supply of BVDV strains required for assessing proficiency of diagnostic tests	Email

***ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations***

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

No

***ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases***

11. Did your Laboratory collect epizootiological data relevant to international disease control?

No

If the answer is no, please provide a brief explanation of the situation:
No data was collected

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

No

If the answer is no, please provide a brief explanation of the situation:
No data was processed and analysed

**13. What method of dissemination of information is most often used by your laboratory?  
(Indicate in the appropriate box the number by category)**

a) Articles published in peer-reviewed journals: 1

Gianguaspero M, STEINBACH F, STRONG R, Decaro N, Buonavoglia C, Domenis L, Gargano P, Bailly X, Apicella C, Turno P.

Characterization of internal ribosome entry sites according to secondary structure analysis to classify border disease virus strains.

J Virol Methods. 2020 Jan;275:113704. doi: 10.1016/j.jviromet.2019.113704. Epub 2019 Sep 10.

b) International conferences: 0

c) National conferences: 0

d) Other:

(Provide website address or link to appropriate information) 0

***ToR 7: To provide scientific and technical training for personnel from OIE Member Countries  
To recommend the prescribed and alternative tests or vaccines as OIE Standards***

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

No

***ToR 8: To maintain a system of quality assurance, biosafety and biosecurity***

**relevant for the pathogen and the disease concerned**

15. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO/IEC 17025:2005 Testing	UKAS ISO17025-2005 Certificate of Accreditation.pdf
ISO9001	LRQA ISO9001-2015 Certificate Expiry 25-07-2020.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Bovine viral diarrhoea - virus isolation from semen	UKAS
Bovine viral diarrhoea (Erns) antigen - cattle > 30 days old	UKAS
Bovine viral diarrhoea (Erns) antigen ELISA for ear notch tissue samples	UKAS
Bovine viral diarrhoea antibodies in bulk milk	UKAS
Bovine viral diarrhoea antibodies in individual milk	UKAS
Bovine viral diarrhoea antibody SNT	UKAS
Bovine viral diarrhoea antibody ELISA	UKAS
Bovine viral diarrhoea virus in bulk milk samples RT-PCR	UKAS
Bovine viral diarrhoea virus in pooled serum samples RT-PCR	UKAS
Bovine viral diarrhoea virus in tissue or serum RT-PCR	UKAS
Border disease in tissue or serum RT-PCR	UKAS
Pestivirus antibody comparative NPLA	UKAS

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

Yes

(See *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4*)

**ToR 9: To organise and participate in scientific meetings on behalf of the OIE**

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

No

**ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results**

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

No

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

No

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

No

**ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results**

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

Yes

Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at:  
<http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing> see point 1.3

Purpose for inter-laboratory test comparisons <sup>1</sup>	No. participating laboratories	Region(s) of participating OIE Member Countries
BVDV Blood Ag/PCR PT0010	39	<input checked="" type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
BVDV Ear tissue ELISA PT0148	23	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
BVDV bulk milk PT0011	26	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
BVDV serum PT0012	45	<input checked="" type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
BVDV in bulk milk PCR PT0160	13	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
BVDV Ear Tissue PCR PT0178	24	<input checked="" type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input checked="" type="checkbox"/> Middle East

**ToR 12: To place expert consultants at the disposal of the OIE**

24. Did your laboratory place expert consultants at the disposal of the OIE?

No

25. Additional comments regarding your report: