



This report has been validated

# Rabbit haemorrhagic disease

*Name of disease (or topic) for which you	
are a designated WOAH Reference Laboratory:	RABBIT HEMORRHAGIC DISEASE (RHD)
*Address of laboratory	via Antonio Bianchi 7/9, 25124 Brescia (Italy)
*Tel.:	+39 030 2290617
*E-mail address:	lorenzo.capucci@izsler.it
Website:	https://www.izsler.it/chi-siamo/per-chi-e-con-chi-lavoriamo/centri-di-referenza/internazionali/oie-reference
*Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Piero FRAZZI (DVM, General Director of IZSLER)
*Name (including Title and Position) of WOAH Reference Expert:	Dr. Lorenzo Capucci (BSc)
*Which of the following	Governmental Research agency Academic institution
defines your laboratory? Check all that apply:	Other
* These questions are mandatory	

#### TOR1

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)

Include all diagnostic tests performed for the specified disease/topic at your laboratory for purposes such as disease diagnosis, screening of animals for export, surveillance, etc. Do not include tests performed for quality control, proficiency testing or staff training. (Use a table as below and add further lines if needed)

Reponse : Yes

DIAGNOSTIC TEST	INDICATED IN WOAH MANUAL (YES/NO)	TOTAL NUMBER OF 1	EST PERFORMED LAST YEAR
INDIRECT DIAGNOSTIC TESTS		NATIONALLY	INTERNATIONALLY
RHDV Competition ELIS	YES	458	325
RHDV2 Competition EL	YES	967	547

DIAGNOSTIC TEST	INDICATED IN WOAH MANUAL (YES/NO)	TOTAL NUMBER OF T	EST PERFORMED LAST YEAR
EBHSV Competition ELI	YES	389	150
RHDV IgA Isotype ELIS	YES	67	0
RHDV IgG Isotype ELIS	YES	35	23
RHDV IgM Isotype ELIS	YES	68	0
DIRECT DIAGNOSTIC TESTS		NATIONALLY	INTERNATIONALLY
RHDV Sandwich ELISA	YES	301	1
EBHSV Sandwich ELISA			
	YES	186	0
RT-PCR RHDV/RHDV2	YES	186	3
RT-PCR RHDV/RHDV2			
	YES	15	3

#### TOR2

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

If the answer to question 2 is yes, please specify the standard reference reagents available in your laboratory and whether your laboratory produces or import WOAH-approved International Standard Sera (Please add more lines if needed; the name of each Member Country should be written on a separate line) Hold-down the ctrl key to choose multiple countries from the dropdown list.

Reponse : No

NOTE: Currently, there are 22 laboratories that produce Standard Reference Reagents officially recognised by the WOAH for 19 diseases/pathogens. Please click the following link to the list of WOAH-approved International Standard Sera:

http://www.oie.int/en/our-scientific-expertise/veterinary-products/reference-reagents/

If the reagent is not listed on this page, it is NOT considered WOAH-approved. The next two questions allow you to indicate non-WOAH-approved diagnostic reagents.

WOAH-approved SRR producing laboratory – Select your lab from list:Supply imported WOAH-approved SRR – Select where you import from list:

1		
African horse sickness	Enzyme-linked immunosorbent assay	Marisa Arias Centro de Investigación en Sanidad Animal Instituto Nacional de Investigación y Tecnologí Alimentarie (CISA-INIA) 28130 Valdeolmos, Madrid, España Tel: (34-91) 620.23.00 arias@inia.es
Aujeszky s disease	Enzyme-linked immunosorbent assay; Virus neutralisation	Dr Marie-Frédérique Le Potier Agence nationale de sécurité sanitaire de l'alin l'environnement et du travail (Anses) Laboratoire de Ploufragan/Plouzané/Niort Unité de Virologie Immunologie Porcines B.P. 53, 22440 Ploufragan, France Tel: +33 (0)2 96 01 62 90 marie-frederique.lepotier@anses.fr
Bluetongue	Enzyme-linked immunosorbent assay;	To be decided National Veterinary Services Laboratories USDA, Veterinary Services

	WOATT - Reference Labora	atories and Conaborating Centres
	Agar gel immunodiffusion	P.O. Box 844, Ames Iowa 50010, United States of America Tel: (1-515) 337.75.51 NVSL.DVL.Heads@usda.gov https://www.aphis.usda.gov/aphis/ourfocus/ar info-services/sa_reagents/ct_reagents
Bovine brucellosis	Indirect and Competitive enzyme-linked immunosorbent assay; Complement fixation; Agglutination; Buffered Brucella antigen tests; Fluorescence polarisation assay	Dr Adrian Whatmore Animal and Plant Health Agency New Haw, Addlestone Surrey KT15 3NB, United Kingdom Tel: (+44-1932) 35.76.10 Adrian.Whatmore@apha.gov.uk
Brucella abortus	Complement fixation; Agglutination; Buffered Brucella antigen tests; Fluorescence polarisation assay; Indirect and Competitive enzyme-linked immunosorbent assay	Dr Judith A. Stack (as above)
Brucella ovis	Complement fixation	Dr Adrian Whatmore (as above)
Classical swine fever	Virus neutralisation	Dr Helen Crooke Animal and Plant Health Agency New Haw, Addlestone Surrey KT15 3NB, United Kingdom Tel: (44-208) 026 9665 helen.crooke@apha.gov.uk
Contagious bovine pleuropneumonia	Both irradiated and non-irradiated sera are available. Please contact the Reference Laboratory for advice on their suitability for different types of serological test (complement fixation test, indirect or competitive enzyme-linked immunosorbent assay)	Dr Massimo Scacchia Istituto Zooprofilattico Sperimentale dell'Abru: "G. Caporale" Via Campo Boario, 64100 Teramo, Italy Tel: (39-0861) 33.24.05 m.scacchia@izs.it
Contagious bovine pleuropneumonia	Complement fixation test	Dr Ana Rosa Pombo Botelho Instituto Nacional de Investigação Agrária e Ve (INIAV, IP) Av. da República, Quinta do Marquês

		s/n, 2780-157 Oeiras, Portugal Tel: +351-21 440 35 14 ana.botelho@iniav.pt
Enzootic bovine leukosis	Agar gel immunodiffusion	Prof. Thomas Vahlenkamp Institute of Virology Centre for Infectious Diseases Faculty of Veterinary Medicine Leipzig University, An den Tierkliniken 29 04103 Leipzig, Germany Tel: (49-341) 97.38.201 Thomas.vahlenkamp@uni-leipzig.de
Equine infectious anaemia	Agar gel immunodiffusion	Dr Stephan Zientara UMR Virologie Anses/INRA/ENVA 23 avenue du Général de Gaulle 94703 Maison-Alfort, France Tel: 33 (0)1 43.96.72.82 s.zientara@vet-alfort.fr stephan.zientara@anses.fr
Equine influenza	Haemagglutination inhibition; single radial haemolysis	Dr Marie-Emmanuelle Behr-Gross European Directorate for the Quality of Medicines, Council of Europe 7 allée Kastner, F-67081 Strasbourg Cédex, France Tel: 33 (0)3 90.21.41.08 marie-emmanuelle.behr-gross@edqm.eu
Equine influenza	Antigens and antisera for invitro standardisation of vaccines	NIBSC (National Institute for Biological Standa Control), P.O. Box 1193, Blanche Lane, South Mimms, Potters Bar, Hertfordshire EN6 3QH, United Kingdom Tel: (44-1707) 65.47.53 standards@nibsc.ac.uk
Equine viral arteritis	Virus neutralisation	Dr Peter J. Timoney Maxwell H. Gluck Equine Research Center, Dept of Veterinary Science, University of Kentu Lexington, Kentucky 40546-0099, United States of America Tel: (1-859) 47 57 ext. 81094 ptimoney@uky.edu
Foot and mouth disease	Enzyme-linked immunosorbent assay (antigen and antibody detection); Virus neutralisation	Dr Donald King Institute for Animal Health, Pirbright Laborator Ash Road, Pirbright, Woking, Surrey GU24 ONF, United Kingdom Tel: (44-1483) 23.24.41 donald.king@pirbright.ac.uk
Foot and mouth disease	Nonstructural protein tests	Dr Edviges Maristela Pituco Centro Panamericano de Fiebre Aftosa OPS/ON Av. President Kennedy 7778, Sao Bento Duque de Caxias, ZC 25040-004 Rio de Janeiro, Brazil Tel: (55-21) 36.61.90.64 pitucoedv@paho.org

	Infectious bovine rhinotracheitis	Virus neutralisati Enzyme-linl immunosorl assay	ked	Dr Stephen Valas Laboratoire de Ploufragan- Agence nationale de sécur l'environnement et du trav 60 rue Pied de Fond, CS 28 79024 Niort Cedex, France Tel: 33 (0)5 49.79.61.28 stephen.valas@anses.fr	ité sanitaire de l'alin ail (Anses) 3440
	Ovine and caprine brucellosis (anti-Brucella melitensis [ISaBmS])	Indirect and Competitive enzyme-lini immunosori assay; Fluorescend polarisation Buffered Br antigen test	ked bent ce assay; ucella	Dr Adrian Whatmore (as above)	
	Peste des petits ruminants	Enzyme-linl immunosorl assay		Dr Arnaud Bataille CIRAD-Bios, Campus inter TA A-15/G, B.P. 5035, 3439 Tel: 33 (0)4 67 59 37 98 arnaud.bataille@cirad.fr	
	Rabies	Fluorescent antibody vir neutralisation	us	Dr Florence Cliquet Anses Nancy, Laboratoire des animaux sauvages, Do BP 9, 54220 Malzéville, France Tel: 33 (0)3 83.29.89.50 florence.cliquet@anses.fr	
	Swine vesicular disease	Enzyme-linl immunosorl assay (antik detection);\ neutralisatio	bent body /irus	Dr Donald King The Pirbright Institute, Asl Pirbright, Woking, Surrey, Tel: (44-1483) 23.24.41 donald.king@pirbright.ac.	GU24 ONF, United K
	Trichinellosis	Enzyme-linl immunosorl assay		Dr Maria Angeles Gomez M Istituto Superiore di Sanita Viale Regina Elena 299, 00 Tel: +390-6 49.90.23.04 mariaangeles.gomezmoral	, Laboratorio di Para 161 Roma, Italy
TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TESTING	PRODUCED/ IMPORTED	QUANTITY SUPPLIED NATIONWIDE (ML, MG)	QUANTITY SUPPLIED AT INTERNATIONAL LEVEL (ML, MG)	NAME OF BENEFICIA COUNTRIES
Your messa	Your messag		<10mL 10- 100mL 100- 500mL >500mL	<10mL 10- 100mL> 100- 500mL >500mL	AFGHANISTAN AMERICAN SAM( ALBANIA ANTIGUA AND BA ALGERIA

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

If the answer to question 3 is yes, please specify the standard reference reagents and/or other diagnostic reagents available in your laboratory (Please add more lines if needed)

Reponse : 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	
RHDV	c-ELISA	produced	1 kit	10 kits	4	
serolo						
EBHSV serolo	c-ELISA	produced	2 kits	15 kits	3	
ainal /						
RHDV/ EBHSV	MAbs sandwic	produced	14 kits	11 kits	3	
wireled 4	L ELICA					
RHDV 2	c-ELISA	produced	1 kit	16 kits	6	
RHDV/	MAbs	produced	0	4 kits	1	
RHDV	sandwic					

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	C( OI RE
						M Ea
						Af
Mana						Aı
Monoc Ional	Immuno histo-	produced	0	2mg/2ml	1	A: Pa
						Ει
						M Ea
						Af
						Αı
Refere	PCR	provided	0	1 panel	2	A:
nce						Pa El
						М
						Eε
						Af
						Αı
Positiv e and	Serologi cal	provided	0	1 panel	2	A: Pa
						Eι
						M Ea
						Af
						Ai
Positiv	RT_PCR	provided	0	1	1	A٤
е		provided			·	Pa
						Eı M
						Ea

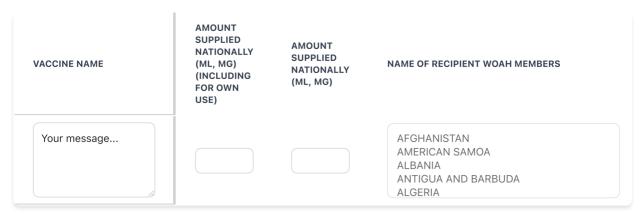
#### 4. Did your laboratory produce vaccines?

Reponse : Yes

#### 5. Did your laboratory supply vaccines to WOAH Members?

If the answer is yes, please provide information

Reponse : **No** 



#### TOR3

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

Reponse: No

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

If the answer is yes to at least one of the previous two questions, please provide information on where detailed information can be obtained (e.g. website, publication or postal address where the report may be requested)

Reponse: No

NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
Your message	Your message

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

If the answer is yes to at least one of the previous two questions, please provide information on where the detailed information can be obtained (e.g. website, publication or postal address where the report may be requested)

Reponse: **No** 

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

If the answer is yes to at least one of the previous two questions, please provide information on where the detailed information can be obtained (e.g. website, publication or postal address where the report may be requested)

Reponse : No

NAME OF THE NEW VACCINE DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
Your message	Your message

#### TOR4

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

If the answer is yes, please provide details using the appropriate box (indicate the number of samples by shipments received during last year)

Reponse: Yes

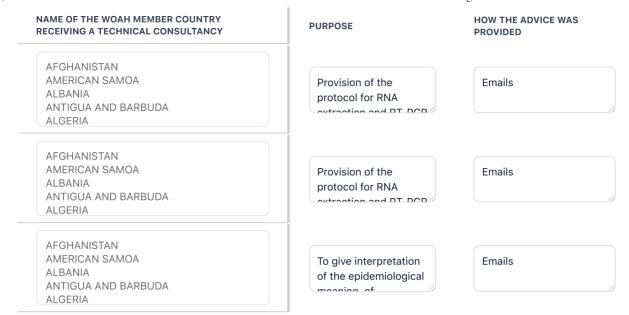


#### 11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAH Member?

If the answer is yes, please provide details using the following table (indicate which means was used to provide the assistance: remote, in loco, etc.)

Reponse: Yes

NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
AFGHANISTAN AMERICAN SAMOA ALBANIA ANTIGUA AND BARBUDA ALGERIA	To give information on the epidemiology and	Email and analyses of samples
AFGHANISTAN AMERICAN SAMOA ALBANIA ANTIGUA AND BARBUDA ALGERIA	Provision of the protocol for RNA	Emails
AFGHANISTAN AMERICAN SAMOA ALBANIA ANTIGUA AND BARBUDA ALGERIA	rovision of the protocol for RNA	Emails



#### TOR5

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

If the answer is yes, please provide details using the suggested table Hold-down the ctrl key to choose multiple countries from the dropdown list.

Reponse: Yes



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

\*Regulatory research needs = a gap in knowledge that could help in setting/updating standard(s) in the Terrestrial and Aquatic Codes and Manuals

Click here!

#### TOR6

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

Reponse: Yes

We analyse the genomic and

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

Reponse: Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

Epidemiological data obtained from the examination of

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:

5

1) ASIN JAVIER, DANIEL REJMANEK, DEANA L.
CLIFFORD, ANDREA B. MIKOLON, EILEEN E.

b) International conferences:

6

1) BARATELLI M., MOLIST-BADIOLA J., PUIGREDON-FONTANET A., PASCUAL M., BOIX O., MORA-IGUAL

c) National conferences:

0

Your message...

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

0

Your message...

#### TOR7

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

If the answer is yes, please provide the total number of trained persons for each of the following categories:

Reponse : Yes

a) Technical visit

2

ands-on training courses		
ternships (>1 month)		
provide details (specify the type	of training provided using the letter ranked above)	
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	TUNISIA	1
a	ALGERIA	3
d	PORTUGAL/SPAIN	1
b	PHILIPPINES	30
3		
	CERTIFICATE SCAN (PDF, JPG, PNG FORMAT)	
	JPG, PNG FORMAT)  Fich	ier soumis : C:\fakepath\CERTIFICATO-D: REDITMENTO-2.pdf
your quality managemenswer is yes, please prose: Yes	PDF Fich ACC	ier soumis : C:\fakepath\CERTIFICATO-Di REDITMENTO-2.pdf
your quality manageme answer is yes, please pro se: Yes	PDF  Fich ACC  ent system accredited?  vide information	
UNI CEI ENISO/IEC 170:  your quality manageme answer is yes, please pro se : Yes  TEST FOR WHICH YOUR LABORATORY IS ACCREDITED	PDF  Fich ACC  ent system accredited?  vide information  ACCREDITATION BODY	
your quality managements of the second section which your discussion of the second section of the section of the section of the second section of the se	PDF  Fich ACC  ent system accredited?  vide information  ACCREDITATION BODY  ILAC MRA, ACCREDIA	
your quality managemeenswer is yes, please prose: Yes  TEST FOR WHICH YOUR LABORATORY IS ACCREDITED  RT_PCR  Serological Competitive	PDF  Fich ACC  Port system accredited?  Evide information  ACCREDITATION BODY  ILAC MRA, ACCREDIA  ILAC MRA, ACCREDIA	
your quality managemeenswer is yes, please properties: Yes  TEST FOR WHICH YOUR LABORATORY IS ACCREDITED  RT_PCR  Serological Competitive	PDF  Fich ACC  Port system accredited?  Evide information  ACCREDITATION BODY  ILAC MRA, ACCREDIA  ILAC MRA, ACCREDIA  ILAC MRA, ACCREDIA	

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

If the answer is yes, please provide details

Reponse: Yes

The laboratory works according to the Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4 and the WHO Laboratory Biosafety Manual. A risk analysis approach was adopted to manage the biological risks of specific agents aimed at biosecurity in veterinary

#### TOR9

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

If the answer is yes, please provide a list of scientific meetings using the appropriate table

Reponse: No

NATIONAL/ INTERNATIONAL	TITLE OF EVENT	CO- ORGANISER	DATE (MM/YY)	LOCATION	NO. PARTICIPANTS
International National	Yo ur		gg/mm/aaaa		

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

If the answer is yes, please provide a list of scientific meetings using the appropriate table

Reponse: Yes

TITLE OF EVENT	DATE (MM/YY)	LOCATION	ROLE (SPEAKER, PRESENTING POSTER, SHORT COMMUNICATIONS)	TITLE OF THE WORK PRESENTED
Meeting between	28/01/2022	VDC on	Speaker	1. Lagovir
Technical questions on	10/03/2022	VDC on	Speaker	1.RABBI T

#### **TOR10**

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

Reponse: Not applicable (only WOAH Reference Laboratory designated for the disease

**24.** Are you a member of a network of WOAH Reference Laboratories designated for the same pathogen? If the answer is yes, please provide details using the following table

Reponse: Not applicable (Only WOAH Reference Laboratory designated for the disease)

PURPOSE OF THE PROFICIENCY TESTS: 1	ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT)	NO. PARTICIPANTS	PARTICIPATING WOAH REF. LABS/ ORGANISING WOAH REF. LAB.
Your message			Your message

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

If the answer is yes, please provide details using the following table

Reponse: Not applicable (Only WOAH Reference Laboratory designated for the disease)

PURPOSE OF THE PROFICIENCY TEST	ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT)	NO. PARTICIPATING LABORATORIES	PARTICIPATING WOAH REF. LABS/ ORGANISING WOAH REF. LAB.

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?

If the answer is yes, please provide details using the following table

Reponse: Not applicable (Only WOAH Reference Laboratory designated for the disease)

TITLE OF THE PROJECT OR CONTRACT	SCOPE	NAME(S) OF RELEVANT WOAH REFERENCE LABORATORIES
Your message	Your message	Your message

#### **TOR11**

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

If the answer is yes, please provide details using the table provided

Reponse: Yes

Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: http://www.oie.int/fr/notre-expertise-scientifique/laboratoires-de-reference/test-de-competence see point 1.3

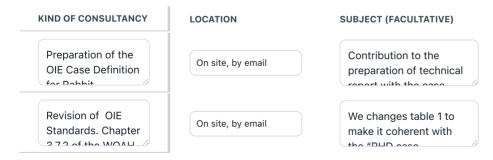
PURPOSE FOR INTER- LABORATORY TEST COMPARISONS1 <sup>1</sup>	ROLE OF YOUR REFERENCE LABORATORY (ORGANIZER/PARTICIPANT)	NO. PARTICIPATING LABORATORIES	REGION(S) OF PARTICIPATING WOAH MEMBER COUNTRIES
We prepared and distributed a panel	Organizer	3	Africa Americas Asia and Pacific Europe Middle East

#### **TOR12**

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

If the answer is yes, please provide a list of details (attendance at, for example WOAH Commission meetings, ad hoc Group meetings, review of WOAH Standards, responding to specific technical queries from WOAH, technical papers on diagnostic test procedures or vaccine production, etc.)

Reponse: Yes



#### 29. Additional comments regarding your report:

(For example, please explain why there was little or no activity in the reporting period or any other difficulty encountered in fulfilling the Terms of Reference, if relevant.)

Reponse: Yes

During 2022 the laboratory has applied both nationally and internationally the specific direct and indirect tests (MAbsELISA and RT PCR for antigen detection, cELISA and isotype\_ELISAs for antibodies detection) specifically developed developed for RHDV2.