OIE Reference Laboratory Reports Activities

Activities in 2020

This report has been submitted : 2021-01-14 10:04:14

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Glanders
Address of laboratory:	P.O. Box 597 Dubai UNITED ARAB EMIRATES
Tel.:	+971-4 337.51.65
Fax:	+971-4 336.86.38
E-mail address:	cvrl@cvrl.ae
Website:	www.cvrl.ae
Name (including Title) of Head of Laboratory (Responsible Official):	Priv. Doz. Dr. Dr. habil.Ulrich Wernery
Name (including Title and Position) of OIE Reference Expert:	Priv. Doz. Dr. Dr. habil.Ulrich Wernery Scientific Director
Which of the following defines your laboratory? Check all that apply:	Governmental

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	
Indirect diagnostic tests		Nationally	Internationally
CFT	Yes	3,145	1,820
Direct diagnostic tests		Nationally	Internationally
Culture	No	0	0
PCR	No	0	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
Positive control serum	CFT, ELISA and Western blot	Provided	0	15ml	Through private company	☐Africa ☒Americas ☒Asia and Pacific ☐Europe ☐Middle East
Negative control serum	CFT, ELISA and Western blot	Provided	0	17.5ml	Through private company	☐Africa ☒Americas ☒Asia and Pacific ☐Europe ☐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?

Yes

Name of OIE Member Country seeking assistance	Date (month)	No. samples received for provision of diagnostic support	No. samples received for provision of confirmatory diagnoses
BAHRAIN	January-December	507	0
EGYPT	January-December	17	0
JORDAN	January-December	113	0
KUWAIT	January-December	717	0
OMAN	January-December	112	0
SAUDI ARABIA	January-December	354	0
UNITED ARAB EMIRATES	January-December	3,143	0

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
BRAZIL	How to interpret CFT , especially for inconclusive results	e-mail
BRAZIL	Transportation of serum sample for re-confirmation by serological tests	e-mail
UNITED STATES OF AMERICA	Inconclusive serology results of a clinically healthy horse in quarantine	e-mail
MEXICO	Euthanasia of a horse that has tested positive for Glanders	e-mail

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?

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	OIE Member Countries involved other than your country
Assessing the pathogenic ability of genomically altered B. mallei strains which were re-isolated from experimentally infected donkeys and guinea pigs	on going	Assessing pathogenic ability	Institut fuer Mikrobiologie der Bundeswehr, Munich	GERMANY
Evaluation of antibody response of sera from experimentally infected donkey's sera with B. mallei using different B. mallei recombinant protein	on going	To assess the species specific response to different B. mellei recombinant proteins	OIE Glanders Reference Laboratory, Anses, France	FRANCE
Glanders CFT and ELISA testing of melioidosis sera of artificially infected horses	on going	To assess the cross reaction	OIE Glanders Reference Laboratory, Anses, France	FRANCE

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?

Yes

If the answer is yes, please provide details of the data collected:
Since many years we performed serological investigations on equine sera sent to CVRL from neighboring countries for Glanders. This gives us comprehensive epizootiological data about disease situation (see Kuwait)

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

Yes

If the answer is yes, please provide details of the data collected:
All data achieved by CVRL are sent to the authorities at the ministerial level of the UAE and the home countries from where we receive the samples.

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: 2
Laroucau, K., R. Aaziz, F. Vorimore, K. Varghese, T. Deshayes, C. Bertin, S. Delannoy, A.M. Sami, M.A. Batel, M. E. Shorbagy, K.A.W. Almutawaa, S.J. Alanezi, Y.S.N. Alazemi, V.G. Cambert and U. Wernery (2020)
A genetic variant of Burkholderia mallei detected in Kuwait: Consequences for the PCR diagnosis of glanders.
Transboundary and Emerging Diseases DOI:10.1111/tbed.13777

Laroucau, K., M. Saqib, B. Martin, T. Deshayes, C. Bertin, U. Wernery, S. Joseph, H. Singha, B.N. Tripathi and C. Beck (2020)
Development of a microsphere-based immunoassay for the serological detection of glanders in equids.
Acta Tropica DOI: 10.1016/j.actatropica.2020.105463

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 17025:2017	4. CVRL ISO cert_ scope_ appendix -2.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
African Horse Sickness	IAS, USA
Equine Piroplasmosis	IAS, USA
Equine Infectious Anaemia	IAS, USA
Equine Viral Arteritis	IAS, USA
Glanders	IAS, USA
Dourine	IAS, USA
CEM	IAS, USA
Brucellosis	IAS, USA
West Nile	IAS, USA
Stangles	IAS, USA
EHV 1 & 4	IAS, USA
Influenza A virus isolation	IAS, USA
Avian Paramyxo virus Type -1 (APMV-1) virus isolation	IAS, USA
Equine arteitis virus isolation from semen	IAS, USA
MERS CoV	IAS, USA
ELISA technique for various diseases	IAS, USA
CFT technique for various diseases	IAS, USA
AGID technique for various diseases	

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?

Yes

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?

Yes

Title of the project or contract	Scope	Name(s) of relevant OIE Reference Laboratories
Evaluation of antibody response of sera from experimentally infected donkey's sera with B. mallei using different B. mallei recombinant protein	To assess the species specific response to different B. mallei recombinant proteins	OIE Glanders Reference Laboratory, Anses, France
Glanders CFT and ELISA testing of melioidosis sera of artificially infected horses	To assess the cross reaction. the melioidosis sera from this trial can be distributed to other laboratory if interested.	OIE Glanders Reference Laboratory, Anses, France

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[1]	No. participating laboratories	Region(s) of participating OIE Member Countries
Serological testing competency	2	☐Africa ☐Americas ☒Asia and Pacific ☐Europe ☐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: