

# OIE Reference Laboratory Reports Activities

## *Activities in 2019*

**This report has been submitted : 2020-02-13 04:28:10**

<b>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</b>	Equine infectious anaemia
<b>Address of laboratory:</b>	427 Maduan Street Harbin 150001 CHINA (PEOPLES REP. OF)
<b>Tel.:</b>	+86-451-51051749
<b>Fax:</b>	+86-451-51997166
<b>E-mail address:</b>	wangxiaojun@caas.cn
<b>Website:</b>	
<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Prof. Xiaojun Wang
<b>Name (including Title and Position) of OIE Reference Expert:</b>	Prof. Xiaojun Wang
<b>Which of the following defines your laboratory? Check all that apply:</b>	Academic

**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		Nationally	Internationally
cELISA	YES	3349	0
AGID	YES	900	0
Direct diagnostic tests		Nationally	Internationally
Real time PCR	NO	30	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
AGID antigen	AGID	Harbin National Engineering Research Center of Veterinary Biologics Company	1128ml	0	0	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East
Positive Sera	AGID	Harbin National Engineering Research Center of Veterinary Biologics Company	2314ml	0	0	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East
cELISA KIT	cELISA	Harbin National Engineering Research Center of Veterinary Biologics Company	3066KIT	0	0	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input 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?

Yes

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

No

Name of the new test or diagnostic method or vaccine developed	Description and References (Publication, website, etc.)
The competitive ELISA for the detection of antibodies against EIAV(cELISA)	The cELISA kit is comprised with a monoclonal antibody and a HRP labeled EIAV Gag P26 protein. A monoclonal antibody against EIAV 26 was used for coating. The purified recombinant p26 protein expressed in E.coli was labeled with HRP as a detection antigen. The positive serum will block the binding between the coating monoclonal antibody and p26 labeled with HRP. This assay has high specificity and good repeatability, and it is 8 times more sensitive than AGID. This kit has been validated with other commercial ELISA kit and AGID test and has been available since 2017 in China.
Standard EIA antigen and serum for AGID test	The EIAV Gag p26 protein was expressed in E.coli. The purified p26 was used as the standard antigen for AGID test. The standard serum with antibodies against EIAV was also prepared in the lab. The AGID test with these two standard materials was optimized and validated with other commercial AGID test. These reagents have been available since 2017 in China.

***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?

No

***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?

Yes

If the answer is yes, please provide details of the data collected:
---

We check the disease status on OIE website.
---

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:
---

We are preparing a manuscript about developing a competitive ELISA for the detection of antibodies against EIAV, where the epizootiological data was included since 2015 in China.
--

**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

The development and evaluation of an epitope-based competitive ELISA for the detection of antibodies against EIAV. (unpublished manuscript)

b) International conferences: 1

1. A presentation was made on "The second international equine science and technology conference" in China.

c) National conferences: 9

The diagnostic techniques of EIA including updated AGID reagent and new competitive ELISA and the data of epidemiological investigation for EIA in China were disseminated in different kinds of training courses in 2019.

1. For the construction of equine diseases free zone in Hongzhou, three training courses were performed in January, May and September.

2. For the construction of equine diseases free zone in Inner Mongolia, three training courses were performed in July, September and November.

3. For the prevention and control of EIA, one training course was performed in Hohhot in December.

4. For the prevention and control of EIA, two training courses were performed in Xinjiang in June and July.

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)
CNAS	CNAS-2023-English.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
AGID for EIA	China National Accreditation Service for Conformity Assessment

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
Proficiency testing for EIA in veterinary laboratories organised by APHA	28	<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

**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?

Yes

Kind of consultancy	Location	Subject (facultative)
Review of OIE standards	Nanjing, China	Equine infectious anemia, equine influenza

25. Additional comments regarding your report:

We have limited international activities in 2019. We did not receive requirements for EIA standard reagents and consolation from our neighboring countries. We do have the ability to provide standard AGID and cELISA kits to others.