

# WOAH Reference Laboratory Reports Activities 2023

## Activities in 2023

This report has been submitted : 7 mai 2024 09:53

### Laboratory Information

<b>Name of disease (or topic) for which you are a designated WOA Reference Laboratory:</b>	porcine reproductive and resiratory syndrome
<b>Address of laboratory:</b>	No.17 Tiangui Street Biomedical Base Daxing District Beijing 102618
<b>Tel.:</b>	+86-10 59.19.88.96
<b>E-mail address:</b>	tiankg@263.net
<b>Website:</b>	http://www.cadc.net.cn
<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Zhi Zhou director
<b>Name (including Title and Position) of WOA Reference Expert:</b>	Kegong Tian Professor
<b>Which of the following defines your laboratory? Check all that apply:</b>	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 WOA Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
<b>Indirect diagnostic tests</b>			
LSIVET SUI PRRS A/S (LSI) (type North American)		3126	0
Porcine reproductive and respiratory syndrome virus antibody test kit (IDEXX) (type North American)		987	0
<b>Direct diagnostic tests</b>			
Cell Culture (Marc-145)		878	0
Real-time RT-PCR		4765	0

### TOR2: REFERENCE MATERIAL

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

No

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

No

4. Did your laboratory produce vaccines?

Yes

5. Did your laboratory supply vaccines to WOA Members?

No

### TOR3: NEW PROCEDURES

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

Yes

NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
Universal Real-time RT-PCR for Porcine Reproductive and Respiratory Syndrome Virus	establishment and Application of Universal Real-time RT-PCR for Porcine Reproductive and Respiratory Syndrome Virus
ELISA kit	Porcine Reproductive and Respiratory Syndrome Virus ELISA Kit for NA and EU Antibody Assay
PRRSV magnetic particle chemiluminescence antibody detection kit	Porcine Reproductive and Respiratory Syndrome Virus Magnetic Particle Cchemiluminescence Antibody Detection Kit for NA and EU Antibody

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

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

Yes

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

Yes

NAME OF THE NEW VACCINE DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
HP-PRRSV attenuated vaccine	Highly Pathogenic Porcine Reproductive and Respiratory Syndrome Purification and Thermo-stable Vaccine, live (JXA1-R Strain, Suspension culture)
PRRSVNADC30-Like attenuated vaccine	developing PRRSV NADC30-Like live vaccine
PRRSV killed vaccine	developing PRRSV NADC30-Like killed vaccine

## TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

No

## TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

Yes

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAHS MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
Linking Epidemiology and Laboratory Research on Transboundary Animal Diseases and Zoonoses in China, Lao and Myanmar ( LinkTADS)	5 Years	LinkTADS brings together world-class research institutes and experts in cross-border cooperation with the aim to coordinate research among the Lao, Myanmar and China, thus improving scientific excellence in animal health(epidemiology and laboratory).	FAO, WOAHS	LAOS MYANMAR

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

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:

PRRSV-1 genetic sequece from Chinese swine herds

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:

GenBank

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:

2

*Efficacy of a porcine reproductive and respiratory syndrome virus 1 (PRRSV-1) natural recombinant against a heterologous PRRSV-1 isolate both clustered within the subgroup of BJEU06-1-like isolates. Chen Li , Shuai Li, Shubin Li, Ming Qiu, Hong Lin, Zhe Sun , Yuejia Qiu , Wenhao Qi, Binghui Feng , Jixiang Li , Wanglong Zheng, Xiuling Yu, Kegong Tian, Shaobin Shang, Kewei Fan , Jianzhong Zhu, Nanhua Chen. Vet Microbiol. 2023,285:109847. doi: 10.1016/j.vetmic.*

*Pathogenicity characterization of PRRSV-1 181187-2 isolated in China.Wang X, Bai X, Wang Y, Wang L, Wei L, Tan F, Zhou Z, Tian K.Microb Pathog. 2023,180:106158. doi: 10.1016/j.micpath.*

b) International conferences:

1

*Fifth Regional Workshop on Swine Disease Control in Asia and the Pacific  
Beijing, China, 21-22 Nov 2023*

c) National conferences:

2

*The National Training on Animal disease diagnosis technology and standard material development. Beijing, China, 19-20 September,2023.  
Prevention and control measures against swine diseases & laboratory diagnostic techniques in breeding herds, China. 18-19, April,2023.*

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

## TOR7: SCIENTIFIC AND TECHNICAL TRAINING

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

Yes

a) Technical visit : 0

b) Seminars : 30

c) Hands-on training courses: 0

d) Internships (>1 month) 0

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
B	JAPAN	30
B	CHINA (PEOPLE'S REP. OF)	30
B	KOREA (REP. OF)	30

## TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO/ICE 17025	PDF	CNAS实验室认可证书 (CNASL18143)-英文.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Isolation and identification for PRRSV isolation; PRRSV antigen (Real-time RT-PCR) and antibody diagnosis (ELISA, IFA, IPMA)	China National Accreditation Service for Conformity Assessment(CNAS)

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

Yes

Reference laboratory set up biosafety committee, biosafety daily management, personnel training system, emergency Plan for Laboratory Biosafety Accidents. The laboratory virus storage room is equipped with anti-theft doors and Windows, video surveillance system and infrared anti-theft alarm system, and adopts a double-lock storage system, etc.

## TOR9: SCIENTIFIC MEETINGS

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

Yes

NATIONAL/ INTERNATIONAL	TITLE OF EVENT	CO-ORGANISER	DATE (MM/YY)	LOCATION	NO. PARTICIPANTS
International	Fifth Regional Workshop on Swine Disease Control in Asia and the Pacific	WOAH Regional Representation for Asia and the Pacific	2023-11-21	China	30

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

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
Fifth Regional Workshop on Swine Disease Control in Asia and the Pacific	2023-11-21	China	Speaker	The epidemic status and control of PRRSV in China

## TOR10: NETWORK WITH WOAHP REFERENCE LABORATORIES

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

Yes

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

No

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

No

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

No

## TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

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

No

## TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

No