

# WOAH Reference Laboratory Reports Activities 2025

This report has been submitted: 29 décembre 2025 04:47

## LABORATORY INFORMATION

<b>*Name of disease (or topic) for which you are a designated WOAHO Reference Laboratory:</b>	Porcine reproductive and respiratory syndr
<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>	
<b>*Name (including Title) of Head of Laboratory (Responsible Official):</b>	Zhi Zhou director
<b>*Name (including Title and Position) of WOAHO 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 WOAHO Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
<b>Indirect diagnostic tests</b>			
LSIVET SUISS PRRS A/S (HIPRA) (PRRSV-2)	Yes	653	0
Porcine reproductive and respiratory syndrome virus antibody test kit (IDEXX) (PRRSV-2)	Yes	2834	0
IFA	Yes	136	0
<b>Direct diagnostic tests</b>			
Cell Culture (Marc-145)	Yes	232	0
Real-time RT-PCR	Yes	8750	0

## TOR2: REFERENCE MATERIAL

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

No

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

No

4. Did your laboratory produce vaccines?

Yes

5. Did your laboratory supply vaccines to WOAHO Members?

No

## TOR3: NEW PROCEDURES

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

Yes

7. Did your laboratory validate diagnostic methods according to WOAHP Standards 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 chemiluminescence Antibody Detection Kit for NA and EU Antibody

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

Yes

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

Yes

Name of the new vaccine developed	Description and References (Publication, website, etc)
PRRSV NADC30-Like attenuated vaccine	Developing PRRSV NADC30-Like live vaccine
PRRSV killed vaccine	Developing PRRSV killed vaccine

## TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

No

## TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	WOAHP 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, WOAHP	LAOS MYANMAR

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

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:

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Genbank

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:

4

*Emergence, prevalence and evolution of porcine reproductive and respiratory syndrome virus 1 in China from 1994 to 2024.* Qiu Y, Qiu M, Li S, Li S, Zhu J, Tian K, Chen N. *Virology*. 2025 605:110457. doi: 10.1016/j.virol.2025.110457.  
*Tilmicosin inhibits the infections of currently prevalent porcine reproductive and respiratory syndrome viruses via the downregulation of CD163 expression.* Qiu M, Li X, Li S, Li S, Xie N, Sun Z, Lin H, Zhu J, Tian K, Chen N. *Virulence*. 202516(1):2561831. doi: 10.1080/21505594.2025.2561831.  
*The GP2a 91/97/98 amino acid substitutions play critical roles in determining PRRSV tropism and infectivity but do not affect immune responses.* Qiu M, Li S, Li S, Sun Z, Lin H, Yang S, Cui M, Qiu Y, Qi W, Yu X, Shang S, Tian K, Meurens F, Zhu J, Chen N *J Virol*. 2025 Apr 15;99(4):e0004825. doi: 10.1128/jvi.00048-25.  
*Refining Lineage Classification and Updated RFLP Patterns of PRRSV-2 Revealed Viral Spatiotemporal Distribution Characteristics in China in 1991-2023.* Tian X, Wei Z, Khan M, Zhou Z, Zhang J, Huang X, Yang Y, Wang S, Wang H, Cai X, Meng F, An T *Transbound Emerg Dis*. 2025:9977088. doi: 10.1155/tbed/9977088. eCollection 2025.

b) International conferences:

1

*The WOAHA Asia Regional Workshop on Swine Disease Control. Nanning, Guangxi, China, July 15-16, 2025*

c) National conferences:

2

*Prevention and control measures against swine diseases & laboratory diagnostic techniques in breeding herds, Beijing, China, 18-19 September, 2025.*  
*National training of animal disease eradication technology. Beijing, China. 4-5, November, 2025.*

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

0

0

## 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 : 1

b) Seminars : 1

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
A	CHINA (PEOPLE'S REP. OF)	11

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B	CHINA (PEOPLE'S REP. OF)	11
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## 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	location	No. Participants
International	The WOAHP Asia Regional Workshop on Swine Disease Control	WOAHP Regional Representation for Asia and the Pacific	2025-07-14	Nanning, Guangxi, P. R. China,	11

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

Yes

Title of event	Date	location	Role (speaker, presenting poster, short communications)	Title of the work presented
The WOAHP Asia Regional Workshop on Swine Disease Control	2025-07-15	Nanning, Guangxi, P. R. China,	speaker	The epidemic and control of Porcine reproductive and respiratory syndrome in China
The WOAHP Asia Regional Workshop on Swine Disease Control	2025-07-15	Nanning, Guangxi, P. R. China,	speaker	Swine-infected diseases prevention and control status 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. Are you a member of a network of 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 during the past 2 years?

No

*Because the samples cannot be transported across borders*

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 WOAHO Reference Laboratories for the same pathogen during the past 2 years?

Yes

Purpose for inter-laboratory test comparisons <sup>1</sup>	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the test	WOAH Member Countries
Enhance the capacity and level of provincial veterinary laboratories for PRRSV diagnosis	Organizer	31	National provincial veterinary laboratories proficiency tests in 2025	CHINA (PEOPLE'S REP. OF),

## TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

No

No