

WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted : 2 juin 2024 11:05

Laboratory Information

Name of disease (or topic) for which you are a designated WOA Reference Laboratory:	Brucellosis (Brucella abortus, Brucella melitensis, Brucella suis)
Address of laboratory:	China Institute of Veterinary Drug Control (IVDC), No. 33 Qingfeng Street, Daxing District Beijing, 102600, CHINA (PEOPLE'S REPUBLIC OF CHINA)
Tel.:	+86 01062103630 / +86 01061255326
E-mail address:	zhuliangquan2024@126.com
Website:	http://www.ivdc.org.cn/
Name (including Title) of Head of Laboratory (Responsible Official):	Prof. Weizhong Huang, General Director of IVDC
Name (including Title and Position) of WOA Reference Expert:	Prof. Liangquan Zhu Designated expert, WOA Reference Laboratory for Brucellosis (Brucella abortus, Brucella melitensis, Brucella suis) at IVDC
Which of the following defines your laboratory? Check all that apply:	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
Indirect diagnostic tests			
cELISA, iELISA		4673	0
Rt-qPCR		126	0
Direct diagnostic tests			
Isolation and identification of Brucella		18	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 (nonWOAH-approved) and/or other diagnostic reagents to WOA Members?

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOA MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
Rose Bengal Plate Agglutination antigen	RBT	Produced	97500mL	150mL	1	PAKISTAN,
Serum Agglutination antigen	SAT	Produced	15000mL	150mL	1	PAKISTAN,
Milk Ring Test antigen	MRT	Produced	20mL	5mL	1	PAKISTAN,

Brucellosis Positive Standard Serum	RBT, SAT, MRT, Colloidal Gold, FPA, ELISA	Produced	64mL	1mL	1	PAKISTAN,
Animal Brucella Competitive ELISA kit	ELISA	provided	0 dose	576 dose	1	PAKISTAN,
Bovine Brucellosis Antibody Indirect ELISA Kit	ELISA	provided	0 dose	576 dose	1	PAKISTAN,
Brucella Fluorescence Polarisation Assay Kit	FPA	provided	0 dose	1000 dose	1	PAKISTAN,
Rt-qPCR kit	Rt-qPCR	provided	0 dose	100 dose	1	PAKISTAN,

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAHA 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.)
Brucellosis Universal iELISA Antibody Detection Kit	Unpublished

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

No

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

Yes

NAME OF THE NEW VACCINE DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
A non resistant rough type brucella strain	China National Intellectual Property Administration CN202311467356.1

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

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

Yes

NAME OF THE WOAHA MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
PAKISTAN	Training on diagnostic techniques for brucellosis	in loco

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

No

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

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:

In 2023, a total of 4673 clinical samples of brucellosis were tested for antibody, with samples from 9 provinces (autonomous regions and municipalities) including Beijing, Shanxi, Guangdong, Hebei, Yunnan, Jilin, Inner Mongolia Autonomous Region, Gansu, and Heilongjiang. Among them, there were 3473 serum samples from cows, 400 serum samples from deer, 667 serum samples from horses, and 133 serum samples from camels.

In 2023, a total of 126 clinical samples of brucellosis were tested for pathogen, with samples from four provinces (cities, autonomous regions) including Hebei, Beijing, Gansu, and Inner Mongolia.

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

No

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:

1

LI Lin-jiao, PENG Xiao-wei, LIU Ming-he, FENG Yu, ZHANG Ying-hui, XU Lei, LI Jun-ping, Advances in Laboratory Testing Techniques for Animal Brucellosis, Chinese Journal of Veterinary Drug, 2023, 57(04): 78-87. (in Chinese)

b) International conferences:

1

The 3rd International Symposium on Brucellosis

c) National conferences:

5

1. *Brucellosis Diagnosis Technology Training*
2. *Prevention and control of animal brucellosis in northwest China*
3. *Prevention and Control of Major Animal Diseases in Southwest China*
4. *Prevention and Control of Zoonozoonotic Diseases Academic Forum of Chinese Veterinary Medical Association*
5. *Biological Products Academic Forum of the Chinese Society of Animal Husbandry and Veterinary Medicine*

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

1

<http://www.ivdc.org.cn/bb/>

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 : 8

c) Hands-on training courses: 7

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	PAKISTAN	7
B	PAKISTAN	7
B	PAKISTAN	7
B	PAKISTAN	7

B	PAKISTAN	7
B	PAKISTAN	7
B	PAKISTAN	7
B	PAKISTAN	7
C	PAKISTAN	4
C	PAKISTAN	4
C	PAKISTAN	4
C	PAKISTAN	4
C	PAKISTAN	4
C	PAKISTAN	4
C	PAKISTAN	4
C	PAKISTAN	3

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO 17025	CNAS

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Rose Bengal Plate Agglutination Test	China National Accreditation Service for Conformity Assessment
China National Accreditation Service for Conformity Assessment	China National Accreditation Service for Conformity Assessment
Complement Fixation Test	China National Accreditation Service for Conformity Assessment
China National Accreditation Service for Conformity Assessment	China National Accreditation Service for Conformity Assessment
Serum Agglutination Test	China National Accreditation Service for Conformity Assessment
China National Accreditation Service for Conformity Assessment	China National Accreditation Service for Conformity Assessment

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

Yes

The biosafety protection of our laboratory meets the international and national requirements for the management of highly pathogenic pathogens. We have BSL-3 and ABSL-3 laboratories, and developed biological risk management manuals such as "Safety Manual (AQSC-SWAQ-2019D)" and "Brucella Risk Assessment Report (FXPG01-SWAQ-2019D)". Our laboratory has a strict biosafety prevention and control system, which can meet the various experimental operation requirements related to Brucella.

TOR9: SCIENTIFIC MEETINGS

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

No

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

No

TOR10: NETWORK WITH WOA?H REFERENCE LABORATORIES

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

No

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

No

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

No

26. Did your laboratory collaborate with other WOA 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 WOA Reference Laboratories for the same pathogen?

Yes

Purpose for inter-laboratory test comparisons ¹	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the Test	WOAH Member Countries
Validation of a diagnostic protocol (specify the test)	Co-organizer	80		CHINA (PEOPLE'S REP. OF),

TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

Yes

Due to customs clearance difficulties, it is hard to organize/participate in international laboratory proficiency testing.