

WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 8 mars 2023 00:26

Laboratory Information

Name of disease (or topic) for which you are a designated WOA Reference Laboratory:	Equine influenza
Address of laboratory:	Equine Research Institute, Japan Racing Association 1400-4 Shiba, Shimotsuke Tochigi 329-0412 JAPAN
Tel.:	+81-285 44 0090
E-mail address:	manabu_nemoto@jra.go.jp
Website:	https://japanracing.jp/en/about/jra_organization/jeri.html
Name (including Title) of Head of Laboratory (Responsible Official):	Yoshinori Kasashima DVM, PhD, Director
Name (including Title and Position) of WOA Reference Expert:	Manabu Nemoto DVM, PhD
Which of the following defines your laboratory? Check all that apply:	Horse racing authority

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	
Indirect diagnostic tests		Nationally	Internationally
Haemagglutination Inhibition	Yes	12	0

Direct diagnostic tests		Nationally	Internationally
Real-time RT-PCR	No	265	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
Horse anti-sera against H3N8 equine influenza virus	Haemagglutination Inhibition and neutralisation assay	Produced	0	60ml	1	Europe

4. Did your laboratory produce vaccines?

No

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?

No

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

No

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

No

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

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

No

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

Yes

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
Antigenic characterisation of Florida sublineage clade 1 strains	2022-	To evaluate the effectiveness of vaccines against recently circulating Florida sublineage clade strains	- Irish Equine Centre	IRELAND
Antigenic characterisation of Florida sublineage clade 1 strains	2022-	To evaluate the effectiveness of vaccines against recently circulating Florida sublineage clade strains	- Gluck Equine Research Center, University of Kentucky	UNITED STATES OF AMERICA

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:

- We performed RT-PCR for equine influenza using nasal swabs collected from febrile racehorses in Japan, and they were all negative.
- We imported recent strains from abroad and performed the antigenic characterisation of recently circulating strains to evaluate the vaccine efficacy.

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:

We submitted the data to the WOAH expert surveillance panel on equine influenza vaccine composition.

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:

3

1. Ohta M, Kambayashi Y, Mita H, Kuroda T, Bannai H, Tsujimura K, Yamanaka T, Garvey M, Cullinane A, Yamayoshi S, Kawaoka Y, Nemoto M. Protective efficacy of a reverse genetics-derived inactivated vaccine against equine influenza virus in horses. *Vaccine*. 2022. 40:6362-6366.
2. Ohta M, Bannai H, Kambayashi Y, Tsujimura K, Tamura N, Iwamoto Y, Wakuno A, Yamayoshi S, Kawaoka Y, Nemoto M. Antibody Responses to a Reverse Genetics-Derived Bivalent Inactivated Equine Influenza Vaccine in Thoroughbred Horses. *J Equine Vet*

Sci. 2022. 109:103860.

3. Ohta M, Bannai H, Kambayashi Y, Tamura N, Tsujimura K, Yamayoshi S, Kawaoka Y, Nemoto M. Growth properties and immunogenicity of a virus generated by reverse genetics for an inactivated equine influenza vaccine. *Equine Vet J.* 2022. 54:139-144.

b) International conferences:

1

WOAH expert surveillance panel on equine influenza vaccine composition

c) National conferences:

0

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

0

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

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

No

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
		L22-702.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Haemagglutination Inhibition and Conventional RT-PCR	Perry Johnson Laboratory Accreditation (PJLA)

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

Yes

We have specific laboratories with restricted access. Experiments have been performed and viruses have been stored at specific laboratories with safety cabinets and autoclaves. The application related to biorisk management was submitted to MAFF of Japan to use equine influenza virus for our research and was accepted.

TOR9: SCIENTIFIC MEETINGS

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

No

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

No

TOR10: NETWORK WITH WOA REFERENCE LABORATORIES

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

Yes

24. Are you a member of a network of WOA Reference Laboratories designated for the same pathogen?

No

25. Did you organise or participate in inter-laboratory proficiency tests with WOA 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?

Yes

TITLE OF THE PROJECT OR CONTRACT	SCOPE	NAME(S) OF RELEVANT WOA REFERENCE LABORATORIES
WOA expert surveillance panel on equine influenza vaccine composition	Evaluation of vaccine efficacy against recently circulating strains	- Irish Equine Centre - Gluck Equine Research Center, University of Kentucky

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	Region(s) of participating WOA Member Countries
To check our skills in haemagglutination Inhibition and conventional RT-PCR	Organiser and participant	1	Asia and Pacific

TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

No