

WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted : 3 mai 2024 13:50

Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Prurigo lumbar
Address of laboratory:	Centro de Encefalopatías y Enfermedades Transmisibles Emergentes. Universidad de Zaragoza. C/ Miguel Servet, 177 50013 Zaragoza SPAIN
Tel.:	+34-976 76 2947
E-mail address:	badiola@unizar.es
Website:	http://centroeets.unizar.es/
Name (including Title) of Head of Laboratory (Responsible Official):	Prof Marta Monzón
Name (including Title and Position) of WOAH Reference Expert:	Prof. Juan José Badiola Díez. Fundador y Director Honorífico del Centro de Encefalopatías y Enfermedades Transmisibles Emergentes
Which of the following defines your laboratory? Check all that apply:	Academic institution

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 WOAH Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests			
BioRad TeSeE ELISA		587	0
IDEXX herdCheck BSE antigen test kit, EIA ELISA		2800	0
Direct diagnostic tests			
Histopatología		11	0
Inmunohistoquímica		11	0

TOR2: REFERENCE MATERIAL

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

No

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

No

4. Did your laboratory produce vaccines?

Not applicable

5. Did your laboratory supply vaccines to WOAH Members?

Not applicable

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 WOAHP 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 WOAHP Standards for the designated pathogen or disease?

No

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?

No

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

Yes

Research need : 1

Please type the Research need: La facilitación de la colaboración internacional ayudaría a la actualización de las normas

Relevance for WOAHP Facilitation of international collaboration,

Relevance for the Codes or Manual

Field

Animal Category

Disease:

Kind of disease (Zoonosis, Transboundary diseases)

If any, please specify relevance for Codes or Manual, chapter and title

(e.g. Terrestrial Manual Chapter 2.3.5 - Minimum requirements for aseptic production in vaccine manufacture)

Answer:

Notes:

Answer:

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:

Se recogen datos para remitir al Ministerio de Agricultura, Pesca y Alimentación para su divulgación

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:

5

- Hernaiz A, Sentre S, Betancor M, López-Pérez Ó, Salinas-Pena M, Zaragoza P, Badiola JJ, Toivonen JM, Bolea R, Martín-Burriel I 5-Methylcytosine and 5-Hydroxymethylcytosine in Scrapie-infected sheep and mouse brain tissues. *Int J Mol Sci.* 2023 Jan 13;24(2):1621. DOI: 10.3390/ijms24021621.
- Sola D, Betancor M, Marco Lorente PA, Pérez Lázaro S, Barrio T, Sevilla E, Marín B, Moreno B, Monzón M, Acín C, Bolea R, Badiola JJ, Otero A. Diagnosis in Scrapie: Conventional methods and new biomarkers. *Pathogens* 2023; 12(12): 1399. DOI.org/10.3390/pathogens12121399.
- Betancor M, Marín B, Otero A, Hedman C, Romero A, Barrio T, Sevilla E, Douet JY, Huor A, Badiola JJ, Andréoletti O, Bolea R. Detection of classical BSE prions in asymptomatic cows after inoculation with atypical/Nor98 scrapie. *Vet. Res.* 2023; 54(1): 89. DOI: 10.1186/s13567-023-01225-2.
- Sola D, Tran L, Våge J, Madslén K, Vuong TT, Korpenfelt SL, Ågren EO, Averhed G, Nöremark M, Sörén K, Isaksson M, Acín C, Badiola JJ, Gavner-Widén D, Benestad SL. Heterogeneity of pathological prion protein accumulation in the brain of moose (*Alces alces*) from Norway, Sweden and Finland with chronic wasting disease. *Vet. Res.* 2023; 54(1): 74.
- Hernaiz A, Cobeta P, Marín B, Vázquez FJ, Badiola JJ, Zaragoza P, Bolea R, Martín-Burriel I. 2023. Susceptibility of ovine bone marrow derived mesenchymal stem cell spheroids to Scrapie prion infection. *Animals.* 2023; 202313(6): 1043. doi:10.3390/ani13061043.
- Lozada J, Betancor M, Pérez S, Bolea R, Badiola JJ, Otero A. Endoplasmic reticulum stress and ubiquitin-proteasome system impairment in natural scrapie. *Front. Mol. Neurosci.* 2023; 16:1175364. DOI: 10.3389/fnmol.2023.1175364.

b) International conferences:

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- Lozada J, Betancor M, Pérez Lázaro S, Bolea R, Badiola JJ, Otero A. Endoplasmic reticulum stress and ubiquitin-proteasome system impairment in natural Scrapie. 11th Iberian Congress on Prions. Barcelona, España. 11 mayo 2023
- Pérez Lázaro S, Bravo S, Younas N, Barrio T, Otero A, Requena Jr, Martín-Burriel I, Zerr I, Badiola JJ, Bolea R. Proteomic scrapie biomarker analysis in the CNS. Póster congreso internacional. 11th Iberian Congress on Prions. Barcelona, España. 11 mayo 2023
- Marco Lorente PA, Larrañaga N, López F, Betancor M, Pérez Lázaro S, Bolea R, Badiola JJ, Otero A. Extraction and decontamination of scrapie prions. 11th Iberian Congress on Prions 2023. 11 mayo 2023.
- Sevilla, E.; Otero, A.; Badiola, JJ.; Bolea R. Center for Encephalopathies and Transmissible Emerging Diseases, a Reference Laboratory for Transmissible Spongiform Encephalopathies. Presentación póster. One health conference. Dubai, Emiratos árabes unidos. 23 de Junio de 2023.
- Betancor, M.; Marín, B.; Otero, A.; Hedman, C.; Romero, A.; Barrio, T.; Sevilla, E.; Douet, JY.; Huor, A.; Badiola, JJ.; Andréoletti, O.; Bolea, R. Detection of classical BSE prions in asymptomatic cows after inoculation with atypical/Nor98 scrapie. Presentación: póster. Prion 2023. Faro, Portugal. 16 de Octubre de 2023.

c) National conferences:

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- Lozada J, Marco Lorente P, Betancor M, Pérez Lázaro S, Bolea R, Badiola JJ, Otero A. Distribución en el sistema nervioso de marcadores de estrés del retículo endoplásmico en ovinos con scrapie. XXXIV Reunión de la Sociedad Española de Anatomía Patológica Veterinaria. Valencia, España. 7 junio 2023
- Pérez Lázaro S, Bravo Sb, Younas N, Barrio T, Otero A, Sevilla E, Requena JR, Martín-Burriel I, Zerr I, Badiola JJ, Bolea R. Validación y estudio inmunohistoquímico de potenciales biomarcadores de scrapie analizando su depósito y distribución en el sistema nervioso central ovino. XXXIV Reunión de la Sociedad Española de Anatomía Patológica Veterinaria. Valencia, España. 7 Junio 2023
- Pérez Lázaro S, Otero A, Marín B, Betancor M, Sevilla E, Eraña H, Castilla J, Sánchez-Martín MA, Badiola JJ, Vidal E, Bolea R. Las características del scrapie atípico pueden reproducirse mediante inoculación intracerebral en ovino de priones originados espontáneamente. XXXIV Reunión de la Sociedad Española de Anatomía Patológica Veterinaria. Valencia, España. 7 Junio 2023
- Sola D, Sánchez E, de Francisco J, Gonzalez B, Badiola JJ, Acín C. Alteraciones del sueño en ovejas con Scrapie. III Encuentro Grupos de Investigación IA2. Zaragoza. 24 octubre 2023.
- Marco Lorente PA, Larrañaga N, López F, Betancor M, Pérez Lázaro S, Bolea R, Badiola JJ, Otero A. Detección de priones en materiales del entorno del ganado ovino y descontaminación de subproductos de origen animal. III Encuentro Grupos de Investigación IA2. 24 octubre 2023

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

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TESIS DOCTORALES

- Caracterización de los receptores tipo Toll en la infección por priones usando como modelo el scrapie ovino. Mirta García Martínez. Enero 2023.
- Contribuciones al estudio de biomarcadores, terapia y fenómeno de cepas en las enfermedades priónicas. Marina Betancor Caro. Marzo de 2023.

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAHA 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)	
ISO17025	pdf	CERT_1951_LE_1663_rev2.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
ELISA IDEXX	ENAC (ENTIDAD NACIONAL DE ACREDITACIÓN)
ELISA BIORAD	ENAC (ENTIDAD NACIONAL DE ACREDITACIÓN)
HISTOPATOLOGÍA	ENAC (ENTIDAD NACIONAL DE ACREDITACIÓN)
INMUNOHISTOQUÍMICA	ENAC (ENTIDAD NACIONAL DE ACREDITACIÓN)

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

Yes

TOR9: SCIENTIFIC MEETINGS

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

No

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

No

TOR10: NETWORK WITH WOAHP REFERENCE LABORATORIES

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

No

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?

Yes

Purpose for inter-laboratory test comparisons ¹	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the Test	WOAHP Member Countries
Comprobar la capacidad de los laboratorios participantes en diagnosticar muestras de Scrapie, mediante el empleo de técnicas de diagnóstico rápido autorizadas en la UE.	Participante	18	Diagnóstico rápido	SPAIN,
Determinar la aptitud de un laboratorio para efectuar pruebas de diagnóstico de Scrapie (como parte del programa de acreditación de dicho laboratorio).	Participante	2	Histopatología e inmunohistoquímica	SPAIN,

TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

Yes

Se ha iniciado el proceso requerido para el establecimiento de la de acreditación ISO17043 en nuestro laboratorio.