

OIE Reference Laboratory Reports Activities

Activities in 2021

This report has been submitted : 2022-01-18 11:40:01

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Scrapie
Address of laboratory:	Via Bologna 148 10154 Torino ITALY
Tel.:	+39-11 26 86 296
Fax:	+39-11 26 86 322
E-mail address:	crisrina.casalone@izsto.it
Website:	www.izsplv.it
Name (including Title) of Head of Laboratory (Responsible Official):	Cristina Casalone
Name (including Title and Position) of OIE Reference Expert:	Cristina Casalone
Which of the following defines your laboratory? Check all that apply:	Other: Research

ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards

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 OIE Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests		Nationally	Internationally
none	none	none	none
Direct diagnostic tests		Nationally	Internationally
IDEXX BSE-scrapie Antigen kit EIA	Yes	6703	none
Immunohistochemistry for pathological prion protein	Yes	223	none
Histology	Yes	223	none
Scrapie confirmatory immunoblotting	Yes	201	2
PrP genotyping	yes	7054	none

**ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards.
To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.**

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

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

No

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to OIE Member Countries?

No

ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

Yes

Name of OIE Member Country seeking assistance	Date (month)	No. samples received for provision of diagnostic support	No. samples received for provision of confirmatory diagnoses
CROATIA	11/2021	0	2

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

Yes

Name of the OIE Member Country receiving a technical consultancy	Purpose	How the advice was provided
BELGIUM	Technical support on the immunohistochemistry diagnosis on scrapie tissues	Continuous exchange of technical information by email and sending new slides and protocol
LITHUANIA	Technical support on the immunohistochemistry diagnosis on scrapie tissues	Continuous exchange of technical information by email and sending new slides and protocol
AUSTRIA	Technical support on the immunohistochemistry diagnosis on scrapie tissues	Continuous exchange of technical information by email and sending new slides and protocol
IRELAND	Technical support on the immunohistochemistry diagnosis on scrapie tissues	Continuous exchange of technical information by email and sending new slides and protocol
CZECH REPUBLIC	Technical support on the immunohistochemistry diagnosis on scrapie tissues	Continuous exchange of technical information by email and sending new slides and protocol
SLOVENIA	Technical support on the immunohistochemistry diagnosis on scrapie tissues	Continuous exchange of technical information by email

ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	OIE Member Countries involved other than your country
Enhancing Research for Africa Network	24 months	The main task of the ERFAN network aims at enhancing research collaborations and to push forward the activities of veterinary Institutions	5 Italians IIZZSS	ALGERIA BOTSWANA LIBYA MOROCCO MOZAMBIQUE SOUTH AFRICA SUDAN TUNISIA ZAMBIA ZIMBABWE

ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases

11. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

If the answer is yes, please provide details of the data collected:
We participated to the writing of "The European Union Summary Report on surveillance for the presence of Transmissible Spongiform Encephalopathies (TSEs) in 2021

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

Yes

If the answer is yes, please provide details of the data collected:
Through a collaboration with EFSA in the frame of the drafting "The European Union Summary Report on surveillance for the presence of Transmissible Spongiform Encephalopathies (TSEs) in 2021

13. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category)

a) Articles published in peer-reviewed journals: 2

- Alessandra Favole, Maria Mazza, Antonio D'Angelo, Guerino Lombardi, Claudia Palmitessa, Luana Dell'Atti, Giulia Cagnotti, Elena Berrone, Marina Gallo, Tiziana Avanzato, Erika Messina, Loretta Masoero, Pier Luigi Acutis, Daniela Meloni, Franco Cardone, Maria Caramelli, Cristina Casalone, Cristiano Corona. RT-QuIC detection of pathological prion protein in subclinical goats following experimental oral transmission of L-type BSE. BMC Res Notes. 2021 Dec 7;14(1):442. doi: 10.1186/s13104-021-05859-3.

- Scientific report on the analysis of the 2-year compulsory intensified monitoring of atypical scrapie. Arnold M., Ru G., Simmons M., Vidal-Diez A., Ortiz-Pelaez A., Stella P., European Food Safety Authority (EFSA) -EFSA Journal

b) International conferences: 3

- 5th National Congress of the Italian Society for Virology (SIV) 5-6 July 21

- EURL feedback meetings 11 - 13 October 2021

- 38th International Society for Animal Genetics Conference. Virtual 26-30 July 2021

c) National conferences: 2

- XX-Congresso-Nazionale-SIDILV, virtual 25-26 November 2021

- 74° convegno SISVET 2021. Virtual 23-25 June 2021

d) Other:

(Provide website address or link to appropriate information) 13

Working group:

- TSE WG on 14 June: connexion and updated documents gruppo TSE per CEA e EURL 2021 15/6/21

- "Enhancing Research for Africa Network (ERFAN) - SADC Region".

- "Enhancing Research for Africa Network (ERFAN) - Nord Africa".

- EFSA cross cutting Working Group on Uncertainty.
- 16th meeting of the Network on EFSA BSE-TSE 18-19/10/ 2021, web-meeting
- Network for Zoonoses Monitoring Data dell'EFSA.
- EFSA panel "BSE TSE Network" – 18-19 October 2021

Speakers:

- EURL feedback meetings (11th and 13th October 2021). "EURL PrP Immunohistochemistry NRL Performance Technical EQA"
- EURL feedback meetings (11th and 13th October 2021) "EURL Histopathology interpretation"
- EURL feedback meetings (11th and 13th October 2021) "Results of Confirmatory BSE and Scrapie Immunoblot tests"
- Università di Camerino - Scuola di Specializzazione di Sanità Animale, Allevamento e Produzioni Zootecniche. "Aggiornamenti sulle malattie da prioni animali: normativa, epidemiologia, diagnostica, genetica" webinar, 14 June 2021.
- Università degli Studi di Bari "Aldo Moro" nell'ambito del corso di Dottorato in Sanità Animale e Zoonosi titolo "Twenty-year active surveillance on trasmissibile spongiform encephalopathies" - 24 february 2021
- Università di Sassari - Scuola di specializzazione in Sanità Animale, Allevamento e Produzione zootecniche . "BSE", "Scrapie, test di conferma e attività EURL" e "Chronic Wasting Disease" - webinar 1 october 2021.

ToR 7: To provide scientific and technical training for personnel from OIE Member Countries

To recommend the prescribed and alternative tests or vaccines as OIE Standards

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

Yes

- a) Technical visits: 0
 b) Seminars: 0
 c) Hands-on training courses: 2
 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
C	Croatia	2

ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned

15. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO 17025	ACCREDIA_ILAC_MRA.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
IDEXX BSE-Scrapie Antigen Kit EIA	ACCREDIA-ILAC MRA
Scrapie confirmatory immunoblotting	ACCREDIA-ILAC MRA
Immunohistochemistry for pathological prion protein	ACCREDIA-ILAC MRA
Histology	ACCREDIA-ILAC MRA
PrP Genotyping	ACCREDIA-ILAC MRA

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

Yes

(See Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4)

ToR 9: To organise and participate in scientific meetings on behalf of the OIE

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
FIRST ERFAN GENERAL MEETING	13/10/2021	online	working group coordinator	TSE-WG Road map 21-22
EURL TSE Meeting	11-13/10/2021	online	Speakers	Feedback on the Proficiency Testing EQA round

ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results

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

Yes

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

Yes

Purpose of the proficiency tests: ¹	Role of your Reference Laboratory (organiser/participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.
Scrapie Confirmatory Immunoblotting	Participant	24	Organising EURL TSE, IT
TSE Histopathology and immunohistochemistry interpretation EQA	Participant	39	Organising EURL TSE, IT
PrP immunohistochemistry technical EQA	Participant	20	Organising EURL TSE, IT
Verify EU approved rapid test diagnostic standards and method	Participant	26	Organising EURL TSE, IT

¹ validation of a diagnostic protocol: specify the test; quality control of vaccines: specify the vaccine type, etc.

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

No

ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

Yes

Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at:
<http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing> see point 1.3

Purpose for inter-laboratory test comparisons ¹	No. participating laboratories	Region(s) of participating OIE Member Countries
Harmonising existing test methods (IDEXX HerdCheck BSE-scrapie Antigen Kit EIA)	11 (Italian IIZZSS Labs)	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East

ToR 12: To place expert consultants at the disposal of the OIE

24. Did your laboratory place expert consultants at the disposal of the OIE?

No

25. Additional comments regarding your report:

Our OIE Centre for BSE and scrapie collaborates with EURL TSE as part of the same Institution and also all staff, including myself, works for both centres. From 2019 we have been providing diagnostic advice to European Nrls. From two years we have been working closely with countries in North Africa and South Africa.