

OIE Reference Laboratory Reports Activities

Activities in 2019

This report has been submitted : 2020-01-13 10:22:51

| | |
|--|---|
| Name of disease (or topic) for which you are a designated OIE Reference Laboratory: | Infectious bursal disease (Gumboro disease) |
| Address of laboratory: | B.P. 53 22440 Ploufragan-Plouzané FRANCE |
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| Website: | |
| Name (including Title) of Head of Laboratory (Responsible Official): | Dr. Nicolas Terradosi, DVM, PhD, Dipl ECPVS, Head of Ploufragan-Plouzane-Niort ANSES Laboratory |
| Name (including Title and Position) of OIE Reference Expert: | Nicolas Terradosi |
| Which of the following defines your laboratory? Check all that apply: | Governmental 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 |
| AGID | yes | 845 | 0 |
| Viral neutralization | yes | 0 | 0 |
| Direct diagnostic tests | | Nationally | Internationally |
| viral isolation or titration on viral isolation or titration on embryonated eggs | yes | 0 | 0 |
| viral isolation or titration on CEF | yes | 0 | 0 |
| viral isolation or titration on lymphocytes | no | 737 | 0 |
| Viral detection by AC-ELISA | yes | 0 | 0 |
| partial amplification of IBDV genome (RT-PCR for VP2 or VP1) | yes | 32 | 18 |
| qRT-PCR quantification of IBDV genome | no | 1235 | 18 |
| Complete IBDV genome sequencing (Sanger or NGS) | no | 35 | 0 |
| Preparation of viral stocks from infected bursae of Fabricius | yes | 50 | 0 |

**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?

Yes

| Type of reagent available | Related diagnostic test | Produced/ provide | Amount supplied nationally (ml, mg) | Amount supplied internationally (ml, mg) | No. of recipient OIE Member Countries | Region of recipients |
|---------------------------|-------------------------|-------------------|-------------------------------------|--|---------------------------------------|---|
| Viral antigen | IDG,ELISA | produit | 2 mL | 0 | 1 | <input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East |
| Positive anti-IBDV serum | IDG, ELISA | produit | 3mL | 0 | 1 | <input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East |

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 |
|---|--------------|--|--|
| NEW ZEALAND | 09/2019 | 0 | 6 |
| ICELAND | 12/2019 | 0 | 8 |

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 |
|--|---|-----------------------------|
| NEW ZEALAND | Better understanding of the origin of the virus that was detected in this country free of IBDV. | emails and written report. |

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?

No

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?

No

If the answer is no, please provide a brief explanation of the situation:

No study was organized but the laboratory received sequence data from several countries and discussed their relevance for disease control.

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:

Studies based on samples supplied by collaborators during the past years have been published in peer-reviewed journals (see below).

**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: 3

Continuous circulation of an antigenically modified very virulent infectious bursal disease virus for fifteen years in Egypt.

Samy A, Courtillon C, Briand FX, Khalifa M, Selim A, Arafa AES, Hegazy A, Etteradossi N, Soubies SM. Infect Genet Evol. 2019 Oct 30;78:104099. doi: 10.1016/j.meegid.2019.104099. [Epub ahead of print]

Antigenicity, pathogenicity and immunosuppressive effect caused by a South American isolate of infectious bursal disease virus belonging to the "distinct" genetic lineage.

Tomás G, Marandino A, Courtillon C, Amelot M, Keita A, Pikula A, Hernández M, Hernández D, Vagnozzi A, Panzera Y, Domańska-Blicharz K, Etteradossi N, Pérez R, Soubies SM.

Avian Pathol. 2019 Jun;48(3):245-254. doi: 10.1080/03079457.2019.1572867. Epub 2019 Feb 12.

Chicken endothelial cells are highly responsive to viral innate immune stimuli and are susceptible to infections with various avian pathogens.

Lion A, Esnault E, Kut E, Guillory V, Trapp-Fragnet L, Soubies SM, Chanteloup N, Niepceron A, Guabiraba R, Marc D, Etteradossi N, Trapp S, Quéré P.

Avian Pathol. 2019 Apr;48(2):121-134. doi: 10.1080/03079457.2018.1556386. Epub 2019 Jan 10.

b) International conferences: 3

- « Zakaźne zapalenie bursy Fabrycjusza, zakaźna anemia kurcząt oraz zakażenia cirkowirusowe ptaków » organized by PIWET, Pulawy, Poland, 10/18-19/2019 : « Infectious bursal disease – epidemiology and global situation » and « Diagnosis of IBD »

- « Fachgespräch über Geflügelkrankheiten » organized by « Deutsche Veterinärmedizinische Gesellschaft », Hanover, Germany, on 10/24/2019. « an update on the epidemiology of infectious bursal disease ».

-21th World Veterinary Poultry Association Congress, Bangkok, 16th-20th September 2020, "Infectious bursal disease : impact and intervention strategies"

-"Expert days" organized by "Zoopole development" on behalf of Boehringer Ingelheim, Ploufragan, France, 06/25/2019 : "infectious bursal disease"

c) National conferences: 2

- conference organized by "Zoopole development" on behalf of Hipra, Ploufragan, France, 03/14/2019 : "la bursite infectieuse aviaire".

-oral presentation in French branch of WVPA annual meeting, 06/18/2019, Ploufragan, France : "Projet EPIBURS2020 : Investigation de la diversité génétique et pathotypique des souches de bursite infectieuse aviaire"

circulant en France : appel à prélèvements."

d) Other:

(Provide website address or link to appropriate information) 1

Report 190852 to New Zealand national authorities+ OIE scientific and technical department.

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: 0

d) Internships (>1 month): 1

| 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 |
|--|---|---|
| d | Spain | 1 |

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) |
|-----------------------------------|---|
| NF EN ISO/CEI 17025 | Quality insurance compliance certificate 2019.pdf |

16. Is your quality management system accredited?

No

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

No

(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?

No

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?

No

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?

No

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

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: