OIE Reference Laboratory Reports Activities

Activities in 2019

This report has been submitted : 2019-12-27 11:17:31

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Leishmaniosis
Address of laboratory:	Istituto Zooprofilattico Sperimentale della Sicilia (IZSSi), National Reference Centre for Leishmaniasis (C.Re.Na.L.), via Gino Marinuzzi 3, 90129, Palermo ITALY
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Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Salvatore Seminara, official manager
Name (including Title and Position) of OIE Reference Expert:	Dr. Fabrizio Vitale, Molecular Biology Dept. Director; National Reference Center for Leishmaniasis (C.Re.Na.L.)
Which of the following defines your laboratory? Check all that apply:	Governmental

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	
Indirect diagnostic tests		Nationally	Internationally
Indirect immunofluorescence test (IFAT)	Yes	4352	2
Direct diagnostic tests		Nationally	Internationally
Leishmania culture	Yes	37	none
Real Time RT-PCR	Yes	2597	1

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
positive dog control serum	indirect immunofluorescent test	produced	55	1.3	3	☐Africa ☐Americas ☒Asia and Pacific ☒Europe ☐Middle East
negative control serum	indirect immunofluorescent test	produced	55	1.3	3	☐Africa ☐Americas ☒Asia and Pacific ☒Europe ☐Middle East
slide antigens (kit)	indirect immunofluorescent test	produced	14820	30	3	☐Africa ☐Americas ☒Asia and Pacific ☒Europe ☐Middle East
immunofluorescent dog conjugate	indirect immunofluorescent test	provide	35	2.8	3	☐Africa ☐Americas ☒Asia and Pacific ☒Europe ☐Middle East
Leishmania infantum DNA	real Time PCR (RTPCR)	produced	1.8	none	1	☐Africa ☐Americas ☐Asia and Pacific ☒Europe ☐Middle East

leishmania infantum strain	Leishmania infantum strain culture	produced	4	4	1	☐Africa ☐Americas ☐Asia and Pacific ☒Europe ☐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
UNITED KINGDOM	november	3	3

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
GREECE	Quality assurance	IFAT proficiency test
GREECE	Quality assurance	Reference Material
ITALY	Quality assurance	IFAT proficiency test
ITALY	Quality assurance	Reference Material
UNITED KINGDOM	Quality assurance	Molecular diagnosis
GEORGIA	Quality assurance	IFAT proficiency test
PORTUGAL	Quality assurance	Reference Material

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
rICERCA CORRENTE izs si 01/19: Studio degli aspetti epidemiologici e fattori di rischio della Leishmaniosi nel bacino del Mediterraneo: sistema di sorveglianza Italia-Tunisia.	2 years	monitoring dog leishmania infection in tunisia	Dr. Karim Aoun, Istituto Pasteur di Tunisi-Department of Parasitology	TUNISIA
PROGETTO IZS SI 02/18 “Identificazione e studio del ruolo dei mirna nel processo infettivo della Leishmania”	2 years	Identification and study of the role of mirna in the infectious process of Leishmania	Prof. V. Gennarino Columbia University Medical Center.	UNITED STATES OF AMERICA
First Mediterranean Course	2 years	leishmaniasis	Mhoamed Gharbi, ecole Nationale de Medicine Veterinaire Tunis	TUNISIA
Leishmania project in Turkye	2 years	monitoring dog leishmania infection in turkey	dr. Mehmet Erman, University of Istambul	TURKEY
DISCONTOOLS expert group for Leishmania	2 years	Leishmaniasis Network	prof. Jose de la Fluente (SaBio istituto de investigation en recursos cinegeticos, IREC)	SPAIN
DISCONTOOLS expert group for Leishmania	2 years	Leishmaniasis Network	Dr. Sofia Boutsini DVM, MSc, PhD Veterinary Centre of Athens Head of Parasitology – Parasitic Diseases, Entomology and Bee Pathology Department 25 , Neapoleos str., Ag.Paraskevi ATHENS 15310 GREECE	GREECE
DISCONTOOLS expert group for Leishmania	2 years	Leishmaniasis Network	Dr. Carla Maia (Medical Parasitology Unit-Global Healt and Tropical Medicine Istituto de Higiene e Medical Tropical)	PORTUGAL
DISCONTOOLS expert group for Leishmania	2 years	Leishmaniasis Network	Dr. Laia Solano-Gallego (universidad Autonoma de Barcelona	SPAIN
DISCONTOOLS expert group for Leishmania	2 years	Leishmaniasis Network	prof. Gaetano Oliva University of Naples	ITALY

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:
Analyzes the vectors in limited territories and assesses the seroprevalence of the disease in Italian regions

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:
produces a data report to the Ministry of Health

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
1. Castelli G, Bruno F, Saieva L, Alessandro R, Galluzzi L, Diotallevi A, Vitale F. Exosome secretion by Leishmania infantum modulate the chemotactic behavior and cytokinic expression creating an environment permissive for early infection. Exp Parasitol. 2019 Mar;198:39-45. doi: 10.1016/j.exppara.2019.01.014.

2. Pereira A, Parreira R, Cristóvão JM, Castelli G, Bruno F, Vitale F, Campino L, Maia C. Phylogenetic insights on Leishmania detected in cats as revealed by nucleotide sequence analysis of multiple genetic markers. Infect Genet Evol. 2019 Oct 25;77:104069. doi: 10.1016/j.meegid.2019.104069.

3. Priolo V, Martínez-Orellana P, Pennisi MG, Masucci M, Prandi D, Ippolito D, Bruno F, Castelli G, Solano-Gallego L. Leishmania infantum-specific IFN-γ production in stimulated blood from cats living in areas where canine leishmaniosis is endemic. Parasit Vectors. 2019 Mar 26;12(1):133. doi: 10.1186/s13071-019-3386-y.

b) International conferences: 1
06/28/2019 network "Zoonoses Data Collection" EFSA-Ministero della Salute

c) National conferences: 3
Corso ECM di Formazione itinerante: “La Leishmaniosi animale e umana: sorveglianza e controllo ”, Trapani 11/04/2019.

Corso ECM di Formazione itinerante: “La Leishmaniosi animale e umana: sorveglianza e controllo ” Barcellona P.G. 17/04/2019

Corso ECM di Formazione itinerante: “La Leishmaniosi animale e umana: sorveglianza e controllo ”, Caltanissetta 18/04/2019.

d) Other:
(Provide website address or link to appropriate information) 1

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: 10
b) Seminars: 8
c) Hands-on training courses: 0
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
a	italy	10
b	italy	8

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	Certificato di Accreditamento ISO 17025.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
screening e titolazione sierologica mediante immunofluorescenza indiretta per la leishmaniosi	ACCREDIA
isolamento Leishmania da materiale biologico di specie recettive	ACCREDIA
Analisi Quantitativa mediante PCR Real Time della Leishmana infantum	ACCREDIA

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?

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?

Not applicable (Only OIE Reference Lab. designated for disease)

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?

Not applicable (Only OIE Reference Lab. designated for disease)

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?

Not applicable (Only OIE Reference Lab. designated for disease)

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
Organise proficiency tests (IFAT)	15	☐Africa ☐Americas ☒Asia and Pacific ☒Europe ☐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?

Yes

Kind of consultancy	Location	Subject (facultative)
revision OIE Terrestrial Manual, ninth ediction: Chapter on leishmaniosis	palermo	Dr. Vitale, Dr Castelli, Dr Bruno

25. Additional comments regarding your report: