

# OIE Reference Laboratory Reports Activities

## *Activities in 2019*

**This report has been submitted : 2020-02-10 16:19:37**

<b>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</b>	Babesiosis
<b>Address of laboratory:</b>	Istituto Zooprofilattico Sperimentale della Sicilia (IZSSi), Italian Reference Centre for Anaplasma, Babesia, Rickettsia, Theileria (C.R.A.Ba.R.T.), via Gino Marinuzzi 3, 90129, Palermo ITALY
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<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Dr. Salvatore Seminara, official manager
<b>Name (including Title and Position) of OIE Reference Expert:</b>	Dr. Santo Caracappa DVM, Health Director of IZSSi, Director of National Reference Center for Anaplasma, Babesia, Rickettsia and Theileria (CRABaRT)
<b>Which of the following defines your laboratory? Check all that apply:</b>	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	
		Nationally	Internationally
Indirect diagnostic tests		Nationally	Internationally
Babesia bovis IFI	Yes	519	0
Babesia bigemina ELISA	No	680	0
Babesia canis IFI	No	4	0
Babesia caballi IFI	Yes	10	0
Babesia caballi ELISA	No	1	1
Direct diagnostic tests		Nationally	Internationally
PCR Babesia bovis (rap1)	Yes	1	
PCR real time Babesia spp.	No	46	
PCR Babesia caballi (BC48)	No	32	
PCR Babesia microti (ssRNA)	No	3	

**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
Babesia bovis Positive serum	IFI	provide	5,1 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
Babesia bigemina positive serum	IFI	provide	2,9 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

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?

No

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

No

**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
OIE Twinning contract between the OIE reference network of Istituti Zooprofilattici Sperimentali (IIZZSS) in Italy (Parent Collaborating Centre) and the Abu Dhabi Food Control Authority (ADFCA), the Animal Health Centre for Diagnostic and research in Abu Dhabi - United Arab Emirates (Candidate Centre) for the establishment and development of an OIE Collaborating Centre on camel diseases	36 months	Twinning project	Abu Dhabi Food Control Authority - ADFCA Italian IIZZSS Network	UNITED ARAB EMIRATES
Identification and molecular characterization of tickborne diseases in ticks collected from farm ruminants in Lebanon	18 months	Analysis of tickborne pathogens	Lebanese Agricultural Research Institute, Lebanon.	LEBANON
Identification and molecular characterization of tickborne diseases in ticks collected from farm ruminants in Lebanon	18 months	Analysis of tickborne pathogens	Czech Academy of Sciences, Institute of Parasitology, Czech Republic	CZECH REPUBLIC
Identification and molecular characterization of tickborne diseases in ticks collected from farm ruminants in Lebanon	18 months	Analysis of tickborne pathogens	University of South Bohemia, Czech Republic	CZECH REPUBLIC
Identification and molecular characterization of tickborne diseases in ticks collected from farm ruminants in Lebanon	18 months	Analysis of tickborne pathogens	SaBio. Instituto de Investigación de Recursos Cinegéticos, Spain	SPAIN

**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:
see TOR 5

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:
See TOR 5

**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

Arizza V, Vecchioni L, Caracappa S, Sciurba G, Berlinghieri F, Gentile A, Persichetti MF, Arculeo M, Alduina R. New insights into the gut microbiome in loggerhead sea turtles *Caretta caretta* stranded on the Mediterranean coast. *PLoS One*. 2019 Aug 14;14(8):e0220329. doi: 10.1371/journal.pone.0220329. eCollection 2019.

Díaz-Sánchez S, Hernández-Jarguín A, Torina A, de Mera IGF, Blanda V, Caracappa S, Gortazar C, de la Fuente J. Characterization of the bacterial microbiota in wild-caught *Ixodes ventraloi*. *Ticks Tick Borne Dis*. 2019 Feb;10(2):336-343. doi: 10.1016/j.ttbdis.2018.11.014. Epub 2018 Nov 19.

b) International conferences: 0

c) National conferences: 0

d) Other:

(Provide website address or link to appropriate information) 0

**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?

No

**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 n. 0246.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
PCR Babesia bovis	ACCREDIA
PCR Babesia bigemina	ACCREDIA
PCR Babesia caballi	ACCREDIA
PCR Babesia microti	ACCREDIA
Real Time PCR Babesia microti	ACCREDIA
Babesia spp. smears	ACCREDIA
ELISA Babesia bigemina	ACCREDIA
IFI Babesia bovis	ACCREDIA
IFI Babesia caballi	ACCREDIA
IFI Babesia canis	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?

No

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?

Yes

Kind of consultancy	Location	Subject (facultative)
Twinning program on Camel diseases	palermo	Training to researchers from United Arab Emirates
Enhancing Research for Africa Network (ERFAN) meeting	Pretoria, South Africa	Istituto Zooprofilattico Sperimentale della Sicilia & ERFAN

25. Additional comments regarding your report: