

# DETERMINATION OF THE SENSITIVITY OF URANOTEST DIROFILARIA FOR DIAGNOSTIC OF HEARTWORMS IN CATS AND COMPARISON WITH SNAP FILARIA IDEXX® (Preliminar report)

Dogs are definitive hosts for *D.immitis* but cats can also be infected. *D.immitis* is more and more diagnosed thanks to the increasing knowledge among the veterinarians of this feline illness and the development of better diagnostic procedures.

The diagnostic of *D.immitis* in cats is more complicated than in dogs and it is easier to misdiagnose it due to the low number of parasites that infect to the cats and the low antigenic load in this specie.

## Objective

- To determine the sensitivity of **URANOTEST DIROFILARIA®** to detect antigens of *D.immitis*, using sera from naturally and experimentally infected cats.
- To determine the sensitivity of **URANOTEST DIROFILARIA®** in the detection of the *D.immitis* by using positive confirmed sera to antibodies of *D. immitis*.
- Comparison of results using **SNAP FILARIA IDEXX®**

## Methodology

- Specimens from cats
- Group 1: 5 cats from endemic area with heartworms detected by ultrasounds .
- Groups 2-3: 3 cats from endemic area with heartworms confirmed by necropsy ( two cats with 2 females and one cat with 1 male and 1 female)
- Group 3: 6 cats experimentally infected with microfilarias and euthanized at 6 months with presence of heartworms ( determination done at 2, 4 and 6 months post- infection - 18 specimens)
- Group 4: 50 cats positive to antibodies of *D. immitis*
- Group 5: 40 cats positives to antibodies of *D. immitis* and *Wolbachia spp*

- Testing Method

Commercial kit **URANOTEST DIROFILARIA®** following the instructions of the manufacturer

Commercial kit **SNAP FILARIA IDEXX®** following the instructions of the manufacturer

## Results

Groups	SPECIMEN	IDEXX	%	URANO	%
1	5 cats ultrasound +	3	60	5	100
2	3 cats necropsy +	3	100	3	100
3	5 cats experimentally infected( day 0)	0	0	0	0
3	5 cats experimentally infected (2 months post inoculation)	0	0	0	0
3	5 cats experimentally infected (4 months post inoculation)	0	0	0	0
3	5 cats experimentally infected (6 months post inoculation)	3	60	1	20
4	50 cats (Dirofilaria antibodies +)	0	0	0	0
5	40 cats (Dirofilaria antibodies + and Wolbachia antibodies +)	5	12,5	3	7,5

<b>CATS EXPERIMENTALLY INFECTED (6 months post innoculation)</b>	<b>Males</b>	<b>Females</b>	<b>IDEXX</b>	<b>URANO</b>
<b>1</b>	<b>0</b>	<b>1</b>	<b>+</b>	<b>-</b>
<b>2</b>	<b>0</b>	<b>3</b>	<b>+</b>	<b>+</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>-</b>
<b>4</b>	<b>2</b>	<b>1</b>	<b>-</b>	<b>-</b>
<b>5</b>	<b>0</b>	<b>1</b>	<b>+</b>	<b>-</b>
<b>6</b>	<b>0</b>	<b>1</b>	<b>-</b>	<b>-</b>