RAPID CHW AG TEST USER GUIDELINE

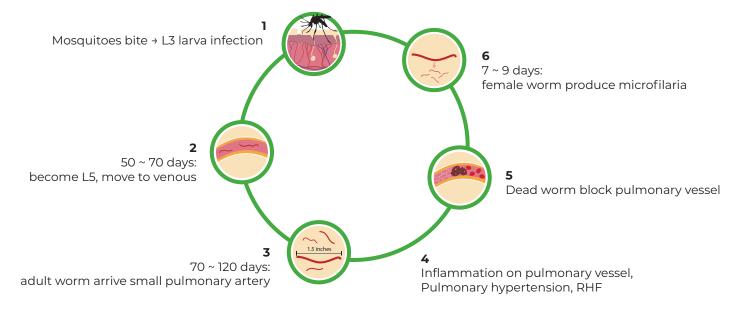
Etiologic Agent



Wolbachia (bacteria inside **Dirofilaria immitis**) VECTOR MOSQUITOES



Transmission



Clinical Signs

EARLY STAGE

- · Mild cough
- · Depression
- Fatigue
- · Anorexia
- · Weight loss

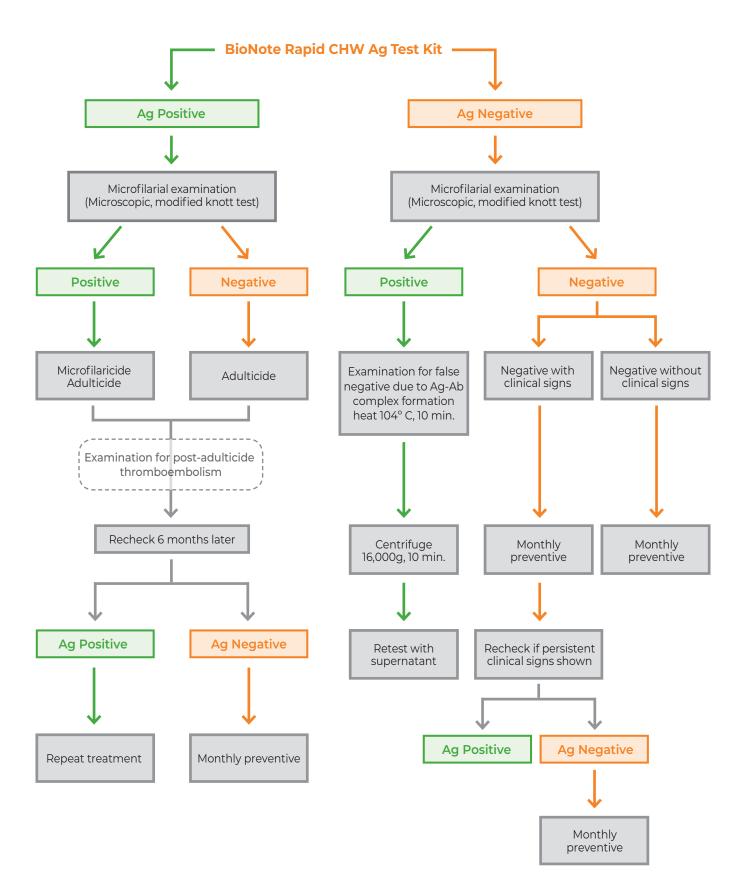
LATE STAGE

- · Abnormal heart, lung sounds
- Dyspnea, Fever
- Hemoptysis from PTE (Pulmonary Thromboembolism)
- Swollen belly due to excess fluid in the abdomen
- Hepatomegaly

EMERGENCY

- Caval syndrome = Cardiovascular collapse marked bv...
 - Sudden labored breathing
 - Pale gums
 - Dark bloody or coffeecolored urine







Trouble Shooting

Microfilaria (+), Ag test (-)

Possible reasons	Plan		
Ag/Ab complex formation	Heat 104° C for 10 min \rightarrow centrifuge at 16,000g for 10 min. \rightarrow retest with supernatant		
Other parasites (A.reconditum)	PCR experiment		

Microfilaria (-), Ag test (+)

Possible reasons	Plan		
Drug administration (microfilaricide)			
Infection with immature heartworms	Adulticide Treatment		
Infection with only female or male worm			

Treatment



DAY 0 Exercise restriction. If symptomatic, stabilization with appropriate therapy and care DAY 0 PDS 0.5 mg/kg BID (1st Week), 0.5 mg/kg SID (2nd week), 0.5 mg/kg EOD (3rd, 4th week)

DAY 1~28 PDS 0.5 mg/kg BID (1st week), 0.5 mg/kg SID (2nd week), 0.5 mg/kg EOD (3rd, 4th week)

DAY 30 Canine heartworm preventive

DAY 60 Canine heartworm preventive

DAY 60 1st melarsomine 2.5 mg/kg IM

DAY 60 Exercise restriction

DAY 90 Canine heartworm preventive

DAY 90 2nd melarsomine 2.5 mg/kg IM

DAY 91 3rd melarsomine 2.5 mg/kg IM

DAY 120 Microfilarial Test. If positive, microfilaricide treatment

DAY 271 CHW Ag Test



Evaluation

	Necropsy Results	No. of Positive results		
Infection Status		No. of specimen	No. of worm/dog	by Anigen Rapid Dirofilaria immitis Ag
	Negative (102)	102	0	0
Positive (72)	Only adolescent worms	7	1-6	4
	Only male adult worms	4	1-3	4
	Only female adult worms	8	1-2	7
	Adult male worms and adolescents	6	1-2 adult worms	6
	Adult male worms and adolescents	11	> 2 adult worms	11
	Adult female worms and adolescents	8	1-2 adult worms	8
	Adult female worms and adolescents	6	>2 adult worms	6
	Adult worms of both sexes and adolescer	nts 12	1-2 adult worms	12
	Adult worms of both sexes and adolescer	nts 10	> 2 adult worms	10
	Total	174		68

Cheju National University, South Korea

Sensitivity and specificity of ANIGEN RAPID™ and ANIGEN RAPID™ 2.0 canine heartworm antigen test kits.

Cuong Tu Ba¹*, Catherine Berezaie¹, Dele Kang², Liz Jo². ¹Modern Veterinary Therapeutics, LLC, Coral Gables, FL. ²Animal Genetics Inc., Korea¹

necropsy showed a sensitivity of 85% (11/13) in samples with 1 female worm recovered at necropsy, 100% (12/12) in samples with 2 female worms recovered at necropsy and 100% (30/30) in samples with 3 or more female worms recovered at necropsy.

American Association of Veterinary Parasitologists 53rd Annual Meeting



