

PROCEEDINGS

AAVP

AMERICAN ASSOCIATION OF
VETERINARY PARASITOLOGISTS

45th Annual Meeting
July 22-25, 2000
Salt Lake City, Utah

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Study to determine the performance of commercially available canine heartworm antigen test kits.

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Veterinarians may use point-of-care test kits to diagnose *Dirofilaria immitis* infection. In this study, serum samples from dogs with natural or experimental heartworm infections and serum samples from dogs without heartworm infections (some with other parasite infections) were tested blindly. The results are listed in Table 1. The test kits evaluated had excellent specificity and sensitivity. All test kits had lower sensitivity with small worm burdens. These smaller worm burdens may not be clinically relevant. Infections with only male worms were not detectable with any test kit. Because of comparable performance, the choice of which test kit to use in the clinic will depend more on clinic preferences for type of test, ease of use and technician capabilities.

Table 1. Specificity and sensitivity of various canine heartworm antigen tests

Test	Neg, n=100	1 female, n=21	2 females, n=20	≥3 females, n=57	Male only, n=10
DiroCHEK [®]	100	85.7	95	100	0
PetCheck [®] HTWM PF	100	76.2	85	100	0
HESKA [™] Solo Step [™] CH Batch Test Strips	100	71.4	95	96.5	0
AbboScreen [™] Canine Heartworm Antigen Test	96	71.4	100	93	0
HESKA [™] Solo Step [™] CH	100	76.2	95	96.5	0
ICT Gold [®] HW	100	61.9	85	93	0
Snap [®] Heartworm PF	100	76.2	85	100	0
Witness [®] HW	100	71.4	90	94.7	0
FILARIA IC (Italian)	100	76.2	85	100	0
Witness [™] HW (Australian)	100	66.7	90	94.7	0