Parasite detection: diagnostic performance

Per-target sensitivity and positive predictive value of the automated scan, against expert microscopist review.

PLACEHOLDER VALUES. This layout shows illustrative numbers only. They are not validation results and must not be cited.

DEFINITIONS

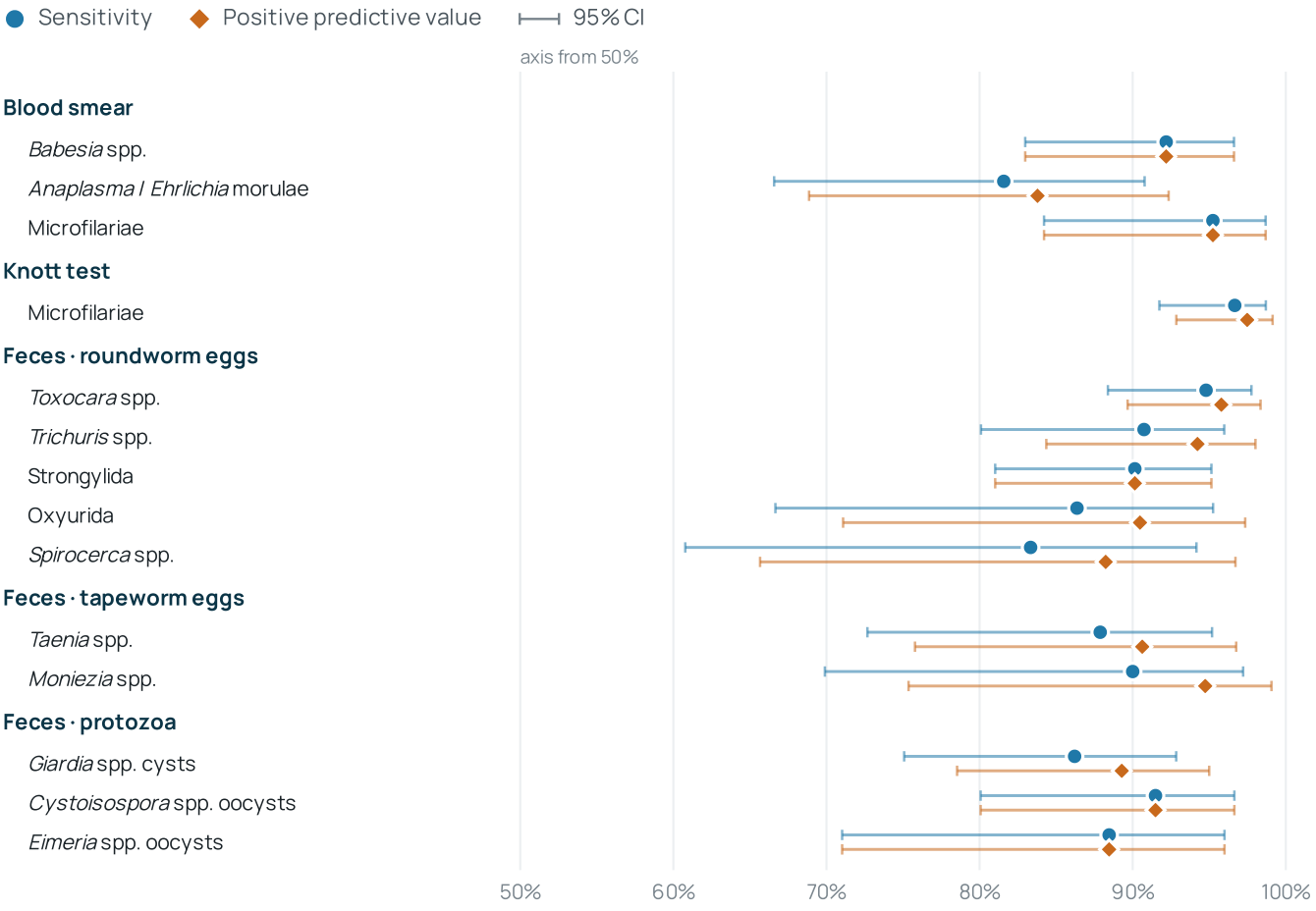
Sensitivity = TP / (TP + FN). Share of reference-positive samples the system flagged.

Reference standard: blinded review of the same slide by a veterinary microscopist.

Positive predictive value (precision) = TP / (TP + FP). Share of system-positive samples confirmed by the reference.

Intervals: 95% Wilson score confidence intervals. **n** = reference-positive samples.

SENSITIVITY AND PPV PER TARGET



VALUES

Target	n	TP	FN	FP	Sensitivity, % (95% CI)	PPV, % (95% CI)
Blood smear						
Babesia spp.	64	59	5	5	92.2 (83.0–96.6)	92.2 (83.0–96.6)
Anaplasma / *Ehrlichia* morulae	38	31	7	6	81.6 (66.6–90.8)	83.8 (68.9–92.3)
Microfilariae	42	40	2	2	95.2 (84.2–98.7)	95.2 (84.2–98.7)
Knott test						
Microfilariae	120	116	4	3	96.7 (91.7–98.7)	97.5 (92.8–99.1)
Feces · roundworm eggs						
Toxocara spp.	96	91	5	4	94.8 (88.4–97.8)	95.8 (89.7–98.4)
Trichuris spp.	54	49	5	3	90.7 (80.1–96.0)	94.2 (84.4–98.0)
Strongylida	71	64	7	7	90.1 (81.0–95.1)	90.1 (81.0–95.1)
Oxyurida	22	19	3	2	86.4 (66.7–95.3)	90.5 (71.1–97.3)
Spirocerca spp.	18	15	3	2	83.3 (60.8–94.2)	88.2 (65.7–96.7)
Feces · tapeworm eggs						
Taenia spp.	33	29	4	3	87.9 (72.7–95.2)	90.6 (75.8–96.8)
Moniezia spp.	20	18	2	1	90.0 (69.9–97.2)	94.7 (75.4–99.1)
Feces · protozoa						
Giardia spp. cysts	58	50	8	6	86.2 (75.1–92.8)	89.3 (78.5–95.0)
Cystoisospora spp. oocysts	47	43	4	4	91.5 (80.1–96.6)	91.5 (80.1–96.6)
Eimeria spp. oocysts	26	23	3	3	88.5 (71.0–96.0)	88.5 (71.0–96.0)