

Validation of the SNAP fPL Test

Two studies were performed that compared results of the SNAP® fPL™ Test with the results of the Spec fPL® Test.

Study 1: In-clinic performance of the SNAP fPL Test¹

Trained technicians from four veterinary practices visually interpreted the results of the SNAP fPL Test using serum samples collected from their feline patients.

Study design

Unique feline serum samples from 80 cats (20 at each location) were assayed on the SNAP fPL Test. Each sample was tested once on three independent lots of the SNAP fPL Test, for a total of 240 tests. Samples were then submitted for Spec fPL testing.

Agreement between Spec fPL and SNAP fPL Test results

Spec fPL concentration	N	Percentage agreement SNAP fPL Test/Spec fPL Test
Normal ($\leq 3.5 \mu\text{g/L}$)*	61	89%–93%
Elevated ($> 3.5 \mu\text{g/L}$ to $< 5.4 \mu\text{g/L}$)*	7	100%
Consistent with pancreatitis ($\geq 5.4 \mu\text{g/L}$)*	12	92%–100%

Sample N = 80

*The reference intervals for Spec fPL have been updated to align with recently published studies. Therefore the RI referred to in the table above do not align with IDEXX's current interpretive criteria.

Study 2: Agreement of SNAP fPL results with clinically defined samples¹

A population of cats with extensive clinical evaluations was previously used to determine the appropriate reference intervals for the Spec fPL Test. This study was presented at the ACVIM Forum/Canadian VMA Convention in Montreal, Canada, in June 2009.² A subset of samples from this population was tested on the SNAP fPL Test.

Study design

A total of 49 samples from cats with known Spec fPL concentrations and known clinical evaluations were tested on the SNAP fPL Test. Of the total sample population, 26 cats were clinically defined as healthy, 6 cats were clinically defined as “definitely pancreatitis,” and 17 cats were clinically defined as “probably pancreatitis.”

Each SNAP fPL device was visually read by a technician blinded to the known clinical diagnosis and Spec fPL concentrations.

Test accuracy, *continued*

Agreement between clinical assessment and SNAP fPL Test results

Clinical assessment		Total SNAP fPL Test results		Specificity	Sensitivity
		Normal	Abnormal		
Normal	26	26	0	100%	
Definitely pancreatitis	6	1	5		87%
Probably pancreatitis	17	2	15		87%

Sample N = 49

Summary and conclusions

Diagnosing feline pancreatitis can be difficult, especially because most cats present with nonspecific gastrointestinal signs. The SNAP® fPL™ Test has a high percentage of agreement with the reference laboratory Spec fPL Test, the most accurate test available for feline pancreatitis. The SNAP fPL Test provides an accurate, reliable, pet-side tool to help veterinarians quickly diagnose or rule out pancreatitis. Included as part of the initial workup, the SNAP fPL Test provides valuable diagnostic information sooner to help the veterinarian determine whether pancreatic inflammation is likely and, if so, to speed time to treatment.

In those cats with abnormal SNAP fPL Test results, consider follow-up testing with the Spec fPL Test to determine Spec fPL concentration and to assess disease severity. Periodic monitoring with the Spec fPL Test can help to assess response to therapy.

References

1. Data on file at IDEXX Laboratories, Inc. Westbrook, Maine USA.
2. Forman MA, Shiroma JT, Armstrong PJ, Simpson KW, Robertson JE, Buch J. Evaluation of feline pancreas-specific lipase (Spec fPL) for the diagnosis of feline pancreatitis [ACVIM abstract 165]. *J Vet Intern Med.* 2009;23(3):733-734.