

Proven Greater Sensitivity for Canine Pancreatitis

SNAP® cPL™ Test
(canine pancreas-specific lipase)



New research shows that the canine pancreas-specific lipase test (Spec cPL® Test) is better than other methods for the diagnosis of dogs with acute pancreatitis.¹ For superior pancreatitis testing in a pet-side assay, the SNAP® cPL™ Test also measures cPL concentration using the same reagents and ELISA methodology.

A multi-institutional, independent study from the Comparative Gastroenterology Society

Presented at the 2009 ACVIM Forum, the Comparative Gastroenterology Society study found that, with 93% sensitivity and 78% specificity, the cPL test is better able to discriminate dogs with suspected pancreatitis than other assays.

A multi-institutional study evaluating diagnostic utility of Spec cPL® in the diagnosis of acute pancreatitis in dogs

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Purpose—To investigate the performance of the Spec cPL ELISA in dogs with a clinical diagnosis of acute pancreatitis.

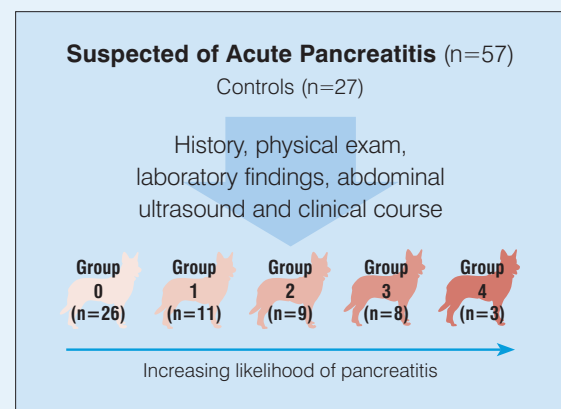
Design—Fourteen members from the Comparative Gastroenterology Society, representing five different institutions, recruited a total of 84 dogs for the study (see figure 1). Cases with an initial differential diagnosis that included acute pancreatitis (APS; n=57), or did not include acute pancreatitis (CO; n=27), were included. Clinical and laboratory findings (including total amylase and lipase) as well as ultrasound information for each dog was reviewed by a panel of four board-certified internists blinded to the Spec cPL result. Based upon their evaluation, dogs were categorized into one of five predefined groups as to the likelihood that the dog had pancreatitis.

Results—Spec cPL differed according to group (1-Way ANOVA, $P < 0.001$) and was higher ($P < 0.001$) in dogs with greater suspicion of pancreatitis (groups 2, 3 and 4) than those without suspicion of pancreatitis (groups 0APS and 0CO). Results of the study also found that:

- Amylase and lipase activities did not differ between groups.
- Spec cPL sensitivity and specificity for cases with clinical scores of 0 (no pancreatitis) and of 2, 3 and 4 (pancreatitis), calculated using current cut off values of $< 200 \mu\text{g/L}$ as negative and $> 400 \mu\text{g/L}$ positive, yielded a 93% sensitivity and 78% specificity.
- The likelihood ratio of a negative test (0.029) was better than that for a positive test (1.3).

Conclusions—The Spec cPL Test is better able to discriminate dogs with suspected pancreatitis than amylase and lipase, and that dogs with a Spec cPL result $< 200 \mu\text{g/L}$ are unlikely to have clinical acute pancreatitis.

Figure 1. Eighty-four dogs were recruited for the study and divided into five groups



Clinical Relevance for Practitioners

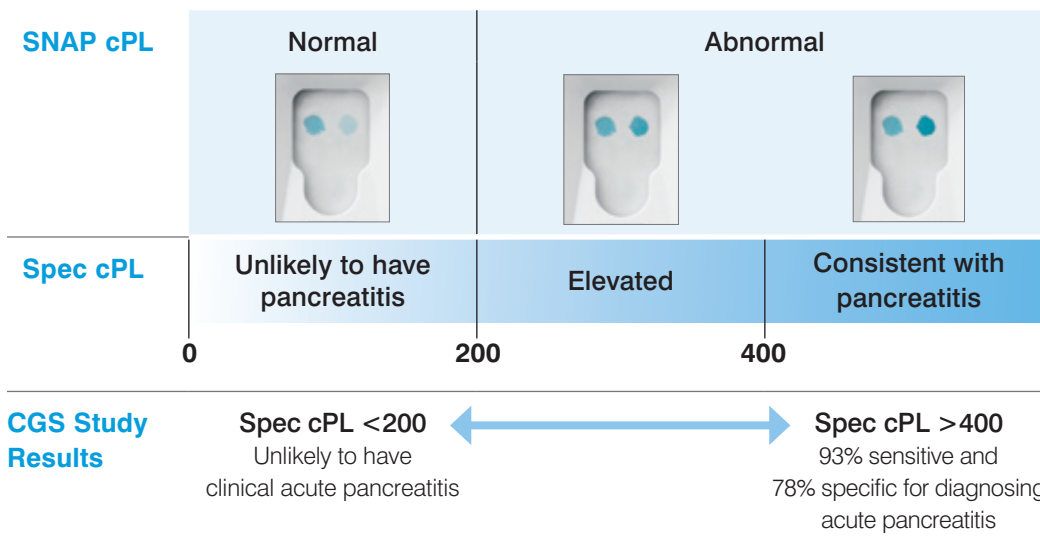
This study demonstrates the utility of cPL as part of the initial workup on dogs presenting with vomiting, anorexia or abdominal pain. Running the SNAP® cPL™ Test with your baseline chemistry will help you diagnose or rule out acute pancreatitis sooner.

Use the SNAP cPL Test pet-side for immediate, actionable results:

- **Normal** result indicates pancreatitis is very unlikely.
- **Abnormal/elevated** result indicates cPL is increased (>200 µg/L) and pancreatitis is possible.

As demonstrated by the CGS study, the Spec cPL Test can be used as a reflex test to determine if increased levels of cPL are consistent with acute pancreatitis (>400 µg/L).

Alignment of CGS study results with the Spec cPL and SNAP cPL tests



Additionally, IDEXX research found a >95% correlation of normal and abnormal results between the Spec cPL and SNAP cPL tests.²

n=70

Total Spec cPL		Total SNAP cPL		Correlation
Normal	24	Normal	23	95.8%
Elevated and consistent with pancreatitis	46	Abnormal	44	95.6%

Of the "consistent with pancreatitis" samples, 100% were interpreted correctly with the SNAP cPL Test. The SNAP cPL Test identified one *normal* sample as *abnormal* and two *elevated* samples as *normal*. None of the cPL concentrations greater than 400 (consistent with pancreatitis) were read as *normal* using the SNAP cPL Test.

Add the SNAP cPL Test to your initial workup for a more complete evaluation of patients presenting with vomiting, anorexia or abdominal pain.

To order, contact your authorized IDEXX distributor or call 1-800-248-2483.

To learn more about canine pancreatitis, go to www.idexxlearningcenter.com/pancreatitis.

1. McCord K, Davis J, Leyva F, et al. A multi-institutional study evaluating diagnostic utility of Spec cPL® in the diagnosis of acute pancreatitis in dogs. Paper presented at: 2009 ACVIM Forum and Canadian Veterinary Medical Association Convention; June 5, 2009; Montréal, Québec, Canada.

2. Data on file at IDEXX Laboratories, Inc. Westbrook, Maine, USA.