

# 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.**<sup>1</sup> 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.

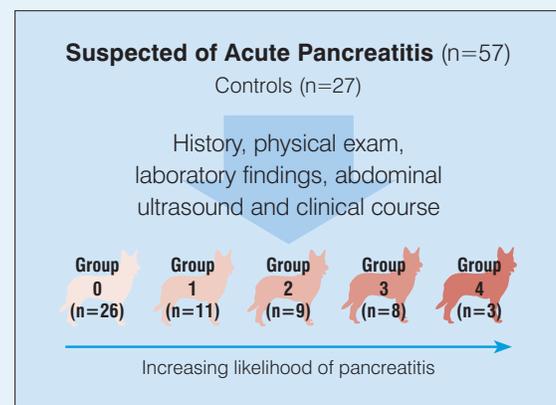
**Design**—Fourteen members from the Comparative Gastroenterology Society, representing five different institutions, recruited a total of 84 dogs for the study (see figure 1). Cases with an initial differential diagnosis that included acute pancreatitis (APS; n=57), or did not include acute pancreatitis (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

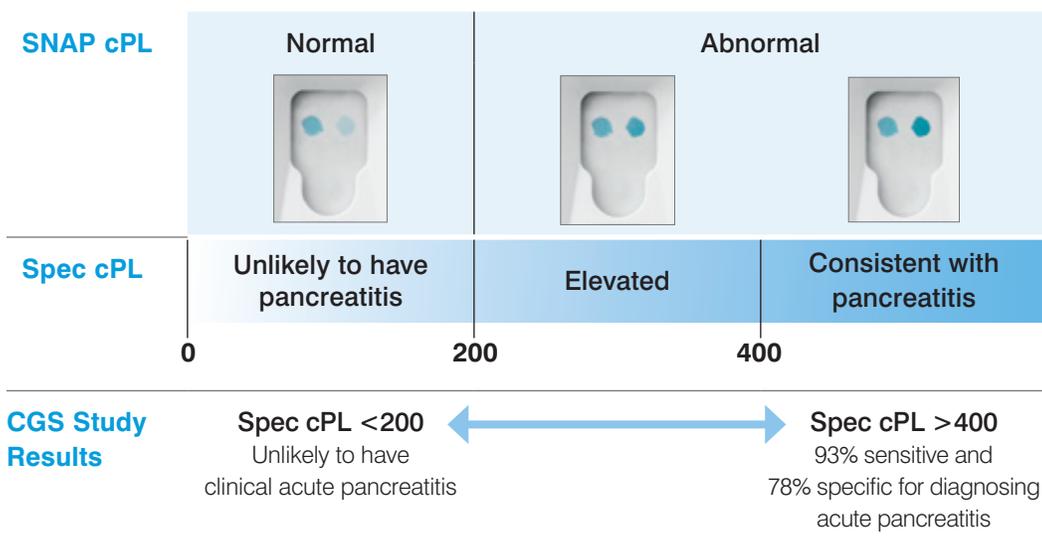
This study demonstrates the utility of cPL as part of the initial workup on dogs presenting with vomiting, anorexia or abdominal pain. Running the SNAP® cPL™ Test with your baseline chemistry will help you diagnose or rule out acute pancreatitis sooner.

### 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.<sup>2</sup>

n=70

Total Spec cPL	Total SNAP cPL	Correlation
Normal	Normal	24 / 23 = 95.8%
Elevated and consistent with pancreatitis	Abnormal	46 / 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](http://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.