

LETTER TO THE EDITOR

Response to letter regarding “ACVIM consensus statement on pancreatitis in cats”

Dear Editors,

Thank you for giving us the opportunity to respond to the letter of Dr Kook and Dr Oppliger. We would like to point out that we were limited by a total word count of 10 000 words. During the 18-month period the consensus statement was crafted by the expert panel, we spent more than 40 working hours as a team in addition to individual time working on sections and produced more than 100 drafts, which led to a document of approximately 14 000 words. Thus, we had no choice but to remove some content. The aim of the consensus statement was to give a concise summary of all aspects of pancreatitis in cats and thus a specific focus on lipase assays was not possible.

We agree with many of the comments Dr Kook and Dr Oppliger raised in their letter and had made the same points in our consensus statement. For example, we agree that there is poor correlation between abdominal ultrasound and elevation of pancreatic enzyme activities or concentrations in cats (see section 6.2 of the consensus statement¹), dogs, or humans with pancreatitis. Study design, ultrasonographer experience, equipment, and established pancreatic-specific enzyme cutoffs can impact this correlation. The severity of the pancreatitis, determined by histopathology, has been reported to positively impact this correlation.² The same correlation is also frequently noted in clinical cases, as was discussed in our statement.

The abstract cited by the panel was considered a landmark study as it represents the only study where a panel of blinded internists with an interest in pancreatitis from multiple institutions assessed the clinical data from a large number of cats.³ All other studies, including the ones cited by Dr Kook and Dr Oppliger, are single institution studies where the investigators were not blinded. The fact that this study has not yet reached the primary literature was appropriately disclosed by labeling the reference as an abstract. Also, since 1 of the panel chairs (M.F.), was the primary author of said study, the panel was aware that lack of publication of the full manuscript was due to clerical reasons rather than content issues (ie, the manuscript had not yet undergone peer review rather than having been rejected). However, the panel recognizes the limitations of referencing an abstract, which has not yet undergone peer review.

We would like to address 3 additional comments:

Dr Kook and Dr Oppliger cite 1 study that showed a correlation of 1 1,2-o-dilauryl-rac-glycero-3-glutaric acid-(6'-methylresorufin) ester (DGGR)-lipase assay and Spec feline pancreas-specific lipase (fPL)

with a Spearman r of .82 and refer to such agreement as “almost perfect.” The panel would like to point out that for assays that supposedly measure the same analyte an agreement of 0.82 would be considered unacceptable. Space constraints limited our ability to discuss all aspects of fPLI or DGGR-lipase assays. However, the panel concluded that there is no convincing evidence that DGGR-lipase assays in general are comparable with PLI assays for the diagnosis of pancreatitis in cats. Importantly, there are a wide variety of DGGR-based assays on the market, which differ in assay technology, validation parameters, and clinical utility and thus a detailed discussion was beyond the scope of this consensus statement. However, the available literature was referenced and discussed appropriately in the context of a consensus statement covering all aspects of pancreatitis in cats.

The panel was cautious about interpreting the significance of lymphocytic infiltration in the pancreas of healthy cats. For that reason, the statement pointed out that 1 of the references used a cutoff of 10% lymphocytic infiltration as normal.⁴ However, at least in dogs, a previous study found no lymphocytic infiltration in 40/44 healthy dogs in which the pancreas was sectioned every 2 cm.⁵

Finally, Dr Kook and Dr Oppliger also note that one must consider cost and turnaround time when comparing diagnostic tests. While we agree that this is important, the authors of the consensus panel would like to note that turn-around time for a DGGR-based lipase assay should be no faster than that for fPLI as currently, almost all DGGR-based assays have to be performed by a clinical pathology laboratory rather than in-clinic. Thus, while there may be a turn-around advantage for clinicians at academic institutions, this would not translate to a similar advantage to the veterinary profession at large. Also, any cost differences between a DGGR-based lipase assay and measurement of fPLI should be minimal when considering the overall cost for a clinical work-up of a cat with suspected pancreatitis. In addition, the aim of this consensus statement is to address the scientific literature surrounding the diagnosis as well as causes and management of pancreatitis. Costs and accessibility of different assays vary in different geographic regions and comments around this would be beyond the scope of this consensus statement.

The panel was called upon by ACVIM to critically evaluate the topic of pancreatitis in cats. A draft of the consensus

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statement was released to the membership of ACVIM for public comment for a period of 30 days and all members and candidates were invited to join the virtual presentation of the consensus statement. All suggestions from the public comment period as well as those received during or after the virtual presentation were carefully considered before the manuscript was finalized. The panel would like to thank those diplomates who submitted comments and thus helped to improve the consensus statement.

Thank You!

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REFERENCES

1. Forman MA, Steiner JM, Armstrong PJ, et al. ACVIM consensus statement on pancreatitis in cats. *J Vet Intern Med.* 2021;35:703-723.
2. Forman MA, Marks SL, De Cock HE, et al. Evaluation of serum feline pancreatic lipase immunoreactivity and helical computed tomography versus conventional testing for the diagnosis of feline pancreatitis. *J Vet Intern Med.* 2004;18:807-815.
3. Forman MA, Shiroma JT, Armstrong PJ, et al. Evaluation of feline specific lipase (spec fPL) for the diagnosis of feline pancreatitis. *J Vet Int Med.* 2009;23:733-734.(abstract).
4. Oppliger S, Hartnack S, Reusch CE, Kook PH. Agreement of serum feline pancreas-specific lipase and colorimetric lipase assays with pancreatic ultrasonographic findings in cats with suspicion of pancreatitis: 161 cases (2008-2012). *J Am Vet Med Assoc.* 2014;244:1060-1065.
5. Neilson-Carley SC, Robertson JE, Newman SJ, et al. Specificity of a canine pancreas-specific lipase assay for diagnosing pancreatitis in dogs without clinical or histologic evidence of the disease. *Am J Vet Res.* 2011;72:302-307.