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## LETTER TO THE EDITOR

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## Response to letter regarding "Association between abdominal ultrasound findings, the specific canine pancreatic lipase assay, clinical severity indices, and clinical diagnosis in dogs with pancreatitis"

Dear Dr DiBartola and Dr Hinchcliff,

Thank you for the opportunity to respond to the letter from Dr Wilkinson regarding our recent publication "Association between abdominal ultrasound findings, the specific canine pancreatic lipase assay, clinical severity indices, and clinical diagnosis in dogs with pancreatitis."

We appreciate the comments and input of Dr Wilkinson in this area and agree that abdominal ultrasonography is a vital tool in the diagnostic approach to patients with clinical signs of gastrointestinal/ pancreatic disease. The value of ultrasonography is 2-fold. Firstly, to detect changes consistent with pancreatic edema, and secondly to help rule out additional differential diagnoses for pancreatic edema or other abdominal causes of the patient's clinical signs. The data in this manuscript and in previous studies<sup>1</sup> does; however, highlight a discrepancy between abdominal ultrasonography and pancreatic lipase assays in the diagnosis of pancreatitis. This discrepancy does not negate the value of ultrasonography or pancreatic lipase, but it does indicate that ultrasound findings should be interpreted in the context of other patient data, as noted by Dr Wilkinson. Such data may include history, physical examination findings, assessment of portal hypertension, and other ultrasonographic findings.

Given the current lack of consensus regarding a practical, definitive gold standard diagnostic test for acute pancreatitis in companion animal species, the authors encourage the use of a combination of diagnostic results, rather than a single assay or imaging modality alone. Currently, the authors utilize history, physical examination data, routine bloodwork, pancreatic lipase concentration, and ultrasonographic findings to assign a clinical diagnosis of pancreatitis in dogs. The authors also recognize that this is an evolving area of research and consider the use of pancreatic cytology or biopsy, in atypical or poorly responsive cases or where pancreatic neoplasia is a differential diagnosis given the results of recent studies.<sup>2,3</sup>

In summary, we wish to thank Dr Wilkinson for stressing the importance of abdominal ultrasonography and for stressing consideration of other differential diagnosis in the diagnostic approach to pancreatitis. We also welcome any additional research in this area.

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[Correction added on September 16, 2020 after first online publication: minor text revision made.]

## REFERENCES

- Kook PH, Kohler N, Hartnack S, Riond B, Reusch CE. Agreement of serum spec cPL with the 1,2-o-dilauryl-rac-glycero glutaric acid-(6'methylresorufin) ester (DGGR) lipase assay and with pancreatic ultrasonography in dogs with suspected pancreatitis. J Vet Intern Med. 2014;28(3):863-870.
- Cordner AP, Sharkey LC, Armstrong PJ, McAteer KD. Cytologic findings and diagnostic yield in 92 dogs undergoing fine-needle aspiration of the pancreas. J Vet Diagn Invest. 2015;27(2):236-240.
- 3. Aupperle-Lellbach H, Törner K, Staudacher M, et al. Histopathologic findings and canine pancreatic lipase immunoreactivity in normal dogs and dogs with inflammatory and neoplastic diseases of the pancreas. *J Vet Intern Med.* 2020;34:1127-1134.

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