

1. [Correlation between Pathologists Assessing Endoscopic Gastric and Intestinal Biopsies Using WSAVA Guidelines](#)

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We examined agreement between 4 board-certified pathologists who independently evaluated endoscopic mucosal biopsies of canine and feline stomach and intestine using WSAVA Guidelines (*J Comp Pathol* 2008, 138:S1-43). Slides with 2,287 pieces of tissue from 85 dogs and 41 cats were obtained from 7 institutions. Pathologists scored 16 histological parameters as normal, mild, moderate or severe. Spearman rank correlation coefficient was used to determine pair-wise correlation between individual pathologists (i.e., 6 comparisons for each histological lesion). Correlation was consistently very weak (i.e.,  $\leq 0.40$ ) for gastric neutrophils (0.06-0.31), duodenal neutrophils (-0.03-0.37) duodenal eosinophils (0.08-0.40), deep gastric injury (5 of 6 comparisons were -0.03-0.38) and duodenal fibrosis (0.11-0.32). Inconsistent correlations that were weak included gastric eosinophils (3 of 6 comparisons were 0.06-0.32) and gastric atrophy (2 of 6 comparisons were 0.18-0.28). All comparisons for gastric intraepithelial lymphocytes (0.44-0.66), gastric lamina propria lymphocytes (0.48-0.66), gastric fibrosis (0.41-0.69), gastric follicular hyperplasia (0.44-0.61) and duodenal crypt lesions (0.51-0.73) were stronger. Duodenal intraepithelial lymphocytes, lamina propria lymphocytes, dilated lacteals and blunt villi each had 1 of 6 comparisons  $\leq 0.40$ . However, if the pair-wise correlation between 2 specific pathologists was consistently eliminated, 24 of the 25 remaining comparisons of these duodenal tissues were 0.42-0.73. Additional work is necessary to accomplish consistency on select histological lesions (neutrophils, eosinophils, duodenal fibrosis, gastric atrophy, deep gastric injury). We suspect variation in staining and tissue processing contributed to lack of agreement between pathologists on eosinophils and neutrophils.

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