Review of: "RNA in-situ hybridization for pathology-based diagnosis of feline infectious peritonitis (FIP): current diagnostics for FIP and comparison to the current gold standard"

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The article offers a new way to diagnose FIPV using RNA ISH with the target of the ORF1ab gene of the virus. The article is well written, however, there is typo here and there. Notably in page 3 paragraph 1, where the word ‘specificity’ was written twice. The introduction part was very informative, compare and contrast all the available diagnostic methods for FIPV in particular concerning specificity and sensitivity. The invasive nature of obtaining samples is the main hurdle in the diagnosis of FIPV using a gold standard of IHC, making it limited as a confirmatory post mortem diagnosis only. The other concern with IHC is the level of sensitivity, in which the author would like to improve using a new method RNA ISH. Traditionally, RNA ISH technique was used to detect the RNA transcript, requiring high expression level of the gene of interest. However, the method is suitable for RNA virus such as FIPV to be detected as the amount of viral RNA will be abundant inside the permissive and susceptible cells. Comparing the performance of RNA ISH to IHC on the same tissue, the author managed to show the increase in specificity. Unfortunately, the usage of proprietary probe and the absence of FIPV-negative samples in the experiment making it not possible to asses specificity. Despite those limitations, the article shows that RNA ISH is a potential method to detect FIPV both at the clinic as well as research lab.