GABAPENTIN SEDATION IN CATS WITH AND WITHOUT CHRONIC KIDNEY DISEASE

PROJECT STUDY: Investigation of the pharmacokinetics of gabapentin sedation in cats with and without chronic kidney disease.

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Interim report summary, MT17-002

In this study, normal cats have completed the full pharmacokinetic (PK) study at 20 mg/kg and the limited sampling pharmacokinetic study at 10 mg/kg. Sixteen chronic kidney disease (CKD cats) - (ten IRIS Stage 2, twelve IRIS Stage 3) - have completed the limited sampling PK study at 10 mg/kg. Samples from eight CKD cats have been analyzed to date to test the model. The model performed well and the data for normal cats demonstrated that half-life was similar to previous published reports. For the limited sampling portion of the study, the median half-life of gabapentin in normal cats is similar. In contrast, CKD cats had significantly higher median calculated half-life after the single 10 mg/kg dose. The investigators are currently still enrolling CKD cats with the goal of including additional early IRIS stage 2 cats and IRIS Stage 4 cats. One feline medicine exclusive practice has been recruited to provide an additional enrollment location for the project. The investigator plans to conclude this portion of the study in time to submit a future ACVIM or AAFP abstract.

Presentations:
The data from the normal cat PK study was presented as an oral abstract at AAFP Annual Conference in San Francisco, November 2019:

Pharmacokinetics of Single Dose Gabapentin for Stress Relief in Normal Cats
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