

FINAL REPORT



Evaluating a New Treatment for Dogs with Kidney Disease

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RESULTS: Drug Telmisartan Superior to Enalapril in Limiting the Severity of Proteinuria in Dogs with Chronic Kidney Disease

Morris Animal Foundation-funded researchers from the University of Georgia evaluated the drug telmisartan and its ability to reduce proteinuria (abnormally high protein levels in the urine) in dogs with chronic kidney disease. Proteinuria is a known risk factor for the development of uremic crisis and death in dogs with chronic kidney disease (CKD). Identification of an agent that safely and effectively reduces proteinuria in dogs with CKD will greatly improve the lives of thousands of dogs suffering from this condition.

The current standard of care for CKD and proteinuria includes diet change and medications to slow progression of the disease. In addition, drugs known as angiotensin-converting enzyme inhibitors (ACEi) are widely prescribed by veterinarians to decrease urine protein levels in dogs. Although these medications are effective in many patients, others respond inconsistently or not at all to ACEi, highlighting the need for additional therapies.

In this blinded clinical trial, 39 client-owned dogs with CKD were randomly assigned to receive either telmisartan or the commonly recommended ACEi drug enalapril. A combination of both drugs also was prescribed to dogs in the study in which proteinuria was not sufficiently controlled by their assigned medication.

Researchers evaluated treatment response of each patient over several months by measuring urine protein levels and other factors to gauge each drug strategy's effectiveness. Final data analysis indicated dogs treated with telmisartan had a greater decrease in urinary protein levels than dogs treated with enalapril, both at short- and immediate-term measurement timepoints.

Of the estimated 300,000 to one million pet dogs in the United States suffering from CKD, up to 52% are affected by abnormal protein loss in the urine. To date, clinical use of telmisartan has been commonly reserved for patients that fail to respond to treatment with enalapril or other ACEi medications. The findings of this study suggest telmisartan might be useful as a first-line therapy for the treatment of proteinuria in dogs with chronic kidney disease. However, further study is needed to determine whether telmisartan also improves survival time in these patients.

Thank you for your generous support of this study!