

## Researchers study stem-cell therapy for feline kidney disease

January 9 2014, by Jennifer Dimas

Chronic kidney disease in older cats is the focus of a fifth clinical trial under way at Colorado State University's James L. Voss Veterinary Teaching Hospital, where veterinarians are exploring novel stem-cell therapy that could, for the first time, hold promise for treating one of the most perplexing feline diseases.

CSU researchers seek area cats with the disease to participate in the clinical trial; cats with concurrent diseases are not eligible. For information about the trial and to determine eligibility for enrollment, visit col.st/1lB4KHf.

Studies suggest that about 50 percent of cats older than 10 suffer from chronic kidney disease.

Although the disease is very common, risk factors are poorly understood and it is tough to treat: Chronic <u>kidney disease</u> is considered irreversible, and treatment typically centers on slowing progression of the disease through supportive care, such as dietary changes, injected fluids and blood-pressure medication.

Yet in a pilot study last year, CSU veterinarians determined that stemcell therapy could provide a new treatment option for cats. After preliminary results, the research team is further investigating the ability of stem cells to repair damaged kidneys.

Veterinarians are intrigued by use of stem-cell therapy for chronic



kidney failure in cats because earlier studies demonstrated that the approach could decrease inflammation, promote regeneration of damaged cells, slow loss of protein through urine and improve kidney function, said Dr. Jessica Quimby, a veterinarian leading the CSU research.

"In our pilot study last year, in which stem cells were injected intravenously, we found stem-cell therapy to be safe, and we saw evidence of improvement among some of the cats enrolled in the trial," Quimby said. "In this study, we will further explore stem-cell therapy with the new approach of injecting the cells close to the damaged organs. We hope this proximity could yield even better results."

For the CSU study, the <u>stem cells</u> used have been cultivated from the fat of young, healthy cats; donor animals are not harmed.

The study will track cats with <u>chronic kidney disease</u> for about two months, with a variety of diagnostic tests conducted before and after stem-cell treatment to analyze kidney function.

## Provided by Colorado State University

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