



UW Veterinary Care
UNIVERSITY OF WISCONSIN-MADISON

LOOKING FOR Dogs with Bladder Cancer

Bladder Cancer in Dogs: Genetic and Environmental Risk Factors

The Study

Urinary bladder cancer (transitional cell carcinoma) in dogs is an aggressive, treatment-resistant disease. Specific breed predispositions to bladder cancer (Scotties and Westies), along with several environmental risk factors, suggest a gene-environment interaction for bladder cancer risk in dogs, as has been shown in people. In humans, genetic variants in the carcinogen-detoxifying enzyme glutathione-s-transferase (GST) are associated with an increased risk of bladder cancer. The aim of this study is to determine whether genetic variants in canine GST and exposure to certain environmental chemicals contribute to dog's risk for bladder cancer.

Who Qualifies

Any dog diagnosed with transitional cell carcinoma of the bladder or urethra—either by cytology or histopathology.

What Happens

The inside of the patient's cheek is swabbed to obtain a DNA sample for GST gene sequencing. This may be done at UW Veterinary Care or at the dog's primary care veterinarian. The client completes a 5-page questionnaire about the dog's environment. Katherine Luethcke provides

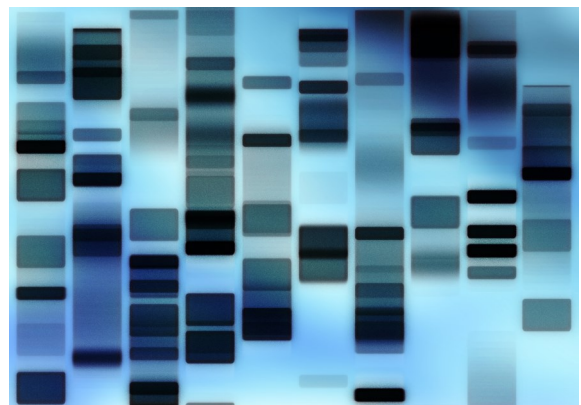
primary veterinarians with study packets, including swabs and questionnaires.

Why Participate

Better characterization of genetic and environmental risk factors for bladder cancer risk may help us to recommend evidence-based preventative care and monitoring for individual dogs, such as avoidance of specific environmental risk factors and more frequent monitoring with ultrasound and periodic voided urinalyses.

More Information

If you are interested in participating in this study, please contact Katherine Luethcke at luethcke@wisc.edu or Dr Lauren Trepanier at latrepanier@vetmed.wisc.edu. Thank you for your interest in this study.



DNA "fingerprint"