

Announcement of a Research Study at the National Cancer Institute, Bethesda MD

MOLECULAR IMAGING OF DOGS WITH OSTEOSARCOMA

Referral of Potential Participants Available at the

HOPE ADVANCED VETERINARY CENTER - ROCKVILLE

Osteosarcoma is the most common primary bone tumor found in dogs. Osteosarcoma typically affects large breed older dogs but younger dogs can also be diagnosed with this very aggressive cancer.

Dogs with osteosarcoma share many important characteristics with humans that have this disease. There is an unmet need to increase our understanding of how tumors utilize nutrients (like glucose) to help us develop strategies to combat these tumors.

The Hope Advanced Veterinary Center-Rockville is working with the National Cancer Institute (NCI) to enroll dogs in a study evaluating osteosarcoma using magnetic resonance imaging (MRI). MRI provides superior anatomic detail, particularly of the soft tissues associated with the tumor. Subsequent studies will evaluate the addition of a tracer called ¹³C-pyruvate, to map the areas of tumor that are metabolically active.

Inclusion criteria:

- Radiographic findings highly suggestive of osteosarcoma (based on appearance and location)
- Patients are otherwise healthy and good anesthetic candidates
 - Thoracic radiographs, blood work (CBC/chemistry panel), and urinalysis are important in assessing overall health and tumor staging

Some dogs may also be candidates for a small tumor biopsy and/or aspirates to assist in validation of the imaging results. The tumor sample would be taken using a small, sterile needle while your dog is already under anesthesia.

There is no financial incentive to participate in this study. All costs associated with anesthesia and imaging are paid for by the study. If a tumor sample is obtained, the cost of submitting the tissue for review by a pathologist is the responsibility of the owner. Your dog's participation in this study may help provide valuable information with regard to the diagnosis and future treatment of dogs and humans with bone cancer.

The Hope Advanced Veterinary Center can provide additional information about the study and serve as your initial liaison with NCI. Please contact Rachel Rasmussen, DVM, DACVIM (Oncology), of the Hope Advanced Veterinary Center by phone at 301-637-3228.

The NCI study's principal investigator is Amy K. LeBlanc, DVM Diplomate ACVIM (Oncology). Dr. LeBlanc is the Director of the Comparative Oncology Program, Center for Cancer Research, National Cancer Institute.

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