

Funded Study: Treatment of Canine Oral Melanoma
University of Illinois Cancer Care Clinic and Comparative Oncology Research Laboratory

Study Title: Quantitative ultrasound for detection of lymph node metastasis from oral melanoma and to document tumor response to stereotactic radiosurgery in dogs as a large animal model of metastatic cancer

Purpose of Study: The purpose of this study is to correlate in vivo QUS findings in dogs with melanoma of nearby LNs with biopsy findings after the LNs are removed, and to correlate changes in QUS parameters of the primary tumor in the mouth with response to radiation therapy. These findings can be translated to other tumor types and across species to apply these techniques in humans so that patients have a non-invasive, non-radioactive method to determine which LNs should be removed, and so that patients who are not responding to radiation treatment can make an informed decision about completing or stopping radiation before side effects occur.

Inclusion Criteria:

- Dogs with confirmed (histopathology) of oral melanoma
- Dogs must be in good overall condition and have no other serious illness.

Eligibility Diagnostics:

Prior to study entry, pet owners will be charged an initial consultation fee and be financially responsible and required to have the following diagnostics performed in their dog:

- 1) Diagnosis of oral melanoma with histopathology, if not already documented
- 2) Screening blood work and urinalysis, if not performed within 7 days
- 3) Chest radiographs for staging purposes
- 4) CT of head for radiation therapy planning

Treatment:

Dogs will undergo a CT scan of the head for radiation therapy planning. The primary tumor as well as the mandibular and retropharyngeal lymph nodes (LNs) will be ultrasonically scanned (QUS) using the multimodal imaging approach with the dog under anesthesia prior to surgery. Within 1 hour after scanning, the LNs will be surgically excised and submitted for histopathology. A minimum of 2 and maximum of 4 LNs will be removed. After surgery, the dog will return and be treated with stereotactic radiosurgery to the primary tumor. Radiation therapy will be given on 3 consecutive days. QUS imaging biomarker analyses will be performed prior to lymph node surgery, prior to radiation, weekly for the first month, then monthly for 2 evaluations, then once at 6 months post radiation. Routine physical examinations and CT scans will be performed routinely following completion of therapy.

Compensation:

Owners will be responsible for any associated costs for eligibility for the clinical trial, which include a head CT scan, CBC, chemistry, urinalysis, diagnosis of tumor via histopathology, and chest radiographs. Once pet is deemed eligible, the clinical trial is fully funded. Owners will be responsible for the treatment of any complications that may arise throughout the course of treatment and unrelated medical conditions.

Contact Information:

Please feel free to contact our Clinical Trials Coordinator, Rebecca Kameron, at (217) 300-6453 or rmoss81@illinois.edu to refer a patient or for any additional information. Referring veterinarian and client calls are welcome.