Funded Study: Treatment of Feline Oral Squamous Cell Carcinoma
University of Illinois Cancer Care Clinic and Comparative Oncology Research Laboratory

Study Title: Enhancing the treatment of bone-invasive feline oral squamous cell carcinoma by combining radiation therapy with zoledronate

Purpose of Study
Feline oral squamous cell carcinoma is the most common oral tumor affecting cats. Often times these pets present with very advanced disease and current therapies (including surgery, radiation therapy and chemotherapy) do not provide a significant nor durable response, and cats succumb to this disease in a matter of months. Radiation therapy is considered a standard of care treatment to decrease tumor growth as well as bone pain, and zoledronate is a compound that is used to decrease bone destruction. This clinical trial is evaluating the effectiveness of combining radiation therapy with zoledronate to enhance treatment of these tumors.

Inclusion Criteria
- Cats with histologically confirmed oral squamous cell carcinoma with bony invasion
- Cats cannot have been treated with surgery, chemotherapy, or radiation therapy (NSAIDs are allowed)
- Cats cannot have significant co-morbid illness and must have a survivability of 8 weeks.

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 cat:
1) Diagnosis of oral squamous cell carcinoma with histopathology (biopsy)
2) Lymph node aspirates of both mandibular lymph nodes
3) Screening blood work and urinalysis
4) CT scan of the head and thorax (alternatively, can perform thoracic radiographs) under sedation or general anesthesia

Treatment
For four weekly treatments, each cat will receive radiation therapy. At the first treatment, a Zometa infusion will be given in conjunction with radiation therapy. At four weeks, a second Zometa infusion will be given, and at 8 weeks an end-of-study CT scan will be performed with a third Zometa infusion. All treatments must be done at the University of Illinois Veterinary Teaching Hospital.

Compensation
The study will pay for the cost of each recheck appointment associated with the treatments, blood work (CBC and chemistry panel) and urinalysis each week, radiation therapy under general anesthesia, and three Zometa infusions. Following completion of the treatment protocol, the study will pay for the costs associated with the end-of-trial CT scan that allows for accurate measurement of tumor response to therapy. Pet owners are responsible for initial diagnostics performed to confirm study eligibility (see eligibility diagnostics, ~1500-2000) and pain medications.

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