

Funded Study: Treatment of feline oral squamous cell carcinoma (OSCC).

Study Title: Evaluation of stereotactic body radiation therapy (SBRT), Olaparib and bexagliflozin in the treatment of bulky oral squamous cell carcinoma in cat.

Purpose of Study/Background/Objectives: The purpose of this study is to evaluate the safety and efficacy of SBRT in combination with Olaparib and bexagliflozin in cats with naturally occurring OSCC. The treatments will consist of combining focused radiation therapy with two oral drugs that are hypothesized to enhance radiation killing effects as well as promote the immune attack of cancer cells.

Inclusion Criteria:

- Cats > 1 year old, any sex or breed, > 3kgs
- Tumor must be accessible for biopsies and must be amenable to radiation therapy.
- Histologic or cytologic confirmation of oral squamous cell carcinoma.

Exclusion Criteria:

- Diabetes Mellitus
- Untreated comorbid conditions
- Poor anesthetic candidate for any reason
- Cats with IRIS stage II or greater
- Cats with ALT higher than 107

Eligibility Diagnostics:

- CBC, Chemistry Panel, U/A, T4
- Cytology or histopathologic diagnosis
- CT scan of the head

Treatment/Protocol: The patient will receive radiation therapy given once every 24 hours for 3 consecutive days, along with oral Olaparib and bexagliflozin at home. An esophageal feeding tube will be placed in all patients, and both the tumor and lymph nodes will be sampled at scheduled timepoints throughout the trial. CT scans and lab work will be used to assess patients at recheck appointments.

Compensation: Following enrollment, owners will be responsible for recheck exam fees. If the patient needs extra monitoring or support for CT scans and/or radiation therapy clients will be responsible for those fees also. The clinical trial will cover the cost of the delivery of radiation therapy, feeding tube placement, recheck bloodwork and

CT scans along with the at home oral medications. In the event of adverse events partial funding to cover these costs is available if treatment is pursued at the University of Illinois. Pet owners are responsible for treatment of unrelated medical conditions.

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.

