Pilot Study of AuroLase® Therapy for the Treatment of Canine and Feline Solid Tumors

Purpose
To determine the safety and efficacy of AuroLase® therapy (nanoparticle infusion plus targeted laser treatment) in the treatment of canine and feline cancers

Background
Modern cancer therapies use strategies that aim to get rid of cancer while preserving healthy tissue and maintaining the best possible quality of life. The current treatments for dog and cat solid tumors include surgery, radiotherapy, chemotherapy, or any combination of these three.

This study is investigating a gold nanoparticle-based, ablative technique that aims to destroy tumor cells while limiting damage to healthy tissue. This approach has the potential to directly benefit animals with cancer, as well as indirectly benefit human cancer patients by advancing our knowledge of cancer therapy.

Eligibility
- Pets with superficial or oral solid tumors <10cm LD
- Dogs must weigh more than 20 lbs. Cats must be larger than 6.6 lbs.

Exclusion Criteria
- Cats with oral squamous cell tumors
- Pets with lymphoma or other systemic cancers
- Pets with tumors >10cm LD or concurrent life threatening disease.
- Pets who have received chemotherapy within 3 weeks, or radiation within 6 months, prior to beginning the study.
- Pets with significant metastatic disease that would reduce the prognosis to <1 month if left untreated.
- Note: The Aurolase laser cannot penetrate bone, and therefore cannot be used to treat tumors that have spread to bone.

Study Design
After the initial pretreatment evaluation, pets will undergo two procedures. 1) Infusion with AuroShell ® Particles. This process is similar to chemotherapy administration. The nanoparticle infusion will last for 30-45 minutes. 2) Laser treatment of targeted tumor. This procedure will be carried out under general anesthesia. Laser dose will be delivered to the tumor site. Pets must return for follow-up visits at 3, 6, 12, 18 and 24 weeks post-treatment.

Compensation
Study pays the cost of treatment, tumor biopsy, blood work, and urinalysis, as well as the cost for recheck visits. A $50 incentive is paid for each recheck completed on time. Owner is responsible for the cost of the initial consultation and diagnostic and staging tests to establish eligibility.

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If your query is urgent, please call the Small Animal Hospital (540) 231-4621 and ask for the oncologist on duty.