**Title:** Use of indirect computed tomography lymphangiography for identification of sentinel lymph node metastasis in dogs with melanoma or mast cell tumors

**Investigators:**
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If interested, please have your primary veterinarian request additional information through the Surgery service by calling the Clinical Trials Coordinator at 706-296-7818.

**Study description:**
Melanomas and mast cell tumors are common malignancies in dogs that frequently metastasize to lymph nodes. Dogs that have lymph node metastasis from these tumors have been shown to have a worse prognosis than dogs without lymph node metastasis. More recently, it has been recognized that patients with mast cell tumors benefit from identification and removal of metastatic lymph nodes. Therefore, it is imperative to develop methods to accurately identify lymph node metastasis to allow for accuracy in staging to determine prognosis and treatment options for these patients. We hypothesize that evaluation of the sentinel lymph node after computed tomography lymphangiography will allow accurate identification of sentinel lymph nodes and allow for their classification into metastatic and non-metastatic groups.

**Inclusion criteria:**
1. Dogs with histologically or cytologically confirmed melanoma or mast cell tumors
2. Gross tumor must be present
3. Mass must be accessible for tumor injection without image guidance
4. No previous history of reactions to contrast agents containing iodine
5. Signed owner consent

Dogs will be sedated or anesthetized for computed tomography (CT) lymphangiography, which will allow identification of the sentinel lymph node. Dogs will then have their sentinel lymph node surgically removed (if peripherally accessible) at the time of primary tumor removal.

The study will pay for the costs of the CT scan, contrast agent for CT scanning, and surgical removal with histopath analysis of the lymph node in dogs already undergoing surgery for the primary tumor. Clients will be responsible for all other costs pertaining to their dog’s diagnosis, surgery, and treatment.

**Duration of study:**
The study is currently OPEN.

**Potential benefits to veterinary medicine:**
This study has the potential to increase the sensitivity of staging for dogs with melanomas and mast cell tumors, allowing veterinarians to be more accurate in terms of prognosis and treatment recommendations for these patients. This may also provide a therapeutic benefit in that sentinel
lymph nodes identified to be highly suspicious for metastasis on computed tomography lymphangiography can be recommended for surgical excision, reducing the overall tumor burden in the patient.