

Detection of remaining cancer cells after removal (Soft tissue sarcoma and mammary tumors)

Purpose:

Surgery is the most common treatment used for skin and mammary cancer in dogs. The pathologist determines whether surgery has removed all cancer cells many days after the procedure. We need rapid and accurate testing during surgery to detect residual cancer to decrease cancer recurrence and the necessity for repeated surgery or treatments. Polarization-sensitive optical coherence tomography (PS-OCT) is an imaging technology that uses near-infrared light waves to generate real-time, high-resolution images of the microscopic structure of tissues, specifically looking at the organization of the tissues. We have performed some initial evaluations using this optical coherence tomography for detection of residual cancer, which has had very encouraging results. This study will focus on assessing whether PS-OCT (a new type of optical coherence tomography) could help us improve the accuracy to detect residual cancer in dogs following soft tissue sarcoma or mammary cancer removal. This project will open the door to veterinarians having the technology to allow accurate real-time interpretation of surgical margins to minimize the necessity for additional surgeries or other treatments and decrease the tumor recurrence.

What qualifies my pet for this trial?

To participate in this clinical trial your dog must:

- Have a diagnosis of soft tissue sarcoma or mammary tumor (Cytology or histopathology).
- Undergoing surgical removal at OSU

What does enrolling in this clinical trial involve?

Following tumor removal, the tumor specimen will be scanned using polarization-sensitive optical coherence tomography to assess for tumor cells extending to tumor margins.

Client Compensation

Study participants will receive the tumor specimen imaging for free and receive a \$70 account credit to OSU account to help with the costs of histopathology.

Contact:

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**If you believe your pet may be eligible to enter this study,
please fill out a pre-screening questionnaire.**



**Pre-Screen
HERE**