GRANT PROGRESS REPORT REVIEW

Grant: 00768: *A Collaborative Study by Veterinary Oncologists, Pathologists and Diagnostic Laboratories to Enhance the Detection, Diagnosis and Treatment of Canine Lymphoma*

Principal Investigator: Dr. Ted Valli, DVM

Research Institution: University of Illinois

Grant Amount: $42,128.00

Start Date: 7/1/2007   **End Date:** 6/30/2010

Progress Report: 30 month

Report Due: 12/31/2009   **Report Received:** 2/1/2010

Recommended for Approval: Approved

(Content of this report is not confidential. A grant sponsor's CHF Health Liaison may request the confidential scientific report submitted by the investigator by contacting the CHF office.)

Original Project Description:
Background: Lymphoma is the most common canine cancer treated by chemotherapy and a most common neoplasm that afflicts dogs of all breeds and ages. Many of the malignancies that occur in dogs are like those that occur in humans, especially for the tumors of the lymphoid system. The World Health Organization has devised a new system of recognizing and categorizing the many subtypes of lymphoid tumors with very different characteristics that must be considered in providing effective treatments. Currently lymphomas in dogs are treated as if they are all of the same type, but we now find that like those in humans the canine lymphomas are of many types that also benefit from specific identification and treatment.

Objective: The goal of this study is to demonstrate that veterinary diagnosticians can effectively apply the human criteria to the canine tumors and thus permit much more effective treatment by veterinary oncologists. This application will alter costs of treatment according to tumor type and increase survival in animal companions that share our lives and environments.

Original Grant Objectives:
Objective 1: To provide veterinary oncologists with specific disease designation that permits much more accurate prognosis and therapy tailored to the behavioral characteristics of each lymphoid neoplasm.

Objective 2: To initiate universal use of an upgraded system of lymphoma recognition and classification based on definition of canine lymphoma as a series of specific diseases each with characteristic rates of progression and responses to therapy.

Objective 3: To permit a rational basis for genetic research on canine lymphoma by providing tissues to molecular biologists defined by specific disease, and on which unique genetic alterations that lead to cancer may be identified.

Objective 4:   To complete the followup analysis of survival by diagnosis of the 1000 dogs studied in the collection of these cases. This analysis to be stratified by the subtype of lymphoma as determined in the main study and as well by the type of treatment given.

Publications:
- Manuscript submitted - "Veterinary Pathologists Achieve 80% Agreement in Application of WHO Diagnoses to Canine Lymphomas"

Report to Grant Sponsor from Investigator:
Accomplishments:
1. We have shown that canine lymphomas can be accurately defined using the WHO classification system designed for humans and based on disease subtype.

2. There is now a large cadre of DVM Oncologists who have contributed to this study and have seen in their own practice the validity of the method and continue to use it.

3. With colleagues we are reversing the standard of animal models of human disease to the detection of specific genetic alterations in the canine genome associated one subtype of lymphoma that can then be searched for in human neoplasms.