



## ***The Golden Retriever Club of America, Inc.***

---

### **Innovation in Hemangiosarcoma Therapy**

The AKC Canine Health Foundation (AKC CHF) has recently approved funding for a clinical trial to test a combination of drugs that may improve survival time for dogs diagnosed with hemangiosarcoma. Preliminary data in dogs are very encouraging, as are results in humans with a very similar cancer.

#### **AKC CHF Grant # 02534**

**Title:** Clinical Trial for Evaluation of Propranolol and Doxorubicin in the Treatment of Canine Hemangiosarcoma

**Primary Investigator:** Erin B. Dickerson, PhD; University of Minnesota

**Co-investigators:** David R. Brown, PhD; University of Minnesota, Michael O. Childress, DVM, MS; Purdue University, Jennifer Mahoney, DVM and Pascale Salah; University of Pennsylvania

#### **Study Description**

Canine hemangiosarcoma is a largely incurable cancer in dogs, and treatment approaches to improve outcomes have remained relatively stagnant over the past few decades. Treatment remains a challenge partly because the cancer is frequently detected at an advanced stage and because these tumors are often resistant to chemotherapies. Recently published reports showed that propranolol, a drug used to treat heart disease in humans and dogs, substantially increased the survival time of human angiosarcoma patients when used in combination with standard of care treatments. Propranolol was also shown to sensitize hemangiosarcoma cells to doxorubicin, providing a more effective way to kill tumor cells. Because angiosarcoma is strikingly similar to canine hemangiosarcoma, this multi-institutional clinical trial has been designed to determine the efficacy of propranolol in dogs with hemangiosarcoma when used in combination with surgery and chemotherapy. The main goal of the study is to establish whether propranolol in combination with doxorubicin following surgery improves outcomes for dogs when compared to the use of chemotherapy and surgery alone. The investigators will also

evaluate the plasma concentrations of propranolol achieved during dosing to assess whether the levels of propranolol correlate to survival times. If successful, the findings from this approach will be rapidly conveyed to the veterinary community, and the guidelines provided to clinicians for the use of propranolol and doxorubicin for the treatment of canine hemangiosarcoma.

**Dogs will be enrolled at three sites:**

**The University of Minnesota**

<https://www.vetmed.umn.edu/centers-programs/clinical-investigation-center/current-clinical-trials>

**Purdue University**

<https://vet.purdue.edu/ctr/clinical-research/veterinary-clinical-trials.php>

**University of Pennsylvania**

<https://www.vet.upenn.edu/research/clinical-trials-vcic>

**Dates: July 1, 2019 – June 30, 2022**

**All breeds are eligible**