

CHF 02946: Towards Curative Outcomes in Canine Hemangiosarcoma

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ABSTRACT: Canine hemangiosarcoma is the most aggressive cancer seen in all dogs, but disproportionately affects older, large breed dogs. Despite aggressive treatment with surgery and chemotherapy, more than 50% of dogs die due to metastatic spread of their cancer within 6 months and no significant advancements in the treatment of hemangiosarcoma have occurred in over 30 years. Several challenges have hindered improvements in outcomes including limitations in the capabilities of current imaging and/or blood-based markers to detect early relapse/metastasis, gaps in current understanding of the molecular biology of hemangiosarcoma, and a lack of effective therapies that effectively alter the aggressive metastatic behavior of this cancer. A nation-wide clinical trial for 400 dogs with splenic hemangiosarcoma seeks to deliver curative outcomes for dogs with this disease. With collaboration from AKC Canine Health Foundation, dog-owning families from outside the geographical enactment of 30 Ethos veterinary hospitals can join the trial to receive care, and to conduct genomic correlative studies with two internationally recognized scientific teams to gain critical new knowledge necessary to propel the field to this future goal of curative outcomes. Researchers will utilize a patient-forward approach and leverage genomic insight into hemangiosarcoma to propose and answer the following questions: (1) are there molecular biomarkers that predict prognosis in dogs with this disease?; (2) can we define genomic subgroups of dogs with hemangiosarcoma who are most likely to benefit from specific anticancer drugs?; (3) can we define new therapeutic approaches to prevent the spread of this cancer? This approach follows the road map used in transforming childhood leukemia from a fatal diagnosis to a commonly cured disease. By leveraging the strengths of a unique and multidisciplinary team of clinicians and scientists, this canine hemangiosarcoma study will lay the foundation for accelerating drug development and improving patient outcomes for dogs with this devastating disease.