

OWNER CONSENT FORM

The Research Institute at Nationwide Children's Hospital

Name of Study: Osteosarcoma Genetics

Protocol: IACUC exempt

Name of Investigators: Carlos Alvarez, Ph.D., The Research Institute at Nationwide Children's Hospital and The Ohio State University College of Medicine, Columbus, OH, USA

Purpose and Brief Explanation of Study:

A multifactorial and complex disease, such as cancer, is mediated by genetic and epigenetic changes as well as environmental influences. Better understanding of molecular mechanisms and risk factors contributing to disease risk can be achieved through collection and comprehensive analyses of genetic, molecular, epidemiological, and clinical data from a relatively homogenous population. This has not been feasible in humans yet.

Originally funded by a grant award by the American Kennel Club Canine Health Foundation and subsequently by a grant from the Scottish Deerhound Club of America, Dr. Carlos Alvarez is conducting genetic studies of osteosarcoma risk in dogs. These studies have two arms: 1) inherited genetic risk (germ line DNA variation), and 2) cancer mutations (somatic DNA variation and RNA/protein expression). These are generally studied separately due to the inability to know the heritable genetic loci in humans. However, it may be possible in dogs due to their vastly reduced level of genetic variation within breeds (on the order of 100-fold). Indeed there are over 30 genome loci that have been mapped in three breeds, and Dr. Alvarez's group has identified additional candidate loci. Utilizing biological materials from pet dogs volunteered by their owners, Dr. Alvarez is collecting those necessary for determining inherited germ line risk (saliva/cheek swab or blood) and somatic variation (normal blood or other tissue, and tumor tissue). Those biological materials would be used to isolate DNA for germ line risk, and DNA, RNA and protein for genetic, epigenetic and gene expression studies comparing normal to somatic variation in cancer tissue.

This unique project will demonstrate the translational value of canine studies in identifying cancer-linked genetic, epigenetic, and environmental risk factors clinically correlated with military-specific exposures. Ultimately, the study may lead to the development of new effective treatments, thus improving the quality of patient care and quality of life.

I, the undersigned, am the owner, or authorized agent for the owner, and agree to enter my animal into the above clinical study. The design and objectives of the study have been clearly explained to me and I agree to submit a saliva/cheek swab taken by me or blood or surgically removed tumor sample taken by my personal veterinary staff during normal veterinary care (by shipping in self-addressed packaging to Dr. Alvarez's lab at NCHRI, Columbus, OH). I understand that I may be contacted at a later time and asked to provide another cheek swab or blood sample. In the case of a blood sample, it would be collected by my own veterinary care provider during the course of normal health care when blood is already being collected, and shipped as noted above.

1. I understand that blood or saliva will be collected from my dog. I also understand that my dog will experience minimal discomfort from these procedures.
2. I have been informed of the most common adverse effects that might result from this procedure. The most serious adverse effects include slight bruising following blood collection.
3. I agree to allow the use of data collected as a result of my animal's inclusion in the study for publication in scientific journals and presentation at scientific meetings. I authorize the taking and use of photographs for teaching and publication purposes.
4. I have been given an opportunity to ask any questions of the investigators relating to this study. I certify that I have read and fully understand this authorization and consent to have my animal participate in this study.

Signature of Owner/Agent

Date

Witness

Date