

SAMPLE SUBMISSION INSTRUCTIONS

- The requirements for participation vary according to the study component. For the most updated information, please contact Dr. Modiano at 612-625-7436 or the lab at 612-626-6890
- Blood samples and tumor tissue should be submitted at the time of diagnosis. Tissue samples cannot be included if dogs have been treated prior to enrollment, but blood samples can still be used for certain aspects of the research program.
- Histopathology support will be provided by the Histopathology Shared Resource Laboratory of the University of Minnesota Comprehensive Cancer Center. Special tests may be performed by other commercial or academic laboratories at the discretion of the investigators. Any information that has diagnostic relevance will be communicated to the referring veterinarian in a timely manner.
- Veterinarians must coordinate sample submission with the participating laboratories ahead of time.
- We will require follow-up information on each patient, including specific treatment protocol, time to remission, disease-free interval, condition and time of relapse (if applicable), survival time, and cause of death. Owners will be encouraged to complete follow-up surveys where requests for this information will be included, but we also may need to contact the attending veterinarians directly to clarify information or obtain details.

SPECIFIC INSTRUCTIONS FOR SAMPLE SUBMISSION:

Peripheral blood samples: two to three EDTA tubes (5 ml each) shipped at room temperature or in a cooler with cold packs (if sent at the same time as tumor samples). All samples must be shipped using procedures that comply with all Federal regulations for shipment of biological samples. Breakable tubes should be placed in a Styrofoam tube mailer or wrapped in protective material like “bubble-wrap”. The mailer or tubes must then be placed in a secondary container (polypropylene tube or sealed plastic bag) that is leak-proof and impermeable to liquids. When packaging liquids, there must be sufficient absorbent material placed between the primary container and the secondary container to contain a leak from the primary container. This container should then be placed in the appropriate mailing container (cardboard box or Styrofoam container) and labeled as required by the Department of Transportation and the IATA. Please contact us for information on your specific package.

Tumor samples: we require ***fresh, sterile, viable tissues*** for this study. It is imperative that tissues be obtained from viable areas, as necrosis will hinder our ability to use the samples. Sterile, viable tissue

allow for the establishment of immortalized cell lines that can be used in the laboratory for years to come to study the processes that lead to cancer, as well as to develop novel therapies.

- We request that a **tumor sample be included in 10% neutral buffered formalin solution**. This will allow us to obtain a diagnosis even when there are problems with shipping or delivery. For hemangiosarcoma of the spleen, heart, or liver please include a 14-g tru-cut or surgical wedge biopsy sample, or if the sample is obtained at the time of splenectomy, hepatectomy, or pericardectomy, a representative section of the tumor in a proper container with at least 10 volumes of formalin. For cutaneous hemangiosarcoma, place a section of the tumor in formalin. Because of the preparation required, reports of margins may not be feasible. Packaging should be as for blood samples above, including an absorbent material and a secondary container or separate sealed bag. Samples should not be frozen. This sample should then be placed in the appropriate mailing container (cardboard box or Styrofoam container) and labeled as required by the Department of Transportation and the IATA. Please contact us for information on your specific package.
- Collection of **viable tissue samples** requires exceptional attention to detail and aseptic technique. At least one additional tru-cut biopsy or section obtained as above are required for participation. If the tumor is in the skin, it should be submitted in this form only if it can be separated from the cutaneous layer and a sterile sample can be included without overlying epithelial tissue and hair. The excised, sterile tumor (from any location) must be placed in a sterile container with a sterile support medium (provided by the investigators as tissue culture media with antibiotics). If the sample is too large to fit in the container (conical tube) provided, it can be cut into smaller sections using sterile instruments while the tumor is placed on a sterile surface (for example, a sterile sponge or the surgical drape). The tissue must never contact a non-sterile surface (for example, the operating table or the instrument table). Sterile saline (0.9% NaCl) is unacceptable as transport media because the lack of a pH buffer makes the solution acidify rapidly, diminishing the viability of the tissue.
- The container (tube or tubes) with the sterile tumor sample should be placed on ice (or a suitable ice pack for shipping) immediately and shipped by overnight courier service. Packaging should be as for blood and fixed tumor samples above, including absorbent material and a secondary container or separate sealed bag. Samples should not be frozen. This container should then be placed in the appropriate mailing container (cardboard box or Styrofoam container) and labeled as required by the Department of Transportation and the IATA. Please contact us for information on your specific package.
- Costs associated with shipping and diagnostic tests may be the dog owner's responsibility.

- In the event that a diagnostic biopsy was done before the owner or veterinarian was aware of the study, we will request assistance to obtain the tissue blocks from the diagnostic laboratory.

For more information, contact the Principal Investigator or any member of the laboratory by phone at 612-626-6890 or by email at lab@modianolab.org.