

## Owner CONSENT to Participate in Research and AUTHORIZATION to Use Identifiable Health Information for Research

<b>Client Name:</b>
<b>Address:</b>
<b>Dog Name:</b>
<b>Medical Record Number:</b>

**UNIVERSITY OF WISCONSIN-MADISON  
School of Veterinary Medicine**

*Title of Study:* **<sup>18</sup>F FDG PET-MRI in Canine Brain Tumor Patients**

*Study Sponsor:* UW SVM Companion Animal Fund

*Study Investigators:* Kaitlin Jones, DVM

Samantha Loeber, DVM, DACVR, DACVR-EDI

Starr Cameron, BVetMed, DACVIM (Neurology)

*Contact information:* **Clinic telephone:** 608.263.7600

**Email:** [SLoeber@wisc.edu](mailto:SLoeber@wisc.edu) or [Starr.cameron@wisc.edu](mailto:Starr.cameron@wisc.edu)

### **Purpose of the Research**

- Evaluate dogs diagnosed with brain tumors with an advanced imaging technique called PET-MRI (positron emission tomography-magnetic resonance imaging) using the radiotracer <sup>18</sup>F-Fluorodeoxyglucose (FDG).
- PET plays a key role in cancer and neurologic imaging in people, but it is still new in veterinary medicine. Evaluating FDG-PET-MRI in dogs with brain tumors is important to help us improve our ability to diagnose, prognosticate, and develop targeted treatments for our veterinary patients.

### **Description of Procedure**

- You are invited to participate in a clinical research study investigating FDG-PET-MRI characteristics of brain tumors in dogs.
- After your dog has been diagnosed with a brain tumor on initial MRI, a PET-MRI brain scan will be scheduled.
- On the day of the PET-MRI scan, your dog will be transported from UWVC to the Wisconsin Institutes for Medical Research (WIMR) PET imaging center by UWVC doctors and staff. At WIMR, your dog will be given an injection of FDG, and a PET-MRI brain scan will be performed under general anesthesia.
- Immediately after the PET scan, your dog will be recovered from anesthesia and transported back to UWVC. Once at a releasable radioactivity level, your dog will be able to return home with you that evening (usually after 6pm).
  - In some instances, your dog might not be ready to go home that same evening, due to late recovery from anesthesia, a radiation level that is too high to be

released (uncommon), or you are unable to pick them up in the evening. In this case, an overnight stay at UWVC may be arranged.

- You will be provided with an educational guide for animal interaction and radiation safety information upon hospital discharge (see “**Owner Guide to PET imaging**” on page 4)

### **What will the participation of my dog involve?**

- To be eligible for this study, your dog must be 4 years or older and must have been diagnosed with a brain tumor on MRI within the past 3 months.
- Your dog must be clinically stable and have undergone a previous anesthetic event without complication.
- Brain tumor biopsy is **very important** for definitive diagnosis of cancer type and image analysis. There are 2 ways to obtain a biopsy:
  1. If your dog is a candidate for brain surgery and tumor biopsy, those results will be very useful in this study (*surgery and biopsy costs are **separate and not included** in this study*).
  2. If your dog is not a candidate for brain surgery, or if surgery and tumor biopsy is not elected, an alternative way to obtain a definitive diagnosis of cancer type is on post-mortem necropsy (autopsy) evaluation.
    - If unfortunately your pet is euthanized or passes away in the future, a necropsy provides owners and clinicians an opportunity to learn as much as possible about your dog’s tumor. The information obtained from your dog’s necropsy may improve understanding of the disease and benefit other animals with similar disease(s). It would be highly beneficial for this study if a necropsy was elected for your dog in the future.

### **What will disqualify my dog from this study?**

- Dogs are ineligible for this study if they:
  - Are a poor anesthesia candidate
  - Have undergone previous brain tumor treatment via surgery, chemotherapy or radiation therapy
  - Have an elevated blood sugar (blood glucose >130mg/dl)

### **Possible Discomforts and Risks**

- There is minimal risk to your dog during this non-invasive imaging procedure. Potential risks may include:
  - Drug reactions:
    - 18F-FDG – No adverse reactions have been documented in dogs.
    - MRI contrast (Multihance) – Rare adverse reactions include: cardiac arrhythmias, hypersensitivity reactions, acute renal failure, extravasation complications, and injection site reactions.
  - General Anesthesia: Organ injury (e.g. renal, ophthalmic, cerebral) secondary to hypotension, aspiration and secondary aspiration pneumonia, adverse reactions to medications/anesthetic agents (varying from mild hypersensitivity reactions to anaphylaxis), and cardiopulmonary arrest (CPA).

**Possible Benefits**

- PET-MRI will be paid for by the study, and \$100 will be credited to your UWVC account.
- Your dog’s participation may benefit other dogs in the future by helping us evaluate cutting edge advanced imaging technology of canine brain tumors with FDG-PET-MRI.
- This study will play a role in advancing the level of care for veterinary patients with PET scans, and provide opportunities to utilize an advanced imaging technology in dogs that is standard of care in human medicine.

**Extent of Confidentiality of Records**

- The data collected in the course of this study may be used in research reports and papers published in scientific journals, and presented at scientific meetings. Any such publication will not allow identification of individual dogs or owners included in the study.

**Compensation or Therapy for Injuries**

- As diagnostic procedures are associated with minimal risk, there is no commitment to provide any compensation for research-related injury or unforeseen risk.

**Contact Persons for the Study**

- Please contact Dr. Samantha Loeber (SLoeber@wisc.edu) or Dr. Starr Cameron (Starr.cameron@wisc.edu) for further information.

**Voluntary Participation and Right to Withdraw**

- Your participation is voluntary. You do not have to sign this form and you may refuse to do so. If you refuse to sign this form, however, you cannot take part in this research study. You may completely withdraw from the study at any time.

**Termination of Participation by the Principal Investigator**

- It is possible that your dog may not be included in the final analysis.

**Financial Obligations**

- There are no financial obligations associated with participation in this research.

**Authorization to Participate in this Study**

**I have read the information in this consent form, obtained answers to my questions, and I voluntarily agree to have my dog participate in this study. I have received a copy of this consent form.**

Signed \_\_\_\_\_  
Owner or Owner’s agent Date

Signed \_\_\_\_\_  
Investigator or person obtaining consent Date

## Owner Guide to PET Imaging

PET imaging is Positron Emission Tomography, and it can be combined with a CT or MRI scan.

In human medicine, a PET scanner is often used to diagnose cancer, look for the spread of disease, and monitor or even predict response to treatment. In veterinary medicine we are using this same modality to evaluate tumors and infections in our companion animal patients. It is highly sensitive, noninvasive “functional” imaging technique that uses small radioactive materials called radiotracers, a special camera, and a computer to evaluate organ and tissue functions.

Your pet has been given a small amount of a radioactive compound, F-18, that has a half-life of 110 minutes. 10 half-lives = 18.3 hours, which is when radiation is considered to be at background levels. In other words, the radioactivity is not detectable at that point. The radioactive compound is excreted in the urine, feces and saliva.

Your pet radiation levels are at a releasable level of < 2 mR/HR at 1 meter.

**After your pet is released to you, you must still take precautions for the next 16 hours.**

These include:

- Keep your pet strictly confined to your premises during this period. Do not allow your pet to roam freely in the neighborhood.
- Stay 3-feet or further away from your pet, except for brief periods for necessary care. Radiation exposure decreases rapidly with distance.
- Minimize close contact with your pet, including arranging to have your pet sleep in a separate room.
- Children under the age of 18 and pregnant women should not have any prolonged, close contact with your pet.
- Your pet is still excreting low levels of radioactive tracer. Wear disposable gloves when picking up feces and/or minimize handling of waste during this time.
- Wash your hands carefully after handling your pet, its food dishes or feces / litter pan.

If your pet should need veterinary attention or die prior to completion of 16 hours, notify your veterinarian at the School of Veterinary Medicine or Drs. Forrest or Loeber at 608-263-7600.

**I have read and understand the radiation safety precautions necessary because my pet was imaged with a PET tracer and I agree to follow them carefully.**

---

Owner Signature

---

Date