Date of Exam: / / 20 m m dd yyyy

1. Last seizure occurrence in relation to study:

// 20 m m dd yyyy and : (HH:MM)  AM  PM  24-hr clock

1. Ligand (check only one):

FDG

FMZ

AMT

FCWAY

Other, specify:

* 1. Dose, specify:

1. Processing (check only one):

None-routine visual analysis

Co-registered to MRI

Co-registered CT

3D stereotactic surface projection (SSP)

SPM analysis

EEG during uptake to assure interictal study

Condition of study:

Inter-Ictal  Ictal  Peri-Ictal

1. Rating (check only one):

Visual

Semi quantitative (ROI AI)

Quantitative (ROI)

Voxel based (SPM)

1. Uptake (check only one):

Increased  Decreased

1. Distribution (check only one):

Global

Hemisphere

Multifocal

Lobar

Regional

1. Lateralization (check only one):

Left

Right

Bilateral

Not lateralized

1. Location (check all that apply):

Table for Recording Cortical Location and Side

| Location | Side |
| --- | --- |
| Frontal Polar (FP) : | Left  Right |
| Mesial frontal (MF): | Left  Right |
| Dorsal lateral frontal (DLF): | Left  Right |
| Orbital frontal (OF): | Left  Right |
| Mesial parietal (MP): | Left  Right |
| Insula (INS): | Left  Right |
| Dorsal lateral parietal (DLP): | Left  Right |
| Basal ganglia: | Left  Right |
| Mesial occipital (MO): | Left  Right |
| Lateral occipital (LO): | Left  Right |
| Basal occipital (BO): | Left  Right |
| Temporal polar (TP): | Left  Right |
| Mesial temporal (MT): | Left  Right |
| Lateral temporal (LT): | Left  Right |
| Thalamus: | Left  Right |
| Cerebellum: | Left  Right |

1. Study Conclusion (check only one):

Positive (e.g. definite abnormality or change(s) and localizes to a single predominant region)

Negative (e.g. normal, no change)

Inconclusive (e.g. some abnormality or change, but indeterminate or not definite)

## GENERAL INSTRUCTIONS

FDG-PET is most commonly used to help lateralize the seizure focus for planning epilepsy surgery. FDG-PET may have localizing value but this is less reliable than its lateralizing abilities. FDG-PET is most reliable when interictal studies can be assured; thus an EEG should be obtained before and during ligand uptake and the patient observed. While the data can be interpreted visually outcome data is linked to semi quantitative measures (LI). If a visual analysis is undertaken, then results are most meaningful for research purposes when the rater is blinded to patient identity and clinical information. Co-registration with MRI is increasingly performed and my help interpretation of studies. Uptake should be in a dark and quiet room. The ligand dose should be recorded, and date of last seizure. If sedation is used, it is best to do so after the uptake period (20-30 minutes), and the patient rapidly sedated for scanning (usually propofol/versed). The study is performed to identify regional hypometabolism, rarely in increased glucose consumption seen, usually when subclinical seizures or non convulsive status is present.