1. Date of Exam**:** //20 m m dd yyyy
2. Last seizureoccurrence in relation to study: //20 m m dd yyyy and : (HH:MM) [ ] AM [ ] PM [ ] 24-hr clock
3. Ligand (check only one):

[ ] ECD
[ ] HMPAO
[ ] Other, specify:

1. Dose, specify:
2. Processing (check only one):

[ ] None- ictal and interictal scans not registered and no intensity correction

[ ] Ictal – interictal SPECT subtraction

[ ] Ictal – interictal SPECT analyzed by SPM

[ ] EEG during uptake to assure interictal/ictal study

[ ] Co-registered to MRI

1. [ ] Condition of study:

[ ] Inter-Ictal [ ] Ictal [ ] Peri-Ictal

1. Rating (check only one):

[ ] Visual

[ ] Semi quantitative (ROI AI)

[ ] Voxel based (SPM)

[ ] Subtraction based

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

[ ] Unknown

1. Location **(check all that apply):**

Table for 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.