Date of Surgery (MM/DD/YYYY):

Suspected pathology (Choose all that apply):

[ ] Mesial temporal sclerosis

[ ] Neoplasm

[ ] Cortical dysplasia

[ ] Tuberous sclerosis

[ ] Cavernous malformation

[ ] Arteriovenous malformation

[ ] Malformation of cortical development

[ ] Hemorrhage

[ ] Stroke

[ ] Infection

[ ] Gliosis, traumatic

[ ] Gliosis, unknown

[ ] Unknown

[ ] Other, specify:

Surgical Data Details Table

| Procedure | Details |
| --- | --- |
| [ ] Diagnostic (If applicable) |

|  |  |
| --- | --- |
| Electrodes | Electrode Location  |
| [ ] Depth | [ ] Hippocampus[ ] Left [ ] Right [ ] Bilateral[ ] Frontal[ ] Left [ ] Right [ ] Bilateral[ ] Temporal [ ] Left [ ] Right [ ] Bilateral[ ] Parietal[ ] Left [ ] Right [ ] Bilateral[ ] Occipital[ ] Left [ ] Right [ ] Bilateral[ ] Insula[ ] Left [ ] Right [ ] Bilateral[ ] Amygdala[ ] Left [ ] Right [ ] Bilateral[ ] Other, specify:\_\_\_\_\_\_\_\_\_\_\_[ ] Left [ ] Right [ ] Bilateral |
| [ ] Subdural | [ ] Hippocampus[ ] Left [ ] Right [ ] Bilateral[ ] Frontal[ ] Left [ ] Right [ ] Bilateral[ ] Temporal [ ] Left [ ] Right [ ] Bilateral[ ] Parietal[ ] Left [ ] Right [ ] Bilateral[ ] Occipital[ ] Left [ ] Right [ ] Bilateral[ ] Insula[ ] Left [ ] Right [ ] Bilateral[ ] Amygdala[ ] Left [ ] Right [ ] Bilateral[ ] Other, specify:\_\_\_\_\_\_\_\_\_\_\_[ ] Left [ ] Right [ ] Bilateral |
| [ ] Epidural | [ ] Hippocampus[ ] Left [ ] Right [ ] Bilateral[ ] Frontal[ ] Left [ ] Right [ ] Bilateral[ ] Temporal [ ] Left [ ] Right [ ] Bilateral[ ] Parietal[ ] Left [ ] Right [ ] Bilateral[ ] Occipital[ ] Left [ ] Right [ ] Bilateral[ ] Insula[ ] Left [ ] Right [ ] Bilateral[ ] Amygdala[ ] Left [ ] Right [ ] Bilateral[ ] Other, specify:\_\_\_\_\_\_\_\_\_\_\_[ ] Left [ ] Right [ ] Bilateral |
| [ ] Foramen ovale | [ ] Hippocampus[ ] Left [ ] Right [ ] Bilateral[ ] Frontal[ ] Left [ ] Right [ ] Bilateral[ ] Temporal [ ] Left [ ] Right [ ] Bilateral[ ] Parietal[ ] Left [ ] Right [ ] Bilateral[ ] Occipital[ ] Left [ ] Right [ ] Bilateral[ ] Insula[ ] Left [ ] Right [ ] Bilateral[ ] Amygdala[ ] Left [ ] Right [ ] Bilateral[ ] Other, specify:\_\_\_\_\_\_\_\_\_\_\_[ ] Left [ ] Right [ ] Bilateral |
| [ ] Interhemispheric | [ ] Hippocampus[ ] Frontal[ ] Temporal [ ] Parietal[ ] Occipital[ ] Insula[ ] Amygdala[ ] Other, specify: \_\_\_\_\_\_\_\_\_\_\_ |
| [ ] Other, specify: | [ ] Hippocampus[ ] Left [ ] Right [ ] Bilateral[ ] Frontal[ ] Left [ ] Right [ ] Bilateral[ ] Temporal [ ] Left [ ] Right [ ] Bilateral[ ] Parietal[ ] Left [ ] Right [ ] Bilateral[ ] Occipital[ ] Left [ ] Right [ ] Bilateral[ ] Insula[ ] Left [ ] Right [ ] Bilateral[ ] Amygdala[ ] Left [ ] Right [ ] Bilateral[ ] Other, specify: \_\_\_\_\_\_\_\_\_\_\_[ ] Left [ ] Right [ ] Bilateral |

 |
| [ ] Anterior Temporal Lobectomy (ATL) | Laterality[ ] Left [ ] RightEstimate of size of resection based on (Choose all that apply): [ ] Surgical estimation[ ] Post-operative imagingSuperior temporal gyrus (cm): \_\_\_Middle temporal gyrus (cm): \_\_\_Inferior temporal gyrus (cm): \_\_\_Parahippocampal gyrus (cm): \_\_\_Amygdala (% of total): \_\_\_Hippocampus (cm): \_\_\_ |
| **[ ]** Anterior Temporal Lobectomy plus (ATL+)(Complete in addition to ATL section above, if applicable.) | Adjacent resection: [ ] Yes [ ] NoLocation of resection beyond ATL (Choose all that apply):[ ] Lateral temporal[ ] Left [ ] Right[ ] Occipital[ ] Left [ ] Right[ ] Parietal[ ] Left [ ] Right[ ] Orbitofrontal[ ] Left [ ] Right[ ] Dorsolateral frontal[ ] Left [ ] Right[ ] Medial frontal[ ] Left [ ] Right[ ] Central cortex[ ] Left [ ] RightEstimate of size of resection beyond ATL based on (Choose all that apply):[ ] Surgical estimation [ ]  Post-operative imagingLargest Dimension: AP (cm): \_\_\_ Largest Dimension: LAT (cm): \_\_\_Largest Dimension: Depth (cm): \_\_\_ Volume of resected tissue (cm3): \_\_\_ |
| [ ] Amygdalohippocampectomy | Laterality:[ ] Left [ ] RightApproach to hippocampus:[ ] Sylvian Fissure[ ] Superior temporal gyrus/sulcus[ ] Middle temporal gyrus/sulcus [ ] Sub-temporal[ ] Other, specify:Estimate of size of resection based on (Choose all that apply):[ ] Surgical estimation [ ] Post-operative imagingParahippocampal gyrus (cm): \_\_\_Amygdala (% of total): \_\_\_Hippocampus (cm): \_\_\_ |
| [ ] Lesionectomy | Location of lesion (Choose all that apply):[ ] Lateral temporal[ ] Left [ ] Right[ ] Medial temporal[ ] Left [ ] Right[ ] Occipital[ ] Left [ ] Right[ ] Parietal [ ] Left [ ] Right[ ] Hypothalamus[ ] Left [ ] Right[ ] Orbitofrontal[ ] Left [ ] Right[ ] Dorsolateral frontal[ ] Left [ ] Right[ ] Medial frontal[ ] Left [ ] Right[ ] Central cortex[ ] Left [ ] Right[ ] Insula[ ] Left [ ] Right[ ] Multifocal[ ] Left [ ] Right[ ] Other, specify:[ ] Left [ ] RightExtent of resection (Choose all that apply):[ ] Incomplete lesion removal[ ] Complete lesion removal[ ] Removal of one lesion, others remain[ ] Unknown[ ] Other, specify:Extent of size of resection based on (Choose all that apply):[ ] Surgical estimation [ ] Post-operative imaging |
| [ ] Lesionectomy+(Complete in addition to Lesionectomy section above, if applicable.) | Adjacent resection: [ ] Yes [ ] NoExtent of resection (Choose all that apply): [ ] Lesion + anatomically abnormal adjacent brain[ ] Lesion + electrically abnormal adjacent brainEstimate of size of resection beyond lesionectomy based on (Choose all that apply):[ ] Surgical estimation [ ] Post-operative imagingLargest Dimension: AP (cm): \_\_\_Largest Dimension: LAT (cm): \_\_\_Largest Dimension: Depth (cm): \_\_\_Volume of resected tissue (cm3): \_\_\_ |
| **[ ]**  Neocortical resection (Topectomy) | Location (Choose all that apply):[ ] Lateral temporal[ ] Left [ ] Right[ ] Occipital[ ] Left [ ] Right[ ] Parietal[ ] Left [ ] Right[ ] Orbitofrontal[ ] Left [ ] Right[ ] Dorsolateral frontal[ ] Left [ ] Right[ ] Medial frontal[ ] Left [ ] Right[ ] Central cortex[ ] Left [ ] Right[ ] Insula[ ] Left [ ] RightEstimate of size of resection based on (Choose all that apply):[ ] Surgical estimation [ ] Post-operative imagingLargest Dimension: AP (cm): \_\_\_Largest Dimension: LAT (cm): \_\_\_Largest Dimension: Depth (cm): \_\_\_Volume of resected tissue (cm3): \_\_\_ |
| [ ] Multi-lobar resection | Lesion: [ ] Yes [ ] NoLobe: Temporal Lobe resected? [ ] Yes [ ] NoIf yes:Laterality (Choose all that apply): [ ] Left [ ] RightBasis for estimated percentage of lobe removed (Check all that apply):[ ] Surgical estimation[ ] Post-operative imagingEstimated percentage of lobe removed:[ ] 0-25[ ] 26-50[ ] 51-75[ ] 76-100Lobe: OccipitalLobe resected? [ ] Yes [ ] NoIf yes:Laterality (Choose all that apply): [ ] Left [ ] RightBasis for estimated percentage of lobe removed (Choose all that apply):[ ] Surgical estimation[ ] Post-operative imagingEstimated percentage of lobe removed:[ ] 0-25[ ] 26-50[ ] 51-75[ ] 76-100Lobe: ParietalLobe resected? [ ] Yes [ ] NoIf yes:Laterality (Choose all that apply): [ ] Left [ ] RightBasis for estimated percentage of lobe removed (Choose all that apply):[ ] Surgical estimation[ ] Post-operative imagingEstimated percentage of lobe removed:[ ] 0-25[ ] 26-50[ ] 51-75[ ] 76-100Lobe: FrontalLobe resected? [ ] Yes [ ] NoIf yes:Laterality (Choose all that apply): [ ] Left [ ] RightBasis for estimated percentage of lobe removed (Choose all that apply):[ ] Surgical estimation[ ] Post-operative imagingEstimated percentage of lobe removed:[ ] 0-25[ ] 26-50[ ] 51-75[ ] 76-100InsulaInsula resected? [ ] Yes [ ] NoIf yes: Laterality (Choose all that apply): [ ] Left [ ] RightBasis for estimated percentage of insula removed (Choose all that apply):[ ] Surgical estimation[ ] Post-operative imagingEstimated percentage of insula removed:[ ] 0-25[ ] 26-50[ ] 51-75[ ] 76-100 |
| [ ] Hemispherectomy | Laterality: [ ] Left [ ] RightType: [ ] Anatomical hemispherectomy [ ] Functional hemispherectomy[ ] Other, specify:  |
| **[ ]** Vagus nerve stimulation (VNS) | Laterality:[ ] Left [ ] Right |
| [ ] Corpus callosotomy | Extent of disconnection based on (Choose all that apply):[ ] Surgical estimation[ ] Post-operative imagingExtent of disconnection:[ ] Complete (1st stage)[ ] Anterior two-thirds[ ] Anterior half[ ] Completion of callosotomy (2nd stage)[ ] Posterior callosotomy |
| **[ ]** Multiple subpial transection | Location (Choose all that apply):[ ] Lateral temporal[ ] Left [ ] Right[ ] Medial temporal[ ] Left [ ] Right[ ] Occipital[ ] Left [ ] Right[ ] Parietal[ ] Left [ ] Right[ ] Orbitofrontal[ ] Left [ ] Right[ ] Dorsolateral frontal[ ] Left [ ] Right[ ] Medial frontal[ ] Left [ ] Right[ ] Central cortex[ ] Left [ ] RightEstimate of size based on (Choose all that apply):[ ] Surgical estimation[ ] Post-operative imagingLargest Dimension: AP(cm):Largest Dimension: LAT(cm):Was resection performed in conjunction with MST?[ ] Yes [ ] NoIf Yes, complete the section appropriate for the resection. |
| [ ] Stereotactic lesioning | Lesion found on MRI? [ ] Yes [ ] NoIf Yes, type (Choose all that apply):[ ] Laser[ ] Radiofrequency[ ] Focused ultrasound[ ] RadiosurgeryIf radiosurgery, marginal dose (Gy): ­­­\_\_\_ Lobe/location (Check all that apply):[ ] Medial temporal[ ] Left [ ] Right[ ] Lateral temporal[ ] Left [ ] Right[ ] Occipital[ ] Left [ ] Right[ ] Parietal [ ] Left [ ] Right[ ] Orbitofrontal[ ] Left [ ] Right[ ] Dorsolateral frontal[ ] Left [ ] Right[ ] Medial frontal[ ] Left [ ] Right[ ] Central cortex[ ] Left [ ] Right[ ] Insula[ ] Left [ ] Right[ ] Hypothalamus[ ] Periventricular[ ] Left [ ] Right |
| **[ ]** Therapeutic brain stimulation:**[ ]** Responsive (Closed-loop)**[ ]** Open-loop | Number of electrodes placed: \_\_\_\_Target of electrode(s) (Choose all that apply):[ ] Cortical:[ ] Hippocampus[ ] Left [ ] Right[ ] Lateral temporal[ ] Left [ ] Right[ ] Occipital[ ] Left [ ] Right[ ] Parietal [ ] Left [ ] Right[ ] Orbitofrontal[ ] Left [ ] Right[ ] Dorsolateral frontal[ ] Left [ ] Right[ ] Medial frontal[ ] Left [ ] Right[ ] Central cortex[ ] Left [ ] Right[ ] Insula[ ] Left [ ] Right[ ] Subcortical:[ ] Anterior thalamus[ ] Left [ ] Right[ ] Centromedian thalamus [ ] Left [ ] Right[ ] Cerebellum[ ] Left [ ] Right[ ] Subthalamic nucleus[ ] Left [ ] Right[ ] Brainstem[ ] Left [ ] Right[ ] Other, specify: \_\_\_\_\_\_\_\_\_Stereotactic coordinates, (Write in values, if available):Anterior-posterior: \_\_\_\_Lateral: \_\_\_\_Depth: \_\_\_\_Method of placement (Choose all that apply):[ ] Local anesthesia[ ] General anesthesia[ ] Frameless stereotaxy[ ] Framed stereotaxy[ ] Other, specify: \_\_\_\_\_\_\_Method of verifying placement (Choose all that apply):[ ] Neuroimaging[ ] EEG[ ] Unit recording[ ] None[ ] Other, specify:Stimulus parameters (write in values or range) Frequency (per second): \_\_\_\_Voltage (V if constant volt stimulator): \_\_\_\_Current (mA if constant current stimulator): \_\_\_\_Polarity:[ ] Bipolar[ ] Referential[ ] Other, specify:Pulse width(microseconds): \_\_\_Stimulus type:(Choose below)[ ] Continuous[ ] Intermittent[ ] Responsive stimulationOn cycle time (seconds): \_\_\_Off cycle time (seconds): \_\_\_Postoperative MRI verification?[ ] Yes[ ] No[ ] Unknown |

Other Surgical Procedure (enter details):

## Additional Surgical Details

Language Laterality:

[ ] Language(dominant)

[ ] Language(non-dominant)

[ ] Unknown

Intraoperative ECoG:

[ ] Pre-resection

[ ] Post-resection

[ ] None

Intraoperative cortical stimulation mapping:

[ ] Yes

[ ] No

Stereotaxis?:

[ ] Frame

[ ] Frameless

[ ] None

Pathology Data

Pathology Data Details (Choose all that apply):

Hippocampus (Choose all that apply):

[ ] Classic hippocampal sclerosis

[ ] End folium sclerosis

[ ] Dispersion of dentate granule cell layer

[ ] Other hippocampal damage

Temporal lobe(describe):

Vascular:

[ ] Cavernous malformation

[ ] Sturge Weber malformation

[ ] Arteriovenous malformation (AVM)

[ ] Stroke(ischemic/hemorrhagic)

Tumor:

[ ] Astrocytoma (include grade)

[ ]  Grade I [ ]  Grade II [ ]  Grade III [ ]  Grade IV [ ]  Grade Unidentifiable

[ ] Dysembryoplastic neuroepithelial tumor (DNET)

[ ] Mixed glioma (include grade)

[ ]  Grade I [ ]  Grade II [ ]  Grade III [ ]  Grade IV [ ]  Grade Unidentifiable

[ ] Metastatic

[ ] Oligodendroglioma (include grade)

[ ]  Grade I [ ]  Grade II [ ]  Grade III [ ]  Grade IV [ ]  Grade Unidentifiable

[ ] Ganglioglioma

[ ] Other, specify:

Other Low Grade Developmental Tumor Grade (if known):

[ ]  Grade I [ ]  Grade II [ ]  Grade III [ ]  Grade IV [ ]  Grade Unidentifiable

Associated cortical dysplasia? [ ] Yes [ ] No

Infectious/inflammatory:

[ ] Abscess

[ ] Cysticercosis

[ ] Rasmussen’s encephalitis

[ ] Other, specify:

Developmental:

[ ] Focal cortical dysplasia - ILAE Type Ia

[ ] Focal cortical dysplasia - ILAE Type Ib

[ ] Focal cortical dysplasia - ILAE Type IIa

[ ] Focal cortical dysplasia - ILAE Type IIb

[ ] Focal cortical dysplasia - ILAE Type IIIa

[ ] Focal cortical dysplasia - ILAE Type IIIb

[ ] Focal cortical dysplasia - ILAE Type IIIc

[ ] Focal cortical dysplasia - ILAE Type IIId

[ ] Polymicrogyria

[ ] Tuber (documented TS)

[ ] Agyria/pachygyria

[ ] Heterotopic gray matter

[ ] Hemimegalencephaly

[ ] Other low grade developmental tumor

Traumatic(describe):

## Postoperative Course

Hospital-stay (days):

Post-operative seizures?: [ ] Yes [ ] No

If yes, how many?:

## Post-operative complications, neurological (new or worsened deficit-check all that apply):

[ ] Aphasia – if Yes, specify:

[ ] Anomia

[ ] Visual field deficit:

[ ] Quadrantanopia

[ ] Hemianopsia

[ ] Hemiparesis

[ ] Memory deficit – if Yes, specify:

[ ] Cranial nerve deficit – if Yes, specify:

[ ] Altered mental status – if Yes, specify:

[ ] Herniation syndrome

[ ] Stroke

[ ] Psychiatric – if Yes, specify:

## Post-Operative Complications (Choose all that apply)

[ ] Wound infection:

[ ] Superficial

[ ] Deep

[ ] Post-operative hematoma

[ ] UTI

[ ] DVT/PE

[ ] Pneumonia

[ ] Stroke

[ ] Hemorrhage

[ ] Respiratory, other – if Yes, specify:

[ ] Nausea/vomiting

[ ] GI, other – if Yes, specify:

[ ] MI

[ ] Death

[ ] Other, specify:

Re-admission within 30 days?:

[ ] Yes [ ] No

If Yes, list the reason for re-admission:

Return to Operating Room?:

[ ] Yes [ ] No

If Yes, list the reason for return:

Resolution (please complete for all applicable complications):

Postoperative complication (specify):

largely resolved by (date):

Postoperative complication(specify):

largely resolved by (date):

Postoperative complication (specify):

largely resolved by (date):

Postoperative complication (specify):

largely resolved by (date):

Postoperative complication (specify):

largely resolved by (date):

## General Instructions

Surgery and pathology information is collected to verify the inclusion and exclusion criteria and to describe the study population. The CDEs on this form are classified as Supplemental – Highly Recommended for any study that involves surgery. Typically, the Surgery and Pathology form captures surgeries that EVER occurred at some point in time within a protocol-defined period (e.g., the last 12 months). The form should focus on any clinically relevant surgical or invasive interventions (i.e., surgeries/interventions related to the protocol treatment, to the disease being studied, etc.)

## REFERENCES

Blümcke I, Thom M, Aronica E, Armstrong DD, Vinters HV, Palmini A, Jacques TS, Avanzini G, Barkovich AJ, Battaglia G, Becker A, Cepeda C, Cendes F, Colombo N, Crino P, Cross JH, Delalande O, Dubeau F, Duncan J, Guerrini R, Kahane P, Mathern G, Najm I, Ozkara C, Raybaud C, Represa A, Roper SN, Salamon N, Schulze-Bonhage A, Tassi L, Vezzani A, Spreafico R. The clinicopathologic spectrum of focal cortical dysplasias: a consensus classification proposed by an ad hoc Task Force of the ILAE Diagnostic Methods Commission. Epilepsia. 2011 Jan;52(1):158-74.

Blümcke I, Thom M, Aronica E, Armstrong DD, Bartolomei F, Bernasconi A, Bernasconi N, Bien CG, Cendes F, Coras R, Cross JH, Jacques TS, Kahane P, Mathern GW, Miyata H, Moshé SL, Oz B, Özkara Ç, Perucca E, Sisodiya S, Wiebe S, Spreafico R. International consensus classification of hippocampal sclerosis in temporal lobe epilepsy: a Task Force report from the ILAE Commission on Diagnostic Methods. Epilepsia. 2013 Jul;54(7):1315-29.