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 Right  Estimate of size of resection based on (Choose all that apply):  Surgical estimation  Post-operative imaging  Superior 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 No  Location 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 Right  Estimate of size of resection beyond ATL based on (Choose all that apply):  Surgical estimation  Post-operative imaging  Largest Dimension: AP (cm): \_\_\_  Largest Dimension: LAT (cm): \_\_\_  Largest Dimension: Depth (cm): \_\_\_  Volume of resected tissue (cm3): \_\_\_ |
| Amygdalohippocampectomy | Laterality:  Left Right  Approach 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 imaging  Parahippocampal 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 Right  Extent 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 No  Extent of resection (Choose all that apply):  Lesion + anatomically abnormal adjacent brain  Lesion + electrically abnormal adjacent brain  Estimate of size of resection beyond lesionectomy based on (Choose all that apply):  Surgical estimation Post-operative imaging  Largest 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 Right  Estimate of size of resection based on (Choose all that apply):  Surgical estimation Post-operative imaging  Largest Dimension: AP (cm): \_\_\_  Largest Dimension: LAT (cm): \_\_\_  Largest Dimension: Depth (cm): \_\_\_  Volume of resected tissue (cm3): \_\_\_ |
| Multi-lobar resection | Lesion: Yes No  Lobe: Temporal  Lobe resected? Yes No  If yes:  Laterality (Choose all that apply): Left Right  Basis for estimated percentage of lobe removed (Check all that apply):  Surgical estimation  Post-operative imaging  Estimated percentage of lobe removed:  0-25  26-50  51-75  76-100  Lobe: Occipital  Lobe resected? Yes No  If yes:  Laterality (Choose all that apply): Left Right  Basis for estimated percentage of lobe removed (Choose all that apply):  Surgical estimation  Post-operative imaging  Estimated percentage of lobe removed:  0-25  26-50  51-75  76-100  Lobe: Parietal  Lobe resected? Yes No  If yes:  Laterality (Choose all that apply): Left Right  Basis for estimated percentage of lobe removed (Choose all that apply):  Surgical estimation  Post-operative imaging  Estimated percentage of lobe removed:  0-25  26-50  51-75  76-100  Lobe: Frontal  Lobe resected? Yes No  If yes:  Laterality (Choose all that apply): Left Right  Basis for estimated percentage of lobe removed (Choose all that apply):  Surgical estimation  Post-operative imaging  Estimated percentage of lobe removed:  0-25  26-50  51-75  76-100  Insula  Insula resected? Yes No  If yes:  Laterality (Choose all that apply): Left Right  Basis for estimated percentage of insula removed (Choose all that apply):  Surgical estimation  Post-operative imaging  Estimated percentage of insula removed:  0-25  26-50  51-75  76-100 |
| Hemispherectomy | Laterality:  Left Right  Type:  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 imaging  Extent 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 Right  Estimate of size based on (Choose all that apply):  Surgical estimation  Post-operative imaging  Largest Dimension: AP(cm):  Largest Dimension: LAT(cm):  Was resection performed in conjunction with MST?  Yes No  If Yes, complete the section appropriate for the resection. |
| Stereotactic lesioning | Lesion found on MRI? Yes No  If Yes, type (Choose all that apply):  Laser  Radiofrequency  Focused ultrasound  Radiosurgery  If 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 stimulation  On 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

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