|  |  |  |
| --- | --- | --- |
| Main group | | |
| Study Name: | | |
| GUID (GUID): | | |
| Subject ID number (SubjectIDNum): | | Age in Years (AgeYrs): |
| Visit Date (VisitDate): | | Site Name (SiteName): |
| Days since Baseline (DaysSinceBaseline): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |
| Case Control Indicator (CaseContrlInd):   * Case ⭘ Control ⭘ Unknown | What is the vital status of the subject? (VitStatus):  O Alive ⭘ Dead ⭘ Unknown | |
| Form administration | | |
| What time frame do the questions in this form refer to? (ContextType) Select one. If “Other, specify” is selected, please write in response.   * After injury * At time of assessment * Before injury * Last 2 weeks * Last 6 months * Last 24 hours * Last month * Last week * Last year * Prior to death * Since last interview * Time of injury * Other, specify (ContextTypeOTH) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |
| Who filled out this form? (DataSource) Select one. If “Other, specify” is selected, please write in response.   * Brother * Chart/Medical Record * Daughter * Father * Friend * Mother * Participant/Subject * Physician * Sister * Son * Spouse * Other, specify (DataSourceOTH) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |

## Technical Information

### Date (and time in available and known) of the imaging study (ImgStdyDateTime):\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Use 24 hour clock yyyy-mm-dd hh: mm:ss

### Imaging file hash code (ImgFileHashCode):\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Findings

### **\***Brain imaging assessment result (ImgBrainAssessmtReslt):

Choose one.

* Abnormal
* Normal
* Not done
* Unknown

1. Brain imaging result is normal except for non-trauma related to incidental findings.  
   (ImgNormalityNonTraumaInd)

Choose one.

* Yes
* No
* Not Applicable

Note: If answered #3 and 4 “Normal,” “Not done,” “Not Applicable” or “Unknown,” skip remaining questions.

### The brain imaging result is abnormal. The following findings are related to trauma. Select all that apply (ImgAbnrmlyTraumaTyp):

* Brain atrophy / Encephalomalacia
* Cervicomedullary Injury / Brainstem Injury
* Cisternal Compression
* Contusion Injury
* Diffuse Axonal Injury
* Edema
* Epidural Hematoma
* Extraaxial Hematoma
* Fourth Ventricular Shift / Effacement
* Gliosis
* Intracerebral Hemorrhage
* Intraventricular Hemorrhage
* Ischemia
* Midline Shift
* Not Applicable
* Paranasal Sinus Disease
* Penetrating Injury
* Skull Fracture
* Subarachnoid Hemorrhage
* Subcutaneous Hematoma
* Subdural Hematoma
* Swelling
* Traumatic Aneurysm
* Vascular Dissection
* Venous Sinus Injury Other, specify (ImgAbnrmlyTraumaTypOTH)\_\_\_\_\_\_\_\_\_\_\_\_\_\_

### Marshall CT classification code (MrshlCTClassCode). Choose one:

* 1 -Diffuse injury, NVP: Intracranial pathology not visible on CT scan.
* 2 - Diffuse injury: Cisterns present with shift 0-5 mm, lesions present, but no high or mixed density lesion >25 cc. May include bone fragments and foreign bodies.
* 3 - Diffuse injury with swelling: Cisterns compressed or absent, shift 0-5 mm, no high or mixed density lesion >25 cc.
* 4 - Diffuse injury with shift: Shift >5 mm, no high or mixed density lesion >25 cc.
* 5 - Mass lesions: High or mixed density lesion > 25cc.

## Subcutaneous hematoma

### Presence of subcutaneous hematoma (SubcutlHematomaInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

### Subcutaneous hematoma anatomic site (SubcutlHematomaBrainAntmicSite). Select all that apply:

Frontal 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Facial 🞎 R 🞎 L

Orbit 🞎 R 🞎 L

### Subcutaneous hematoma advanced (SubcutlHematomaBrainExtntTyp). Select all that apply:

* Cephalhematoma
* Laceration
* Scalp Contusion
* Subgaleal

## Paranasal sinus disease

1. Presence of paranasal sinus disease (ParanasSinusDiseaseInd ). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

### Paranasal sinus disease anatomic site (ParanasSinusDiseaseAntmicSite). Select all that apply:

Ethmoid 🞎 R 🞎 L

Frontal 🞎 R 🞎 L

Mastoid 🞎 R 🞎 L

Maxillary 🞎 R 🞎 L

Spenoid 🞎 R 🞎 L

## Skull fracture

1. Presence of skull fracture (SkullFractInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Skull fracture anatomic site (SkullFractAntmicSite). Select all that apply:

Anterior fossa 🞎

Frontal 🞎 R 🞎 L

Middle fossa 🞎

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Posterior fossa 🞎

Skull base 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Other 🞎

1. Skull fracture morphology findings type (SkullFractMorphFindTyp). Select all that apply:

* Comminuted. Involving at least one separate non-contiguous bone segment.
* Compound. Communication with the skin, mastoid air cells, or paranasal sinuses.
* Depressed. Less than 1 cm or full thickness of skull.
* Diastatic. Separated more than 3 mm, or separation of a suture.
* Linear. Includes simple and branched.
* Other craniofacial fractures. For children younger than 3 years, of interest for relevance for inflicted injuries.
* Penetrating. Resulting from an in driven foreign body, such as knife or missile.
* Ping pong fracture. Smooth depression typically seen in infants and toddlers, without a complete bony cortical disruption.
* Probable fracture. One in which fracture itself cannot be seen definitively, but is suspected to be present based on other findings such as adjacent subgaleal and extra-axial hemorrhage, intracranial air, or other findings.

1. Presence of pneumocephalus (Pneumocephalus). Choose one:

* Yes
* No
* Unknown

## Epidural hematoma

1. Presence of epidural hematoma (EpdurlHematomaStatus). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Epidural hematoma anatomic site (EpidurHematmaAntmicSite). Select all that apply:

Frontal 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Posterior fossa 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

1. Epidural hematoma findings type (EpidurHematmaFindTyp). Select all that apply:

* Likely venous (due to association with adjacent bony injury/fracture, venous sinus, size, distribution, timing).
* Likely arterial (due to "swirl", different densities, location near major dural artery).

1. Epidural hematoma volume measurement (EpidurHematmaVolMeasr) \_\_\_\_\_\_\_ cm3

## Extraaxial hematoma

1. Presence of an extraaxial hematoma (ExtrAxlHematmInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Extraaxial hematoma anatomic site (ExtrAxlHematmAntmicSite). Select all that apply:

Frontal 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Posterior fossa 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Tentorial 🞎 R 🞎 L

Interhemispheric supratentorial - Anterior (frontoparietal) 🞎

Interhemispheric supratentorial - Posterior (occip) 🞎

1. Extraaxial hematoma volume measurement (ExtrAxlHematmVolMeasr)\_\_\_\_\_\_\_\_\_\_\_ cm3

## Subdural Hematoma Acute

1. Presence of an acute subdural hematoma (SubDurHematmAcutInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Subdural hematoma acuteness type (SubduralHematomaTyp). Choose one:

* Acute
* Chronic
* Lengthy
* Prolonged
* Subacute

1. Subdural hematoma acute anatomic site (SubdurlHematAcutAntmicSite). Select all that apply:

Frontal 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Tentorial 🞎 R 🞎 L

Posterior fossa - interhemispheric infratentorial 🞎 R 🞎 L

Interhemispheric supratentorial - Anterior (frontoparietal) 🞎

Interhemispheric supratentorial - Posterior (occip) 🞎

1. Subdural hematoma acute type (SDHAcuteAntmicSite). Choose one:

* Heterogeneous (i.e. mixed density)
* Homogeneous

### Sudural hematoma acute, subacute or chronic volume measurement (SDHAcuteChrncVolMeasr) \_\_\_\_\_cm3

## Subdural Hematoma SubAcute

1. Presence of subacute or chronic subdural hematoma (SDHSubAcutChronInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Subdural hematoma subacute or chronic anatomic site (SDHSubAcuteChrncAntmicSite). Select all that apply:

Frontal 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Posterior fossa 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Tentorial 🞎 R 🞎 L

Interhemispheric - Anterior (frontoparietal) 🞎

Interhemispheric - Posterior (occip) 🞎

1. Subdural hematoma subacute or chronic findings type (SDHSubAcuteChrncFindType). Select all that apply:

* Heterogeneous
* Homogeneous
* Loculations/Septations

1. Subdural hematoma acute, subacute or chronic volume measurement (SDHAcuteChrncVolMeasr)\_\_\_\_\_\_\_\_\_\_\_cm3

## Subdural Hematoma/Mixed Density Subdural Collection

1. Presence of subdural hematoma mixed density or CSF-like collection (SDHMxDensCSFCollctInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Subdural hematoma mixed density or CSF-like collection anatomic site (SDHMxDenstyCSFCollctAntmicSite). Select all that apply:

Frontal 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Posterior fossa 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Tentorial 🞎 R 🞎 L

Interhemispheric - Anterior (frontoparietal) 🞎

Interhemispheric - Posterior (occip) 🞎

1. Subdural hematoma mixed density or CSF-like collection findings type (SDHMxDenstyCSFCollctFindTyp). Select all that apply:

* Hyperintense/dense
* Hypointense/dense
* Isointense/dense

1. Subdural hematoma mixed density or CSF-like collection volume measurement (SDHMxDenstyCSFCollctVolMeasr)\_\_\_\_\_\_\_\_\_\_cm3

## Subarachnoid hemorrhage (SAH)

1. **\***Presence of subarachnoid hemorrhage (SAHStatus). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Subarachnoid hemorrhage anatomic site (SubarachndHemorrhgAntmicSite). Select all that apply:

Frontal 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Perimesencephalic 🞎

Posterior fossa 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Tentorial 🞎 R 🞎 L

SuprasellarTentorial 🞎 R 🞎 L

Interhemispheric - Anterior (frontoparietal) 🞎

Interhemispheric - Posterior (occip) 🞎

1. Subarachnoid hemorrhage extent type (SAHExtentTyp). Choose one:

* Diffuse.Involving more than two contiguous lobes or brain regions, supra- and infratentorical compartments, or multiple basal cisterns.
* Focal. In 1-2 locations or lobes of the brain.

1. Subarachnoid hemorrhage findings type (SAHFindTyp). Select all that apply:

* Acute hydrocephalus
* Linear
* Mass-like (>3mm thickness, splaying of Sylvian fissure or other cistern)

1. Intracerebral hemorrhage hemorrhagic component volume measurement (SubarachHemVolTotalMeasr) in mm3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Vascular dissection

1. Presence of vascular dissection (VasclrDisctInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Vascular dissection anatomic site (VasclrDisctBrainAntmicSite). Select all that apply:

Carotid 🞎 R 🞎 L

Vertebral 🞎 R 🞎 L

Other, specify (VasclrDisctBrainAntmicSiteOTH)\_\_\_\_\_\_\_\_\_\_\_\_

1. Vascular dissection site type (VasclrDisctSiteTyp). Choose one:

* Intracranial ⭘ Cervical

1. Vascular dissection extent type (VasclrDisctExtentTyp). Choose one:

* Luminal narrowing greater than 50% (including "string sign")
* Luminal narrowing less than 50%
* Vessel occlusion

1. Vascular dissection findings type (VasclrDisctFindTyp). Choose one:

* Watershed or embolic infarction in the territory of the dissected vessel with SAH
* Watershed or embolic infarction in the territory of the dissected vessel without SAH
* Adjacent skull fracture (e.g. carotid canal)

## Traumatic aneurysm

1. Presence of traumatic aneurysm (TraumatcAnrysmInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Traumatic aneurysm anatomic site (TraumtcAnrysmAntmicSite). Select all that apply:

ACA 🞎 R 🞎 L

Basilar 🞎

Carotid 🞎 R 🞎 L

MCA 🞎 R 🞎 L

PCA 🞎 R 🞎 L

Vertebral 🞎 R 🞎 L

Other, specify (TraumtcAnrysmAntmicSiteOTH)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Traumatic aneurysm findings type (TraumAneurysmFindType). Choose one:

* Intraluminal thrombus
* Cavernous (intradural)
* Skull fracture, with penetrating injury
* Skull fracture, without penetrating injury

1. Traumatic aneurysm volume measurement (TraumtcAnrysmVolMeasr)\_\_\_\_\_\_\_\_\_\_ mm3

## Venous sinus injury

1. Presence of venous sinus injury (VenousSinusInjInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Venous sinus injury anatomic site (VenousSinusInjryAntmicSite). Select all that apply:

Sigmoid sinus 🞎 R 🞎 L

Transverse sinus 🞎 R 🞎 L

Sagittal sinus - Anterior (frontoparietal) 🞎

Sagittal sinus - Posterior (occipital) 🞎

1. Venous sinus injury morphology type (VenousSinusInjMorphTyp ). Select all that apply:

* Compression
* Laceration
* Occlusion

## Midline shift

1. Presence of midline shift supratentorial (MidlneShftSuprtentorialInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Midline shift supratentorial measurement (MidlneShftSuprtentorialMeasr) \_\_\_\_\_\_\_mm
2. Side of the shift supratentorial (MidlineShiftSupratentDisplTyp). Choose one:

* Right-to-left
* Left-to-right

## Cisternal compression

1. Presence of cisternal compression (CstrnlCompressInd). Choose one:

* Absent
* Obliterated
* Visible but compressed – Asymmetric
* Visible but compressed – Symmetric

1. Cisternal compression type (CistCompressTyp). Choose one:

* Mixed
* Present (i.e. cisternal compression is present in at least one location)
* Indeterminate
* Premorbid (when applicable)

1. Cisternal compression anatomic site (CistCompressAntmicSite). Select all that apply:

* Cisterna magna
* Perimesencephalic cistern
* Prepontine cistern
* Superior cerebellar cistern
* Suprasellar cistern

### Specify laterality (LatTyp). Choose one:

* Bilateral
* Left
* Midline
* Right
* Unknown

## Fourth Ventricle Shift/Effacemet

1. Presence of ventricle-fourth shift or effacement status (FourVentShftEffcmntInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Ventricle-fourth shift or effacement displacement type (Ventric4thShiftEffaceDisplTyp). Choose all that apply:

* Right-to-left
* Left-to-right
* Anterior
* Posterior

1. Ventricle-fourth shift or effacement findings type (Ventric4thShiftEffaceDisplTyp). Select all that apply:

* Brainstem compression
* Herniation
* Hydrocephalus

1. Ventricle-fourth shift or effacement measurement (Ventric4thShiftEffaceMeasr) \_\_\_\_\_\_\_\_\_\_\_mm

## Contusion Injury

1. Presence of contusion (ContusnInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Are there multiple contusions to report? (ContusnMultipleInd)

* Yes
* No

### Contusion number. Number of traumatic/injury event if two or more injuries were experienced (InjEventNum)\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Contusion anatomic site (ContusnAntmicSite). Select all that apply.   
   List each lesion as a separate entry.

Cerebellum 🞎 R 🞎 L

Frontal 🞎 R 🞎 L

Internal Capsule 🞎 R 🞎 L

Medulla 🞎 R 🞎 L

Midbrain 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Pons 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Thalamus/Basal Ganglia 🞎 R 🞎 L

1. Contusion findings (ContusnFindTyp). Select all that apply.

* Cortical
* Deep brain structure
* Gliding contusions (small lesions at gray-white junction, usually seen in context of diffuse axonal injury)
* Hemorrhagic
* Non-hemorrhagic
* Probable brain laceration (linear hemorrhagic or non-hemorrhagic pattern, often associated with overlying skull fracture)
* Subcortical

1. Contusion volume measurement (ContusnVolMeasr) \_\_\_\_\_\_\_\_\_\_\_\_cm3

## Intracerebral Hemorrhage Injury

1. Presence of intracerebral hemorrhage (IntrCerebrlHemrrhgeInd). Choose one:

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Are there multiple intracerebral hemorrhages to report? (IntrCerebrlHemrrhgeMultipleInd)

* No
* Unknown
* Yes

1. Intracerebral hemorrhage injury number. Number of traumatic/injury event if two or more injuries were experienced. (InjEventNum)\_\_\_\_\_\_\_\_\_\_
2. Intracerebral hemorrhage anatomic site (IntracerebrlHemrrhgAntmicSite). Select all that apply.

Cerebellum 🞎 R 🞎 L

Frontal 🞎 R 🞎 L

Internal Capsule 🞎 R 🞎 L

Medulla 🞎 R 🞎 L

Midbrain 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Pons 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Thalamus/Basal Ganglia 🞎 R 🞎 L

1. Intracerebral hemorrhage findings type (ICHHemFindTyp). Select all that apply.

* Layered (i.e., with fluid level)
* Surrounding ring of non-hemorrhagic signal (edema)

1. Intracerebral hemorrhage entire lesion volume measurement (IntracrbrlHemrrhgEntLesnVolMsr) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_cm3
2. Intracerebral hemorrhage hemorrhagic component volume measurement (IntracrbrlHmrrhgHmrrCompVolMsr)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm3

## Intraventricular Hemorrhage

1. Presence of intraventricular hemorrhage (IVHStatus). Choose one.

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Intraventricular hemorrhage anatomic site (ICHAntmicSite). Select all that apply.

Third ventricle 🞎

Fourth ventricle 🞎

Lateral ventricle 🞎 R 🞎 L

1. Presence of intraventricular hemorrhage ventriculomegaly (IntravntrcHmrrghVntrclmglyINd). Choose one.

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Intraventricular hemorrhage volume measurement (IVHVolMeasr) \_\_\_\_\_\_\_\_\_\_\_\_cm3
2. Intraventricular hemorrhage pattern type (IntraventricHmrrhgPattrnTyp). Choose one.

* Obstructive
* Non-obstructive

## Diffuse Axonal Injury (DAI)

1. Presence of diffuse axonal injury (DAI) (DiffseAxonlInjInd). Choose one.

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Are there multiple DAI to report? (DiffseAxonlMultipleInjInd)

* No
* Unknown
* Yes

1. DAI number. Number of traumatic/injury event if two or more injuries were experienced (InjEventNum)\_\_\_\_\_\_\_\_\_\_\_

### DAI or TAI anatomic site (DAITAIAntmicSite). Select all that apply.

Brainstem: Dorsolateral rostral 🞎 R 🞎 L

Brainstem: Other 🞎 R 🞎 L

Cerebellar Peduncles 🞎 R 🞎 L

Cerebellum 🞎 R 🞎 L

Corpus Callosum: Body 🞎 R 🞎 L

Corpus Callosum: Genu 🞎 R 🞎 L

Corpus Callosum: Splenium 🞎 R 🞎 L

Frontal 🞎 R 🞎 L

Internal Capsule: Anterior limb 🞎 R 🞎 L

Internal Capsule: Posterior limb 🞎 R 🞎 L

Medulla 🞎 R 🞎 L

Midbrain 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Pons 🞎 R 🞎 L

Subcortical White matter: Frontal 🞎 R 🞎 L

Subcortical White matter: Occipital 🞎 R 🞎 L

Subcortical White matter: Parietal 🞎 R 🞎 L

Subcortical White matter: Temporal 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Thalamus/Basal Ganglia 🞎 R 🞎 L

1. DAI or TAI lesions number (DAITAILesnNum)\_\_\_\_\_\_\_

## Traumatic axonal injury (TAI)

1. Presence of traumatic axonal injury (TAI) (TraumatcAxonalInjInd). Choose one.

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Are there multiple TAI to report? (TraumatcAxonlMultipleInjInd)

* No
* Unknown
* Yes

1. TAI number. Number of traumatic/injury event if two or more injuries were experienced (InjEventNum)\_\_\_\_\_\_\_\_\_\_\_
2. DAI or TAI anatomic site (DAITAIAntmicSite). Select all that apply.

Brainstem: Dorsolateral rostral 🞎 R 🞎 L

Brainstem: Other 🞎 R 🞎 L

Cerebellar Peduncles 🞎 R 🞎 L

Cerebellum 🞎 R 🞎 L

Corpus Callosum: Body 🞎 R 🞎 L

Corpus Callosum: Genu 🞎 R 🞎 L

Corpus Callosum: Splenium 🞎 R 🞎 L

Frontal 🞎 R 🞎 L

Internal Capsule: Anterior limb 🞎 R 🞎 L

Internal Capsule: Posterior limb 🞎 R 🞎 L

Medulla 🞎 R 🞎 L

Midbrain 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Pons 🞎 R 🞎 L

Subcortical White matter: Frontal 🞎 R 🞎 L

Subcortical White matter: Occipital 🞎 R 🞎 L

Subcortical White matter: Parietal 🞎 R 🞎 L

Subcortical White matter: Temporal 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Thalamus/Basal Ganglia 🞎 R 🞎 L

1. DAI or TAI lesions number (DAITAILesnNum) \_\_\_\_\_\_\_\_

## Penetrating injuries

1. Presence of brain penetrating injury(ies) (PenetratngInjBrainInd). Choose one.

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Are there multiple penetrating injury(ies) to report? (PenetratngInjBrainMultipleInd)

* No
* Unknown
* Yes

1. Penetrating injuries number (InjNumber)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Penetrating injuries deepest extent penetrated anatomic site (PenetrateInjDeepExtntAntSite). Select all that apply.

* Dura
* Parenchyma
* Scalp
* Skull

1. Penetrating injuries anatomic site (PenetratInjryBrainAntmicSite). Select all that apply.

Cerebellum 🞎 R 🞎 L

Frontal 🞎 R 🞎 L

Internal Capsule 🞎 R 🞎 L

Medulla 🞎 R 🞎 L

Midbrain 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Pons 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Thalamus/Basal Ganglia 🞎 R 🞎 L

1. Penetrating injury associated findings (PenetratngInjBrainAssocFindTyp). Select all that apply.

* Crosses midline
* Indriven fragments (bone, foreign bodies)
* Through and through trajectory (entrance and exit sites)
* Transventricular trajectory

1. Mechanism of penetrating injury (PenetratingInjuryMechTyp). Select all that apply.

* Blast
* Crush
* Direct impact
* Fragment (incl. shell/shrapnel)
* Gunshot wound
* Missile
* Projectile
* Stab wound

Other, specify (PenetratingInjuryMechTypOTH)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Gunshot wound caliber number (GunshtWndClbrNum)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Cervicomedullary junction or brainstem injury

1. Presence of cervicomedullary junction or brainstem injury (CervimedJunctBrnstmInjInd). Choose one.

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Cervicomedullary junction or brainstem injury anatomic site (CervimedyJunctBrnstmInjAnatSit). Select all that apply.

* Cervical
* Medulla
* Midbrain
* Pons

1. Cervicomedullary junction or brainstem injury type (CrvcomedullryBrainstmInjryTyp).

* Subtotal
* Total

## Edema

1. Presence of edema (EdemaInd). Choose one.

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Edema anatomic site (EdemaAntmicSite). Select all that apply.

Brainstem 🞎 R 🞎 L

Cerebellum 🞎 R 🞎 L

Deep grey matter 🞎 R 🞎 L

Frontal 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

1. Edema extent type (EdemaExtentTyp). Select all that apply.

* Bihemispheric
* Focal
* Global
* Hemispheric
* Lobar
* Multilobar
* Posterior fossa

1. Edema findings type (EdemaFindTyp). Select all that apply.

* Cytotoxic
* Indeterminate
* Interstitial
* Osmotic
* Vasogenic

1. Edema volume measurement (EdemaVolMeasr)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_cm3

## Brain swelling

1. Presence of brain swelling (BrainSwellngInd). Choose one.

* Present
* Absent
* Indeterminate
* Premorbid (when applicable)

1. Brain swelling anatomic site (BrainSwellAntmicSite). Select all that apply.

Brainstem 🞎 R 🞎 L

Cerebellum 🞎 R 🞎 L

Deep grey matter 🞎 R 🞎 L

Frontal 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

1. Brain swelling extent (BrainSwellngExtntTyp). Select all that apply.

* Bihemispheric
* Focal
* Global
* Hemispheric
* Lobar
* Posterior fossa

## Ischemia or infarction or hypoxic-ischemic injury

### Presence of ischemia or infarction or hypoxic-ischemic injury (IschmInfrctHypxcIschmcInjryInd). Choose one.

* Absent
* Indeterminate
* Present
* Premorbid (when applicable)

1. Ischemia or infarction or hypoxic-ischemic injury anatomic site (IschInfrctHypoIschInjryAnatSit). Select all that apply.

Brainstem 🞎 R 🞎 L

Cerebellum 🞎 R 🞎 L

Deep grey matter 🞎 R 🞎 L

Frontal 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

1. Ischemia or infarction or hypoxic-ischemic injury extent type (IschInfarcHypxcIschInjExtntTyp). Choose one.

* Bihemispheric
* Focal
* Global
* Hemispheric
* Lobar
* Multilobar
* Posterior fossa

### Presence on scan of ischemia or infarction or hypoxic-ischemic injury, acute or subacute (IschInfrctHypoIschInjASaFndTyp). Select all that apply.

* Bright (for MRI)
* Hyperdense (for CT)
* Hypodense (for CT)
* Hypointense (for MRI)
* Isodense (for CT)
* Isointense (for MRI)
* Mixed (for CT or MRI)
* Normal (for MRI)

### Recommended MRI procedure(s) for ischemia, infarction, hypoxic-ischemic injury (IschInfrctHypoIschInjMRITyp). Select all that apply.

* FLAIR-Hyperintense
* FLAIR - Hypointense
* FLAIR - Isointense
* FLAIR - Mixed
* T1 - Hyperintense
* T1 - Hypointense
* T1 - Isointense
* T1 - Mixed
* T2 - Hyperintense
* T2 - Hypointense
* T2 - Isointense
* T2 - Mixed

1. Ischemia or infarction or hypoxic-ischemic injury pattern type (IschInfarcHypxcIschInjAnatSite). Select all that apply.

* Arterial
* Dissection
* Global
* Indeterminate
* Lacunar
* Mixed
* Venous
* Watershed

## Brain atrophy or encephalomalacia

1. Presence of brain atrophy or encephalomalacia (BrainAtrphEncphlmlReslt). Choose one.

* Absent
* Present
* Likely
* Indeterminate
* Premorbid (when applicable)

1. Are there multiple brain atrophy injuries to report? (BrainAtrphEncphMultipleInjInd)

* No
* Unknown
* Yes

1. Brain atrophy number. Number of traumatic/injury event if two or more injuries were experienced (InjEventNum)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Brain atrophy or encephalomalacia anatomic site (BrainAtrphEncphlmlAntmicSite). Select all that apply.

Brainstem 🞎 R 🞎 L

Cerebellum 🞎 R 🞎 L

Deep grey matter 🞎 R 🞎 L

Frontal 🞎 R 🞎 L

Hippocampus 🞎 R 🞎 L

Medulla 🞎 R 🞎 L

Midbrain 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Pons 🞎 R 🞎 L

Supratentorial ventricular system 🞎 R 🞎 L

Supratentorial white matter   
(corpus callosum, periventricular white matter) 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

1. Brain atrophy or encephalomalacia volume (BrainVolumetrcAnlysMeasr)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_cm3

## Gliosis

1. Presence of gliosis (GliosisInd). Choose one.

* Absent
* Present
* Likely
* Indeterminate
* Premorbid (when applicable)

1. Are there multiple gliosis injuries to report? (GliosisMultipleInd)

* No
* Unknown
* Yes

1. Gliosis injury number. Number of traumatic/injury event if two or more injuries were experienced (InjEventNum)\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Gliosis anatomic site (GliosisAntmicSite). Select all that apply.

Cerebellum 🞎 R 🞎 L

Frontal 🞎 R 🞎 L

Internal capsule 🞎 R 🞎 L

Medulla 🞎 R 🞎 L

Midbrain 🞎 R 🞎 L

Occipital 🞎 R 🞎 L

Parietal 🞎 R 🞎 L

Pons 🞎 R 🞎 L

Temporal 🞎 R 🞎 L

Thalamus/Basal ganglia 🞎 R 🞎 L

1. Gliosis volumetric analysis measurement (GliosisVolMeasr) \_\_\_\_\_\_\_\_\_\_\_\_\_\_cm3

## Incidental findings

1. Any other incidental findings are found within the imaging study? (ImgOthrIncidentalFindInd)

* No
* Unknown
* Yes

1. The type of other incidental findings found within the imaging study (ImgOthrIncidentalFindTyp). Select all that apply.

* Vascular malformations
* Venous malformations
* PVL
* Other white matter intensities

Other, specify (ImgOthrIncidentalFindOTH)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Are incidental findings significant enough to affect imaging analysis? (ImgIncidentalFindSignInd)

* No
* Unknown
* Yes

1. Please specify (GeneralNotesTxt)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| Appendix 1.CORE TBI Data Elements TBI core CDEs questions are highlighted in yellow on the CRF with a red asterisk. | |
| Variable Name | Page number |
| ImgBrainAssessmtReslt | 2 |
| SAHStatus | 7 |