## A. General Information

1. Reader: \_\_ \_\_ \_\_ (Initials)
2. Date imaging read:
3. MRI study date and time // (24 hour clock) yyyy mm dd hh mm ss
4. Magnetic Field Strength (choose one):

[ ]  1.5T [ ]  3.0T

1. \*Date of birth:
2. Age at MRI: \_\_\_\_
3. Gestational Age at Birth \_\_\_\_

**Table 1: General Information**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. Imaging Sequence
 | Axial | Coronal | Sagittal |  |
| T1 | Yes | No | Yes | No | Yes | No | DWI/DTI | Yes | No |
| T2 | Yes | No | Yes | No | Yes | No | ADC | Yes | No |
| T2Flair | Yes | No | Yes | No | Yes | No | 1. Other
 | Yes | No |
| GRE/SWI | Yes | No | Yes | No | Yes | No | Specify: |
| SPGR | Yes | No | Yes | No | Yes | No |

## Overall Assessment:

1. Are signal abnormalities present as listed in Section B? [ ] Yes [ ] No
2. Is there loss of gray/ white matter differentiation? [ ] Yes [ ] No
3. Are there any brain abnormalities as listed in Section C? [ ] Yes [ ] No
4. Overall Diagnosis: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## • If No to Q10, Q11, and Q12, proceed to Section D and complete form.

• If Yes to Q10, Q11, or Q12, complete as appropriate; Sections B, C, and D.

**MRI READING**

## B. Signal and Structural Abnormalities

**Table 2: Signal and Structural Abnormalities**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Lesion # | Hemi-spheric | Region | Site/ Subsite | Side | T1 | T2 | T2\*/SWI | FLAIR | DWI/DTI | ADC | Focal/Dif | GM/ WM | Size | Extent | TYPE | Comments |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**C. BRAIN ABNORMALITIES:** - Mark appropriate sections with ‘x’ if present

ACUTE

14. Hemorrhage? [ ] Yes [ ] No [ ] Indeterminant

If Yes, complete Table 3

**Table 3. Acute Brain Abnormalities: Hemorrhage**

|  |  |  |  |
| --- | --- | --- | --- |
| Region | Site | Left | Right |
| Frontal | cortical/subcortical |  |  |
| periventricular |  |  |
| Temporal | cortical/subcortical |  |  |
| periventricular |  |  |
| Parietal | cortical/subcortical |  |  |
| periventricular |  |  |
| Occipital | cortical/subcortical |  |  |
| periventricular |  |  |
| Parasagittal area |  |  |
| Perirolandic |  |  |
| Caudate |  |  |
| Putamen |  |  |
| Globus pallidus |  |  |
| Thalamus |  |  |
| Brain stem |  |  |
| Cerebellum |  |  |

15. Edema? [ ] Yes [ ] No [ ] Indeterminant

If Yes, complete Table 4

**Table 4. Acute Brain Abnormalities: Edema**

|  |  |  |  |
| --- | --- | --- | --- |
| Region | Site | Left | Right |
| Frontal | cortical/subcortical |  |  |
| periventricular |  |  |
| Temporal | cortical/subcortical |  |  |
| periventricular |  |  |
| Parietal | cortical/subcortical |  |  |
| periventricular |  |  |
| Occipital | cortical/subcortical |  |  |
| periventricular |  |  |
| Parasagittal area |  |  |
| Perirolandic |  |  |
| Caudate |  |  |
| Putamen |  |  |
| Globus pallidus |  |  |
| Thalamus |  |  |
| Brain stem |  |  |
| Cerebellum |  |  |

1. Infarction? [ ] Yes [ ] No [ ] Indeterminant

If Yes, complete Table 5

**Table 5. Acute Brain Abnormalities: Infarction**

|  |  |  |  |
| --- | --- | --- | --- |
| Cerebral Infarction Arterial Territory | **Left**  | **Right**  |  |
| MCA |  |  |
| PCA |  |  |
| ACA |  |  |
| Watershed Area |  |  |
| Venous Infarction | **Left** | **Right** | **Site** |
| Cortical/subcortical |  |  |  |
| White matter |  |  |  |

**C. BRAIN ABNORMALITIES:** - Mark appropriate sections with ‘x’ if present

**CHRONIC-Encephalomalacia**

**Atrophy**

1. Cerebral Atrophy [ ] Yes [ ] No [ ] Indeterminant

If Yes, complete Table 6

**Table 6. Chronic Brain Abnormalities-Encephalomalacia: Cerebral Atrophy**

|  |  |  |  |
| --- | --- | --- | --- |
| Region | Site | Left | Right |
| Frontal | cortical/subcortical |  |  |
| periventricular |  |  |
| Temporal | cortical/subcortical |  |  |
| periventricular |  |  |
| Parietal | cortical/subcortical |  |  |
| periventricular |  |  |
| Occipital | cortical/subcortical |  |  |
| periventricular |  |  |
| Parasagittal area |  |  |
| Perirolandic |  |  |

1. Atrophy in other brain regions? [ ] Yes [ ] No [ ] Indeterminant

If Yes, complete Table 7

**Table 7. Chronic Brain Abnormalities-Encephalomalacia:Other Brain Region Atrophy**

|  |  |  |  |
| --- | --- | --- | --- |
| Region | Code, specify Site/Subsite | Left | Right |
| Caudate |  |  |  |
| Putamen |  |  |  |
| Globus pallidus |  |  |  |
| Thalmus |  |  |  |
| Brain stem |  |  |  |
| Cerebellum |  |  |  |

19. Cysts? [ ] Yes [ ] No

If Yes, complete Table 8

**Table 8.** **Chronic Brain Abnormalities-Encephalomalacia: Cysts**

|  |  |  |  |
| --- | --- | --- | --- |
| Region | Site | Left | Right |
| Frontal | cortical/subcortical |  |  |
| periventricular |  |  |
| Temporal | cortical/subcortical |  |  |
| periventricular |  |  |
| Parietal | cortical/subcortical |  |  |
| periventricular |  |  |
| Occipital | cortical/subcortical |  |  |
| periventricular |  |  |
| Parasagittal area |  |  |
| Perirolandic |  |  |
| Caudate |  |  |
| Putamen |  |  |
| Globus pallidus |  |  |
| Thalamus |  |  |
| Brain stem |  |  |
| Cerebellum |  |  |

20. Scarring / gliosis? [ ] Yes [ ] No [ ] Indeterminant

If Yes, complete Table 9

**Table 9.** **Chronic Brain Abnormalities-Encephalomalacia: Scarring / Gliosis**

|  |  |  |  |
| --- | --- | --- | --- |
| Region | Site | Left | Right |
| Frontal | cortical/subcortical |  |  |
| periventricular |  |  |
| Temporal | cortical/subcortical |  |  |
| periventricular |  |  |
| Parietal | cortical/subcortical |  |  |
| periventricular |  |  |
| Occipital | cortical/subcortical |  |  |
| periventricular |  |  |
| Parasagittal area |  |  |
| Perirolandic |  |  |
| Caudate |  |  |
| Putamen |  |  |
| Globus pallidus |  |  |
| Thalamus |  |  |
| Brain stem |  |  |
| Cerebellum |  |  |

1. Mineralization? [ ] Yes [ ] No [ ] Indeterminant

If Yes, complete Table 10

**Table 10. Chronic Brain Abnormalities-Encephalomalacia: Mineralization**

|  |  |  |  |
| --- | --- | --- | --- |
| Region | Site | Left | Right |
| Frontal | cortical/subcortical |  |  |
| periventricular |  |  |
| Temporal | cortical/subcortical |  |  |
| periventricular |  |  |
| Parietal | cortical/subcortical |  |  |
| periventricular |  |  |
| Occipital | cortical/subcortical |  |  |
| periventricular |  |  |
| Parasagittal area |  |  |
| Perirolandic |  |  |
| Caudate |  |  |
| Putamen |  |  |
| Globus pallidus |  |  |
| Thalamus |  |  |
| Brain stem |  |  |
| Cerebellum |  |  |

1. QUALITATIVE assessment of Commissures:

Corpus callosum thinning/hypoplasia: [ ] None [ ] Equivocal [ ] Moderate [ ] Marked

Corpus callosum dysplasia: [ ] None [ ] Equivocal [ ] Moderate [ ] Marked

Corpus callosum agenesis: [ ] None [ ] Partial [ ] Complete

Mega (enlarged/thickened) corpus callosum: [ ] None [ ] Present

Anterior commissure: [ ] Normal [ ] Reduced [ ] Absent [ ] Enlarged

1. QUALITATIVE assessment of VENTRICULAR DILATION:

**Table 11. Ventricular Dilation Qualitative Assessment**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ventricle/space | None | Mild | Moderate | Marked | Shunted |
| Left lateral |  |  |  |  |  |
| Right lateral |  |  |  |  |  |
| 3rd ventricle |  |  |  |  |  |
| 4th ventricle |  |  |  |  |  |
| Extra-axial |  |  |  |  |  |

1. Focal Infarcts (acute or sequelae as encephalomalacic changes)

**Table 12. Focal Infarcts**

|  |  |  |  |
| --- | --- | --- | --- |
| **Region** | **Left** | **Right** | **Prior injury in chronic phase or malformation** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

1. Midline Shift? [ ] Yes [ ] No

**C. BRAIN ABNORMALITIES:** - Mark appropriate sections with ‘x’ if present

**CHRONIC-Brain Malformation**

1. Malformation of Cortex? [ ] Yes [ ] No [ ] Indeterminant

If yes, then specify location, side, and Code abnormality in Table 13

**Table 13. Chronic Brain Abnormalities-Brain Malformations: Cortex Malformations**

|  |  |  |
| --- | --- | --- |
| **Region** | **Left**  | **Right**  |
| Frontal Cortex |  |  |
| Temporal Cortex |  |  |
| Parietal Cortex |  |  |
| Occipital Cortex |  |  |
| Subcortical Abnormalities |  |  |

Type for Cortical Malformation Code: Pachygyria; Lissencephaly; Polymicrogyria; Focal Cortical Dysplasia; Heterotopia; Schizencephaly; Other, specify.

1. Malformation of Other Brain Regions? [ ] Yes [ ] No [ ] Indeterminant

If Yes, then specify location, side, and Code abnormality in Table 14

**Table 14. Chronic Brain Abnormalities-Brain Malformations: Other Brain Malformations**

|  |  |  |
| --- | --- | --- |
| **Region** | **Left**  | **Right**  |
| Caudate |  |  |
| Putamen |  |  |
| Globus pallidus |  |  |
| Thalamus |  |  |
| Brain stem |  |  |
| Cerebellum |  |  |
| Hemispheres |  |  |
| Vermis |  |  |
| Other, specify |  |  |

Malformation of other Brain Regions Code: Hypoplasia; Dysplasia; Cyst(s); Cleft; Lack of Separation; Other, specify

Brain stem Code: Midbrain, Ventral; Midbrain, Dorsal; Pons, Ventral; Pons, Dorsal; Medulla, Ventral; Medulla, Dorsal

Corpus Callosum Code: Rostrum; Genu; Body; Splenium

Other Regions of Interest: Hypothalamus; Optic chiasm; Internal capsule, Posterior limb; Internal capsule, Anterior limb; Corona Radiata; Hippocampus

**D. SUMMARY CLASSIFICATIONS**

1. Basal Ganglia Thalamus classification: **[ ]** Normal **[ ]** Minimal **[ ]** Moderate **[ ]** Severe [ ] 1N/A
2. Posterior Limb Internal Capsule classification: **[ ]** Normal **[ ]** Equivocal **[ ]** Abnormal [ ] 1N/A
3. Anterior Limb Internal Capsule classification: **[ ]** Normal **[ ]** Equivocal **[ ]** Abnormal [ ] 1N/A
4. Watershed area (Between vascular zones, code 0–5): \_\_\_ **[ ]** Indeterminate [ ] 1N/A

0 = Normal

1 = Single focal infarction

2 = Abnormal signal anterior or posterior WM

3 = Abnormal anterior, posterior watershed cortex and WM zones

4 = Anterior and posterior watershed zones

5 = More extensive cortical involvement beyond watershed zones

1. White Matter injury Number of punctuate lesions \_\_\_\_\_\_\_\_

 **[ ]** Minimal (≤ 3 punctate lesions)

**[ ]** Moderate (> 3 punctate lesions)

**[ ]** Severe (Too many to count)

[ ] 1N/A

1. Focal Cortical Injury **[ ]** Minimal **[ ]** Moderate **[ ]** Severe [ ] 1N/A
2. Pattern of Injury \_\_\_ \_\_\_ 1N/A

1Section D: specify comments below for all marked as N/A

**E. COMMENTS**

**General Instructions**

This CRF includes data typically recorded when performing Magnetic Resonance Imaging. This technique is used to visualize detailed internal structures in the body and brain.

\*Element is classified as Core.

**Specific Instructions and key**

Please see the Data Dictionary for definitions for each of the data elements included in this CRF Module.

Magnetic field strength – Choose one.

**Section A: GENERAL INFORMATION**

For Q8 & Q9 responses are Yes/No. If left blank, analyzed as NO.

For Q6 & Q7 are not keyed into DMS, used as reference from RTI reports.

Overall Assessment – If No to Q10, Q11, and Q12, proceed to Section D and complete form; If Yes to Q10, Q11, or Q12, complete as appropriate; Sections B, C, and D.

**Section B: Signal and Structural Abnormalities**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Hemi** | **REGION** | **CODE** | **SITE** | **CODE** | **SUBSITE1** | **CODE** |
| Hemispheric Devastation. If one or both hemispheres are devastated, code the affected area(s) as 1 = r; 2 = l; 3 = R>L; 4 = L>R; or 5 = =R. No region or lesion details are expected if a hemisphere is devastated, leave blank. | CEREBRAL | C\*2 | Frontal | F | cortical | C |
|  |  |  |  | subcortical | SC |
|  |  |  |  | periventricular | PV |
|  |  | Temporal | T | cortical | C |
|  |  |  |  | subcortical | SC |
|  |  |  |  | periventricular | PV |
|  |  | Parietal | P\*2 | cortical | C |
|  |  |  |  | subcortical | SC |
|  |  |  |  | periventricular | PV |
|  |  | Occipital |  | cortical | C |
|  |  |  |  | subcortical | SC |
|  |  |  |  | periventricular | PV |
|  |  | Parasagittal | PARA |  |  |
|  |  | Perirolandic | PER |  |  |
|  |  | Perisylvian3 | PERI |  |  |
|  |  | Insular3 | INS |  |  |
| INTRAVENTRIC3 | VENT |  |  |  |  |
| CEREBELLAR3 | BEL |  |  |  |  |
| BASAL GANGLIA3 | BG22,4 | Putamen | P\*2 | Code GM only |  |
|  |  | Caudate | C (cau) |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Hemi** | **REGION** | **CODE** | **SITE** | **CODE** | **SUBSITE1** | **CODE** |
| Hemispheric Devastation. If one or both hemispheres are devastated, code the affected area(s) as 1 = r; 2 = l; 3 = R>L; 4 = L>R; or 5 = =R. No region or lesion details are expected if a hemisphere is devastated, leave blank. |  |  | Globus Pallidus; Lentiform nucleus | GP *(LN)* |  |  |
| THALAMUS3 | T\*2 |  |  | Code GM + WM |  |
|  |  |  |  |  |  |
| INTERNAL CAPSULE |  |  |  |  |  |
| Posterior Limb3 | PLIC |  |  |  |  |
| Anterior Limb3 | ALIC |  |  |  |  |
| CORONA RADIATA3 | CR |  |  |  |  |
| HIPPOCAMPUS3 | HIP |  |  |  |  |
| BRAINSTEM | BS | Medulla |  |  |  |
|  |  | Ventral | MVen |  |  |
|  |  | Dorsal | MDor |  |  |
|  |  | Pons |  |  |  |
|  |  | Ventral | PVen |  |  |
|  |  | Dorsal | PDor |  |  |
|  |  | Midbrain |  |  |  |
|  |  | Ventral | MidVen |  |  |
|  |  | Dorsal | MidDor |  |  |
| CORPUS CALLOSUM | CC | Genu | G |  |  |
|  |  | Body | B |  |  |
|  |  | Splenium | SPL |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Hemi** | **REGION** | **CODE** | **SITE** | **CODE** | **SUBSITE1** | **CODE** |
| Hemispheric Devastation. If one or both hemispheres are devastated, code the affected area(s) as 1 = r; 2 = l; 3 = R>L; 4 = L>R; or 5 = =R. No region or lesion details are expected if a hemisphere is devastated, leave blank. | PITUITARY | PIT |  |  |  |  |
| HYPOTHALAMUS | HY |  |  |  |  |
| OPTIC CHIASM | OP |  |  |  |  |
| EXTRA-AXIAL | EX\*2 | Frontal | F | Subarachnoid | SAR |
|  |  |  |  | Subdural | SDR |
|  |  |  |  | Epidural | EPI |
|  |  | Temporal | T | Subarachnoid | SAR |
|  |  |  |  | Subdural | SDR |
|  |  |  |  | Epidural | EPI |
|  |  | Parietal | P\*2 | Subarachnoid | SAR |
|  |  |  |  | Subdural | SDR |
|  |  |  |  | Epidural | EPI |
|  |  | Occipital | O | Subarachnoid | SAR |
|  |  |  |  | Subdural | SDR |
|  |  |  |  | Epidural | EPI |
| SCALP | S\*2 | Frontal | F | Caput | CAP |
|  |  |  |  | Subgaleal | SubG |
|  |  | Temporal | T | Caput | CAP |
|  |  |  |  | Subgaleal | SubG |
|  |  | Parietal | P\*2 | Caput | CAP |
|  |  |  |  | Subgaleal | SubG |
|  |  | Occipital | O | Caput | CAP |
|  |  |  |  | Subgaleal | SubG |
| VASCULAR | VAS | Arterial | ART |  |  |
|  |  | Venous | VEN |  |  |
| OTHER | OTH |  |  |  |  |

1Subsite coded in ‘Site’ column in Section B, Table 2. Signal and Structural Abnormalities

2Region code defines Site Code P\* (to distinguish different sites with the letter P of multiple sites)

3Note Extent in table below: (Complete ‘extent column’ in Section B, Table 2. Signal and Structural Abnormalities

4For Basal Ganglia (code GM only) and Thalamus regions code (GM + WM)

|  |  |
| --- | --- |
| **Side** | **Code** |
| Right | R, R=L (R/L), R>L |
| Left | L, L=R (L/R), L>R |

**T1, T2, T2\*/SWI, IR, DWI/DTI, ADC**

|  |  |
| --- | --- |
| **Intensity** | **Code** (any two combinations are acceptable) |
| Hypointense/Low | L |
| Isointense | I or I/L |
| Hyperintense | H or H/L |

|  |  |
| --- | --- |
| **FOCAL/DIFFUSE** | **Code** |
| If Focal Code |  |
| Punctate | FP |
| Linear | FL |
| Nodular | FN |
| If diffuse | D |
| If multifocal | MF |

|  |  |
| --- | --- |
| **GM/WM** | **Code** (can code both) |
| If gray matter | GM |
| IF white matter | WM |

|  |
| --- |
| **SIZE**Enter MEASURED diameter of lesion, i.e., 3 = 3mm, 4 = 4mm, etc. If multifocal, enter largest diameter. If linear, enter measured LENGTH of lesion. |

|  |  |
| --- | --- |
| **Extent3** | **REGION/SITE** |
| Perisylvian, insular | Intraventricular | Basal Ganglia (Caudate, Putamen, Globus pallidus), Thalamus, PLIC, ALIC, Corona Radiata, Hippocampus, all Extra-axial spaces and the Cerebellar region should have extent coded |
| 1 | Mild | Minimal lateralVentricular/germinal matrixhemorrhage | <1/3 involved |
| 2 | Moderate | Hemorrhage filling but not distending the ventricle | 1/3 – 2/3 involved |
| 3 | Extensive | Extensive involvement filling ventricle and distending | >2/3 complete involvement |

|  |  |
| --- | --- |
| **TYPE** | **GUIDELINES for Interpretation** |
| Cystic/cavitation abnormalities | T1 hypo T2 hyper, FL hypo |
| Non-Cystic abnormalities | T1 hyper or hypo T2 hyper FL hyper*\*\*Note; T1 hyper in absence of marked T2* *hypo is gliosis* |
| Hemorrhage or mineralization | GRE hyp +/- hyper and MARKED T2 hypo |
| **CODE** |
| Cystic | CYS (or C) | C/NC = CYS + NCYS |
| Non-Cystic | NCYS or (NC) |
| Hemorrhage | HEM |
| Mineralization | MIN |
| Infarct | INF |
| Gliosis | GLI |

**Section C. BRAIN ABNORMALITIES**

 **ACUTE**

Hemorrhage

 Edema

 Infarction

**CHRONIC**

**Encephalomalacia**

Atrophy

Cysts

Scarring / Gliosis

Mineralization

**Brain Malformation**

**Section D. SUMMARY CLASSIFICATIONS**

**Basal Ganglia Thalamus (BGT) Classification**

|  |  |
| --- | --- |
| Normal | No signal abnormalities |
| Minimal | Focal abnormalities but normal signal within the PLIC |
| Moderate | Focal abnormalities involving the posterior lentiform nuclei and ventrolateral nuclei of the thalami with equivocal or abnormal signal in the PLIC |
| Severe | Widespread abnormalities in all regions of the BG, thal, and abnormal PLIC signal intensity |
| N/A  | Not applicable. Provide comments in Section E |

**PLIC/ALIC Score**

|  |  |
| --- | --- |
| Normal | High signal on T1 SE and IR in at least 1/3 of the limb, and a much smaller area of low signal intensity within the high on T2 SE |
| Equivocal | Only asymmetry of signal intensity within the PLIC |
| Abnormal | Partial to complete absence of normal high signal within the PLIC on Ti WE and IR and loss of normal low signal intensity on T2 SE |
| N/A | Not applicable. Provide comments in Section E |

**Watershed area**

|  |
| --- |
| Area of infarction; watershed area (between vascular zones, code 0-5) |
| 0 = Normal1 = Single focal infarction2 = Abnormal signal anterior or posterior WM3 = Abnormal anterior, posterior watershed cortex and WM zones4 = Anterior and posterior watershed zones5 = More extensive cortical involvement beyond watershed zones |
| N/A Not Applicable. Provide comments in Section E. |
| **White Matter Injury** |
| **Minimal** | ≤ 3 punctate lesions |
| **Moderate** | > 3 punctate lesions |
| **Severe** | Too many to count |
| **N/A** | Not Applicable. Provide comments in Section E. |

|  |
| --- |
| **Focal Cortical Injury** |
| **Minimal** | < 1/3 involved |
| **Moderate** | 1/3 – 2/3 involved |
| **Severe** | >2/3 involved |
| **N/A** | Not Applicable. Provide comments in Section E. |

|  |
| --- |
| **NICHD NRN Pattern of Injury** |
| **0** | Normal |
| **1A** | Minimal cerebral lesions only with no involvement of basal ganglia (BG) or Thalamus (T) or anterior limb of the internal capsule (ALIC) or posterior limb of the internal capsule (PLIC) and no area of watershed infarction |
| **1B** | More extensive cerebral lesions without BGT, PLIC, ALIC involvement or infarction |
| **2A** | Any BGT, ALIC, PLIC involvement or watershed infarction noted without any other cerebral lesions |
| **2B** | Involvement of either BGT, ALIC, PLIC or area of infarction and additional cerebral lesions |
| **3** | Cerebral hemispheric devastation |
| **N/A** | Not applicable. Provide comments Section E |

**References**

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