1. Has brain MRI been performed?  Yes  No
   1. If yes, have multiple brain MRIs been performed?  Yes  No, single brain MRI
   2. If yes, how many have been performed?  2  3  4  5  6  >6

Table for recording MRI results

| Brain MRI | Date Performed  (yyyy-mm-dd) | Age of affected | Where Performed |
| --- | --- | --- | --- |
| 1st | Data to be entered by site | [derived field] | Data to be entered by site |
| 2nd | Data to be entered by site | [derived field] | Data to be entered by site |
| 3rd | Data to be entered by site | [derived field] | Data to be entered by site |

1. Was sedation used?  Yes  No
2. General description of field of view/ anatomical positioning:
3. Magnetic field strength of scanner used:

1.5 T  3.0 T  4.0 T  7.0 T  Other: T

1. Body part scanned:  Brain  Cervial spine  Thoracic spine  Lumbar spine
2. Head circumference at time of scan: cm
3. Total time in scanner (include all studies done within each particular session): :HH:MM
4. RF receiver coil(s) and number of channels: (check all that apply)

Head coil,  Neck coil,  Spine Array,  Body coil (transmit)

1. Sequences used:  T1-weighted  T2-weighted  FLAIR  Other:
2. Specify sequence name of T1 or T2 used:
3. Contrast used:  Yes  No

If yes, name of the contracts: dosage:

1. T1-MRI sequence parameters
   1. Slice orientation:  Axial  Coronal  Sagittal  Oblique
   2. Field of view: x mm2
   3. In-plane resolution: x mm2
   4. Slice thickness: mm
   5. Gap between slices: mm or % (for 2D acquisition)
   6. Number of slices:
   7. Repetition time (TR): ms
   8. Echo time (TE): ms
   9. Acquisition time: minutes

Check box if items #7a-f are the same for all sequences.

1. T2 sequence parameters (copy the following sections if parameters are different for the 2 sequences)
   1. Slice orientation:  Axial  Coronal  Sagittal  Oblique
   2. Field of view: x mm2
   3. In-plane resolution: x mm2
   4. Slice thickness: mm
   5. Gap between slices: mm or %
   6. Number of slices:
   7. Repetition time (TR): ms
   8. Echo time (TE): ms
   9. Acquisition time: minutes
2. FLAIR sequence parameters (copy the following sections if parameters are different for the 2 sequences)
   1. Slice orientation:  Axial  Coronal  Sagittal  Oblique
   2. Field of view: x mm2
   3. In-plane resolution: x mm2
   4. Slice thickness: mm
   5. Gap between slices: mm or %
   6. Number of slices:
   7. Repetition time (TR): ms
   8. Echo time (TE): ms
   9. Acquisition time: minutes
   10. Inversion time (TI): ms
3. Name of the scanner manufacturer:

GE Siemens Philips Toshiba Other:

1. Clinical read of MRIs
   1. Read type: Local  Central
   2. Reader blinded to clinical data? Yes  No
   3. Quality of images technically satisfactory? Yes  No
2. Lesions found Yes  No
   1. If Yes, type of lesion(s):  Malformation  WM hyperintensity  Grey matter hyperinsity

Infarct  Other, specify:

* 1. If infarct or other abnormalities, specify:

1. Other incidental findings Yes No

If yes, indicate Type(s):

PVL

Other white matter intensities

Venous malformations

Vascular malformations

Other, specify

1. Malformations
   1. Cortex – Pachygyria (includes cobblestone lissencephaly):  Yes  No
      1. If Yes, indicate location(s):

Frontoparietal Temporal Occipital

* + 1. If Yes, indicate thickness of the cortex:
  1. Cortex Lissencephaly (LIS type 1): Yes  No
     1. If Yes, indicate thickness of the cortex:
  2. Cortex – Polymicrogyria:  Yes  No
     1. If Yes, indicate location(s):

Frontoparietal Temporal Occipital

* 1. Other cortical abnormality**:**  Yes  No
     1. If yes, specify:

Schizencephaly Porencephaly Other, specify:

* + 1. If yes, indicate location (s):

Frontoparietal Temporal Occipital

* 1. Subcortical cysts:  Yes  No
     1. If Yes, indicate location(s):

Frontoparietal Temporal Occipital

* 1. Ventricles**:**  Normal  Abnormal
     1. If Abnormal**,** specify:

Dilation  Other, specify:

* 1. Brainstem:  Normal  Abnormal
     1. If Abnormal, specify:

Hypoplasia Anterior concavity Posterior concavity  Other

* 1. Pons:Normal  Abnormal
     1. If Abnormal, specify:

Hypoplasia Cleft Other

* 1. Cerebellum:  Normal  Abnormal
     1. If Abnormal, specify:

Vermal hypoplasia

Hemispheric hypoplasia

Vermal dysplasia

Hemispheric dysplasia

Cysts

Cleft

Other, specify

1. White matter hyperintensity
   1. White matter on T2 weighted images:  Normal  Abnormal
      1. If Abnormal, indicate location(s):

Frontal

Parietal

Temporal

Occipital

Periventricular

Deep WM

Cerebellar WM

Diffuse

* 1. Compacted white matter tracts:
     1. Corpus Callosum Involved Spared
     2. Internal capsule Involved Spared
     3. Anterior commissure Involved Spared

1. Grey matter hyperintensity
   1. Grey matter hyperintensityon T2/FLAIR images**:**  Yes  No
      1. If yes, specify**:**

Caudate

Putamen

Pallidum

Thalamus

Subthalamic nucleus

Mammillary body

Substantia nigra

Red Nucleus

Periaqueductal Grey

Cerebellar Nuclei

Floor of the Fourth Ventricle

Colliculi

Other

1. Eye abnormalities:  Yes  No
   1. If yes, specify:

Optic Nerve Abnormalities

Microphthalmia

Cataract

## General Instructions

This form contains data elements that are collected for Brain Magnetic Resonance Imaging. Responses to categories are obtained from health professionals performing the procedure.

## CMD-specific Instructions:

The elements on this CRF are Supplemental – Highly Recommended for dystroglycanopathies; Supplemental for MDC1A; and Exploratory for all other congenital muscular dystrophies.

## Specific Instructions

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

* Multiple MRIs performed – Answer, only if brain MRI was performed.
* Brain MRI date performed - Date/time should be recorded to the level of granularity known (e.g., year, year and month, complete date plus hours and minutes, etc.) and in the format acceptable to the study database.
* Brain MRI age of affected – This is recorded for each brain MRI performed. This is a derived element based on Date of Birth and Visit Date.
* Scanner strength – Choose one.
* Body part scanner – Choose one.
* Head circumference - Record the head circumference of the participant/subject as well as the units for the measurement. Answer should be recorded in centimeters (cm)
* RF receiver coil(s) and number of channels – Choose all that apply
* T2 sequence parameters – If the sequences are different for T1 and T2 sequence parameters, record the T2 parameters as indicated. If they are the same, leave the T2 parameters section blank.
* FLAIR sequence parameters – If the sequences are different for T1 and FLAIR sequence parameters, record the FLAIR parameters as indicated. If they are the same, leave the FLAIR parameters section blank.
* Contrast used - Choose one. If yes, record the name of the contrast agent and its dosage.
* Field of view - Answer should be recorded as a dimension (AAxAA) and in millimeters squared (mm2).
* Plane resolution - Answer should be recorded as a dimension (AAxAA) and in millimeters squared (mm2)
* Slice thickness - Answer should be recorded in millimeters squared (mm2)
* Gap between slices - Answer should be recorded in millimeters squared (mm2) or % (for 2D acquisition)
* Repetition time – Answer should be recorded in milliseconds (ms)
* Acquisition time – Answer should be recorded in minutes