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