1. \*Convergence-Retraction:  Yes  No
2. \*\*Primary position during visual fixation (choose one):

RB, LB, UB, DB, T or M

C/F/R

S/U

Co/Di

L/H

1. \*Primary position in the absence of visual fixation (Nystagmus can be checked with Frenzel goggles or with a direct ophthalmoscope while the other eye is covered) (choose one):

RB, LB, UB, DB, T or M

C/F/R

S/U

Co/Di

L/H

1. \*\*R-Lateral gaze (choose one):

RB, LB, UB, DB, T or M

C/F/R

S/U

Co/Di

L/H

1. \*\*L-Lateral gaze (choose one):

RB, LB, UB, DB, T or M

C/F/R

S/U

Co/Di

L/H

1. \*\*Vertical Downgaze (choose one):

C/F

S/U

UB/DB

1. \*Vertical Upgaze (choose one):

C/F

S/U

UB/DB

1. \*Head Shake/Thrust
2. Normal gain
3. Impaired VOR
4. \*\*Saccadic pursuit:  Yes  No
5. \*Rebound:  Yes  No
6. \*Valsalva induced nystagmus:  Yes  No
7. \*\*\*Neck flexion and nystagmus:  Yes  No
8. \*Strabismus:  Yes  No

\*Element is classified as Supplemental

\*\*Supplemental Highly Recommended

\*\*\*Element is classified as Exploratory

## General Instructions

This form contains data elements that are collected for Chari I Malformation diagnosis. The questions should be answered to the best of the participant’s/subjects ability.

## Specific Instructions

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

* Convergence-Retraction – indicate if convergence and retraction on attempted upgaze saccade is present by selecting yes or no.
* Primary position during visual fixation – please see the following abbreviations defined:
  + Waveform: Pendular or jerk
    - If jerk: RB (right beat) or LB ( left beat)
  + UB=Upbeat
  + DB=Downbeat
  + T=Torsional
  + M=Mixed (combination of horizontal, vertical and/or torsional)  
    C= course high amp
  + F= fine low amp
  + R=Rotatory  
    S=Sustained
  + U=Unsustained
  + Co=Conjugate
  + Di=Disconjugate  
    L=Low freq
  + H=High freq
* Head Shake/Thrust
  + Normal Gain - absence of corrective saccades
  + Impaired VOR- presence of corrective saccades during head impulse while the  
    patient is fixing on a target
* Saccadic pursuit - Assess usual fluidity of smooth pursuit movement left and right with  
  presence of corrective saccades
* Rebound - Assess for presence of nystagmus in primary after persistent eccentric gaze. If present the slow phase is in the direction of the former eccentric gaze.
* Valsalva induced nystagmus - emergence or worsening of nystagmus with valsalva maneuver
* Neck flexion and nystagmus - emergence or worsening of nystagmus with neck flexion
* Strabismus - esotropia/exotropia/skew deviation

\*Element is classified as Core