Additional file 2. Severity rating scale of neurological manifestations and dysphagia

| GAIT ABNORMALITIES | DEFINITION | Original score | Modified score | DYSMETRIA | DEFINITION | Original score | Modified score |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|
| Absence of abnormalities | Normal ambulation | 0 | 0 | Absence of abnormalities | Normal | 0 | 0 |
| Mild abnormalities | Autonomous ataxic gait | 1 | 0.33 | Mild abnormalities | Mild difficulties in reaching the nose or an object | 1 | 0.33 |
| Moderate abnormalities | Assisted ambulation | 2 | 0.67 | Moderate abnormalities | Moderate difficulties in reaching the nose or an object | 2 | 0.67 |
| Severe/ invalidating abnormalities | Wheelchair bound | 3 | 1 | Severe/ invalidating abnormalities | Severe dysmetria, preventing the patient from reaching nose or an object | 3 | 1 |
| DYSTONIA | DEFINITION | Original score | Modified score | DYSARTHRIA | DEFINITION | Original score | Modified score |
| Absence of abnormalities | Normal | 0 | 0 | Absence of abnormalities | Normal language | 0 | 0 |
| Mild abnormalities | Slight dystonia, only with actions, not disabling/interfering with activities | 1 | 0.33 | Mild abnormalities | Understandable language | 1 | 0.33 |
| Moderate abnormalities | Dystonia on action of distant part of body or intermittently at rest, interfering with normal activities and causing moderate impairment of function | 2 | 0.67 | Moderate abnormalities | Poor comprehensive language | 2 | 0.67 |
| Severe / invalidating abnormalities | Severe dystonic movements present at rest and/or causing complete impairment of function | 3 | 1 | Severe/ invalidating abnormalities | Non verbal communication /anarthria | 3 | 1 |
| DEVELOPMENTAL DELAY/ COGNITIVE IMPAIRMENT | DEFINITION | Original score | Modified score | DYSPHAGIA | DEFINITION | Original score | Modified score |
| Absence of cognitive impairment/psychomotor delay | Qualitative assessment reveals acquisition of normal milestones of psychomotor development or the patient is self-sufficient without any support. Alternatively, IQ higher than 70 with two subcategories as follows: - Absent intellectual disability: IQ higher than 84 - Borderline intellectual disability: IQ between 70 and 84. | 0 | 0 | Normal swallowing | Absence of difficulty to swallow | 0 | 0 |
| Mild cognitive impairment/psychomotor delay | Qualitative assessment reveals mild delay in acquisition of psychomotor development milestones or the patient is fairly self-sufficient with minimal/intermittent support and has communication skills. Alternatively, IQ between 50 and 69 | 1 | 0.33 | Mild difficulty to swallow | Long feeding times, difficulty in chewing | 1 | 0.25 |
| Moderate cognitive impairment/psychomotor delay | Qualitative assessment reveals moderate delay in acquisition of psychomotor development milestones or the patient is able of self-care tasks with limited/moderate support and has some communication skills Alternatively, IQ between 35 and 49 | 2 | 0.67 | Moderate difficulty | Arching or stiffening of the neck during feeding, gurgly, hoarse, or breathy voice quality | 2 | 0.50 |
| Severe cognitive impairment/psychomotor delay | Qualitative assessment reveals severe delay in acquisition of psychomotor development milestones or the patient is able / completely unable of very basic self-care skills with extensive or pervasive support and/or is able / completely unable of very basic communication skills Alternatively, IQ below 35 with two subcategories as follows: - Severe intellectual disability: IQ between 20 and 34 - Profound intellectual disability: IQ below 20 | 3 | 1 | Severe difficulty | Excessive drooling or food/liquid coming out of the mouth or nose, coughing or gagging during meals, difficulty breast feeding | 3 | 0.75 |
| | | | | Unable to swallow | Refusing liquid or food of different texture, Nasogastric tube or gastric button feeding (PEG) | 4 | 1 |