



DATABASE

Case Report Form

MFM Study Group

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PATIENT'S ID

Family Name (birth name) : |_____|_____|____|_____

(At least 3 first letters – eventually full name)

Married Name : |_____|_____|____|_____

(At least 3 first letters – eventually full name)

First name |_____|____|_____

(At least 2 first letters – eventually full name)

Date of birth : I__I__I dd I__I__I mm I__I__I yyyy

Gender : M I__I 1 F I__I 2

Handedness : Right I__I 1 Left I__I 2 Not determined/both I__I 3

Clinical Diagnosis (code) : I__I__I__I__I or specify if not in list :.....

(Check at each visit in case of change of diagnosis)

Genetic information: Mutated gene if known (eg, COL6, LMNA...), number CTG repeats for DM1, number SMN copies for SMA, or other :.....

Age at onset of signs (that have led to first visit) |_____|____|, |____| years (0= at birth, ND=unknown)

Date of Death : I__I__I dd I__I__I mm I__I__I yyyy

Participation to the validation study of the 2nd version – French and Swiss centers only: yes I__I 1 no I__I 0

VISIT DATA

Name of Physician :

Consent signed : yes I__I 1 no I__I 0

(recommended, can be obtained at further visit if not at 1st visit)

Date of completion of the MFM scale : I__I__I dd I__I__I mm I__I__I yyyy (last day if MFM done over 2 days)

Diagnosis : Confirmed : I__I 1 suspected : I__I 0

Genetic testing : yes I__I 1 no I__I 0 If yes : year of samplings : I__I__I__I

Participation to a clinical trial presently or previously (or since last visit) ? yes I__I 1 no I__I 0

If yes, specify : DMD steroids I__I 1, ASIRI I__I 2, MFM-20 validation I__I 3, PTC 124 I__I 4, TROPHOS1 I__I 5,

NM Grades of Severity I__I 6 ULENAP I__I 7 DM1DEXA I__I 8 TROPHOS2 I__I 9

Other I__I : specify (contact Dr C Payan)

Date of inclusion in the trial : I__I__I dd I__I__I mm I__I__I yyyy **Date of end:** I__I__I dd I__I__I mm I__I__I yyyy

Ongoing I__I

Medications ongoing (or modified or initiated since last visit) ? yes I__I 1 no I__I 0

Si yes, complete the table «Concomedications» page 9

MEDICAL HISTORY AND PRESENT CLINICAL FEATURES

Ambulation acquired (10 steps without human help) yes I_I 1 no I_I 0

If yes, age of walking acquisition : I_I_I_I months Unknown I_I 9

Loss of ambulation : yes I_I 1 no I_I 0 Not applicable I_I 9

If YES, Age of loss of ambulation (cannot walk 10 steps without human help) : I_I_I years I_I months

Date unknown I_I

Ventilation : yes I_I 1 no I_I 0

If YES, Continuous I_I 1 Intermittent I_I 2

Non invasive I_I 1 Invasive (tracheostomy) I_I 2

Orthopedic surgical history:

			dd	mm	yyyy
Upper limbs	no I_I 0	yes I_I 1	I_I_I	I_I_I	I_I_I_I_I_I
Hips	no I_I 0	yes I_I 1	I_I_I	I_I_I	I_I_I_I_I_I
Knees	no I_I 0	yes I_I 1	I_I_I	I_I_I	I_I_I_I_I_I
Feet	no I_I 0	yes I_I 1	I_I_I	I_I_I	I_I_I_I_I_I
Spine	no I_I 0	yes I_I 1	I_I_I	I_I_I	I_I_I_I_I_I

Surgery other than orthopedic:

			dd	mm	yyyy
Tracheostomy	no I_I 0	yes I_I 1	I_I_I	I_I_I	I_I_I_I_I_I
Gastrostomy:	no I_I 0	yes I_I 1	I_I_I	I_I_I	I_I_I_I_I_I
Cardiac surgery:	no I_I 0	yes I_I 1	I_I_I	I_I_I	I_I_I_I_I_I

Other (that could interfere with motor function) : no I_I 0 yes I_I 1 date: I_I_I_I_I_I_I_I_I_I

Specify:.....

Vignos grade: _____

1 - walks and climbs stairs without assistance

2 - walks and climbs stairs with aid of railing

3 - walks and climbs stairs slowly with aid of railing (over 12 seconds for 4 standard steps)

4 - walks unassisted and rises from chair but cannot climb stairs

5 - walks unassisted but cannot rise from chair or climb stairs

6 - walks only with assistance or walks independently with long leg braces

7 - walks in long leg braces but requires assistance for balance

8 - stands in long leg braces but unable to walk even with assistance

9 - is in wheelchair.

10 - is confined to bed.

Brooke Grade: _____

1 - starting with arms at the sides, the patient can abduct the arms in a full circle until they touch above the head.

2 - can raise arms above head only by flexing the elbow (i.e. shortening the circumference of the movement) or using accessory muscles.

3 - cannot raise hands above head but can raise an 180ml glass of water to mouth (using both hands if necessary).

4 - can raise hands to mouth but cannot raise an 180ml glass of water to mouth.

5 - cannot raise hand to mouth but can use hands to hold pen or pick up pennies from the table.

6 - cannot raise hands to mouth and has no useful function of hands.

Wheelchair use : yes I_I 1 no I_I 0

If yes : manual I_I 1 electrical I_I 2 manual + electrical I_I 3

Mild	moderate	severe	very severe
I_I 1	I_I 2	I_I 3	I_I 4

The **overall severity of the motor disability** is :

DATA AT COMPLETION OF THE MFM

INFORMATIONS CONCERNING THE MFM EXAMINER:

First Name and last name:

Year of first experience in the evaluation of Neuromuscular disorders : I_I_I_I_I yyyy

Date of initial training validated (test of validation passes) with the MFM I_I_I_I_I_I_I_I_I_I dd mm yyyy

Date of last participation to a training session of reactualisation of the MFM : I_I_I_I_I_I_I_I_I_I_I_I_I_I_I_I_I_I_I_I dd mm yyyy

Fatigue/tiredness of patient at start of completion compared to usual state :

Ask : «How do you feel compared to your usual state of wellbeing? »

Better than usual	I_I_1
As usual	I_I_2
More tired than usual	I_I_3
Far more tired than usual	I_I_4

Completion of the MFM: 32 items I_I_1

20 items I_I_2 (*for subjects younger than 7 years – the items highlighted in grey in the scale*)

Are both sides tested systematically? yes I_I_1 no I_I_0

Si YES, complete for items tested both sides, first the side chosen by the patient then the other side

MOTOR FUNCTION MEASURE (MFM)

For each item, report in comments in case of refusal, pain, technical aid during completion....

Items of the MFM scale	Rating		
	D1 =	D2 =	D3 =
1. ☺ SUPINE, HEAD IN MIDLINE POSITION: holds the head for 5 seconds in midline position and turns it completely from one side to the other. <i>comments :</i>	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
2. SUPINE: raises the head and maintains the raised position for 5 seconds <i>comments :</i>	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
3. ☺ SUPINE: flexes the hip and knee more than 90° by raising the foot during the whole movement. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <i>comments :</i>	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
4. ☺ SUPINE, LEG SUPPORTED BY EXAMINER: from the plantar flexion, dorsiflexes the foot to at least 90° in relation to the lower part of the leg. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <i>comments :</i>	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
5. ☺ SUPINE: raises the hand and moves it to the opposite shoulder. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <i>comments :</i>	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
6. ☺ SUPINE, LOWER LIMBS HALF-FLEXED, KNEECAPS AT THE ZENITH AND FEET RESTING ON THE MAT SLIGHTLY APART: maintains for 5 seconds the starting position then raises the pelvis ; the lumbar spine, the pelvis and the thighs are aligned and the feet slightly apart. <i>comments:</i>	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
7. ☺ SUPINE: turns over into prone and frees both upper limbs from under the trunk. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <i>comments :</i>	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
8. SUPINE: without upper limb support sits up. <i>comments:</i>	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
9. ☺ SEATED ON THE MAT: without upper limb support, maintains the seated position for 5 seconds and is then capable of maintaining contact 5 seconds between the two hands. <i>comments:</i>	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
10. ☺ SEATED ON THE MAT, THE TENNIS BALL PLACED IN FRONT OF THE PERSON: without upper limb support, leans forward, touches the ball and sits back again. <i>comments:</i>	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		

Cotation

Items	Report page 5	D1=	D2=	D3=
11. ☺ SEATED ON THE MAT: without upper limb support, stands up. comments:		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
12. ☺ STANDING: without upper limb support, sits down on the chair with the feet slightly apart. comments:		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
13. SEATED ON THE CHAIR: without upper limb support nor leaning against the back of the chair, maintains the seated position for 5 seconds, with the head and trunk in midline position. comments:		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
14. ☺ SEATED ON THE CHAIR OR IN THE WHEELCHAIR, HEAD IN FLEXION: from head in complete flexion, raises the head then maintains it raised for 5 seconds, the head stays in midline position throughout the movement and the holding position. comments:		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
15. SEATED ON THE CHAIR OR IN THE WHEELCHAIR, FOREARMS ON THE TABLE BUT NOT ELBOWS: places both hands on top of the head at the same time while the head and trunk remain in midline position. comments:		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
16. SEATED ON THE CHAIR OR IN THE WHEELCHAIR, THE PENCIL ON THE TABLE: without moving the trunk, reaches the pencil with one hand, forearm and hand off the table with the elbow in full extension at the end of the movement. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 comments :		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
17. SEATED ON THE CHAIR OR IN THE WHEELCHAIR, 10 COINS ON THE TABLE: successively picks up and holds 10 coins in one hand during the 20-second period. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 comments :			<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	
18. ☺ SEATED ON THE CHAIR OR IN THE WHEELCHAIR, ONE FINGER PLACED IN THE CENTER OF THE FIXED CD: goes round the edge of the CD with the same finger without hand support on the table. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 comments :			<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	
19. SEATED ON THE CHAIR OR IN THE WHEELCHAIR, THE PENCIL ON THE TABLE: picks up the pencil and draws a continuous series of loops inside the frame and over its full length touching the top and bottom line of the frame. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 comments :			<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	
Trial n°1
				
Trial n°2
				

Cotation

Items	Report page 6	D1=	D2=	D3=
20. SEATED ON THE CHAIR OR IN THE WHEELCHAIR, HOLDING THE SHEET OF PAPER: tears the sheet of paper folded in 4, beginning from the fold edge. <i>comments:</i>			<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	
21. ☺ SEATED ON THE CHAIR OR IN THE WHEELCHAIR, THE TENNIS BALL ON THE TABLE: picks up the ball, and turns the hand over completely holding the ball. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <i>comments :</i>			<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	
22. ☺ SEATED ON THE CHAIR OR IN THE WHEELCHAIR, ONE FINGER PLACED IN THE CENTER OF THE DIAGRAM: raises the finger and places it successively on the 8 drawings without touching the lines. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <i>comments :</i>			<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	
23. ☺ SEATED ON THE CHAIR OR IN THE WHEELCHAIR, UPPER LIMBS ALONG THE TRUNK: places the two forearms and/or the hands on the table at the same time without moving the trunk. <i>comments:</i>			<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	
24. ☺ SEATED ON THE CHAIR: without upper limb support, stands up with the feet slightly apart. <i>comments:</i>		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
25. ☺ STANDING WITH UPPER LIMB SUPPORT ON EQUIPMENT: without upper limb support, maintains a standing position for 5 seconds with the feet slightly apart, the head, trunk and limbs in midline position <i>comments:</i>		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
26. STANDING WITH UPPER LIMB SUPPORT ON EQUIPMENT: without upper limb support, raises the foot for 10 seconds. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <i>comments :</i>		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
27. ☺ STANDING: without support, touches the floor with one hand and stands up again. <i>comments:</i>		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
28. STANDING WITHOUT SUPPORT: takes 10 steps forward on both heels. <i>comments:</i>		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		

Items	Report page 7	D1=	D2=	D3=
29. STANDING WITHOUT SUPPORT: takes 10 steps forward on a line. <i>comments:</i>		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
30. ☺ STANDING WITHOUT SUPPORT: runs 10 meters. <i>comments:</i>		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
31. STANDING ON ONE FOOT WITHOUT SUPPORT: hops 10 times in place. side: right : <input type="checkbox"/> left : <input type="checkbox"/> contralateral score: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <i>comments :</i>		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
32. ☺ STANDING WITHOUT SUPPORT: without upper limb support, manages to squat and gets up twice in a row. <i>comments:</i>		<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
	TOTAL	D1=	D2=	D3=

Duration of completion : I__I__I__I Minutes

Cooperation of patient : none I__I 0, moderate I__I 1, optimal I__I 2

Comments on overall testing and results obtained: (*if nothing particular, report NAD*)

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.....

SUMMARY OF RATINGS

MFM 32 ITEMS

<u>DIMENSION</u>	<u>TOTAL COTATIONS IN % PER DIMENSION</u>
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D1. Standing and transfers Total Dimension 1 = $\frac{39}{39} \times 100$ = %

D2. Axial and proximal motor function Total Dimension 2 = $\frac{36}{36} \times 100$ = %

D3. Distal motor function Total Dimension 3 = $\frac{21}{21} \times 100$ = %

TOTAL SCORE = $\frac{\text{total of ratings}}{32 \times 3} \times 100$

= $\frac{96}{96} \times 100$

= %

MFM 20 ITEMS

<u>DIMENSION</u>	<u>TOTAL COTATIONS IN % PER DIMENSION</u>
D1. Standing and transfers	$\frac{\text{Total Dimension 1}}{24} \times 100 = \dots \%$
D2. Axial and proximal motor function	$\frac{\text{Total Dimension 2}}{24} \times 100 = \dots \%$
D3. Distal motor function	$\frac{\text{Total Dimension 3}}{12} \times 100 = \dots \%$
TOTAL SCORE	$= \frac{\text{total of ratings}}{20 \times 3} \times 100$ $= \frac{\dots}{60} \times 100$ $= \dots \% \quad$

PRESENT MEDICATIONS OR TAKEN WITHIN THE LAST 3 MONTHS

*Report medications taken regularly by patient within the last 3 months (at first MFM) or modified since last evaluation
The shaded boxes will be completed by the CRA or the curator*

Brand Name or ICD <i>completed par CRA</i>	Indication **	Daily Dose ***	Route (*)	date of start	date of end
.....		I_I_I	I_I_II_I_II_I_I	I_I_II_I_II_I_I Ongoing <input type="checkbox"/> 1 Stopped <input type="checkbox"/> 0
.....		I_I_I	I_I_II_I_II_I_I	I_I_II_I_II_I_I Ongoing <input type="checkbox"/> 1 Stopped <input type="checkbox"/> 0
.....		I_I_I	I_I_II_I_II_I_I	I_I_II_I_II_I_I Ongoing <input type="checkbox"/> 1 Stopped <input type="checkbox"/> 0
.....		I_I_I	I_I_II_I_II_I_I	I_I_II_I_II_I_I Ongoing <input type="checkbox"/> 1 Stopped <input type="checkbox"/> 0
.....		I_I_I	I_I_II_I_II_I_I	I_I_II_I_II_I_I Ongoing <input type="checkbox"/> 1 Stopped <input type="checkbox"/> 0
.....		I_I_I	I_I_II_I_II_I_I	I_I_II_I_II_I_I Ongoing <input type="checkbox"/> 1 Stopped <input type="checkbox"/> 0
.....		I_I_I	I_I_II_I_II_I_I	I_I_II_I_II_I_I Ongoing <input type="checkbox"/> 1 Stopped <input type="checkbox"/> 0
.....		I_I_I	I_I_II_I_II_I_I	I_I_II_I_II_I_I Ongoing <input type="checkbox"/> 1 Stopped <input type="checkbox"/> 0

(*) 1= oral, 2= intravenous, 3= intramuscular, 4= topical, 5= subcutaneous, 6= rectal,
7= intra-nasal, 8= transcutaneous, 9= eye drops, 10= vaginal, 11=by inhalation, 12= other,
99= unknown

** NO ABBREVIATION Please

*** Use « PRN » (Pro Re Nata – as needed) where necessary