## Part A

Referring Hospital:		Referring Physician:		
Compilation Date:/ /				
Patient Initials:		Patient cod	e:	
Date of birth: / /		Sex:	∘ M	o F
Handedness: ○ Left ○ Right Weight:kg Height:cm				
Family Ancestry - geographic origins:				
Maternal:	_ Mother S	Surname: _		
Paternal:	-			
Consanguinity: ○ Yes ○ No				
Current profession:		Since year:		
If you were previously employed: Previous profession(s):				
		From year:		to year
		From year:		to year
		From year:		to year
Highest degree: ○ University degree ○ F	High-school	diploma o	Primary s	school diploma o None
(vears of education:				

## FSHD Comprehensive Clinical Evaluation Form (CCEF) –Evaluation Form Section 1

Diagnosis of cancer: • Yes	o No	
If yes, specify:		Age at diagnosis:
Therapy, Drugs :		
	Dose:	unit From year: to year
Retinal vasculopathy:	o Yes	○ No ○ Not evaluated
Sensorineural deafness:		
	<ul><li>Yes</li></ul>	
Audiometry:	<ul> <li>Alterate</li> </ul>	ed o Normal o Not performed
Epilepsy:	o Yes	∘ No
Cognitive impairment:	o Yes	○ No
Other disease(s)		
Other diseases	o Yes	○ No
If yes, specify:		
Previous trauma: joint, bone frac	tures: o Ye	es o No If yes, specify site and age

Drugs:					
Statins: • Yes	○ No If yes	s, Type:			
	Dose:	١	unit	From year:	to year
Others chronic treatments	: o Yes o No				
If yes					
Drug:	Dose: _			From year:	to year
Reproductive History:					
Have you ever been pregr	ant? o Yes	o No			
Are you pregnant now?	○ Yes	o No			
How many times have you	ı been pregnant:				
Spontaneous abortion:	∘ Yes	o No	if yes, Number	of spontaneous al	oortion:
How many vaginal deliveri	es have you had?	(Please cou	ınt stillbirths as w	vell as live births):	
How many cesarean delive	eries have you had	? {Please c	ount stillbirths as	well as live births	}:
How many of the deliveries	s resulted in a live	birth?:			
How old were you at the ti	me of your first live	birth? age			
How old were you at the ti	me of your last live	birth? age			
Prenatal diagnosis o Ye	s (N°) o	No If	yes, result:		
Modification of the disease	e after the pregnan	cy: O None	e o Worsen	ing o Improve	ement
Menopause: • Yes	s o No If ye	es, physiolo	gical menopause	e: o Yes o N	No age
Hormonal therapy: O Yes	s o No Mo	dification of	f the disease: ○ N	None o Worsenir	ng o Improvement

Physical activity: Have you ever regular	rly played a sport? o Yes o No
If yes, report the two most played sports:	
Sport (1):	○ Professional ○ Amateur From age: to age
Modification of the disease:	○ None ○ Worsening ○ Improvement
Sport (2):	○ Professional ○ Amateur From age: to age
Modification of the disease:	○ None ○ Worsening ○ Improvement
Physiokinesitherapy (PKT): • Yes	∘ No
If yes, Duration of PKT treatment: From ye	ear: to year
Modification of the disease: • None	e o Worsening o Improvement
Surgery: o Yes o No	
If yes, operation (1):	year:
Anesthesia: o General o Local	○ Epidural
Modification of the disease: • None	○ Worsening ○ Improvement
If yes, operation (2):	year:
Anesthesia: o General o Local	○ Epidural
Modification of the disease: • None	Worsening

## FSHD Comprehensive Clinical Evaluation Form (CCEF) –Evaluation Form Section 1

Family history (information from at least three generations should be collected):
"Was/is any of your relatives wheelchair bound?"
"Did/does any of your relatives have a posture like yours?"
"Was any of your relatives sleeping with half-open eyes?"
Other considerations
(pedigree attached)

## Part B NEUROLOGICAL EXAMINATION

Age at Onset of motor	· impairment		
Subjective age at onse	<u>et</u> (when subject has not	iced the appearance of motor impairment in his/her	daily
activities):	years old		
Site of muscle weaknes	s reported by patient at or	set	
Muscle group:			
Facial muscles:	○ Yes ○ No	Shoulder girdle muscles: $\circ$ Yes $\circ$ No	
Abdominal muscles:	○ Yes ○ No	Distal lower limb muscles: ○ Yes ○ No	
Pelvic girdle muscles:	○ Yes ○ No	Distal upper limb muscles: ○ Yes ○ No	
Asymmetry at onset:		If yes, ○ Right ○ Left	
Triggering events	○ Yes ○ No	If yes, event: (1)	_
		(2)	_
Objective evaluation o	of age at onset by specific	questions:	
Have your relatives nev	er noticed that you were s	leeping with half-open eyes?   Yes   No	
If yes, since age	_		
Can you drink with a str	aw?	∘ Yes ∘ No	
If no, since what age ha	ive you been unable to dri	nk with a straw?	
Can you to puff your che	eeks?	∘ Yes ∘ No	
If no, since what age ha	ave you been unable to put	f your cheeks ?	
Have you always been a	able to whistle?	∘ Yes ∘ No	
If no, since age	-		
Have you noticed the ap	opearance of winged scap	ula? ○ Yes ○ No	
If yes, since age	_		
Have you ever noticed t	thinness of upper arms or	a dropped shoulder? • Yes • No	
If yes, since age	_		
Have you ever noticed	asymmetry of the mouth of	r smile when looking in a mirror or in past photographs	from
childhood?		∘ Yes ∘ No	
If yes, since age	_		
Other observations:			

Duration (years) from onse	xt				
Recurrent/chronic pain:	<ul><li>○ Yes</li><li>○ No</li><li>If yes, since age</li></ul>				
Specify location					
Precocious muscle fatigue during the common daily activities,before the onset of muscle impairment:  O Yes O No If yes, since age  Specify location					
Other observations o Yes	s · No				
Face:					
Presence of:					
Widened palpebral fissure	s: Yes ONo				
Puckered lips: o Yes	∘ No				
Horizontal smile: o Yes	○ No				
Orbiculari oris hypokinesia	during speech: O Yes O No				
Dysartria: o Yes o	No				
Orbicularis oculi evaluation	n: o Normal (able to close heavily eyes)				
	o Partial (able to close eyes but incapable to close heavily eyes)				
	<ul> <li>Unable (unable to completely close eyes)</li> </ul>				
Ability to protrude lips: o	Normal o Partial Unable				
Ability to puff out cheeks (a	against no resistance):   Normal   Partial   Unable				
Asymmetric involvement o	f facial muscle: ○ Yes ○ No				
if yes, specify side					
Scapular girdle:					
Ability to abduct arms:	○ Whole (180°)				
	<ul> <li>Complete but abnormal (patient can rise arms above head but only</li> </ul>				
	by flexing the elbow or using the accessory muscle)				
	o Incomplete: >45° but <180° (specify if: o ≥90° or o <90°)				
	<ul><li>Incomplete: ≤45°</li></ul>				

# **Pelvic girdle:**Ability to climb

Ability to climb 4 stairs:	Without support		
	Without support but abnormally		
	○ With support (since age )		
	○ Unable (since age )		
Ability to walk:	Without support		
	<ul><li>With support (since age)</li></ul>		
	○ Unable (since age )		
Gait: o Normal	○ Waddling ○ Hyperlordotic ○ Steppage		
Ability to stand up from a ch	air: ○ Without support		
	○ With support (since age )		
	○ Unable (since age )		
Ability to rise from the floor:	○ Without support		
	○ With support (since age )		
	○ Unable (since age )		
Use of wheelchair: o Not	necessary o With manual control o With electric control o Bed bound		
Legs:			
Ability to walk on tiptoes and	d/or heels: o Normal o On tiptoes only o On heels only o Unable		
Beevor's sign: ○ Posit	ive		

Part C

Medical Research Council (MRC) score:

Scores range from 0 to 5, with .5 increments (e.g. 3, 3.5, 4, 4.5, etc)

MUSCLE	RIGHT MRC score	LEFT MRC score	ATROPHY Yes (right or left) /no
Extrarotator muscles of			
upper limb*			
Triceps*			
Biceps*			
Common finger extensors*			
Wrist extensors*			
Long fingers flexors*			
Wrist flexors*			
Gluteus maximus			
lliopsoas			
Biceps femoris			
Quadriceps			
Triceps surae			
Tibialis anterior			

(* Muscles to be considered for FS	HD score	"Upper limb	s involvement")	
Strength of neck extensors muscle	s: MRC sc	ore		
Weakness of pectoralis muscles:	o Yes	o No	If yes, ○ Right	o Left
Pectoralis muscles atrophy:	<ul><li>Yes</li></ul>	o No	If yes, ○ Right	<ul><li>Left</li></ul>

## PRESENCE OF FOLLOWING TYPICAL FEATURES:

Scapular winging at rest: • Ye (if yes, specify: • Symmet		or ○ Asymmetric winging ○ > right; ○ > left)		
Scapular winging on attempted (if yes, specify:   Symmetry		duction or forward flexion:   Yes   No  Asymmetric winging   right;   left)		
Horizontal clavicles:	0 0,	∘ Yes ∘ No		
Forward sloping of shoulders at	rest:	∘ Yes ∘ No		
Atrophy of pectoral muscles/ axillary creases:   Yes (> right; > left)   No  Sunken or flattened appearance of the chest:   Yes   No				
"Poly-hill sign" with neck, should				
	U°), with exte	ernal rotation of the shoulders :   Yes  No		
Hyperlordosis: O Yes O No				
Orbiculari oris hypokinesia durir	g speech:	○ Yes ○ No		
PRESENCE OF UNCOMMON	EATURES:			
Myotonic phenomenon:	∘ Yes	∘ No		
Rippling phenomenon:	o Yes	∘ No		
Eyelid ptosis:	<ul><li>Yes</li></ul>	∘ No		
Extra-ocular weakness:	<ul><li>Yes</li></ul>	∘ No		
Pharyngeal and lingual muscle	weakness (po	ersistent dysphagia): o Yes o No		
Bent syndrome:	o Yes	∘ No		
Early contractures:	<ul><li>Yes</li></ul>	∘ No		
(If yes, specify site		)		
Dropped head:	<ul><li>Yes</li></ul>	∘ No		
Pes cavus:	<ul><li>Yes</li></ul>	∘ No		
Myoglobinuria:	o Yes	∘ No		
Ogival palatus:	∘ Yes	∘ No		
Others:				

Creatine phosphokinase (CPK) (value of two blood assays separated by	at least	one m	onth):		
Normal range					
○ < 4x normal value (<1000 U/L)					
○ > 4x normal value (>1000 U/L)					
Instrumental evaluation					
Cardiac involvement (ECG, echocardiogram):					
Last ECG's report	_ (date: _	_/_	_/	)	
Last echocardiogram's report	_ (date: _	_/_	_/	)	
Electromyographic pattern of four limbs (detail the examinated muscles)	(date: _	_/_	_/	)	
○ Myopathic pattern (○ Proximal ; ○ Distal)					
○ Neurogenic pattern (○ Proximal ; ○ Distal)					
○ Mixed pattern (○ Proximal ; ○ Distal)					
Electroneurography of four limbs (detail the examinated nerves) (date: _	_//_		_)		
○ Normal ○ Abnormal					
Report of last pulmonary function tests (FVC, MIP, MEP, Cough peak flow	) (date	_/	_/	):	
Report of muscle biopsy (if available; please specify date and biopsied mu	scle)*: (d	ate_	_/	_ /	_)
Biopsied muscle:				_	
Report:					
Other genetic test previously performed (if available):					
*(please attach reports)				_	
Name of the Examiner:					

#### I - Facial weakness

- 0 no weakness
- 1 moderate weakness:

partial ability to do at least one of the following tasks:

- to close eyes
- to protrude lips
- to puff out cheeks
- 2 severe weakness;

unable to do at least one of the following tasks:

- to close eyes
- to protrude lips
- to puff out cheeks

#### II - Scapular girdle involvement

- 0 no involvement
- 1 mild involvement with no limitation of arm abduction
- 2 arm abduction > 45°
- 3 arm abduction < 45°

#### III - Upper limbs involvement \*

- 0 no involvement
- 1 at least two muscles affected with MRC >3
- 2 at least two muscles with MRC ≤ 3

\*The following 4 muscles will be assessed on each side: 1. triceps; 2. biceps; 3. common finger extensors and wrist extensors; 4. long finger flexors and wrist extensors. Only the weaker muscles will be considered for evaluation.

### IV - Legs involvement

The ability to walk on tiptoes and heels will be assessed on each side:

- 0 no involvement
- 1 unable to walk on tiptoes or heels (only one task impaired)
- 2 unable to walk on tiptoes and heels (two tasks impaired)

## V - Pelvic girdle involvement

- 0 no involvement
- 1 able to walk and to climb stairs without support but abnormally/ because of posterior leg muscle hypotrophy
- 2 able to walk unaided, to climb stairs or to stand up from a chair with support
- 3 able to walk unaided but unable to stand up from a chair or to climb stairs without support/ more than 12 seconds
- 4 able to walk with support
- 5 wheelchair bound

#### VI - Abdominal muscle involvement

- 0 no involvement
- 1 presence of Beevor's sign

FSHD	clinical	score:	
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	TYPICAL FEATURES	UNCOMMON FEATURES
ONSET OF MUSCLE WEAKNESS      AXIAL MUSCLES INVOLVEMENT	□Facial weakness of orbicularis oculi or oris □Scapular weakness with alterated ability to abduct arms □Humeral muscles (biceps/triceps)	□Distal lower limbs onset with triceps surae weakness □Distal upper limbs onset □Pelvic girdle onset
	□Hyperlordosis □Beevor's sign	□Camptocormia □Dropped head
FACIAL INVOLVEMENT      A. SCAPULAR GIRDLE INVOLVEMENT	□Weakness of Orbicularis oculi (facial score ≥1) □Weakness of Orbiculari oris (facial score ≥1) □Impairment of upper limb abduction with	□Weakness of extra-ocular muscles □Weakness of masticatory muscles (persistent dysphagia) □Isolated distal
	winged scapula or limitation of forward flexion (scapular FSHD score ≥1)	upper limb muscle weakness  □Impairment of arms abduction (<90°) without winged scapula at rest and/or on attempted shoulder abduction or forward flexion
5. PELVIC GIRDLE INVOLVEMENT		☐Isolated and/or prevailing pelvic girdle muscle weakness
6. LOWER LIMBS INVOLVEMENT	□Weakness of tibialis anterior muscles weakness	□Early gastrocnemius and/or soleus atrophy/weakness
7. BLOOD CPK LEVEL (at least two samples 1 month apart)	□Normal range □< 4x normal value (<1000 U/L)	□Value > 4x normal value (>1000 U/L)
8. OTHER SIGNS	□Shoulders winging on attempted shoulder abduction or forward flexion □Horizontal clavicles □Forward sloping of the shoulders at rest □Sunken or flattened appearance of the chest □Atrophy of pectoralis muscles □Orbiculari oris hypokinesia during speech	□Myotonic phenomenon □Rippling □Eyelid ptosis □Extra-ocular muscle weakness □Early muscle contractures □Cardiomyopathy □Early respiratory insufficiency (Non Invasive Ventilation, NIV; FSHD score <12) □Pes cavus □Myoglobinuria

*Importantly*: Indicate the presence of comorbidities / results of previous injuries / illnesses that can possibly affect the neurological examination:

Extra-muscular involvement: □hearing loss, □epilepsy, □retinal involvement, □cognitive impairment

#### **CATEGORY A**

## Category A1

Severe facial weakness (unable **both** to close eyes **and** to protrude lips) + impairment of upper limb abduction with winged scapula (scapular FSHD score ≥1) + absence of uncommon features

## Category A2

Facial weakness (upper **and** lower facial weakness) + impairment of upper limb abduction with winged scapula (scapular FSHD score ≥1) + absence of uncommon features

## **Category A3**

Facial weakness (upper **or** lower facial weakness) + impairment of upper limb abduction with winged scapula (scapular FSHD score ≥1) + absence of uncommon features

## **CATEGORY B**

## Category B1

Impairment of upper limb abduction with winged scapula (scapular FSHD score ≥1), no facial weakness + absence of uncommon features

## **Category B2**

Facial weakness (facial FSHD score ≥1), no impairment of upper limb abduction + absence of uncommon features

## **CATEGORY C**

### Category C1

Subject with presence of at least one typical sign + FSHD score =0

## Category C2

Subject without signs of muscle weakness + FSHD score =0

#### CATEGORY D

## **Category D1**

Subject fulfilling criteria of categories A1, A2, A3, B1, B2 + at least one uncommon feature

#### Category D2

- -Subject fulfilling criteria of categories C1 or C2 + at least one uncommon feature
- -Subject no fulfilling criteria of any of the above categories