

## MTM & CNM Patient Registry

Questionnaire for patients / parents of patients / symptomatic female carriers

### YOUR DOCTOR

There are two parts to this questionnaire; one that you fill in yourself, and one that we will ask your doctor to fill out for you. To do this, your doctor will use their own login and will be able to see the information that you provide, but they will not be able to edit it. You will be able to see (but not edit) the information they provide about you. If you see any information provided by your doctor that you believe is incorrect, please let the Registry Curator know at [mtmcmregistry@newcastle.ac.uk](mailto:mtmcmregistry@newcastle.ac.uk).

**Please select the name of the main doctor treating your neuromuscular condition:**

[Drop-down list]

**If your doctor is not listed above, please tell us their details so we can invite them to take part. If you don't have a neuromuscular specialist, this could be a family doctor such as a GP.**

**Name of doctor**

[Free text field]

**The hospital or clinic where you see your doctor:**

[Free text field]

**Any contact details you have for the doctor (email, telephone number, etc.):**

[Free text field]

**Please declare your consent by reading and agreeing to the statement below:**

I consent for my doctor named above to enter my medical data into the MTM & CNM Patient Registry. I consent to my named doctor having full read-only access to the data I have entered into the Registry.

[Tick field]

### MEDICAL INFORMATION

Knowing the precise details of an individual's mutation in an MTM or CNM gene will add to our understanding of these conditions and is likely to be important for developing treatments.

If you have the genetic report yourself (or any other document that includes details of the genetic diagnosis) please click on the following link to upload the document:

[Upload document \(link opens in new window\)](#)

Please also enter the name and contact details of the hospital, medical centre or genetics centre where the genetic test was performed in the field below. In case anything is missing, we can easily obtain the correct document for you from them.

If you do not have the genetic report yourself (or the results of the genetic test are pending), please enter the name and contact details of the hospital, medical centre or genetics centre where the test was performed in the field below. We will then contact them and ask for a copy of the report.

If a genetic test has not been performed yet, please contact your doctor, as knowing the details of the mutation is very important for an appropriate treatment.

If a genetic mutation hasn't been confirmed in one of the MTM/CNM genes, you will need to have had a pathological diagnosis of myotubular/centronuclear myopathy via a muscle biopsy. Please note that it is quite likely that only those patients with a confirmed genetic mutation will be able to take part in clinical trials to assess potential treatments for these conditions. However, those without a confirmed genetic diagnosis may be able to take part in research projects to find new genes for MTM or CNM.

For more help and information on how to be tested, speak with your doctor or geneticist.

### **Status of the genetic report**

- I have the genetic report and will send / have sent a copy
- I do not have the genetic report myself but the genetic test results should be available
- The results of the genetic test are pending
- A genetic test has not been performed
- A genetic test has been performed but no mutation was found

**If a genetic test was performed, please give the name and location of the testing hospital, medical centre, or laboratory:**

[Free text field]

**Has a muscle biopsy been performed?**

- Yes
- No
- I don't know
- Not specified

**If you answered yes, please tell us the name of the hospital where it was performed:**

[Free text field]

**If you answered yes, please tell us the location (city/country) of the hospital where it was performed:**

[Free text field]

**Was the myotubular or centronuclear myopathy caused by a mutation in:**

- MTM1 (x-linked myotubular myopathy)
- DNM2 (dynamin 2)
- BIN1 (amphysin II)
- RYR1 (skeletal muscle ryanodine receptor)
- TTN (titin)
- Don't know
- Other (please specify below)

**Other mutation:**

[Free text field]

**Diagnosis, according to the specialist:**

- Myotubular Myopathy (MTM)
- Centronuclear Myopathy (CNM)
- Other (please specify below)

**Other diagnosis:**

[Free text field]

**Please provide the month and year of the most recent neuromuscular examination, if known:**

[Select month] [Select year]

**MOTOR FUNCTION**

Motor function describes your ability to move your body. Sitting independently means that you can stay in a sitting position for several minutes, without being supported by another person or a stabilising device (such as a chair back, corset or brace).

Walking independently means without being supported by another person or stabilizing device (such as a walking frame, calipers or walking canes).

**What is the best motor function ever achieved?**

- Able to walk without support
- Able to walk with support
- Able to sit without support
- Never able to walk or sit independently
- I don't know
- Not specified

**From and until what age was this best motor function achieved?**

This motor function was achieved from the age of [] years and [] months up to the age of [] years and [] months (leave the last two fields blank if this is currently still the case).

**What is the current motor function?**

- Able to walk without support
- Able to walk with support
- Cannot walk but can sit independently (without support)
- Cannot walk or sit independently
- I don't know
- Not specified

**From what age has this level of motor function been achieved?**

This motor function has been achieved from the age of [] years and [] months.

**Does [name] currently use a wheelchair?**

- Always uses a wheelchair
- Sometimes uses a wheelchair, but able to walk short distances independently

- Always uses a wheelchair
- I don't know

**If applicable:**

Started to sometimes use a wheelchair for long distances at the age of [] years and [] months.

Started to always use a wheelchair to get around at the age of [] years and [] months.

**How easily is [name] able to move his eyes?**

This could be full range movement, or some limited movement where you can follow an object with your eyes, even if you can't move your head to look. If you are uncertain, please ask a medical professional such as your physiotherapist or doctor for advice.

- Full range movement of the eyes
- Some limited eye movement
- No eye movement
- I don't know
- Not specified

**Has [name] had spinal surgery for scoliosis?**

Some MTM or CNM patients suffer from weakness in their back muscles which results in a deformation or 'bending' of their spine called scoliosis. In order to stabilise the spine, they often have surgery done. In case such a surgery is planned, but has not yet been performed, please select 'No'

- Yes
- No
- I don't know
- Not specified

**If you answered 'Yes', please provide the age when scoliosis surgery was performed.**

Scoliosis surgery was performed at the age of [] years and [] months.

**OTHER FUNCTIONS**

**Was ventilation required at birth?**

Ventilation means breathing support from a mechanical ventilation device in the form of either non-invasive ventilation via a face or nose mask, or invasive ventilation via a tracheostomy (an operation to make an incision in the windpipe) or endotracheal tube (a breathing tube is inserted into the windpipe). Ventilatory support can be used either all day or for just a few hours.

- Yes
- No
- I don't know
- Not specified

**What type of ventilation is currently used?**

- Non-Invasive Ventilation (NIV) via a nose or face mask

- Invasive ventilation via endotracheal tube or tracheostomy
- No ventilation is currently needed
- Don't know

**How many hours is ventilation currently used for?**

- Full time (at least 16 hours per 24 hours)
- Part-time (less than 16 hours per 24 hours), while sleeping and while awake
- Part-time (less than 16 hours per 24 hours), but only while sleeping
- Ventilation is sometimes used as therapy, i.e. not regularly
- No ventilation is used
- I don't know
- Not specified

**If ventilation is used, from what age has it been required?**

Ventilation has been required from the age of [] years and [] months.

**How many times have antibiotics for chest infections been required over the past 12 months?**

- None required
- Between 1 and 3 times
- Between 4 and 6 times
- More than 6 times
- I don't know
- Not specified

**Is a gastric or nasal tube currently used for feeding?**

MTM/CNM patients sometimes have trouble eating and swallowing food orally (by mouth) and therefore have to be fed through a feeding tube. A gastric feeding tube (also called a G-tube or a Peg) is one that goes directly into the stomach through an incision in the tummy. A nasal feeding tube (also called nasogastric tube) is one that goes through the nose and down into the stomach.

- Yes, a feeding tube only
- Yes, a feeding tube with some oral feeding
- No
- I don't know
- Not specified

**Has [name] ever had an ABNORMAL echocardiogram (ECHO/Sonogram) result?**

Many neuromuscular patients are routinely required to have regular echocardiograms (ECHO / Sonogram) and electrocardiograms (ECG). Heart problems in myotubular myopathy and centronuclear myopathy patients are very rare, and it would be unusual for these tests to be 'abnormal'. However, it would still be helpful if you could complete the questions.

- Yes
- No
- No echocardiogram has been done
- I don't know
- Not specified

**Has [name] ever had an ABNORMAL electrocardiogram (ECG) result?**

- Yes
- No
- No electrocardiogram has been done
- I don't know
- Not specified

#### **ADDITIONAL INFORMATION**

**Do you know of anybody else in [name]'s family who has been diagnosed with myotubular myopathy, centronuclear myopathy or has similar symptoms?**

Since myotubular myopathy and centronuclear myopathy are inherited conditions, it is important for us to know if there are any relatives with similar symptoms or the same diagnosis. If so, please ask them to consider joining this registry, if they haven't already done so.

- Yes
- No
- I don't know
- Not specified

**Are [name]'s biological parents related by blood as second cousins or closer?**

- Yes
- No
- I don't know
- Not specified

**Are [name]'s details registered with any other MTM or CNM-related registry or natural history study?**

Knowing whether you are registered elsewhere will help us to be accurate when we are estimating the prevalence of these conditions.

- Yes
- No
- I don't know
- Not specified

**If you answered 'Yes', please tell us which ones:**

- Congenital Muscle Disease International Registry (CMDIR)
- International Family Registry for Centronuclear and Myotubular Myopathies (Joshua Frase Foundation)
- I don't know
- Other

**If you selected 'Other' please name the registry / registries:**

[Free text field]

**Has [name] ever taken part in a clinical trial?**

This will help us track the development and availability of new therapies and provide information to help with planning and feasibility studies for new clinical trials.

- Yes, currently participating in a clinical trial
- Yes, previously participated in a clinical trial
- No, never participated in a clinical trial
- I don't know
- Not specified

**If you answered Yes, please tell us the full name of the clinical trial.**

[Free text field]

**Please tell us how you heard about this registry.**

This helps us to concentrate our efforts on the best ways to find other people who might want to join the registry.

- My doctor or other healthcare professional, e.g., physiotherapist, genetic counsellor)
- A patient support group (please tell us which one)
- Information included on a genetic test result
- A newsletter (please tell us which one)
- At a conference or other event (please tell us which one)
- Through social media, e.g., a Facebook group (please tell us which one)
- Word of mouth, from friends or family
- Other (please specify)

**Details**

[Free text field]

**Would you like to receive general email communications relevant to Myotubular and Centronuclear Myopathy, such as newsletters, research results and standards of care?**

- Yes
- No
- Not specified

**If you have any feedback or comments on the registration process, please tell us here**

[Free text field]

## **DOCTOR QUESTIONNAIRE**

The individual named above has provided consent for you to enter their medical data into this registry. They will be able to view (but not edit) any information you provide, and you will be able to view (but not edit) the information they have provided. If you see any information provided by them

that you believe is incorrect, please let the Registry Curator know at [mtmcmregistry@newcastle.ac.uk](mailto:mtmcmregistry@newcastle.ac.uk).

## **DIAGNOSIS**

### **Clinical diagnosis**

- Myotubular Myopathy
- Female carrier of XLMTM
- Centronuclear Myopathy
- Other (specify - free text)
- Unknown

### **Has the diagnosis above been genetically confirmed?**

- Yes
- No
- Unknown

*If 'Yes':*

**Upload genetic report (if available and if not provided already by participant.)**

**Enter genetic mutation using format 'Gene c. .... p.' (For example RYR1 c.476G>A p.Arg177Cys)**

*If 'No':*

### **Is there a biopsy report available that is supportive of a CNM diagnosis?**

- Yes and I will upload
- Yes but I don't have it
- No
- Unknown

**If you have it, please upload a copy**

### **Clinical features**

#### **Best motor function ever achieved (use definitions from WHO Motor Milestones):**

- Walking alone (without assistance)
- Walking with assistance
- Sitting without support
- Unable to walk or sit independently
- Unknown

#### **At what age was this level of motor function achieved?**

- [Numerical field] (YY)
- Unknown

#### **Are they still able to achieve this?**



- Yes (*skip to 'Was ventilation required at birth?'*)
- No
- Unknown

*If No:*

**At what age was it lost?**

- [Numerical field] (YY)
- Unknown

**Current motor function (use definitions from WHO Motor Milestones):**

- Walking alone (without assistance)
- Walking with assistance
- Sitting without support
- Unable to walk or sit independently
- Unknown

**At what age was this level of motor function achieved?**

- [Numerical field] (YY)
- Unknown

**Was ventilation required at birth?**

- Yes
- No
- Unknown

**Is ventilation currently used?**

- Yes
- No
- Unknown

*If Yes*

**From what age has ventilation been used?**

- [Numerical field] (YY)
- Unknown

**Current ventilation type**

- IV (Invasive ventilation)
- NIV (Non-Invasive Ventilation) via BiPAP
- NIV (Non-Invasive Ventilation) via CPAP
- Unknown

**Current ventilation frequency**

- Full-time ( $\geq 16$  hours per 24 hours)
- Part-time ( $< 16$  hours per 24 hours), both awake and sleeping
- Part-time ( $< 16$  hours per 24 hours), only while sleeping
- Unknown

**Thank you for your contribution to the registry. We will contact you in 6 months and ask you to either update this record or confirm that nothing has changed.**

If you have any questions or comments please contact the Registry Curator at [mtmcmregistry@newcastle.ac.uk](mailto:mtmcmregistry@newcastle.ac.uk).