ISSUE 8
https://www.dm-registry.org.uk/

UK Myotonic Dystrophy Patient Registry Newsletter

Accelerating research and improving care in myotonic dystrophy

Please remember to update your details and tell your doctors about the registry – it's important for us all to work together.

Inside this Issue:

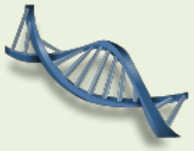
Welcome to the eighth newsletter of the UK Myotonic Dystrophy Patient Registry. We hope you are all staying safe!

As of March 2021 there are **796** participants registered with the UK Myotonic Dystrophy (DM) Patient Registry. This makes the UK registry one of the larger national DM registries in the world! A huge thank you is in order for all of the patients/caregivers, clinicians, researchers and patient organisations who have supported and contributed to this achievement.

1. Please provide your genetic report where possible

Your genetic diagnosis is one of the most important pieces of information within the Registry. This is currently provided by your neuromuscular consultant if you see one. However, if you do not see a neuromuscular (NM) consultant/neurologist (though we recommend you do), it is still important we have this information. **If you have a copy of your genetic report this can be sent directly to the Registry curator.** Alternatively you can speak to your NM consultant/neurologist at your next appointment, they should be able to provide you with a copy of the report if you have been tested. **Please remind your NM doctor/neurologist about the registry and updating this aspect of it on your behalf.**

Most studies and clinical trials in DM looking for participants will only include people with **genetically confirmed** DM1 or DM2.



REMINDER - if your doctor does not appear on the registry as a selected healthcare professional then please update them about the registry at your next appointment, and to contact the registry curator for further information.

2. New studies and research updates from the registry

Pregnancy and fertility in NMD survey - complete ★

An online survey was developed by Newcastle University.

The aim of the survey was to explore the challenges faced by women with an NMD for conceiving, during pregnancy and delivery, and in caring for young children.

17% of participants (75) had DM and were from the registry

Swallowing difficulties in NMD survey - complete ★

An online survey was developed by The National Hospital for Neurology and Neurosurgery and University College London.

The aim of the survey was to understand the experiences and priorities of individuals (and their caregivers) living with an NMD, and swallowing difficulties in the UK.

74% of DM participants heard about the survey via the registry.

Genetic Alliance patient and caregiver survey – complete ★

An online survey was developed by Genetic Alliance to understand the experience of the rare disease patient or caregiver, so that they can detect future changes brought about by the new UK Rare Diseases Framework (formerly known as the UK Strategy for Rare Diseases).

A summary of the new UK Rare Diseases Framework can be found here.

Digital endpoints in neuromuscular disease (NMD) survey – complete ★

An online survey was developed by Parent Project Muscular Dystrophy and a French company, Sysnav.

The aim of the survey was to collect patients, families and caregivers' opinions, expectations and concerns regarding the use of the wearable device, ActiMyo in NMD clinical trials and the clinical meaningfulness of its potential outputs.

105/403 patients who took part had DM and were recruited partly through the registry. There were also 9 DM caregivers who took part.

PREFER project interviews and focus group

Giving patients a voice in the development of treatments means we first need to listen to them. The PREFER project develops recommendations for when and how that voice can be heard through a structured approach known as patient preferences. This work has already begun for patients with diseases such as DM1.

Information about the PREFER project interviews and focus groups were circulated through the registry in 2019. **There were 67 DM1 patients or caregivers who expressed interest in this study with 72% hearing about the study via the registry.**

The PREFER project team plan to produce a summary of the recent results from these interviews/focus groups, which should be shared with the registry soon. The recent scientific publication can be found here.

To see a list of the research projects and clinical trials that the registry has supported since 2012, please visit the new Projects supported section of the website.

3. DM drug development

There are currently a number of drugs in development for the treatment of DM. There are **5** drugs in clinical trials, and almost **40** in pre-clinical development (being tested in cell and animal models).

You can find these compiled on the **UK DM Patient Registry website** with further details below on a number of these *(the registry does not endorse these).* To understand more about how the drug development process works, MDUK have kindly provided this **resource**.

Recent updates

AMO Pharma – *tideglusib* (phase II/II)
AMO Pharma have started their **phase II/III clinical trial** of tideglusib for patients aged 6-16 years with congenital myotonic dystrophy. Tideglusib is given as a liquid solution, and is expected to work by blocking the activity of an enzyme in the brain called glycogen synthase kinase 3beta (GSK3β).

Lupin Pharmaceuticals – *mexiletine* (phase III)
Lupin Pharmaceuticals plan to begin their phase III clinical trials of mexiletine in **6-18 year olds** with myotonic disorders such as DM1 and DM2, and **in adults**. Mexiletine is a capsule that can help decrease muscle stiffness by reducing the time taken for muscles to relax.

Expansion Therapeutics – ERX-963 (phase I)
Expansion Therapeutics completed a phase I clinical trial of their drug ERX-963 for DM1 in 2020.

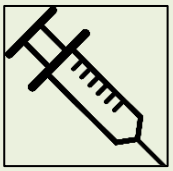
Recent trial results show that ERX-963 was safe, but there was no evidence to show that the drug improved any measures of sleepiness or alertness in DM1.

mRNA – carries information from the DNA to the protein making cell machinery, known as ribosomes

DMPK – the gene that provides instructions to make the protein, *myotonic dystrophy protein kinase.*

MBNL – a protein known as *muscleblind* that has a key role in the development of DM.

Companies close to clinical trials
(click on the company name for more information about their drug)



Dyne Therapeutics
- Developed biological therapy (injection).
- Aim to reduce DMPK mRNA, to potentially stop or reverse the disease.

Avidity Biosciences
- Developed biological therapy (injection) called AOC-1001.
- Aim to reduce DMPK mRNA, to potentially stop or reverse the disease.

Harmony Biosciences
- Developed tablet called pitolisant which is already approved to treat narcolepsy/cataplexy
- Aim to improve daytime sleepiness and fatigue

ARTHEx
- Developed injection called ATX-01.
- Aim to increase MBNL expression to treat muscle dysfunction.

PepGen
- Developed injection called PGN-EDODM1.
- Aim to block the interaction of MBNL1 and reduce myotonia.

REMINDER - If the registry is used to promote or assist with the recruitment for a clinical trial or research study, all eligible patients will be contacted by the registry curator via email.

4. Previous and upcoming events

In September 2020 – the registry Steering Committee met for their annual meeting.

- Most members were in attendance (virtually) and this was a very productive meeting.
- We discussed the current registry operations and the plans for 2021. This also involved discussing a refresh for the registry Steering Committee. We welcome physiotherapist **Jassi Sodhi**, clinical geneticist **Dr Mark Hamilton** and consultant neurologist, **Dr Channa Hewamadduma**!

In December 2020 - the registry was discussed at the **TREAT-NMD Global Database Oversight Committee (TGDOC)** meeting with registry curators across the globe, to discuss best practice and future plans.

International Myotonic Dystrophy Awareness Day (every September 15th)

The declaration of International Myotonic Dystrophy Day is a collaboration of dozens of DM groups and organisations (including the UK DM Patient Registry) from around the globe – each dedicated to helping raise awareness of the condition in their local geographies on **September 15th 2021** and beyond. These include organisations in the UK, USA, Switzerland, the Netherlands, Japan, Italy, Germany, France, Greece, Denmark, Canada, Belgium and Australia.

Learn more about the international organisations working together to raise awareness, learn how to join the movement, and find DM resources, **here.**

For those who may have missed it in February, you can watch the Share4Rare webinar titled '**How to navigate psychological care in neuromuscular conditions' here.** Share4Rare (https://www.share4rare.org/) is an EU funded project which is developing a global platform for, and with rare disease patients and carers.

The **UK Neuromuscular Translational Research Conference 2021** will be held online on 25th and 26th March 2021. The registry plans to present a poster at this meeting.

Upcoming events

The 2021 Myotonic Dystrophy Foundation (MDF) Annual Conference is currently scheduled for 10th and 11th September 2021. The registry plans to present a poster at this meeting.

Each month until the 2021 MDF Annual Conference, companies working on treatments for DM will sit down with the community to share their progress and answer your questions in real time. If you are interested in learning more about these please visit **here** to register for the upcoming meetings and to see the previous ones.

5. New and future registry developments

Publications

The registry has been involved in supporting a variety of clinical trials and research studies since 2012. Please find below a range of publications involving the registry, and projects that the registry has supported (updated as of March 2021). To view these, click on the link in the study title

Jimenez-Moreno, A.C., van Overbeeke, E., Pinto, C.A., Smith, I., Sharpe, J., Ormrod, J., Whichello, C., de Bekker-Grob, E.W., Bullok, K., Levitan, B., Huys, I., de Wit, G.A. and Gorman, G. 'Patient Preferences in Rare Diseases: A Qualitative Study in Neuromuscular Disorders to Inform a Quantitative Preference Study'. *Patient* (2021).

Horrigan, J., Gomes, T.B., Snape, M., Nikolenko, N., McMorn, A., Evans, S., Yaroshinsky, A., Della Pasqua, O., Oosterholt, S. and Lochmuller, H., (2020). 'A Phase 2 Study of AMO-02 (Tideglusib) in Congenital and Childhood-Onset Myotonic Dystrophy Type 1 (DM1)'. *Pediatric Neurology, 112*, pp.84-93.

Landfeldt, E., Nikolenko, N., Jimenez-Moreno, C., Cumming, S., Monckton, D.G., Faber, C.G., Merkies, I.S., Gorman, G., Turner, C. and Lochmüller, H., (2020). 'Change over time in ability to perform activities of daily living in myotonic dystrophy type 1'. *Journal of neurology, 267*(11), pp.3235-3242.

Landfeldt, E., Nikolenko, N., Jimenez-Moreno, C., Cumming, S., Monckton, D.G., Faber, C.G., Merkies, I.S., Gorman, G., Turner, C. and Lochmüller, H., (2020). 'Activities of daily living in myotonic dystrophy type 1'. *Acta Neurologica Scandinavica, 141*(5), pp.380-387.

In the past 12 months, the registry has made some developments to provide patients with more communications and potentially increased research involvement.

The registry website now has a new **Publications** page which includes all of the research publications that have involved the UK DM Patient Registry. To date there have been 20 publications.

New developments coming to the registry and registry website:

- List of >25 projects that the registry has supported since 2012.
- Linkage to the **Newcastle Research Biobank for Rare and Neuromuscular Diseases**. This is a repository that creates a 'bank' of samples including: DNA and cells obtained from blood, urine, saliva, skin, muscle and nerve. Being able to link the registry data anonymously to the biobank could help support future research projects and help us understand more about DM.

The registry is also always looking for feedback on its communications, and on what type of information participants on the registry may like to see from the registry in the future.

Top registry tips:

- Remind your NM doctor/neurologist that you are on the registry if they have not entered your genetic information on there.
- Ask your doctor to contact the registry if they are not listed on there.
- Remember to log in every 12 months in case any of your details have changed (this includes your contact details too).

Please feel free to share information about the registry with anyone you may know who has DM. Thank you very much for being a part of the UK DM Patient Registry and please take care during these difficult times.

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Telephone: 0191 241 8640 (we are still working from home so it would be preferable to email us)

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