

# Inspiring Anniversary Highlights

## Co-creating Patient Experience Data: Insights from Non-Dystrophic Myotonia (NDM) and Myotonic Dystrophy (DM) Collaboration

### Why Patient Experience Data are so important

Patient experience data (PXD) has become a cornerstone of meaningful patient engagement. Co-creation of such data, carried out jointly by patient experts, industry teams, and facilitation partners, ensures that evidence reflects the real lived experience of those affected, **particularly in rare diseases where traditional clinical datasets are inherently limited.** Health systems increasingly rely on patient-generated insights to guide regulatory, clinical, and access decisions. This is where structured collaboration becomes essential to producing credible, high-impact outcomes.

### Understanding Non-Dystrophic Myotonia (NDM) and Myotonic Dystrophy (DM) Through Co-Created Evidence (2017–today)

Since 2017, admedicum has collaborated with Lupin Neurosciences and patient advocates across Europe, the UK, and the United States, to co-create high-quality patient experience data on NDM and DM. This collaboration involved people living with NDM and DM, caregivers, clinical experts, patient organisations, and Lupin’s Medical Affairs team, all working together to map disease burden, support treatment access, and document unmet needs in systematic, internationally coordinated projects. Patient experience data, suitable for clinician and regulatory use, were peer-reviewed and presented at international conferences.

#### RevEal the burden on daily life for myotonic dystrophy patients due to myotonia: preliminary results of the ENSA survey



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**Introduction/ Objectives:**

- Myotonic dystrophy (DM) types 1 and 2 (DM1 and DM2) have many burdensome symptoms that negatively affect quality of life.
- Although recognition is well documented, symptoms of DM do not appear to be fully understood by patients, their caregivers, or healthcare providers.
- ENSA was a patient-reported, international, online survey to investigate the impact of myotonia on people with DM.
- ENSA also sought to assess the first symptoms of DM that prompted a clinical consultation.
- This is a preliminary presentation of key data.

**Method:**

- Study population:** Adults (18 years with DM for caregivers on their behalf) participated in ENSA, which was conducted as an outreach campaign.
- ENSA was open globally between February and May 2023.
- Participants were recruited via patient advocacy groups, social media, and direct outreach.
- Participants were asked if they had undergone genetic testing to confirm their DM diagnosis, although genetic confirmation was not mandatory for inclusion.
- Those who did not require a history of myotonia in order to participate.

**Survey structure:**

- Anonymized online survey that explored DM symptom onset, symptoms that prompted the DM clinical consultation time to medical consultation, myotonia frequency, severity and management.
- Symptom impact was measured on a 5-point scale (1: none/not at all, 5: unbearable)
- Myotonia management treatment strategies were explored broadly.
- ENSA did not investigate specific treatment strategies for myotonia management after consultation with healthcare providers.

**Analysis:**

- Data presented as n, N, median, median range.

**Results:**

- Demographics:** ENSA was completed by 365 people in 23 countries, most participants were in the USA (52.3%), N=198 (54.2%) were women.
- Median (range) age of respondents: 49.8 (22-82) years.
- N=32 (8.8%) of surveys were completed by caregivers, on the behalf of their patients.
- N=261 (72%) of respondents had DM1.
- N=104 (28.8%) of respondents had DM2.
- N=153 (42%) respondents had DM1 or general myotonic myopathy.
- N=212 (58%) respondents whose DM1 diagnosis was confirmed by genetic testing.

**Common symptoms:**

- Myotonia, muscle weakness (lower or upper body), gastro-intestinal symptoms and related sleep often prompted the first clinical consultation about DM (Figure 1).
- Muscle weakness and myotonia were the most common symptoms in other parts of the survey (Figure 2).

**Figure 1: Myotonia was the most common symptom to prompt a first clinical consultation about DM**

**Figure 2: Top 5 frequent symptoms affecting respondents at time of survey (N=362)**

**Figure 3: Myotonia history: Experiencing currently**

**Figure 4: Frequency of (A) upper body myotonia, DM1; (B) lower body myotonia, DM2 (presented as all respondents per percentage)**

**Figure 5: 2017/20 (56%) respondents who experienced myotonia had never used drug treatment for myotonia, used (Table 1)**

**Table 1: Few respondents with myotonia said that they had received any drug treatment for this symptom**

Myotonia treatment prescribed	DM1 (n=261)	DM2 (n=101)
Yes	n=12 (4.6%)	n=7 (6.9%)
No	n=249 (95.4%)	n=94 (93.1%)

**Figure 6: Most common reasons for not receiving drug treatment for myotonia (N=12) more than one answer permitted, size of text reflects number of responses**

**Myotonia well managed without drugs**

**My doctor never offered a drug treatment**

**Other**

**Concerned about side-effects of myotonia drug**

**DM diagnosis and treatment satisfaction**

**DM diagnosis:** 52% of respondents were satisfied with their DM diagnosis.

**DM treatment:** 52% of respondents were satisfied with their DM treatment.

**Conclusion:**

- ENSA survey findings show that myotonia is a debilitating symptom experienced by most people with DM.
- Diagnosis, despite 3 years, affect people with DM and especially DM2, such delays are typical for rare diseases, including genetic testing.
- Despite myotonia being one of the most common symptoms to trigger a clinical consultation and frequently experienced, it is rarely treated.
- Other common symptoms such as muscle weakness, gastro-intestinal symptoms, and related sleep were also reported.
- ENSA patient-reported survey findings indicate that myotonia is a major symptom of DM and one of the top 5 that they want to improve the burden – and potential treatment – of myotonia are under-recognized, both by physicians and by people affected by DM.

The partnership resulted in several landmark outputs: First and foremost, The European patient survey was an important component for supporting the EMA's decision to [maintain the orphan-drug-status](#) of Mexiletine for NDM in November 2018. Following that starting point, further outputs resulted in a burden-of-disease survey, a multi-country study on treatment access barriers, and an international patient-reported survey on the impact of myotonia in DM. These studies, co-created with patient representatives from the earliest design steps through dissemination, have contributed to the advancement of global understanding of NDM and DM.

### **Perspectives from the Collaborators**

*“As regulatory and HTA bodies increasingly integrate patient experience into decision making, co creation models are becoming essential in rare neuromuscular diseases. These approaches expand the understanding of disease burden beyond conventional clinical endpoints and ensure that patient experience meaningfully informs regulatory and development decisions.”*

**- Alla Zozulya Weidenfeller, Head Lupin Medical Affairs Neurosciences**

*“Lived experience isn't just anecdotal - it's essential. When researchers meaningfully engage patients, they gain insights that can fundamentally change how studies are designed, how outcomes are measured, and how successful a therapy can be in everyday life.”*

**- Janet Stone, Epidemiologist (MPH) and Board-Certified Patient Advocate specializing in non-dystrophic myotonia (NDM)**

*“Complex, rare diseases such as Myotonic Dystrophy are often not fully understood and, because of the familial burden, are subsequently under-represented. Ensuring the patient voice is heard, and lived experience is understood, is essential for making meaningful differences to the community and vital for accurately representing this heterogenous cohort through the drug development and regulatory journey.”*

*“In rare and complex conditions, the lived experience of the patients and their carers is fundamental to ensure that new treatments focus on the symptoms that are actually important to the patients. This work demonstrates that conditions with differing medical causes can benefit from an effective collaboration of organisations looking at the impact of shared symptoms in the real world.”*

**- Emma-Jayne and Peter Ashley, Founding Trustees, Cure Myotonic Dystrophy UK Charity**

