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Baseline Characteristics of the First 100 Study Participants With Multifocal Motor Neuropathy in the iMMersioN Study

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BACKGROUND

Multifocal Motor Neuropathy (MMN)

- MMN is a rare, peripheral, immune-mediated, chronic neuropathy characterized by progressive and disabling asymmetric limb weakness without sensory loss[1–3]
- MMN is caused by IgM autoantibody-mediated complement activation, motor nerve conduction block, and axonal degeneration[1–3]
- Patients with MMN typically have a normal life expectancy; however, ≤20% of patients experience severe disability, predominantly in the upper limbs[3]
- Patients living with MMN report broad impacts on their daily lives, work, social life, and overall well-being[4]

iMMersioN Study Rationale

- Due to the low prevalence of the disease (at least 0.6 per 100,000 individuals),[1,3] observational data on patient experience and management of MMN in clinical practice are usually limited to small cohorts and retrospective analyses
- There is an opportunity to further understand MMN diagnosis, disease course and management, and to characterize the healthcare resource use of patients

STUDY DESIGN

FIGURE 1 iMMersioN (NCT05988073): A Multicenter, Prospective, Longitudinal Study in Adult Participants With MMN

*Optional visit.

KEY ELIGIBILITY CRITERIA

INCLUSION CRITERIA

- At least local legal age of consent for clinical studies when signing the informed consent form
- Capable of providing informed consent to participate in the study and complying with protocol requirements
- Diagnosis of MMN based on the 2010 EFNS/PNS MMN criteria by a neuromuscular specialist or neurologist

EXCLUSION CRITERIA

- Participation in any clinical trial with an investigational medicinal product
- Presence of other medical condition that could affect the assessment of MMN

OBJECTIVE AND METHODS

Objective

To characterize disease course, management, and burden on adult patients with a new or existing MMN diagnosis in the iMMersioN (NCT05988073) global, prospective, longitudinal study

Methods

- Outcome measures (including impact on health-related quality of life) will be assessed for up to 37 months while participants receive standard-of-care treatments:
  - MMN Rasch-built Overall Disability Score (MMN-RODS) [range: 0–50]
  - Modified Medical Research Council-10 sum score (mMRC-10) [range: 0–100]
  - Rasch-Transformed Fatigue Severity Scale (RT-FSS) [range: 0–21]
  - Chronic Acquired Polyneuropathy–Patient-Reported Index (CAP-PRI) [range: 0–30]
  - Patient Global Impression of Severity (PGI-S) [range: 1–7]
- Site visits coincide with existing treatment visits (approximately every 3 months), with an optional visit 7–14 days after study start for data collection on relevant disease biomarkers (**Figure 1**)

RESULTS

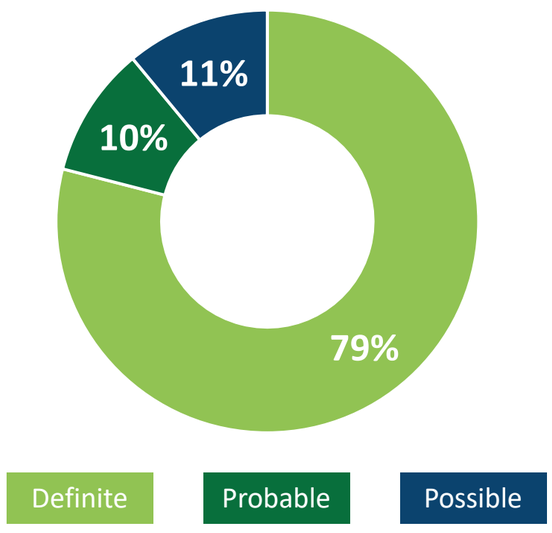
First 100 Participants: Country of Origin

Country	n (%)
Australia	1 (1.0)
Austria	2 (2.0
Bulgaria	12 (12.0)
China	20 (20.0)
Czech Republic	2 (2.0)
France	8 (1.0)
Italy	15 (15.0)
Japan	2 (2.0)
Latvia	11 (11.0)
Poland	12 (12.0)
Spain	5 (5.0)
Sweden	5 (5.0)
United States	5 (5.0)

Mean Time Between Initial Symptoms and Diagnosis

3.5 years

Baseline MMN Diagnosis,* %



*As assessed using the EFNS/PNS criteria at study baseline.

Number of Limbs Affected, %

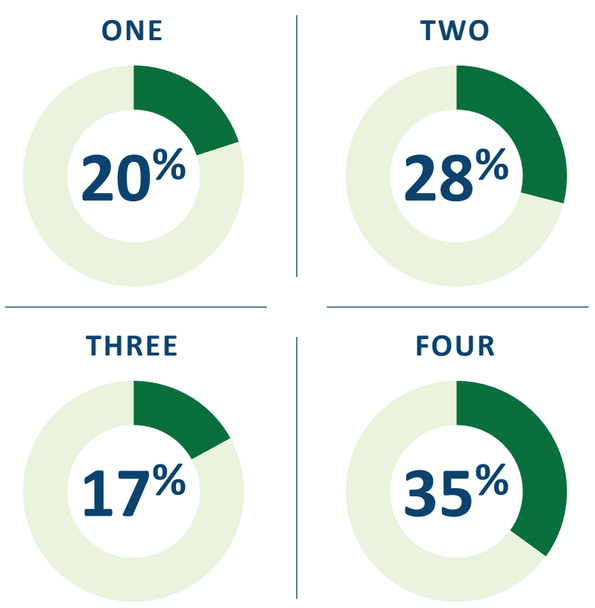


TABLE 1 Baseline Characteristics of the First 100 Study Participants in iMMersioN

	Analysis set (N=100)
Age at time of informed consent, mean (SD), years	52.2 (12.2)
Sex, female, n (%)	38 (38.0)
Race, n (%)	
White	68 (68.0)
Asian	22 (22.0)
Not reported	10 (10.0)
Region, Europe, n (%)	72 (72.0)
Number of limbs affected, n (%)	
1	20 (20.0)
2	28 (28.0)
3	17 (17.0)
4	35 (35.0)
Time since initial symptoms, mean (SD), years	11.6 (9.1)
Time since initial diagnosis, mean (SD), years	8.0 (7.5)
MMN-RODS centile metric score, mean (SD)	73.9 (16.0)
mMRC-10 sum score, mean (SD)	87.8 (13.2)
RT-FSS total score, mean (SD)	11.7 (6.2)
CAP-PRI total score, mean (SD)	10.7 (6.0)
PGI-S score, n (%)	
2 (very mild)	8 (8.0)
3 (mild)	13 (13.0)
4 (moderate)	44 (44.0)
5 (moderately severe)	20 (20.0)
6 (severe)	13 (13.0)
7 (extremely severe)	2 (2.0)

KEY TAKEAWAYS

iMMersioN is the first, global MMN study to provide a detailed view of the impact of MMN and its treatment on patients in a real-world setting

As of enrollment closure (December 23, 2024), 410 participants have been enrolled in the study from >106 sites across 19 countries

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ABBREVIATIONS

CAP-PRI, Chronic Acquired Polyneuropathy Patient-Reported Index; EFNS, European Federation of Neurological Societies; IgM, immunoglobulin M; MMN, multifocal motor neuropathy; MMN-RODS, MMN Rasch-built Overall Disability Scale; mMRC, Modified Medical Research Council; PGI-S, Patient Global Impression of Severity; PNS, Peripheral Nerve Society; RT-FSS, Rasch-Transformed Fatigue Severity Scale; SD, standard deviation.

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