Prospective, long-term, observational study (patient registry) of paediatric myotonic disorders from birth to less than six years of age who are treated with mexiletine (PEGASUS Study)

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Study | Planned

Administrative details

EU PAS number

EUPAS1000000185

Study ID

1000000185

DARWIN EU® study

No

Study countries

France

Italy

Study description

This is a prospective, open-label, multi-centre, single arm, registry study to collect standard relevant clinical and epidemiological data during routine medical evaluation and treatment in paediatric patients with myotonic disorders who are being treated with mexiletine therapy according to the physician.

Study status

Planned

Research institutions and networks

Institutions

Lupin Europe GmbH

Contact details

Study institution contact

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Study contact

EU-RA@lupin.com

Primary lead investigator

Savine Vicart

Primary lead investigator

Study timelines

Date when funding contract was signed
Planned: 05/01/2024

Study start date
Planned: 23/09/2024

Date of final study report
Planned: 05/01/2028

Sources of funding

- Pharmaceutical company and other private sector

Study protocol

Namuscla_PIP_Study_5_MEX-NM-401R_V1.0_31May2024_clean.docx_.pdf (1.11 MB)

Regulatory

Was the study required by a regulatory body?

No

Is the study required by a Risk Management Plan (RMP)?

EU RMP category 3 (required)

Other study registration identification numbers and links

MEX-NM-401

Methodological aspects

Study topic:

Disease /health condition

Study type:

Non-interventional study

Scope of the study:

Disease epidemiology

Drug utilisation

Effectiveness study (incl. comparative)

Evaluation of patient-reported outcomes

Data collection methods:

Combined primary data collection and secondary use of data

Study design:

This is a prospective, open-label, multi-centre, single arm, registry study to collect standard relevant clinical and epidemiological data during routine medical evaluation and treatment in paediatric patients with myotonic disorders who are being treated with mexiletine therapy.

Main study objective:

To evaluate the safety and the efficacy (exploratory) of mexiletine for the treatment of myotonia in the paediatric population aged from birth to less than 6 years using real world data.

Study Design

Non-interventional study design

Case-only

Study drug and medical condition

Medicinal product name

NAMUSCLA

Study drug International non-proprietary name (INN) or common name

MEXILETINE HYDROCHLORIDE

Anatomical Therapeutic Chemical (ATC) code

(C01BB02) mexiletine

mexiletine

Medical condition to be studied

Myotonia

Myotonic dystrophy

Population studied

Short description of the study population

Male and female children from birth to less than 6 years of age with clinical symptoms or signs of myotonic disorders, normal electrocardiogram (ECG) exam and genetic confirmation of the diagnosis i.e., non-dystrophic myotonia (NDM), or myotonic dystrophy (DM) type 1 (DM1), or DM type 2 (DM2).

Age groups

- **Paediatric Population (< 18 years)**
  - Neonate
    - Preterm newborn infants (0 – 27 days)
    - Term newborn infants (0 – 27 days)
  - Infants and toddlers (28 days – 23 months)
  - Children (2 to < 12 years)

Study design details

Setting

Patients who meet the eligibility criteria will be enrolled in 2 cohorts by age groups although cohorts are not enrolled sequentially (cohort definition is to assure minimum requirements for meeting PIP agreements).

Cohort 1 – Infants and children aged between 6 months to less than 6 years.

Cohort 2 – Neonates and infants from birth to less than 6 months.

The overall treatment duration follow-up for each cohort will be at least 2 years.

Dosing and treatment administration in this registry study will be done as per the treating physician standard clinical practice. Visits to the clinic will occur according to routine site´s clinical practice, or when applicable according to the treating practice physician.

Inclusion Criteria:

1. Male or female patients from birth to less than 6 years
2. A genetically confirmed diagnosis of NDM or DM (DM1or DM2), as per the treating clinician.
3. Presence of clinical symptoms of myotonia (hand grip myotonia, myotonia in the leg muscles, any other myotonia symptoms) to be confirmed by the treating clinician.
4. Patients already receiving mexiletine treatment or who are clinically considered for mexiletine treatment as per the treating physician judgement.
5. No history of or significant cardiac abnormalities as determined by a cardiologist’s assessment of the ECG and echocardiogram performed prior to enrolment in the study or as per the treating physician standard of care (NaMuscla SmPC, 2023)
6. No known history or signs and symptoms of any significant liver disorder as per treating physician.

Exclusion Criteria:

1. Any contraindication to mexiletine as listed in the Namuscla Summary of

Product Characteristics (SmPC) (NaMuscla SmPC, 2023)
2. Any other neurological or psychiatric condition that might affect the study assessments, as per the treating clinician.

More eligibility criteria can be found in the study protocol

Comparators

N/A

Data analysis plan

The following data elements will be collected as permitted by the clinical site normal clinical practice for patients with myotonic disorders and/or the patient's age:

- Demographics
- Genetics: DM1, DM2 or NDM corresponding clinical forms
- Musculoskeletal manifestations (myotonia, Charcot-Marie-Tooth disability scale, facial hypotonia)
- Orthopaedic deformities (spine, feet or hands, orthoses, back brace, specialized follow-up, surgery)
- Cardiorespiratory signs (non-invasive ventilation, sleep disorders, ECG / left ventricular ejection fraction (LVEF), pacemaker/defibrillator)
- Ophthalmic and endocrinologic manifestations (cataract, diabetes, thyroid disorders)
- Psychomotor development disabilities
- Gastrointestinal disorders

Data will be entered at baseline upon patient enrolment and entered periodically thereafter for all routine clinical practice patient visits. All data will include the date each assessment was performed. Where available, additional retrospective data will be collected. Retrospective data will be focused primarily

on patterns of mexiletine use and dose adjustments as well as any efficacy assessments. Retrospective safety data will also be recorded, especially in relation to any AEs that affect dosing, SAEs or AESIs, but there will be no requirement to report any retrospective AEs prior to signing the informed consent.

Data management

ENCePP Seal

The use of the ENCePP Seal has been discontinued since February 2025. The ENCePP Seal fields are retained in the display mode for transparency but are no longer maintained.

Use of a Common Data Model (CDM)

CDM mapping

No

Data quality specifications

Check conformance

Unknown

Check completeness

Unknown

Check stability

Unknown

Check logical consistency

Unknown

Data characterisation

Data characterisation conducted

No