

Long-term effectiveness of cladribine in patients previously treated with oral cladribine: a Real-World Evidence analysis using data from the Italian Registry of Multiple Sclerosis (CLARINET-MS)

First published: 04/10/2018

Last updated: 02/07/2024

Study

Planned

Administrative details

EU PAS number

EUPAS25783

Study ID

25784

DARWIN EU® study

No

Study countries

Italy

Study status

Planned

Research institutions and networks

Institutions

[Merck Healthcare KGaA](#)

Germany

First published: 26/02/2024

Last updated: 26/02/2024

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Contact details

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Primary lead investigator

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Study timelines

Date when funding contract was signed

Actual: 01/08/2018

Study start date

Planned: 15/10/2018

Date of final study report

Planned: 21/12/2018

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Merck KGaA

Study protocol

[20181004_MS700568_0027_EnCepP_CTP_Redacted version for review_Redacted.pdf](#) (3.88 MB)

Regulatory

Was the study required by a regulatory body?

No

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

Not applicable

Methodological aspects

Study type

Study type:

Non-interventional study

Scope of the study:

Effectiveness study (incl. comparative)

Main study objective:

Clinical practice data from Italian MS patients who received at least one course of cladribine tablets treatment in pivotal clinical trials are continuously and consistently collected in digital database iMedWeb on entire Italian territory. Study will shed light whether long-term effectiveness of cladribine tablets can be supported by data currently available in Italian MS patient registry.

Study Design

Non-interventional study design

Cohort

Other

Non-interventional study design, other

Non-interventional cohort RWE study

Study drug and medical condition

Medicinal product name

MAVENCLAD

Medical condition to be studied

Multiple sclerosis

Population studied

Age groups

- Adults (18 to < 46 years)
- Adults (46 to < 65 years)
- Adults (65 to < 75 years)
- Adults (75 to < 85 years)
- Adults (85 years and over)

Estimated number of subjects

161

Study design details

Outcomes

To assess the time-to-treatment change in clinical practice as surrogate marker for long-term effectiveness of cladribine in subjects with the clinical isolated syndrome (CIS) or remitting multiple sclerosis (RMS) phenotypes, Time-to-disability progression, Time-to-first EDSS ≥ 6.0 , ≥ 7.0 , Time-to-relapse during observational period, Number of Disease Modifying Treatments (DMTs) after last cladribine tablets course in subjects with CIS, RRMS or SPMS Incidence of conversion of subjects with CIS to a clinically defined MS (CDMS)

Data analysis plan

Statistical testing will not be done as the nature of the study is descriptive and there is no hypothesis testing to be performed. Primary outcome time-to-treatment change as well as secondary outcome time-to-disability progression, time-to-first EDSS ≥ 6.0 , time to-first EDSS ≥ 7.0 and time-to-relapse will be analyzed by means of time-to-event analysis based on Kaplan-Meier method. Median duration and its associated 95% Confidence Intervals (CIs) will be estimated from model. Analyses will be repeated by using gender, MS

phenotype, RCT type and categorized age groups, EDSS score, number of relapses before RCT+1 and time since diagnosis as strata. Further, incidence of conversion from CIS to CDMS will be estimated and number of treatments after last cladribine tablets course will be tabulated. In case of unanticipated outcomes, additional ad hoc analyses will be performed to further investigate the data. Any missing data in RWE data will be assumed to be missing at random.

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.

Data sources

Data sources (types)

[Disease registry](#)

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