A non-interventional post-authorisation safety study to investigate the risk of mortality in multiple sclerosis patients treated with alemtuzumab (LEMTRADA®) relative to comparable multiple sclerosis patients using other disease modifying therapies: a cohort study

First published: 26/08/2021
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Study | Ongoing

Administrative details

PURI
https://redirect.ema.europa.eu/resource/50544

EU PAS number
EUPAS42543

Study ID
50544

DARWIN EU® study
No

Study countries
Belgium
Czechia
Denmark
Germany
Sweden
United Kingdom

Study status
Ongoing

Research institution and networks

Institutions

Parexel International

Sweden
First published: 19/10/2010
Last updated
26/04/2024

Institution | Non-Pharmaceutical company | ENCePP partner

Leibniz Institute for Prevention Research and Epidemiology - BIPS

Germany
First published: 29/03/2010
Last updated
26/02/2024

Institution | Not-for-profit | ENCePP partner

The Danish Multiple Sclerosis Registry Denmark, AIM-IMA (L'Agence Intermutualiste - Het InterMutualistisch Agentschap) Belgium, The Swedish Multiple Sclerosis Registry Sweden, The Czech Multiple Sclerosis Registry (ReMuS) Czechia, University Hospital of Wales Wales, Cambridge University Hospitals England, Derriford Hospital/ Plymouth University England

Contact details

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Primary lead investigator
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Study timelines

Date when funding contract was signed
Planned:
19/10/2020
Actual:
19/10/2020

Study start date
Planned:
01/05/2021
Actual:
07/09/2021

Date of final study report
Planned:
30/09/2024

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Sanofi-Genzyme

Study protocol

alemtuzumab-lemtrada-pass-mort-protocol-may-2021_Redacted.pdf(2.09 MB)

lem_pass_mort_protocol_june242022_CLEAN_Redacted.pdf(1.17 MB)

Regulatory

Was the study required by a regulatory body?
Yes

Is the study required by a Risk Management Plan (RMP)?
EU RMP category 1 (imposed as condition of marketing authorisation)

Regulatory procedure number
EMEA/H/C/003718

Methodological aspects

Study type

Study type list

Study type:
Non-interventional study

Scope of the study:
Assessment of risk minimisation measure implementation or effectiveness

Main study objective:
The primary objective is to ascertain whether multiple sclerosis (MS) patients treated with LEMTRADA have a higher risk of all-cause mortality than comparable MS patients treated with other HE-DMT.

Study Design

Non-interventional study design
Cohort

Study drug and medical condition

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

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
9000

Study design details

Outcomes
The primary outcome is the all-ause mortality, The secondary outcome is the cause-specific mortality. This secondary outcome will be exploratory as it is anticipated that availability and quality of cause-specific mortality data will be variable across data sources.

Data analysis plan
The following statistical analyses will be conducted separately in each data source: - Descriptive statistics - Crude and age-standardised mortality rates will be computed by exposure group (LEMTRADA vs other HE-DMT), for all MS patients and by gender. - Propensity score (PS) model will be constructed in order to create two comparable groups of patients with similar distributions of risk factors (LEMTRADA vs other HE-DMT). PS weight will be computed using the standardised mortality ratio method. - Risk of death among the LEMTRADA group compared to the other HE-DMT group will be expressed as hazard ratio (HR) and computed from a PS weighted time-dependent Cox proportional hazards model that will include a time-dependent exposure. A meta-analysis will be performed by iPRI to combine all HR from each data source in order to obtain a global estimate of the risk of death in the LEMTRADA group compared to the other HE-DMT group.

Documents

Study, other information
lem_pass_mort_protocol_may192021.pdf(1.37 MB)

Data management

Data sources

Data source(s)
German Pharmacoepidemiological Research Database

Data source(s), other
GePaRD

Data sources (types)
Administrative data (e.g. claims)
Disease registry
Electronic healthcare records (EHR)

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