Malignancies in Multiple Sclerosis: multi-country cohort database studies (feasibility study) (MALBEC-f)

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Study | Finalised

Administrative details

Contact details

Study institution contact
Patrick Blin
Study contact

plateforme.bpe@u-bordeaux.fr
Primary lead investigator
Patrick Blin
Primary lead investigator

PURI
https://redirect.ema.europa.eu/resource/46551

EU PAS number
EUPAS21870

Study ID
46551

DARWIN EU® study
No

Study countries
Denmark
France
Netherlands
United States

Study description
The pattern of malignancies in the cladribine clinical program in multiple sclerosis (MS) (all exposed subjects) did not show an obvious difference compared to the available data on malignancies in the general population, or in MS patients. There is no obvious evidence of an increase of the risk of a particular tumor type in cladribine treated subjects compared to European reference populations. No dose-relationship could be found. The effect of age, immunomodulators (IM) and immunosuppressants (IS) treatments on the risk of malignancy in patients with MS is currently uncertain. MS patients seem to have a similar risk of malignancy than the general population but further studies using external data sources are needed to estimate the risk in MS as compared to general population. In this context, this study will provide estimates of malignancies incidence for a cohort of MS patients compared to non-MS patients of the general population, and for a cohort of MS patients newly treated with MS modifying drugs (DMDs), according to the type of medication used. This study will be done in 4 countries: France, the Netherlands, Denmark, United States. The overall results will be used with a view to a later post-marketing evaluation of cladribine.

Study status
Finalised

Research institution and networks

Institutions

Bordeaux PharmacoEpi, University of Bordeaux

France
First published: 07/02/2023
Last updated
08/02/2023

Institution
Hospital/Clinic/Other health care facility
Not-for-profit
Educational Institution
ENCePP partner

The PHARMO Institute for Drug Outcomes Research (PHARMO Institute)

Netherlands
First published: 07/01/2022
Last updated
10/01/2022

Institution | Laboratory/Research/Testing facility | ENCePP partner

Bordeaux PharmacoEpi, University of Bordeaux

France
First published: 07/02/2023
Last updated
08/02/2023

Institution | Educational Institution | Hospital/Clinic/Other health care facility | Not-for-profit | ENCePP partner

Aarhus University & Aarhus University Hospital DEPARTMENT OF CLINICAL EPIDEMIOLOGY

Denmark
First published: 20/07/2021
Last updated
02/04/2024

Institution | Educational Institution | ENCePP partner

Study timelines

Date when funding contract was signed
Actual:
08/09/2017

Data collection
Actual:

10/09/2017

Start date of data analysis
Actual:
01/11/2017

Date of final study report
Planned:
31/12/2018
Actual:
10/12/2018

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Merck KGaA

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 list

Study topic:
Human medicinal product

Disease /health condition

Study type:
Non-interventional study

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

Data collection methods:
Secondary data collection

Main study objective:
To estimate the incidence of malignancies stratified by age and gender:- in the MS cohort compared to a sample of non-MS patients from the general population,- in untreated patients of the MS cohort,- in newly treated patients with disease modifying drugs (DMD) according to the DMD group,To characterize the association between DMD treatment exposure and any occurrence of malignacies.

Study Design

Non-interventional study design
Cohort

Study drug and medical condition

Study drug International non-proprietary name (INN) or common name
INTERFERON BETA-1A
INTERFERON BETA-1B
GLATIRAMER ACETATE
PEGINTERFERON BETA-1A
DACLIZUMAB
TERIFLUNOMIDE
FINGOLIMOD HYDROCHLORIDE
DIMETHYL FUMARATE
ALEMTUZUMAB
MITOXANTRONE
NATALIZUMAB
METHOTREXATE
CYCLOPHOSPHAMIDE
MYCOPHENOLIC ACID
AZATHIOPRINE
RITUXIMAB

Medical condition to be studied
Multiple sclerosis

Population studied

Short description of the study population
Multiple sclerosis patients

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)

Special population of interest
Immunocompromised

Estimated number of subjects
632

Study design details

Outcomes
Occurrence of any malignancies (including/excluding Non-melanoma skin cancer) :- Overall- Per individual malignancy type.

Data analysis plan
The statistical analysis will be performed using the SAS software (latest current version), following a detailed statistical analysis plan.Descriptive analyses will be conducted on the MS population, the untreated MS population and the MS population newly treated with a DMD. Crude and adjusted incidence rates of malignancy will also be calculated stratified on age and gender, in the MS, the untreated MS and the MS newly treated populations. The malignancy incidence estimated in the MS cohort will be then compared to the malignancy incidence estimated after age- and sex-standardization in a sample of non-MS patients from the general population. In the MS newly treated population, the association between DMD and risk of malignancy will be assessed with a time varying cox model.

Data management

Data sources

Data sources (types)
Administrative data (e.g. claims)

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