# OPTIMISE:MS A Prospective, Real World Pharmacovigilance Study in Multiple Sclerosis

**First published:** 10/11/2021

**Last updated:** 14/03/2024





# Administrative details

**Study description** 

EU PAS number	
EUPAS44059	
Study ID	
44060	
DARWIN EU® study	
No	
Study countries	
United Kingdom	

This pragmatic, prospective observational cohort study is planned to run for 7 years to estimate the frequency of serious adverse events with real world DMT use in routine clinical practice in the UK. It is a non-interventional cohort study. The study will recruit people with MS on treatment from major MS care clinics across the country, as well as those starting, switching or potentially eligible for treatment, but who are not currently taking DMT. This study will provide – for the first time - an estimate of overall rates of serious adverse events associated with DMT (including multiple sclerosis relapses or opportunistic infections) in the UK population with MS. It will facilitate a way of exploring related questions regarding the relative benefits vs risks of treatment and the influence of prior treatments on adverse events.

#### **Study status**

Ongoing

#### Research institutions and networks

## Institutions



Royal London Hospital London, John Radcliffe
Hospital Oxford, Frimley Park Hospital Surrey,
Nottingham University Hospitals NHS Trust
Nottingham, Salford Royal NHS Foundation Trust
Great Manchester, Greater Glasgow and Clyde
Scotland, Plymouth Hospital NHS Trust Plymouth,
Southend University Hospital NHS Foundation
Trust Essex, St Georges Hospital London,
University Hospitals Bristol NHS Foundation Trust
Bristol

#### Contact details

#### **Study institution contact**

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Study contact

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#### **Primary lead investigator**

Aleisha Miller

**Primary lead investigator** 

# Study timelines

#### Date when funding contract was signed

Planned: 25/07/2018 Actual: 25/07/2018

#### Study start date

Planned: 28/04/2019 Actual: 28/04/2019

#### Data analysis start date

Planned: 27/08/2019 Actual: 27/08/2019

#### **Date of final study report**

Planned: 12/12/2026

# Sources of funding

- Pharmaceutical company and other private sector
- Other

# More details on funding

Biogen, Merck, Bristol Myers Squibbs

# Study protocol

OPTIMISE\_PROTOCOL\_v6.0\_12\_APR\_2021\_CLEAN.pdf (1 MB)

# Regulatory

#### Was the study required by a regulatory body?

No

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

Not applicable

# Other study registration identification numbers and links

IRAS: 252793

# Methodological aspects

# Study type

# Study type list

#### Study type:

Non-interventional study

#### Scope of the study:

Disease epidemiology

Effectiveness study (incl. comparative)

#### Main study objective:

To characterize the incidence and compare the risk of serious adverse events in people with MS treated with DMD (comparators will be an untreated cohort, and a cohort treated with first line injectable DMD). A serious adverse event in this context is an adverse event resulting in death, requiring in-patient treatment or prolongation of existing in-patient treatment or hospitalisation

# Study Design

#### Non-interventional study design

Cohort

# Study drug and medical condition

#### Medical condition to be studied

Multiple sclerosis

# Population studied

#### **Age groups**

Children (2 to < 12 years)

Adolescents (12 to < 18 years)

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**

4000

# Study design details

#### **Outcomes**

Primary endpoints to be examined according to treatment type, duration and switching include: • Any SAE (any infection requiring hospitalization, any opportunistic infection, any other SAE, any relapse, death, MeDRA coded), Secondary endpoints for exploratory objectives include: Outcomes associated with sequential therapies with multiple DMT Abnormally low total blood lymphocyte count stratified by grade of lymphopaenia Abnormally increased liver function tests stratified by grade of abnormal liver function Disability progression New MRI lesion activity Occurrence of pregnancy and outcomes of pregnancy

#### Data analysis plan

The total number of safety events (SAEs) for DMTs (overall and by individual DMTs) will be presented per 100 person years. Both event rates (multiple events per individual) and incidence will be examined. Continuing quality assessment of the database will be performed. Active interrogation of data collected from sites (via regular audit of a proportion of records) will enable early detection of inconsistent and/or erroneous data, allowing corrections to be made prior to any analysis. Inconsistent data will be defined on an individual patient level (where records are selected for audit), e.g. where clinical records are intrinsically inconsistent (e.g. large fluctuations in EDSS recorded with no relapses recorded, large fluctuations in laboratory values without clinical or treatment correlates). In sites where inconsistent data is detected, further records will be interrogated to further evaluate if any systematic error is present.

# 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

Other

#### Data sources (types), other

Prospective patient-based data collection

# Use of a Common Data Model (CDM)

#### **CDM** mapping

No

# Data quality specifications

#### **Check conformance**

Unknown

#### **Check completeness**

Unknown

#### **Check stability**

### **Check logical consistency**

Unknown

# Data characterisation

#### **Data characterisation conducted**

No