

# MS-Register of the National MS-Society of Germany (DMSG, Bundesverband e.V.)

**First published:** 01/02/2024

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Data source

Human

Disease registry

Primary care medical records

Spontaneous reports of suspected adverse drug reactions

## Administrative details

### Administrative details

#### Data source ID

47729

#### Data source acronym

German MS-Register

#### Data holder

[MS Forschungs- und Projektentwicklungs-gGmbH \(MSFP-gGmbH\)](#)

#### Data source type

Disease registry

Primary care medical records

Spontaneous reports of suspected adverse drug reactions

## Main financial support

Funding from industry or contract research

Funds from patients organisations, charity and foundations

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## Care setting

Hospital inpatient care

Hospital outpatient care

Other

Primary care – specialist level (e.g. paediatricians)

Secondary care – specialist level (ambulatory)

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## Data source qualification

If the data source has successfully undergone a formal qualification process (e.g., from the EMA, ISO or other certifications), this should be described.

No

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## Data source website

<https://www.msregister.de>

## Contact details

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Main

[kontakt@msregister.de](mailto:kontakt@msregister.de)

## Data source regions and languages

### Data source countries

Germany

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## Data source languages

German

## Data source establishment

### Data source established

15/06/2001

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### Data source time span

**First collection:** 15/06/2001

The date when data started to be collected or extracted.

## Publications

### Data source publications

Therapy switches in fingolimod-treated patients with multiple sclerosis: long-term experience from the German MS Registry. Frahm N, Fneish F, Ellenberger D, et al., 2022: Neurology and Therapy article published online: 12 January 2022, doi:10.1007/s40120-021-00320-w

Aggressive multiple sclerosis – a matter of measurement and timing. Ellenberger D, Flachenecker P, Fneish F, Frahm N, Hellwig K, Paul F, Stahmann A, Warnke C, Rommer PS, Zettl UK, 2020: BRAIN published online: September 2020, doi:10.1093/brain/awaa306

Prevalence of pediatric multiple sclerosis in Germany - a nationwide population -based analysis of outpatient insurance claims. Frahm N, Peters M, Bätzing J, Ellenberger D, Akmatov MK, Haas J, Rommer PS, Stahmann A, Zettl UK, Holstiege J, 2021: European Journal of Neurology Vol 28, Issue 9, p3173-3176, first published online: July 9, 2021, doi:10.1111/ene.15015

Treatment patterns in pediatric patients with multiple sclerosis in Germany - a nationwide claims-based analysis. Frahm N, Peters M, Bätzing J, Ellenberger D, Akmatov MK, Haas J, Rommer PS, Stahmann A, Zettl UK, Holstiege J, 2021: Therapeutic Advances in Neurological Disorders published online: October 6, 2021, doi:10.1177/17562864211048336

Associations of Disease-Modifying Therapies With COVID-19 Severity in Multiple Sclerosis. Simpson-Yap S, Stahmann A, et al., 2021: Neurology Article first published online: October 5, 2021, doi:10.1212/WNL.00000000000012753

## Studies

### List of studies that have been conducted using the data source

Survey on the collection of data on adverse events related to medicinal products through registries

Ozanimod Real-World Safety - A Post-Authorisation Multi-National Long-term Non-Interventional Study (ORION)

## Data elements collected

### The data source contains the following information

#### **Disease information**

Does the data source collect information with a focus on a specific disease? This might be a patient registry or other similar initiatives.

Yes

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## Disease details

Multiple sclerosis

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## Disease details (other)

G35.x Multiple Sclerosis

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## Rare diseases

Are rare diseases captured? In the European Union a rare disease is one that affects no more than 5 people in 10,000.

No

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## Pregnancy and/or neonates

Does the data source collect information on pregnant women and/or neonatal subpopulation (under 28 days of age)?

Yes

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## Hospital admission and/or discharge

No

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## ICU admission

Is information on intensive care unit admission available?

Yes

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## Cause of death

Captured

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## Cause of death vocabulary

ICD-10

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## Prescriptions of medicines

Captured

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## **Prescriptions vocabulary**

other

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## **Prescriptions vocabulary, other**

ATC, German PZN

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## **Dispensing of medicines**

Not Captured

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## **Advanced therapy medicinal products (ATMP)**

Is information on advanced therapy medicinal products included? A medicinal product for human use that is either a gene therapy medicinal product, a somatic cell therapy product or a tissue engineered products as defined in Regulation (EC) No 1394/2007 [Reg (EC) No 1394/2007 Art 1(1)].

No

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## **Contraception**

Is information on the use of any type of contraception (oral, injectable, devices etc.) available?

No

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## **Indication for use**

Does the data source capture information on the therapeutic indication for the use of medicinal products?

Captured

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## **Indication vocabulary**

ICD-10

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## **Medical devices**

Is information on medicinal devices (e.g., pens, syringes, inhalers) available?

Yes

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## Administration of vaccines

Yes

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## Procedures

Does the data source capture information on procedures (e.g., diagnostic tests, therapeutic, surgical interventions)?

Not Captured

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## Healthcare provider

Is information on the person providing healthcare (e.g., physician, pharmacist, specialist) available? The healthcare provider refers to individual health professionals or a health facility organisation licensed to provide health care diagnosis and treatment services including medication, surgery and medical devices.

No

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## Clinical measurements

Is information on clinical measurements (e.g., BMI, blood pressure, height) available?

Yes

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## Genetic data

Are data related to genotyping, genome sequencing available?

Not Captured

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## Biomarker data

Does the data source capture biomarker information? The term “biomarker” refers to a broad subcategory of medical signs ( objective indications of medical state observed from outside the patient), which can be measured accurately and reproducibly. For example, haematological assays, infectious disease markers or metabolomic biomarkers.

Not Captured

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## Patient-reported outcomes

Is information on patient-reported outcomes (e.g., quality of life) available?

Yes

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### **Patient-generated data**

Is patient-generated information (e.g., from wearable devices) available?

Yes

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### **Units of healthcare utilisation**

Are units of healthcare utilisation (e.g., number of visits to GP per year, number of hospital days) available or can they be derived? Units of healthcare utilisation refer to the quantification of the use of services for the purpose of preventing or curing health problems.

No

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### **Unique identifier for persons**

Are patients uniquely identified in the data source?

Yes

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### **Diagnostic codes**

Captured

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### **Diagnosis / medical event vocabulary**

MedDRA

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### **Medicinal product information**

Captured

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### **Medicinal product information collected**

Batch number

Brand name

Dosage regime

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## **Medicinal product vocabulary**

Other

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## **If 'other,' what vocabulary is used?**

In-house developed list that contains all for MS approved drugs

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## **Quality of life measurements**

Captured

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## **Quality of life measurements vocabulary**

other

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## **Quality of life measurements, other**

MSIS-29v1

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## **Lifestyle factors**

Not Captured

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## **Sociodemographic information**

Captured

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## **Sociodemographic information collected**

Age

Education level

Gender

Marital status

Socioeconomic status

## **Quantitative descriptors**

## **Population Qualitative Data**

### Population age groups

Adults (18 to < 46 years)

Adults (46 to < 65 years)

Elderly ( $\geq$  65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

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### Estimated percentage of the population covered by the data source in the catchment area

33%

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### Description of the population covered by the data source in the catchment area whose data are not collected (e.g., people who are registered only for private care)

Nation-wide

## Population

### Population size

81252

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### Active population size

41401

## Population by age group

Age group	Population size	Active population size
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Adults (18 to < 46 years)	36990	17975
Adults (46 to < 65 years)	38289	20331
Elderly ( $\geq$ 65 years)	5973	3095
Adults (65 to < 75 years)	4902	2514
Adults (75 to < 85 years)	1028	563
Adults (85 years and over)	43	18

## Median observation time

**Median time (years) between first and last available records for unique individuals captured in the data source**

3.00

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**Median time (years) between first and last available records for unique active individuals (alive and currently registered) captured**

3.70

## Data flows and management

### Access and validation

#### Governance details

Documents or webpages that describe the overall governance of the data source and processes and procedures for data capture and management, data quality check and validation results (governing data access or utilisation for

research purposes).

<https://www.msregister.de/forschung/nutzung-von-registerdaten-use-and-access/>

### **Biospecimen access**

Are biospecimens available in the data source (e.g., tissue samples)?

No

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### **Access to subject details**

Can individual patients/practitioners/practices included in the data source be contacted?

Yes

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### **Description of data collection**

In the majority of our centers, staff logins into our research database using individual accounts and then enters data on their centers pwMS population using the pseudonym generated by the central trusted 3rd party. Data collection by patients can be enabled by the centers using either individual accounts details or visit specific tokens provided to the patients as qr-codes or email links.

## **Event triggering registration**

### **Event triggering registration of a person in the data source**

Disease diagnosis

Practice registration

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### **Event triggering de-registration of a person in the data source**

Death

Emigration

Other

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**Event triggering de-registration of a person in the data source, other**

Patient revokes ICF

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**Event triggering creation of a record in the data source**

Specialist encounter

## Data source linkage

**Linkage**

Is the data source described created by the linkage of other data sources (prelinked data source) and/or can the data source be linked to other data source on an ad-hoc basis?

Yes

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**Linkage description, possible linkage**

Health insurance data: Via a trusted 3rd party we can link between the registry and other data sources by employing probabilistic matching on the identifying data (e.g. names, date of birth, sex and diagnosis code). IRB confirmation is needed.

Regims-registry: linkage is possible through deterministic matching using patient common ID.

## Linked data sources

**Pre linked**

Is the data source described created by the linkage of other data sources?

No

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**Data source, other**

Health insurance data

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**Linkage strategy**

Probabilistic

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**Linkage variable**

Not applicable (multiple variables used in probabilistic linkage strategy)

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**Linkage completeness**

Completeness will depend on the number of insurers included in the linkage.

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**Pre linked**

Is the data source described created by the linkage of other data sources?

No

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**Data source, other**

Regims-registry

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**Linkage strategy**

Deterministic

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**Linkage variable**

Common ID

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**Linkage completeness**

Completeness will depend on the number of insurers included in the linkage.

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Data management specifications that apply for the data source

**Data source refresh**

Monthly

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**Informed consent for use of data for research**

Required for general use

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**Possibility of data validation**

Can validity of the data in the data source be verified (e.g., access to original medical charts)?

Yes

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**Data source preservation**

Are records preserved in the data source indefinitely?

Yes

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**Approval for publication**

Is an approval needed for publishing the results of a study using the data source?

Yes

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**Data source last refresh**

01/06/2023

## Common Data Model (CDM) mapping

**CDM mapping**

Has the data source been converted (ETL-ed) to a common data model?

Yes

**CDM Mappings**

**CDM name**

OMOP

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**CDM website**

<https://www.ohdsi.org/Data-standardization/>

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**Data source ETL CDM version**

5.3.1

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**Data source ETL status**

Completed