# DARWIN EU® - Multiple myeloma: patient characterisation, treatments, and survival in the period 2012–2024

First published: 25/09/2025

**Last updated:** 06/10/2025





## Administrative details

EU PAS number
EUPAS1000000757
Study ID
100000757
DARWIN EU® study Yes
Study countries
Denmark
Denmark Finland
Denmark

Norway		
Spain		
Sweden		

#### Study description

Multiple myeloma is a rare type of blood cancer with an estimated overall crude and age-standardized incidence rate of 6.7 and 2.8 per 100,000 persons in 2022 in Europe, respectively.

Survival rates have improved in recent years due to advancement in disease management and the introduction of new therapies, such as immunomodulatory agents, proteasome inhibitors, and monoclonal antibodies. However, unmet needs for new medicines remain for the patients who do not respond to current therapies.

The rarity of multiple myeloma poses challenges across Europe in obtaining a comprehensive understanding of patient characteristics at the time of diagnosis, the different therapies administered in subsequent treatment lines, and overall survival. This study aims to address these gaps, which are important from a regulatory point of view to provide context and help understand the added value of the newest medicines under development or recently approved.

#### **Study status**

Ongoing

Research institutions and networks

**Institutions** 

Department of Medical Informatics - Health Data Science, Erasmus Medical Center (ErasmusMC)			
☐ Netherlands			
First published: 03/11/2022			
<b>Last updated:</b> 02/05/2024			
Institution			

# Networks

Data Analysis and Real World Interrogation Network
(DARWIN EU®)
Belgium
Croatia
☐ Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Italy
☐ Netherlands
Norway
Portugal

Spain
Sweden
United Kingdom
First published: 01/02/2024
<b>Last updated:</b> 30/04/2025
Network

## Contact details

## **Study institution contact**

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Study contact

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## **Primary lead investigator**

Guido van Leeuwen

**Primary lead investigator** 

# Study timelines

## Date when funding contract was signed

Planned: 08/04/2025

Actual: 08/04/2025

## Study start date

Planned: 08/09/2025

Actual: 08/09/2025

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

Planned: 31/12/2025

# Sources of funding

EMA

# Study protocol

DARWIN\_EU\_Protocol\_P4 C2-004\_RR\_Multiple\_myeloma\_V4.0.pdf (990.2 KB)

# Regulatory

Was the study required by a regulatory body?

Yes

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

Not applicable

# Methodological aspects

Study type

Study type list

#### **Study topic:**

Disease /health condition

#### Study topic, other:

Multiple myeloma

#### Study type:

Non-interventional study

#### Scope of the study:

Disease epidemiology

#### **Data collection methods:**

Secondary use of data

#### Study design:

A cohort study will be conducted using routinely collected health data. The study will comprise of:

• A patient-level characterisation will be conducted to address objective 1,2,3,4 to characterise patients with multiple myeloma diagnosed in the period 2012–2024.

### Main study objective:

- 1. To describe demographic and clinical characteristics of patients with multiple myeloma at the time of diagnosis.
- 2. To describe multiple myeloma treatments (including combinations and regimen types, e.g. triplets, etc.).
- 3. To describe sequences of treatments and treatment combinations for multiple myeloma.
- 4. To estimate the overall survival of incident multiple myeloma patients during the study period (2012–2024).

# Study Design

#### Non-interventional study design

Cohort

# Population studied

#### Short description of the study population

The study population will include all individuals with a first diagnosis of multiple myeloma identified in the database between 01/01/2012 and 31/12/2024.

Participants with a diagnosis of cancer (any, excluding non-melanoma skin cancer) any time prior to the diagnosis of multiple myeloma will be excluded.

#### Age groups

ΑII

In utero

Paediatric Population (< 18 years)

Neonate

Preterm newborn infants (0 - 27 days)

Term newborn infants (0 - 27 days)

Infants and toddlers (28 days - 23 months)

Children (2 to < 12 years)

Adolescents (12 to < 18 years)

Adult and elderly population (≥18 years)

Adults (18 to < 65 years)

Adults (18 to < 46 years)

Adults (46 to < 65 years)

Elderly (≥ 65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

# Data management

#### ENICODD Sool

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 source(s)

Danish Health Data Registries

Hospital District of Helsinki and Uusimaa patient cohort (FinOMOP)

Clinical Data Warehouse of the Bordeaux University Hospital

InGef Research Database

IMI 116026 HARMONY; IMI 945406 HARMONY PLUS - HARMONY Big Data

Platform

The Cancer Registry of Norway

## Data sources (types)

Cancer registry

Electronic healthcare records (EHR)

## Use of a Common Data Model (CDM)

#### **CDM** mapping

Yes

#### **CDM Mappings**

CDM name	
OMOP	
CDM website	
https://www.ohdsi.org/Data-standardization/	
CDM version	
https://ohdsi.github.io/CommonDataModel/index.html	
Data quality specifications	
Check conformance	
Unknown	
Check completeness	
Unknown	
Check stability	
Unknown	
Check logical consistency	
Unknown	
Data characterisation	
Data characterisation conducted	

Unknown