

# An Observational Cohort Study on Multiple Myeloma Patients in Finland

**First published:** 01/09/2017

**Last updated:** 22/02/2024

Study

Finalised

## Administrative details

### EU PAS number

EUPAS19582

### Study ID

47393

### DARWIN EU® study

No

### Study countries

☐ Finland

### Study description

Multiple myeloma (MM) is a progressive clonal haematologic malignancy of plasma cells. In Finland, approximately 400 new MM cases are diagnosed each year, primarily amongst the elderly. The average survival time following

diagnosis is 5-6 years, but prognosis varies greatly and the recent introduction of novel therapies has improved overall survival. However, in Finland, it is not completely known how MM patients are treated in real-life clinical settings. Also, the prevalence of various risk factors, and the effect of a patient's risk status on treatment, e.g. on type, duration, and outcomes such as overall survival and time to next treatment, have not been sufficiently reported. To evaluate the effectiveness of new MM treatments in real-life clinical practice it may not be possible to find suitable comparators shortly after a new treatment has entered the market. To better understand treatment and outcomes of MM in Finland, Takeda Finland will conduct a descriptive retrospective study using nationwide data from the Finnish Hematology Register (FHR). The “whole study cohort” will include patients diagnosed for MM at age 18 years or older during 1 Jan 2010 – 31 Dec 2015. The “actual study cohort” will include a subset of the above patients who are treated for MM during 1 Jan 2010 – 31 Dec 2016, and who have at least one year of potential follow-up time following start of treatment (to 31 Dec 2017). Characteristics of all MM patients recorded in the FHR will be described on an overall level. This study aims to provide a representative description of MM patient characteristics, treatment and outcomes in Finland. The results can then be used as a historical reference for evaluating the changing MM treatment landscape. This study also aims to identify subgroups of patients who may not be able to receive or must discontinue/modify certain conventional therapies due to their unsuitable nature, and to evaluate the outcomes under current and past treatment options.

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## **Study status**

Finalised

## **Research institutions and networks**

### **Institutions**

**IQVIA**

☐ United Kingdom

**First published:** 12/11/2021

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**Institution**

**Non-Pharmaceutical company**

**ENCePP partner**

## Contact details

### Study institution contact

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**Study contact**

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### Primary lead investigator

Massoud Toussi

**Primary lead investigator**

## Study timelines

### Date when funding contract was signed

Planned: 03/12/2016

Actual: 03/12/2016

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### Study start date

Planned: 03/09/2018

Actual: 12/09/2017

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**Data analysis start date**

Planned: 02/10/2017

Actual: 21/09/2018

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**Date of final study report**

Planned: 28/02/2019

Actual: 29/05/2020

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

Takeda

## Study protocol

[ER-9542 Takeda Multiple Myeloma FIN Protocol\\_v1.0\\_2017-08-08\\_signed.pdf](#)  
(1.62 MB)

[ER-9542 Takeda Multiple Myeloma FIN Protocol\\_v2.0\\_CLEAN\\_signatures.pdf](#)  
(876.57 KB)

## Regulatory

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

No

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

Not applicable

## Methodological aspects

### Study type

### Study type list

#### **Study topic:**

Disease /health condition

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#### **Study type:**

Non-interventional study

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#### **Scope of the study:**

Drug utilisation

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

Secondary use of data

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#### **Main study objective:**

The main objectives of the study are to describe the demographics, disease characteristics, and treatment patterns of Finnish MM patients, to identify patient, disease, and treatment-related factors associated with study outcomes, and to identify subpopulations of Finnish MM patients.

## Study Design

## **Non-interventional study design**

Cohort

Other

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## **Non-interventional study design, other**

Retrospective observational study

# Study drug and medical condition

## **Medical condition to be studied**

Plasma cell myeloma

# Population studied

## **Short description of the study population**

The study will include:

1) Patients diagnosed with MM during the period 01 January 2010 – 31

December 2015 and aged 18 years or older at diagnosis (i.e. the whole study cohort).

2) Patients diagnosed with MM during the period 01 January 2010 – 31

December 2015 and treated for MM during the period 01 January 2010 – 31

December 2016 and aged 18 years or older at diagnosis. This actual study

cohort will include only patients for whom at least one treatment initiation date can be identified and

who have a minimum of one year of potential follow-up time (to 31 December 2017).

Inclusion criteria

- MM diagnosis recorded in the FHR
- Age 18 years or older at the time of MM diagnosis

#### Exclusion criteria

- Multiple haematological diagnoses in the FHR for which the treatments cannot be differentiated
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#### **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)

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#### **Special population of interest**

Other

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#### **Special population of interest, other**

Multiple Myeloma patients

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#### **Estimated number of subjects**

1600

## Study design details

#### **Outcomes**

The primary outcomes are patient demographics, disease characteristics, and treatment patterns e.g. types of treatments and treatment lines. The secondary outcomes are patient, disease, and treatment-related factors associated with

treatment selection, overall survival, treatment duration, and time to next treatment.

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### **Data analysis plan**

Patient demographics and disease characteristics will be described for the whole study cohort by mean, standard deviation, median, 25th and 75th percentiles, minimum and maximum (continuous variables) and by proportion and frequency per category (categorical variables). Study outcomes will be described with the Kaplan-Meier estimator in the actual study cohort and in identified subpopulations, and stratified by demographics, disease characteristics, and types and lines of treatment. Factors associated with study outcomes will be identified using a multivariate Cox regression model, with additional demographic variables, disease characteristics and treatment patterns added as variables of interest. Factors associated with treatment selection will be identified using a multivariate logistic model. Sensitivity analyses will be performed to test robustness of the models based on representativeness of the actual study cohort, treatment line definitions, and missingness of certain variables.

## **Documents**

### **Study results**

[ER-9542 Takeda MM FIN\\_Study report v1.0\\_20200529\\_final.pdf](#)(1.34 MB)

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## **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](#)

## Use of a Common Data Model (CDM)

### CDM mapping

No

## Data quality specifications

### Check conformance

Unknown

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### Check completeness

Unknown

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### Check stability

Unknown

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### Check logical consistency

Unknown

## Data characterisation

**Data characterisation conducted**

No