

# The Risk of Esophageal Cancer in Relation to the Treatment and Prevention of Osteoporosis in Women (MK-0217A-352)

**First published:** 19/04/2017

**Last updated:** 11/04/2024

Study

Finalised

## Administrative details

### EU PAS number

EUPAS17909

### Study ID

19310

### DARWIN EU® study

No

### Study countries

☐ United Kingdom

## Study description

This is a 2-phase retrospective database study, using both case-cohort and inception (intention-to-treat) cohort analyses to evaluate any association between oral treatments for osteoporosis and the risk of esophageal cancer in women.

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## Study status

Finalised

# Research institutions and networks

## Institutions

**Merck Sharp & Dohme LLC**

☐ United States

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

**Last updated:** 08/07/2025

**Institution**

**Pharmaceutical company**

## Contact details

### Study institution contact

Clinical Trials Disclosure Merck Sharp & Dohme Corp.  
datasharing@organon.com

**Study contact**

[datasharing@organon.com](mailto:datasharing@organon.com)

## Primary lead investigator

Clinical Trials Disclosure Merck Sharp & Dohme Corp.

Primary lead investigator

## Study timelines

### Date when funding contract was signed

Actual: 24/07/2009

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### Study start date

Actual: 26/02/2010

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### Data analysis start date

Actual: 16/02/2012

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### Date of final study report

Actual: 31/03/2012

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

Merck Sharp & Dohme Corp.

## Study protocol

[0217A-352 protocol\\_final-redaction.pdf](#)(770.06 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)?**

EU RMP category 3 (required)

**Other study registration identification numbers and links**

MK-0217A-352NCT01077817

**Methodological aspects**

**Study type**

**Study type list**

**Study topic:**

Disease /health condition

Human medicinal product

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**Study type:**

Non-interventional study

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**Scope of the study:**

Assessment of risk minimisation measure implementation or effectiveness

**Data collection methods:**

Secondary use of data

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**Main study objective:**

To quantify the relation between prescription of agents used in the treatment of osteoporosis and the subsequent occurrence of esophageal cancer.

## Study Design

**Non-interventional study design**

Other

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**Non-interventional study design, other**

Case-cohort

## Study drug and medical condition

**Study drug International non-proprietary name (INN) or common name**

ALENDRONATE SODIUM

ETIDRONATE DISODIUM

RALOXIFENE

RISEDRONATE SODIUM

SODIUM IBANDRONATE

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**Medical condition to be studied**

Gastrooesophageal cancer

Squamous cell carcinoma

Adenocarcinoma

## Population studied

## Short description of the study population

Women born between 1922 and 1953 with records in the GPRD between 1996 and 2008 who begins treatment for osteoporosis.

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### Age groups

Adults (46 to < 65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

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### Estimated number of subjects

684815

## Study design details

### Outcomes

1. Percentage of Participants With Exposure to Study Drugs (Case-Cohort Analysis) 2. Number of Cases of Esophageal Cancer Per 100,000 Woman-Years (Intent-to-Treat Analysis)

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### Data analysis plan

In the case-cohort study, the effects of covariates and drug exposures were evaluated through a logistic regression model with conditioning on the matched set consisting of the case and her controls. In the intent-to-treat analysis, a proportional hazards regression model was used, with stratification on year of birth, calendar quarter of cohort entry, and exposure history. Both analyses used a robust variance estimator to account for the participation of individuals in multiple matched sets or strata.

## Documents

## Study results

[0217A-352 Final Report\\_final-redaction.pdf](#)(287.63 KB)

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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)

[Other](#)

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### Data sources (types), other

Sources of data were female participants with esophageal cancer (cases) and a comparison subcohort in a case-cohort analysis performed using women meeting criteria from the General Practice Research Database (United Kingdom).

## 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**

Unknown