

# The use and safety of XGEVA or Zoledronic acid in clinical practice among Chinese patients with bone metastases from breast, lung, or prostate cancer – a retrospective cohort study within Taiwan’s Health Insurance Research Database (20190412)

**First published:** 12/03/2021

**Last updated:** 02/07/2024

Study

Finalised

## Administrative details

### **PURI**

<https://redirect.ema.europa.eu/resource/46008>

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### **EU PAS number**

EUPAS39611

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### **Study ID**

46008

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## DARWIN EU® study

No

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### Study countries

Taiwan

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### Study description

This study is a retrospective cohort study aiming to describe the utilization of XGEVA and Zoledronic acid and to characterize the safety of XGEVA among Chinese patients with breast, lung, or prostate cancer following diagnosis of incident bone metastases (BMs). The study population will include patients in Taiwan's National Health Insurance (NHI) Database who were diagnosed with bone metastasis secondary to breast, lung or prostate cancer and were newly treated with XGEVA or Zoledronic acid.

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### Study status

Finalised

## Research institutions and networks

### Institutions

#### Amgen

United States

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

**Last updated:** 21/02/2024

**Institution**

## Contact details

### Study institution contact

Global Development Leader Amgen Inc.

Study contact

[medinfo@amgen.com](mailto:medinfo@amgen.com)

### Primary lead investigator

Global Development Leader Amgen Inc.

Primary lead investigator

## Study timelines

### Date when funding contract was signed

Planned: 15/03/2021

Actual: 25/02/2021

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### Study start date

Planned: 31/05/2021

Actual: 06/04/2021

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### Data analysis start date

Planned: 17/01/2022

Actual: 17/01/2022

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### Date of final study report

Planned: 17/01/2023

Actual: 24/07/2023

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

Amgen

## Study protocol

[EUPAS39611-40005.pdf](#)(842.35 KB)

## Regulatory

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

Yes

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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

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

Drug utilisation

**Data collection methods:**

Secondary use of data

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**Main study objective:**

To describe the use of XGEVA and Zoledronic acid in Chinese patients with breast, lung or prostate cancer following diagnosis of incident bone metastases. The study also will characterize safety of XGEVA as measured by the incidence of osteonecrosis of the jaw (ONJ), atypical femur fracture (AFF), and hypocalcemia.

## Study Design

**Non-interventional study design**

Cohort

Other

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**Non-interventional study design, other**

Retrospective study

## Study drug and medical condition

**Name of medicine**

XGEVA

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

ZOLEDRONIC ACID

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**Medical condition to be studied**

Lung cancer metastatic

Prostate cancer metastatic

Breast cancer metastatic

Metastases to bone

## Population studied

**Short description of the study population**

The study population included patients 18 years or older diagnosed with bone metastasis (BM) secondary to breast, prostate, or lung cancer received treatment with XGEVA or Zoledronic acid between January 1, 2013 and December 31, 2017 identified from the Taiwan's National Health Insurance Research Database (NHIRD).

Inclusion criteria:

- Diagnosis of BM secondary to breast, prostate, or lung cancer and prior to initial use of XGEVA or Zoledronic acid.
- New user of XGEVA or Zoledronic acid during study period (January 1, 2013 to December 21, 2016)
  - o New user of either therapy will be defined as not having been treated with any bone targeting agent therapy prior to treatment initiation with XGEVA or Zoledronic acid.
- At least one year of data available prior to initial administration of XGEVA or

Zoledronic acid.

- 18 or older at diagnosis of BM.

Exclusion criteria:

- Patients with diagnosis of giant cell tumor of the bone, or multiple myeloma (to ensure that included subjects are receiving XGEVA for the indication of the treatment of BM from solid tumors).
  - Evidence of XGEVA or Zoledronic acid use prior to BM diagnosis.
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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**

Patients with bone metastasis

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### **Estimated number of subjects**

6000

## Study design details

## Outcomes

Mean number XGEVA or Zoledronic acid prescriptions per patient  
Treatment duration from first dose to last dose of XGEVA or Zoledronic acid  
Proportion of patients discontinuing XGEVA or Zoledronic acid for more than 90 days  
Proportion of patients who switch therapies  
Time from initial therapy to the switching of therapy  
Incidences of ONJ, AFF, and hypocalcemia per 100 person years

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## Data analysis plan

Primary objective #1 (use of XGEVA or Zoledronic acid) is descriptive and formal hypothesis testing will not be implemented. Primary objective #2 (safety of XGEVA) will estimate the incidence rates of three important identified risk factors in the Global Risk Management Plan for XGEVA, including ONJ, AFF, and hypocalcemia.

## Documents

### Study results

[20190412 Observational Research Study Report Published Report\\_Redacted.pdf](#)  
(681.65 KB)

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## Data management

### Data sources

#### Data sources (types)

[Administrative healthcare records \(e.g., claims\)](#)

### 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