

# Risk factors For Bone Pain among Neulasta® Users (20120320)

**First published:** 11/02/2014

**Last updated:** 17/07/2015

Study

Finalised

## Administrative details

### EU PAS number

EUPAS5644

---

### Study ID

10330

---

### DARWIN EU® study

No

---

### Study countries

-  Australia
-  Austria
-  Belgium
-  Canada
-  France
-  Germany

-  Italy
  -  Luxembourg
  -  Mexico
  -  Netherlands
  -  Poland
  -  Portugal
  -  Russian Federation
  -  Spain
  -  Sweden
  -  United Kingdom
  -  United States
- 

### **Study description**

The purpose of this study is to identify risk factors for developing bone pain among Neulasta® users. Patient data from 23 pegfilgrastim clinical trials were analyzed. Multivariable logistic regression models were used to evaluate risk factors associated with moderate to severe (grade  $\geq 2$ ) bone pain and any grade bone pain in the first chemotherapy cycle and across cycles 1-6.

---

### **Study status**

Finalised

## Research institutions and networks

### Institutions

**Amgen**

 United States

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

**Last updated:** 27/03/2026

**Institution**

## Contact details

### Study institution contact

Global Development Leader Amgen, Inc  
medinfo@amgen.com

**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

Actual: 13/08/2012

---

### Study start date

Actual: 15/08/2012

---

### Data analysis start date

Actual: 12/02/2013

---

## **Date of final study report**

Planned: 01/05/2014

Actual: 13/07/2015

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

Amgen

## Study protocol

[Neulasta\\_20120320\\_Protocol\\_11Feb14.pdf](#) (138.19 KB)

## Regulatory

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

No

## Methodological aspects

Study type

Study type list

**Study topic:**

Human medicinal product

Disease /health condition

---

**Study type:**

Non-interventional study

---

**Scope of the study:**

Disease epidemiology

**Data collection methods:**

Secondary use of data

---

**Main study objective:**

The purpose of this study is to identify risk factors for developing bone pain among Neulasta® users. Patient data from 23 pegfilgrastim clinical trials were analyzed. Multivariable logistic regression models were used to evaluate risk factors associated with moderate to severe (grade  $\geq 2$ ) bone pain and any grade bone pain in the first chemotherapy cycle and across cycles 1-6.

## Study Design

**Non-interventional study design**

Cohort

## Study drug and medical condition

**Medicinal product name**

**Medical condition to be studied**

Bone pain

## Population studied

**Short description of the study population**

Adult patients with non-myeloid malignancies who received myelosuppressive chemotherapy regimens and were at risk of developing Febrile Neutropenia

---

**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)
- 

**Special population of interest**

Other

---

**Special population of interest, other**

Patients with non-myeloid malignancy

---

**Estimated number of subjects**

1974

## Study design details

## **Outcomes**

The primary endpoint is the occurrence of moderate to severe bone pain (grade 2+) in cycle 1 of the study treatment chemotherapy, captured as part of Adverse Event reporting. Moderate to severe bone pain across cycles 1-6, and bone pain of any grade in cycle 1 and bone pain of any grade across cycles 1-6.

---

## **Data analysis plan**

Multivariable logistic regression models were used to identify risk factors associated with the occurrence of bone pain of grade  $\geq 2$  or any grade in cycle 1 and across cycles 1-6. Data collected in the trials and included in the regression model include: baseline patient characteristics (gender, region, race, age, body surface area, and baseline absolute neutrophil count), disease characteristics (primary tumor type, tumor stage), treatment characteristics (chemotherapy, radiotherapy, taxane vs no taxane treatment, and dose of pegfilgrastim), and medical history (osteoporosis/osteopenia, hypercholesteremia, anemia, neutropenia, osteomyelitis/osteonecrosis, arthritis, peripheral neuropathy, chronic fatigue syndrome, gout, bone fracture, and bone pain).

## Documents

### **Study results**

[Final study report for protocol 20120320\\_FV\\_PKM\\_13JUL2015.pdf](#) (1.8 MB)

---

## 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

---

### Data sources (types), other

Patient data from 23 pegfilgrastim clinical trials sponsored by Amgen

## Use of a Common Data Model (CDM)

### CDM mapping

No

## Data quality specifications

### Check conformance

Unknown

---

### Check completeness

Unknown

---

### Check stability

Unknown

---

**Check logical consistency**

Unknown

**Data characterisation**

**Data characterisation conducted**

No