Real-world comparative effectiveness of tofacitinib, tumour necrosis factor inhibitors, and interleukin 17 inhibitors among patients with axial spondylarthritis and psoriatic arthritis

**First published:** 15/11/2024

**Last updated:** 18/02/2025





# Administrative details

| EU PAS number<br>EUPAS1000000226 |  |
|----------------------------------|--|
| <b>Study ID</b> 1000000226       |  |
| DARWIN EU® study                 |  |
| Study countries United States    |  |

#### Study description

This is a non-interventional, population-based retrospective cohort study of adults (ages ≥18 years of age) with Axial spondylarthritis (AxSpA), and Psoriatic arthritis (PsA) identified through a United States (US) administrative claims database.

This study aims to provide data on the comparative real-world clinical effectiveness of advanced therapies (tofacitinib, TNFi, and IL-17i) as well as their associated costs and resource utilization.

The results are intended to provide useful information to healthcare professionals and patients in clinical decision making for patients with these conditions.

De-identified individual who initiated one of the study treatments will be selected from a database between December 14, 2021, and most recent data available for the AxSpA sample and December 14, 2017, and most recent data available for the PsA sample.

The index date will be defined as the date of initiation (first time use) of one of the selected treatments (ie, tofacitinib, TNFi or IL-17i) within the specified identification period for each sample. Patients will be required to have at least 12 months of continuous enrollment (medical and pharmacy benefits) prior to the index date and at least 6 months after the index date.

Analysis will be replicated for a subset of patients with at least 12 months of continuous enrollment after the index date.

The baseline period will be defined as the 12 months before index date.

Patient's demographic and clinical characteristics will be characterized at index date or during the baseline period, depending on the study variable. Treatment effectiveness and healthcare resource utilization and costs will be assessed over the 6 and 12 months following the index date.

Persistence on the index treatment will be assessed over the 12 months following the index date.

#### **Study status**

Ongoing

### Research institutions and networks

### **Institutions**

### Pfizer

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

Last updated: 01/02/2024

Institution

### Komodo Health

### Contact details

### **Study institution contact**

Karina Kauffmann karina.kauffmann@pfizer.com

Study contact

karina.kauffmann@pfizer.com

### **Primary lead investigator**

Genevieve Gauthier

Primary lead investigator

# Study timelines

#### Date when funding contract was signed

Planned: 05/04/2024 Actual: 05/04/2024

#### Study start date

Planned: 05/02/2025 Actual: 18/02/2025

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

Planned: 15/05/2026

# Sources of funding

• Pharmaceutical company and other private sector

## More details on funding

Pfizer

## Study protocol

A3921446\_Protocol\_V1\_23AUG2024\_ REDACTED.pdf(1.1 MB)

A3921446 Protocol V 2.0 dated 03 JAN 2025\_FINAL\_Redacted.pdf(886.66 KB)

# Regulatory

Was the study required by a regulatory body?

No

#### 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

#### **Study type:**

Non-interventional study

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

Secondary use of data

#### Main study objective:

Primary objectives:

- 1. To compare the proportion of AxSpA patients fulfilling effectiveness criteria within 6 months after initiating treatment with tofacitinib vs TNFi vs IL-17i among patients with at least 6 months of continuous enrollment after index date.
- 2. To compare the proportion of b/tsDMARD-naïve PsA patients fulfilling effectiveness criteria within 6 months after initiating treatment with tofacitinib vs TNFi vs IL-17i among patients with at least 6 months of continuous

enrollment after index date.

#### Secondary objectives:

- 1. To compare the proportion of AxSpA patients fulfilling effectiveness criteria within 12 months after initiating treatment with tofacitinib vs TNFi vs IL-17i among patients with at least 12 months of continuous enrollment after index date.
- 2. To compare the proportion of b/tsDMARD-naïve PsA patients fulfilling effectiveness criteria within 12 months after initiating treatment with tofacitinib vs TNFi vs IL-17i among patients with at least 12 months of continuous enrollment after index date.
- 3. Evaluate drug persistence (median time to therapy discontinuation) among AxSpA patients within 12 months of treatment with tofacitinib vs TNFi vs IL-17i among patients with at least 12 months of continuous enrollment after index date.
- 4. Evaluate drug persistence (median time to therapy discontinuation) among b/tsDMARD-naive PsA patients within 12 months of treatment with tofacitinib vs TNFi vs IL-17i among the sample of patients with at least 12 months of continuous enrollment after index date.
- 5. Evaluate health care resource utilization and cost data for AxSpA patients within 6 and 12 months of treatment with tofacitinib vs TNFi vs IL-17i among patients with at least 6 or 12 months of continuous enrollment after index date, respectively.

## Study drug and medical condition

#### Name of medicine

**XELIANZ** 

| Study drug International non-proprietary name (INN) or common name TOFACITINIB |  |
|--|--|
| Medical condition to be studied  |  |
| Axial spondyloarthritis  |  |
| Additional medical condition(s)  |  |
| Psoriatic Arthritis  |  |
| Data management  |  |
| Data sources   |  |
| Data source(s), other Komodo's Healthcare Map database                         |  |
| 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**

Unknown