Uveitis in chronic inflammatory conditions and ulcerative colitis-related pyoderma gangrenosum and axial spondylarthritis: an observational study of patients receiving advanced therapies in the United States

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### Administrative details

EU PAS number
EUPAS107604
Study ID
199002
DARWIN EU® study
No
Study countries  United States

#### Study description

Tofacitinib is a Janus kinase (JAK) inhibitor approved for 5 indications in the US(United States): adults with moderately to severely active rheumatoid arthritis (RA), adults with active psoriatic arthritis (PsA), adults with moderately to severely active ulcerative colitis (UC), adults with active ankylosing spondylitis (also known as radiographic axSpA). Data on tofacitinib clinical efficacy in anterior uveitis (AU) from the clinical trial program across all the indications, and pyoderma gangrenosum (PG) and axial spondylarthritis (axSpA) in the UC clinical trial program, is very limited due to study design, inclusion criteria, and baseline characteristics of the different study populations, which would not allow to perform a post-hoc analysis for these outcomes. In the last years, however, several case reports and small observational studies have highlighted the potential beneficial use of JAK inhibitors (including tofacitinib) in treating uveitis as an extra-musculoskeletal or extra-intestinal manifestations, such as AU, PG, and axSpA. In addition, there is an ongoing phase 3 trial assessing the clinical effectiveness of another JAK inhibitor, baricitinib, in JIAassociated uveitis. This non-interventional study aims to provide data on the comparative clinical effectiveness of advanced therapies on incidence of AU among several chronic inflammatory conditions (UC, PsA and axSpA) as well as incidence of PG and axSpA in patients with UC. The results are intended to provide useful information to healthcare professionals and patients in real-world clinical decision making on treatment choice for patients with these conditions.

### Study status

Ongoing

Research institutions and networks

**Institutions** 

### Pfizer

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Institution

### Komodo Health

### Contact details

### **Study institution contact**

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Study contact

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### **Primary lead investigator**

Milena Gianfrancesco

**Primary lead investigator** 

# Study timelines

Date when funding contract was signed

Actual: 11/11/2023

#### Study start date

Planned: 31/01/2024

Actual: 19/01/2024

#### Data analysis start date

Planned: 15/04/2024

#### Date of final study report

Planned: 01/06/2025

# Sources of funding

Pharmaceutical company and other private sector

### More details on funding

Pfizer

## Study protocol

A3921444\_NIS\_protocol\_Cross\_indication\_uveitis\_\_EIM\_12Jan2024.pdf(5.6 MB)

A3921444\_NIS\_Protocol\_V2.0\_31-May-2024.pdf(211.32 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 topic:**

Disease /health condition

Human medicinal product

#### Study type:

Non-interventional study

#### Scope of the study:

Assessment of risk minimisation measure implementation or effectiveness

#### Main study objective:

This non-interventional study aims to provide data on the comparative clinical effectiveness of advanced therapies on incidence of uveitis among several chronic inflammatory conditions, as well as incidence of pyoderma gangrenosum and axial spondylarthritis in patients with ulcerative colitis (UC).

## Study Design

#### Non-interventional study design

Cohort

## Study drug and medical condition

#### Name of medicine

XELJANZ

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

**TOFACITINIB CITRATE** 

#### Medical condition to be studied

Axial spondyloarthritis
Colitis ulcerative
Psoriatic arthropathy

## Population studied

#### Short description of the study population

All individuals meeting study entry criteria will be included in the analysis. Estimated number of patients will be updated after data analysis.

#### 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)

## Study design details

#### **Outcomes**

To estimate the distributions of demographic and clinical characteristics among patients with inflammatory conditions on tofacitinib and other advanced treatments. To estimate crude incidence rates and hazard ratios of anterior uveitis among patients with inflammatory conditions, and pyoderma gangrenosum and axial spondylarthritis in UC patients on tofacitinib and other treatments. To examine the stratified incidence rates and adjusted hazard ratios of anterior uveitis and pyoderma gangrenosum by previous history of uveitis and pyoderma gangrenosum, respectively.

#### Data analysis plan

Number of events, person-years at risk, and crude incidences will be calculated for each outcome. IRs for select safety events will be calculated with persontime at risk starting on the index date and ending on the date of a censoring event: 1) death, 2) end of study period, 3) the event of interest, 4) treatment switch, 5) treatment discontinuation (+ 90 days), or 6) end of enrollment in the database. IRs per 100 person-years will be calculated based on the number of new events divided by the sum of the duration of patient exposures from the index date to censoring date during the risk period. Hazard ratios will be estimated using an inverse probability (IP) weighted Cox proportional hazards model with time since treatment start as timescale. IP weighting will be used to control for potential confounding variables at baseline, and selected based on a priori knowledge and statistical properties of the cohorts under study.

## Data management

### Data sources

### Data source(s), other

Komodo Health United States

### **Data sources (types)**

Administrative healthcare records (e.g., claims)

# Use of a Common Data Model (CDM)

### **CDM** mapping

No

## Data quality specifications

### **Check stability**

**Check conformance** 

Unknown

### **Check logical consistency**

Unknown

# Data characterisation

#### **Data characterisation conducted**

No