A Retrospective Cohort Study to Assess the Long-Term Safety of Baricitinib Compared with Other Therapies Used in the Treatment of Adults with Moderate to Severe Rheumatoid Arthritis in the Course of Routine Clinical Care (I4V-MC-B004)

First published: 03/04/2019

Last updated: 15/02/2024

Study Finalised

Administrative details

EU PAS number

EUPAS25145

Study ID

30229

DARWIN EU® study

No

Study countries

United States

Study description

*Note, this study was terminated, and the attached final abbreviated report contains descriptive information up until time of termination. The goal of this study is to monitor the incidence and nature of key serious infections, MACE, VTE, and malignancies amongst patients exposed long term to baricitinib compared to patients treated long-term with bDMARDs or cDMARDs. This goal will be achieved through the following specific objectives: 1) To assess and compare the risk of the following aggregate outcomes: serious infections (including herpes zoster) and opportunistic infections (including tuberculosis, Candida infections, and progressive multifocal leukoencephalopathy PML), major adverse cardiovascular events (MACE), malignancies (including lymphoma and typically virus-induced malignancies such as cervical and many oropharyngeal cancers), and venous thromboembolism (VTE), among patients with long-term exposure to baricitinib compared to similar patients with RA with long-term exposure to other indicated medications. 2) To describe the incidence rates of the following individual outcomes: lymphoma, herpes zoster, opportunistic infections such as tuberculosis, Candida, and PML, rhabdomyolysis, myelosuppression (agranulocytosis), hyperlipidaemia (hypercholesterolaemia, hypertriglyceridaemia), gastrointestinal perforations, and evidence of drug-induced liver injury. A secondary objective is to describe the incidence of the above outcomes in very elderly patients (aged ≥75 years old).

Study status

Finalised

Research institutions and networks

Institutions

HealthCore

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Institution

Contact details

Study institution contact

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Study contact

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Primary lead investigator

Claudia Salinas

Primary lead investigator

Study timelines

Date when funding contract was signed

Planned: 31/03/2019

Actual: 25/03/2019

Study start date

Planned: 30/06/2023

Actual: 14/10/2019

Date of interim report, if expected
Planned: 31/03/2027

Date of final study report
Planned: 30/06/2030

Actual: 19/12/2023

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Eli Lilly and Company

Study protocol

B004 Pass Version 1.0 Dec2018_Redacted.pdf (9.95 MB)

Regulatory

Was the study required by a regulatory body?

No

Is the study required by a Risk Management Plan (RMP)?

EU RMP category 3 (required)

Methodological aspects

Study type

Study type:

Non-interventional study

Scope of the study:

Assessment of risk minimisation measure implementation or effectiveness

Main study objective:

The goal of this study is to monitor the incidence and nature of key serious infections, MACE, VTE, and malignancies amongst patients exposed long-term to baricitinib compared to patients treated long-term with bDMARDs or cDMARDs.

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Medicinal product name

OLUMIANT

Medical condition to be studied

Rheumatoid arthritis

Population studied

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)

Estimated number of subjects

12.000

Study design details

Outcomes

1. Primary outcomes to be evaluated in comparative analyses: serious infections and opportunistic infections, major adverse cardiovascular events (MACE), malignancies, and venous thromboembolism. 2. Primary outcomes for descriptive analyses: lymphoma, herpes zoster, opportunistic infections, rhabdomyolysis, myelosuppression (agranulocytosis), hyperlipidemia, GI perforations, and liver injury.

Data analysis plan

Risk of each aggregate primary outcome will be compared between patients with rheumatoid arthritis (RA) treated with baricitinib and similar patients treated with (a) bDMARDs and (b)cDMARDs. Hazard ratios will be calculated based on Cox proportional hazard regression as a measure of the association between baricitinib and each comparative outcome. Propensity scores will be used to address imbalance of potential confounding factors across groups that might otherwise lead to confounding bias. Sensitivity analyses of malignancy will examine the effect of duration of baricitinib exposure and use of different latency windows. For MACE, sensitivity analyses will investigate an intent-to-

treat approach. Recurrent events, such as for infections, will also be explored. Overall incidence rates and rates over time will be calculated separately for comparative, aggregate outcomes (primary outcomes #1 above) and less common outcomes (primary outcomes #2).

Documents

Study results

LY300914 B004 Non-interventional PASS Final Study Report.pdf (663.37 KB)

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)

Administrative healthcare records (e.g., claims)

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