A Retrospective Cohort Study to Assess the Safety of Baricitinib Compared with Other Therapies Used in the Treatment of Rheumatoid Arthritis in Nordic Countries (I4V-MC-B011)

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Administrative details

PURI

https://redirect.ema.europa.eu/resource/42324

EU PAS number

EUPAS25151

Study ID

42324

DARWIN EU® study

Nο

Study countries	
Denmark	
Finland	
Norway	
Sweden	

Study description

This study aims to evaluate the safety of baricitinib among (A) rheumatoid arthritis (RA) and (B) atopic dermatitis patients treated in routine clinical care. Primary objectives: (1) to compare the incidence rates and profiles of: serious infections overall (including herpes zoster) and opportunistic infections (including tuberculosis, Candida infections, and progressive multifocal leukoencephalopathy), major adverse cardiovascular events, malignancies overall (including lymphoma and typically virus induced malignancies such as cervical and many oropharyngeal cancers), and venous thromboembolism, among patients with long term exposure to baricitinib compared to similar patients 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 progressive multifocal leukoencephalopathy, rhabdomyolysis, agranulocytosis, hyperlipidaemia (hypercholesterolaemia, hypertriglyceridaemia) - RA only, gastrointestinal perforations, and liver injury. Secondary objectives: (3) to monitor the incidence rates of the aggregate outcomes of serious infections overall, MACE, malignancies overall, and VTE in very elderly patients, that is, those \geq 75 years of age, (4) to assess the effectiveness of risk minimisation activities by describing the pattern of use of baricitinib and the occurrence of pregnancy, active tuberculosis or active viral hepatitis, and monitoring and treatment of lipid levels in relation to such use in routine clinical care.

Study status

Ongoing

Research institutions and networks

Institutions

Institute of Applied Economics and Health Research (ApHER)

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Institution

Contact details

Study institution contact

Claudia Salinas

Study contact

claudia.salinas@lilly.com

Primary lead investigator

Claudia Salinas

Primary lead investigator

Study timelines

Date when funding contract was signed

Planned: 04/09/2018

Actual: 13/07/2017

Study start date

Planned: 31/12/2018

Actual: 02/12/2019

Date of final study report

Planned: 31/12/2027

Sources of funding

• Pharmaceutical company and other private sector

More details on funding

Eli Lilly and Company Corporate Center

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 list

Study type:

Non-interventional study

Scope of the study:

Assessment of risk minimisation measure implementation or effectiveness Drug utilisation

Main study objective:

1. To compare risk of serious infections overall, opportunistic infections, MACE, malignancies overall and VTE among RA patients treated with baricitinib vs. with other medications, 2. To describe the incidence rates of the following individual outcomes: lymphoma, herpes zoster, specific opportunistic infections, rhabdomyolysis, agranulocytosis, hyperlipidemia, GI perforations, and liver injury.

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Name of medicine

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)

Special population of interest

Pregnant women

Estimated number of subjects

12000

Study design details

Outcomes

Primary outcomes: 1. serious infections overall, opportunistic infections, MACE, malignancies overall, and VTE 2. lymphoma, herpes zoster, opportunistic infections such as tuberculosis, Candida, and PML, rhabdomyolysis, agranulocytosis, hyperlipidaemia (hypercholesterolaemia, hypertriglyceridaemia), gastrointestinal perforations, and liver injury, Secondary outcomes include the occurrence of pregnancy, active tuberculosis or active viral hepatitis and the outcomes described in primary outcomes #1 (above), but among very elderly patients (≥75 years of age) treated with baricitinib.

Data analysis plan

Risk of each aggregate primary outcomes 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 match patients between cohorts. Sensitivity analyses will examine the effect of duration of baricitinib exposure and different latency periods on risk of malignancy. Sensitivity analyses will also investigate recurrent events such as infections. 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 report

LY3009104 B011 Non-interventional PASS Final Study Report Objective 4 (5).pdf (310.83 KB)

Data management

Data sources

Data source(s)

Danish registries (access/analysis)

Sweden National Prescribed Drugs Register / Läkemedelsregistret

Data source(s), other

Swedish Rheumatology Quality Register Sweden, National Inpatient Registry Sweden, Swedish Medical Birth Registry Sweden, Swedish Population Registry Sweden, Swedish Cause of Death Registry Sweden

Data sources (types)

Administrative healthcare records (e.g., claims)

Disease registry
Drug dispensing/prescription data
Electronic healthcare records (EHR)
Use of a Common Data Model (CDM)
CDM mapping
No
Data quality specifications
Check conformance
Unknown
Charle computators and
Check completeness
Unknown
Check stability
Unknown
Check logical consistency
Unknown

Data characterisation

Data characterisation conducted

No