Tofacitinib Pregnancy Exposure Registry OTIS Autoimmune Diseases in Pregnancy Project (OTIS PASS Tofacitinib)

First published: 30/01/2014

Last updated: 05/12/2024

Study | Finalised

Administrative details

EU PAS number

EUPAS5703

Study ID

46130

DARWIN EU® study

No

Study countries

United States

Study description

The Tofacitinib Pregnancy Exposure Registry is a United States-based registry designed to monitor planned or unplanned pregnancies exposed to tofacitinib when used to treat rheumatoid arthritis.

Study status

Finalised

Research institutions and networks

Institutions

Pfizer

First published: 01/02/2024

Last updated: 01/02/2024

Institution

Organization of Teratology Information Specialists (OTIS)

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Institution

Contact details

Study institution contact

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Study contact

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Primary lead investigator

Nana Koram

Primary lead investigator

Study timelines

Date when funding contract was signed

Planned: 31/07/2013

Actual: 17/06/2013

Study start date

Planned: 31/08/2013

Actual: 01/11/2013

Data analysis start date

Planned: 01/10/2023

Actual: 01/10/2023

Date of final study report

Planned: 30/03/2024

Actual: 07/03/2024

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Pfizer 100%

Study protocol

A3921203_PROTOCOL_23DEC2013_2.pdf (942.37 KB)

A3921203_PROTOCOL AMENDMENT 1_V2.0_24JUN2019 .doc.pdf (1.82 MB)

Regulatory

Was the study required by a regulatory body?

No

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

Non-EU RMP only

Methodological aspects

Study type

Study type list

Study topic:

Human medicinal product

Study type:

Non-interventional study

Scope of the study:

Safety study (incl. comparative)

Data collection methods:

Secondary use of data

Study design:

This is a prospective, observational cohort study of pregnancy outcomes in women with a disease for which tofacitinib has an approved indication who are exposed to tofacitinib during pregnancy.

Main study objective:

The main objective of the study is to conduct an observational cohort study that will involve follow-up of live born infrants to one year of age to assess the potential increase in the risk of birth defects in pregnancies exposed to tofacitinib compared with an unexposed comparator population.

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Medicinal product name

XELJANZ

Medical condition to be studied

Rheumatoid arthritis

Psoriatic arthropathy

Colitis ulcerative

Population studied

Age groups

- Preterm newborn infants (0 – 27 days)
- Term newborn infants (0 – 27 days)
- Infants and toddlers (28 days – 23 months)
- **Adult and elderly population (≥18 years)**

Special population of interest

Pregnant women

Estimated number of subjects

300

Study design details

Setting

The cohort study will be conducted by the Organization of Teratology InformationSpecialists (OTIS) which is a network of university and health department based telephone information centers serving pregnant women and healthcare providers throughout North America. These services receive spontaneous telephone inquiries from women and health care providers about the safety or risk associated with environmental exposures in pregnancy,

including medications. Trained Teratogen Information Specialists at each site provide appropriate risk assessment and referral for all patient and health care provider callers free of charge. These services also provide a basis for collaborative research such as this Registry. Thus, individual Teratogen Information Services located throughout the U.S. and Canada will serve as a source of referrals not only for tofacitinib-exposed pregnancies but also for similarly-ascertained pregnant women with an approved indicated disease who have not used tofacitinib and similarly ascertained pregnant women without an autoimmune disease who have not used tofacitinib or any known human teratogen. As OTIS member services receive over 70,000 teratogen information telephone inquiries per year, OTIS members constitute a major source of identification and recruitment of exposed women and appropriate comparison women. Once women are in contact with the Registry Coordinating Center, enrollment in the Registry is voluntary and requires informed consent of the pregnant woman. The Registry will enroll pregnant women who are less than 20 weeks' gestation. This is accomplished by encouraging clinicians to refer patients, and following-up with women who are planning pregnancy who contact an OTIS service or who self-refer, and
direct outreach efforts to target women who are less than 20 weeks' gestation. These efforts reduce possible bias based on prior knowledge of a normal ultrasound, and allow for better estimation of risk of spontaneous abortion.

Comparators

Comparison Group I: Disease-matched Unexposed (to tofacitinib) Cohort: Currently pregnant women with a diagnosis of a disease for which tofacitinib has an approved indication, by maternal report and validated by medical records, who have not taken tofacitinib any time since first day of last menstrual period (LMP) to delivery in the current pregnancy but who may or may not have taken another medication for their disease including an anti-TNF

or other biologic in the current pregnancy. To the extent that tofacitinib-exposed women enrolled in the cohort study also have methotrexate exposure, women in the disease-matched unexposed comparison group I with methotrexate exposure will be recruited to frequency match the number with tofacitinib plus methotrexate, and who agree to enroll prior to 20 weeks' gestation, and who have not had prenatal diagnosis of any major structural defect prior to enrollment.

Comparison Group II: Non-diseased Unexposed (to tofacitinib) Cohort: Currently pregnant women who have not had exposure to a known human teratogen or biologic agent as confirmed by the OTIS Research Center, and who do not have an autoimmune disease, and who agree to enroll prior to 20 weeks' gestation, and who have not had prenatal diagnosis of any major structural defect prior to enrollment.

Outcomes

The primary outcome variable is major structural defects. Secondary outcomes include: minor structural defects, spontaneous abortions, stillbirth, premature delivery, small for gestational age, postnatal growth deficiency, loss to follow-up, serious or opportunistic infections and malignancies.

Data analysis plan

The primary analysis for the cohort study will be a comparison of the birth prevalence of major structural defects in live born infants between the tofacitinib-exposed group and the primary comparator group. This analysis will use chi-square or Fisher's Exact test for univariate comparisons and logistic regression or Cochran-Mantel-Haenzsel test for multivariate analysis (ie, adjustment of possible confounders including demographics and disease duration).

Documents

Study report

A3921203 Final Study Report.pdf (3.79 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 source(s), other

Organization of Teratology Information Specialists

Data sources (types)

Disease registry

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