Non-interventional Post-Authorisation Safety Study of Burosumab in the Treatment of Children >1 year of age, Adolescents and Adults with X-Linked Hypophosphataemia (XLH PASS)

First published: 06/11/2019

Last updated: 19/05/2025

Study Ongoing

Administrative details

EU PAS number

EUPAS32190

Study ID

47168

DARWIN EU® study

No

Study countries

- [ ] Belgium
- [ ] Bulgaria

- [ ] Czechia
- [ ] Denmark
- [ ] France
- [ ] Germany
- [ ] Hungary
- [ ] Ireland
- [ ] Israel
- [ ] Italy
- [ ] Latvia
- [ ] Netherlands
- [ ] Norway
- [ ] Portugal
- [ ] Slovakia
- [ ] Slovenia
- [ ] Spain
- [ ] Sweden
- [ ] Switzerland
- [ ] United Kingdom
- [ ] United Kingdom (Northern Ireland)

Study description

This is a 10-year prospective cohort study using data collected in a European disease registry for XLH. The PASS is non-interventional so all data collected will arise from the usual clinical management of these patients.

Primary objectives

1. To evaluate the frequency and severity of safety outcomes in children and adolescents aged 1 to 17 years with radiographic evidence of bone disease and adults, and who are treated with burosumab for XLH, including but not limited to: long term safety (as evidenced by death, hospitalisations, cardiovascular

disease, cancer all sites), hyperphosphataemia and its complications, ectopic mineralisation, increased parathyroid hormone levels.
2. To prospectively evaluate the frequency and outcomes of pregnancies in female subjects treated with burosumab.
3. To prospectively evaluate the frequency and severity of safety outcomes in subjects with mild to moderate chronic kidney disease at baseline treated with burosumab.

Secondary objectives:
1. To perform a retrospective cohort analysis using data from the XLH Registry to compare the safety outcomes in subjects exposed to burosumab to those in subjects receiving alternative treatments for XLH.

Study status

Ongoing

Research institutions and networks

Institutions

Karolinska Institutet

Sweden

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Institution | Educational Institution

Contact details

Study institution contact

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Study contact

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Primary lead investigator

Ola Nilsson

Primary lead investigator

Study timelines

Date when funding contract was signed

Actual: 20/11/2018

Study start date

Planned: 24/04/2019

Actual: 24/04/2019

Date of interim report, if expected

Planned: 26/10/2020

Actual: 26/10/2021

Date of final study report

Planned: 31/07/2029

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Kyowa Kirin International plc.

Study protocol

XLH Registry Protocol Amendment 2_Final_15Feb2019.pdf(878.72 KB)

XLH Registry Protocol Amendment 3 with embedded PASS_27Oct2021_clean.pdf (1.34 MB)

Regulatory

Was the study required by a regulatory body?

Yes

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

EU RMP category 3 (required)

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)

Main study objective:

The purpose of the study is to characterise the treatment, progression and long-term outcomes of XLH. The safety outcomes will include:

• Long term safety: Death, Hospitalisations, Cardiovascular disease, Cancer (all sites)

• Hyperphosphataemia

• Ectopic mineralisation

• Increased parathyroid hormone levels

• Effects in patients with mild to moderate chronic kidney disease at baseline

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Name of medicine

CRYSVITA

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

BUROSUMAB

Anatomical Therapeutic Chemical (ATC) code

(M05BX) Other drugs affecting bone structure and mineralization

Other drugs affecting bone structure and mineralization

(M05BX05) burosumab

burosumab

Additional medical condition(s)

X-Linked Hypophosphataemia (XLH)

Population studied

Age groups

Infants and toddlers (28 days – 23 months)

Children (2 to < 12 years)

Adolescents (12 to < 18 years)

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

400

Study design details

Outcomes

1. Evaluate frequency & severity of safety outcomes in Children & Adults with XLH with radiographic evidence of bone disease, who are treated with burosumab
2. Prospectively evaluate frequency & outcomes of pregnancies in female subjects treated with burosumab
3. Prospectively evaluate frequency & severity of safety outcomes in patients with mild to moderate CKD treated with burosumab

To perform a retrospective cohort analysis using data from the XLH Registry to compare the safety outcomes in subjects treated with burosumab to those outcomes in subjects receiving alternative treatments for XLH

Data analysis plan

Given the orphan indication and likely relatively small number of burosumab subjects (estimated to be approximately 400 subjects in the XLH Registry at the end of 10 years) the data analysis will be in the form of descriptive statistics as the sample size will not be sufficient for formal comparative analysis.
Medical history and drug details will be captured in the XLH Registry via use of ICD10 codes and the World Health Organization Drug Dictionary (WHODD).
Adverse events will be coded using the latest version of the Medical Dictionary for Regulatory Activities (MedDRA).

Documents

Study, other information

2019PASS Progress report_v1.0_11 Oct 2019_Final.pdf(133.59 KB)

PASS Progress report_v2.0_15 October 2020.pdf(1.38 MB)

Clinical Study Report - Approved Interim CSR - 04-Oct-2021.pdf(1.48 MB)

PASS Progress report_v3.0_04 April 2022.pdf(198.31 KB)

PASS Progress report_v4.0_05Apr2023.pdf(254.01 KB)

PASS Annual Progress Report 2024.pdf(283.98 KB)

PASS Annual Progress Report 2025.pdf(651.2 KB)

Data management

Data sources

Data sources (types)

Disease registry

Other

Data sources (types), other

Prospective patient-based data collection

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