Emicizumab Use in Pediatric Patients in the Real World: an Analysis of the PedNet Registry

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Last updated: 12/06/2025





Administrative details

EU PAS number	
EUPAS31954	
Study ID	
48526	
DARWIN EU® study	
No	
Study countries	
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Austria	
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Austria	

Denmark
Finland
France
Germany
Greece
☐ Ireland
☐ Israel
Italy
Netherlands
Norway
Portugal
☐ Spain
Sweden
Switzerland
United Kingdom

Study description

The main aim of this non-interventional, secondary data use Post-Authorization Safety Study (PASS) is to assess safety of emicizumab use in children with haemophilia A during routine clinical care, among pediatric patients enrolled in the European Pediatric Network for Haemophilia Management (PedNet) Registry.

PedNet Registry is the largest registry in the world for pediatric patients with haemophilia, currently, 20 countries with approximately 32 treatment centers participate. The registry includes all age groups and severities (FVIII <25%), which includes substantial coverage and an adequate representation of the pediatric patient population. The primary safety events of interest in this study are thromboembolic events (TEs), thrombotic microangiopathy (TMA), and anaphylaxis. However, all safety events collected in the PedNet Registry will be reported.

In addition to safety, effectiveness of emicizumab will be evaluated by the annual bleeding rate, as reported in the PedNet Registry. The following criteria describe the population eligible for this study, which will be a subset of the overall population participating in the PedNet Registry.

Inclusion criteria for inclusion in the PedNet Registry:

- Diagnosis of haemophilia A
- Factor VIII activity <25%
- Treated in one of the participating centers.

Additional inclusion for emicizumab-specific analysis:

- Received prophylactic treatment with emicizumab.

Exclusion criteria for the PedNet Registry:

- Referral to a participating center after development of inhibitors
- Informed consent for participation in the PedNet Registry not obtained.

Exclusion criteria for emicizumab-specific analysis:

- Inherited or acquired bleeding disorder other than haemophilia A.

The PedNet Registry will extract data indicated in this protocol, perform the statistical analysis, and provide results to the Marketing Authorization Holder (MAH) who will generate an annual PASS report and/or include the results in the PBRER.

Study status

Ongoing

Research institutions and networks

Institutions

F. Hoffmann-La Roche

First published: 01/02/2024

Last updated: 01/02/2024

Institution

Contact details

Study institution contact

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Study contact

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Primary lead investigator

Letizia Polito

Primary lead investigator

Study timelines

Date when funding contract was signed

Actual: 24/03/2019

Study start date

Planned: 30/11/2019

Actual: 03/12/2019

Date of final study report

Planned: 30/09/2025

Sources of funding

Pharmaceutical company and other private sector

More details on funding

F. Hoffmann-La Roche, Ltd.

Study protocol

Prot MO40685 (PEDNET) emicizumab v1 Redacted.pdf(593.4 KB)

MO40685 (PEDNET)-Protocol v2 Redacted.pdf(284.5 KB)

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)

Other study registration identification numbers and links

PedNet Registry

Methodological aspects

Study type

Study type list

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 Effectiveness study (incl. comparative)

Safety study (incl. comparative)

Data collection methods:

Secondary use of data

Main study objective:

The primary objective for this study is to evaluate the overall safety and tolerability of emicizumab administration in all pediatric patients with haemophilia A in real-world conditions, and in subgroups determined by age

and inhibitor status, as well as by severity for patients without inhibitors

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Name of medicine

HEMLIBRA

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

EMICIZUMAB

Anatomical Therapeutic Chemical (ATC) code

(B02BX06) emicizumab emicizumab

Medical condition to be studied

Haemophilia A without inhibitors
Haemophilia A with anti factor VIII

Population studied

Age groups

Paediatric Population (< 18 years)

Term newborn infants (0 - 27 days)

Infants and toddlers (28 days - 23 months)

Children (2 to < 12 years)

Adolescents (12 to < 18 years)

Estimated number of subjects

215

Study design details

Setting

PedNet Registry is the largest registry in the world for pediatric patients with hemophilia. Currently, at the time of protocol alendment, 19 European countries plus Canada with approximately 32 treatment centers participate in the registry. The registry includes data for children and adolescents up to age 18 years, and with any disease severity (FVIII <25 IU/dL), which provides an adequate representation of the pediatric patient population.

The following criteria describe the population eligible for this study, which is a subset of the overall population participating in the PedNet Registry.

Inclusion criteria for inclusion in the PedNet Registry:

- Diagnosis of hemophilia A
- Factor VIII activity < 25 IU/dL
- Treated in one of the participating centers

 Additional inclusion for emicizumab-specific analysis:
- Received prophylactic treatment with emicizumab

Exclusion criteria for the PedNet registry:

- Referral to a participating HTC after development of inhibitors

- Informed consent for participation in the PedNet Registry not obtained Exclusion criteria for emicizumab-specific analysis:
- Inherited or acquired bleeding disorder other than hemophilia A

Outcomes

- Frequency and incidence of thromboembolic events (TEs), thrombotic microangiopathy (TMA), and anaphylaxis (including terms of systemic hypersensitivity, anaphylaxis, and anaphylactoid events), overall and in subgroups determined by age and inhibitor status, as well as by severity for patients without inhibitors.

Safety endpoints:

- Frequency and incidence of any adverse events (overall, by age, and inhibitor status).

Effectiveness endpoints (overall, by age, and inhibitor status):

- Annual bleeding rate for treated joint and major bleeds;
- Number of treated bleeds, including soft tissue and minor bleeds;
- Percentage of patients with zero treated bleeds.

Data analysis plan

The Marketing Authorisation Holder (MAH) will receive aggregate level data of patients treated with emicizumab from the PedNet Registry on an annual basis. Based on the number of patients, number of adverse events (AEs), and exposure to emicizumab provided by the PedNet Registry, the MAH will perform analyses of frequencies/incidence of AEs overall and grouped by age and inhibitor status, as well as by severity for patients without inhibitors. The youngest age group will be newborns (birth to 28 days). Other age groups include: 29 days to less than(<)6 months, 6 months-<2 years, 2 years-<6 years, 6 years-<12 years, and 12 years-18 years. The MAH will report annual

bleeding rate (ABR) for treated bleeds, percentage of zero bleeds, ABR for joint bleeds and major bleeds overall and grouped by age and inhibitor status, as well as by severity for patients without inhibitors, as sent by the PedNet Registry. ABRs for soft tissue bleeds and minor bleeds is not calculated by PedNet and therefore only the number of bleeds will be presented.

Documents

Study report

Interim_CSR,_Study_MO40685_(PEDNET),_PASS_Annual_Report_30Sep2020,_Published_Oral_Redacted.pdf(905.63 KB)

MO40685 (PEDNET)-Interim CSR Synopsis 2, PASS Annual

Report_30Sep2021_Redacted.pdf(1.43 MB)

MO40685 (PEDNET)-Interim CSR Synopsis 3_PASS Annual

Report_28Sep2022_Redacted.pdf(601.02 KB)

MO40685 (PEDNET)-Interim CSR Synopsis 4_Annual Report_29-Sep-2023_Redacted.pdf(629.55 KB)

MO40685 (PEDNET)-Interim CSR Synopsis 5_Annual Report_17-Sep-2024 Redacted.pdf(492.51 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 source(s) PedNet Haemophilia registry **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**

Check stability

Unknown

Unknown

Check logical consistency

Unknown

Data characterisation

Data characterisation conducted

No