A Phase 3 open-label, multicenter study of the safety, efficacy, and pharmacokinetics of intravenous recombinant coagulation Factor VIII Fcvon Willebrand Factor-XTEN fusion protein (rFVIIIFc-VWF-XTEN; BIVV001) in previously treated pediatric patients <12 years of age with severe hemophilia A

Published: 18-11-2020 Last updated: 09-04-2024

To evaluate the safety of BIVV001 in previously treated pediatric subjects with hemophilia A.

**Ethical review** Approved WMO

**Status** Pending

**Health condition type** Coagulopathies and bleeding diatheses (excl thrombocytopenic)

Study type Interventional

## Summary

#### ID

NL-OMON49869

Source

**ToetsingOnline** 

**Brief title** 

XTEND-Kids

#### **Condition**

- Coagulopathies and bleeding diatheses (excl thrombocytopenic)
- Blood and lymphatic system disorders congenital
  - 1 A Phase 3 open-label, multicenter study of the safety, efficacy, and pharmacokin ... 3-05-2025

## **Synonym**

hemophilia A

## Research involving

Human

## **Sponsors and support**

Primary sponsor: Genzyme Europe BV

Source(s) of monetary or material Support: Bioverativ Therapeutics Inc.

## Intervention

**Keyword:** children, Hemophilia A, open-label, phase 3

## **Outcome measures**

#### **Primary outcome**

Occurrence of inhibitor development

## **Secondary outcome**

- Annualized bleeding rate (ABR), ABR by type of bleed and ABR by location of bleed
- Percentage of participants who maintain FVIII activity above prespecified levels
- Number of injection and dose of BIVV001 to treat a bleeding episode
- Percentage of bleeding episodes treated with a single injection of BIVV001
- Assessment of response to BIVV001 treatment of individual bleeding episodes
- Physician\*s global assessment of the participant\*s response based on BIVV001

#### treatment

- Total annualized BIVV001 consumption
- Annualized Joint Bleeding Rate (AJBR)
- Target joint resolution

- Change in Hemophilia Joint Health Score (HJHS) total score and domain scores
- Changes in Haemophilia Quality of Life Questionnaire for Children (Haemo-QoL) total score and physical health domain scores from baseline to week 52
- Investigators\* or Surgeons\* assessment of participant\*s hemostatic response to BIVV001 treatment
- Number of injections and dose to maintain hemostasis during perioperative period for major surgery
- Total BIVV001 consumption during perioperative period for major surgery
- Number of blood component transfusions used during perioperative period for major surgery
- Type of blood component transfusions used during perioperative period for major surgery
- Estimated blood loss during perioperative period for major surgery
- Number of participants with occurence of adverse events (AEs) and serious adverse events (SAEs)
- Number of participants with occurrence of embolic and thrombotic events
- PK parameter: Maximum activity (Cmax), elimination half-life (t1/2), total clearance (CL), total clearance at steady state (CLss), dose-normalized area under the activity-time curve (DNAUC), area under the activity time curve (AUC), volume of distribution at steady state (Vss), mean residence time (MRT), incremental recovery (IR), trough activity (Ctrough), time above predefined FVIII activity levels

# **Study description**

## **Background summary**

Hemophilia A is a congenital X-linked bleeding disorder that occurs predominantly in males and is characterized by deficiency of functional FVIII. Individuals with severe hemophilia experience frequent bleeding episodes into major joints, soft tissue, and muscle, either spontaneously or following minor trauma. The disease can be acutely life-threatening. Repeated bleeding can lead to debilitating long-term complications, including hemophilic arthropathy from bleeding into the joints.

BIVV001 is designed to be a new class of blood clotting FVIII. Preclinical and clinical experience indicate that BIVV001 has an extended half-life, which can achieve and maintain higher sustained factor activity levels than currently available treatments, with less frequent administration.

## Study objective

To evaluate the safety of BIVV001 in previously treated pediatric subjects with hemophilia A.

## Study design

Phase 3, open label, single arm.

## Intervention

Weekly dose (intravenous) of BIVV001 for 52 weeks.

## Study burden and risks

The risks are related to the blood sampling and possible side effects of the study drug.

# **Contacts**

#### **Public**

Genzyme Europe BV

Paasheuvelweg 25 Amsterdam 1105BP NL

#### **Scientific**

Genzyme Europe BV

Paasheuvelweg 25 Amsterdam 1105BP NL

## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

Children (2-11 years)

## Inclusion criteria

- Participant must be younger than 12 years of age, at the time of signing the informed consent
- Severe hemophilia A defined as <1 IU/dL (<1%) endogenous FVIII as documented either by central laboratory testing at Screening or in historical medical records from a clinical laboratory demonstrating <1% FVIII coagulant activity (FVIII:C) or a documented genotype known to produce severe hemophilia A.
- Previous treatment for hemophilia A (prophylaxis or on-demand) with any recombinant and/or plasma-derived FVIII, or cryoprecipitate for at least 150 EDs for patients aged 6-11 years and above 50 EDs for patients aged below 6 years
- Weight above or equal to 10 kg.

## **Exclusion criteria**

- History of hypersensitivity or anaphylaxis associated with any FVIII product.
- History of a positive inhibitor (to FVIII) test defined as >=0.6 BU/mL, or any value greater than or equal to the lower sensitivity cut-off for laboratories with cut-offs for inhibitor detection between 0.7 and 1.0 BU/mL, or clinical signs or symptoms of decreased response to FVIII administrations. Family history of inhibitors will not exclude the participant.

- Positive inhibitor test result, defined as >=0.6 BU/mL at Screening.

# Study design

## **Design**

Study phase: 3

Study type: Interventional

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Prevention

## Recruitment

NL

Recruitment status: Pending
Start date (anticipated): 22-02-2021

Enrollment: 3

Type: Anticipated

# **Ethics review**

Approved WMO

Date: 18-11-2020

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 18-01-2021

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 20-12-2021

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 06-05-2022

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 25-08-2022

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 28-10-2022

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 13-01-2023

Application type: Amendment

Review commission: MEC Academisch Medisch Centrum (Amsterdam)

Kamer G4-214

Postbus 22660

1100 DD Amsterdam

020 566 7389

mecamc@amsterdamumc.nl

Approved WMO

Date: 25-05-2023

Application type: Amendment

Review commission: MEC Academisch Medisch Centrum (Amsterdam)

Kamer G4-214

Postbus 22660

1100 DD Amsterdam

020 566 7389

mecamc@amsterdamumc.nl

# **Study registrations**

## Followed up by the following (possibly more current) registration

No registrations found.

# Other (possibly less up-to-date) registrations in this register

No registrations found.

# In other registers

Register ID

EudraCT EUCTR2020-000769-18-NL

Other na

CCMO NL74679.018.20