Prospective clinical study in children with severe haemophilia A to investigate clinical efficacy, immunogenicity, pharmacokinetics, and safety of Human-cl rhFVIII

Submission date	Recruitment status	Prospectively registered		
24/01/2011	No longer recruiting	☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
23/02/2011	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
13/12/2017	Haematological Disorders			

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Study information

Scientific Title

Prospective clinical study in children with severe haemophilia A to investigate clinical efficacy, immunogenicity, pharmacokinetics, and safety of Human-cl rhFVIII

Study objectives

Investigation of efficacy and safety (and pharmacokinetics in 50% of the patients included) of Human-cl rhFVIII in severe haemophilia A children (2 - 12 years old), followed for a 6-month open prophylactic treatment period.

On 03/01/2012 the overall trial end date was changed from 01/12/2011 to 01/10/2012. The countries of recruitment were changed to include Romania and Serbia.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics Committee of Brno, Czech Republic, 23/06/2010, ref: 049/10MEK

Study design

Prospective cross-over (part I) open-label trial

Primary study design

Interventional

Secondary study design

Non randomised study

Study setting(s)

Other

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use the contact details to request patient information material

Health condition(s) or problem(s) studied

Severe haemophilia A

Interventions

This study schedules two patient groups and two study phases. One patient group passes through both study phases, whereas the other patient group undergoes the second study phase only.

Study phase I ('pharmacokinetic phase') is intended to give information about the pharmacokinetics of Human-cl rhFVIII and is applicable for half of the patients included into this study. Within this phase, patients will visit their study doctor twice for the purpose of a drug administration and subsequent blood collections. The first time, the blood samples will be taken after the injection of the actually used FVIII concentrate, while the other time, the same procedure will be done after Human-cl rhFVIII administration. All patients having completed study phase I are intended to continue with study phase II.

The remaining half having not been included into study phase I, will only partake in the second study phase ('open treatment phase') which is intended to prove the efficacy of a prophylactic six-month treatment with Human-cl rhFVIII. As the need arises, also on demand treatment with Human-cl rhFVIII will be possible. Further aims of this study phase would be to investigate the immunogenic and the safety potential of Human-cl rhFVIII.

Within study phase II, five consultations with the study physician will take place. Three of them will comprehend a blood collection by which an exclusion of inhibitors will be ensured. The remaining two visits are for incremental recovery purposes, meaning that after having taken a reference blood sample, Human-cl rhFVIII will be administered, followed by two further blood sample withdrawals.

In either case the study starts with a Screening Visit, comprehending identical general basic investigations for all patients.

Intervention Type

Other

Phase

Not Applicable

Primary outcome measure

- 1. Efficacy of prophylactic treatment: the frequency of breakthrough bleeds under prophylactic treatment will be calculated. Study drug consumption data (FVIII IU/kg, extrapolated to monthly and yearly usage) both per subject and in total will be evaluated
- 2. Efficacy of on-demand treatment of breakthrough bleeding episodes

Secondary outcome measures

- 1. Pharmacokinetic parameters: in 50% of the included patients the following pharmacokinetic parameters of Human-cl rhFVIII are determined and compared with the previously used FVIII concentrate: in vivo half-life (T1/2), AUC, Cmax, Tmax, MRT, Vd, and CL. These PK parameters will be calculated for FVIII:C using both the CHR and the OS assays and the actual potency of Human-cl rhFVIII
- 2. In-vivo recovery: will be calculated also over time from the FVIII levels before and peak level obtained in the 0.5 or 2 hours post-infusion samples
- 3. The immunogenic potential of Human-cl rhFVIII is investigated by controlling the inhibitor titre
- 4. The efficacy of Human-cl rhFVIII in surgeries is assessed
- 5. The safety of Human-cl rhFVIII in terms of adverse event monitoring is assessed

Overall study start date

01/01/2011

Completion date

Eligibility

Key inclusion criteria

- 1. Must have severe haemophilia A (FVIII:C less than 1%; historical value as documented in subject records)
- 2. Previously treated with FVIII concentrate, at least 50 EDs
- 3. Immunocompetent (CD4+ count above greater than 200/µL)
- 4. Human immunodeficiency virus (HIV) negative or respective viral load less than 200 particles /µL or less than 400,000 copies/ml
- 5. Freely given written informed consent by parents or legal guardian
- 6. Aged between 2 and 12 years, males only

Participant type(s)

Patient

Age group

Child

Lower age limit

2 Years

Upper age limit

12 Years

Sex

Male

Target number of participants

60

Key exclusion criteria

- 1. Other coagulation disorder than haemophilia A
- 2. Present or past FVIII inhibitor activity (greater than 0.6 BU)
- 3. Target joints
- 4. Severe liver or kidney disease (alanine aminotranferase [ALAT] and aspartate aminotransferase [ASAT] levels greater than 5 times of upper limit of normal, creatinine greater than 120 µmol/L)
- 4. Receiving or scheduled to receive immuno-modulating drugs (other than anti-retroviral chemotherapy) such as alpha-interferon, prednisone (equivalent to greater than 10 mg/day), or similar drugs
- 5. Current participation in another clinical study
- 6. Participation in another interventional clinical study with administration of investigational medical product (IMP) in the course of the past 3 months, except studies investigating already registered FVIII products

Date of first enrolment

01/01/2011

Date of final enrolment

01/10/2012

Locations

Countries of recruitment

Austria

Czech Republic

France

Germany

Poland

Romania

Russian Federation

Serbia

Türkiye

United Kingdom

Study participating centre Oberlaaerstrasse 235

Vienna Austria 1100

Sponsor information

Organisation

Octapharma AG (Switzerland)

Sponsor details

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Sponsor type

Industry

Website

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https://ror.org/002k5fe57

Funder(s)

Funder type

Industry

Funder Name

Octapharma AG (Switzerland)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/03/2016		Yes	No