An open-label, randomized, single center, adaptive, parallel group study to investigate the single dose oral pharmacokinetics (PK) properties of olesoxime formulated as an oral suspension and as an oral solution in the fed state

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Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Neuromuscular disorders
Study type	Interventional

Summary

ID

NL-OMON45676

Source
ToetsingOnline

Brief title
Olesoxime BA study

Condition

- Neuromuscular disorders

Synonym
Neurological muscle degeneration, Spinal muscular atrophy

Research involving
Human

Sponsors and support

Primary sponsor: Hoffmann-La Roche
Source(s) of monetary or material Support: Farmaceutische industrie

Intervention

Keyword: olesoxime, spinal muscular atrophy

Outcome measures

Primary outcome

The pharmacokinetic properties of 10mg/kg olesoxime as oral suspension and

20mg/kg olesoxime as oral solution

Secondary outcome

The safety and tolerability of 10mg/kg olesoxime as oral suspension and 20mg/kg

olesoxime as oral solution

Study description

Background summary

Olesoxime is a new investigational compound that may eventually be used for the treatment of Spinal Muscular Atrophy (SMA), which is a genetic progressive muscle disease.

The disease is caused by a defect in the so-called SMN1 gene. This genetic defect can lead to dysfunction of nerve cells, which are needed to facilitate muscle movement. Ultimately, muscles can become weakened or paralyzed. Olesoxime is able to preserve the functioning of nerve cells. As a result, Olesoxime protects nerve cells from death and not functioning properly.

Olesoxime is in development and is not registered as a drug but has been given to humans before.

Study objective

The study will be performed in 2 parts, Part 1 and Part 2). The purpose of the study is to investigate how quickly and to what extent Olesoxime is absorbed and eliminated from the body. In addition, it will be investigated how safe Olesoxime is and how well Olesoxime is tolerated.

This study is planned to be performed in 90 healthy male and female volunteers, divided over 2 parts.

Part 1 will be performed in 30 healthy male and female volunteers divided over 2 groups. Each group will consist of 15 volunteers. Part 2 will be performed in 60 healthy male and female volunteers.

Study design

The study, conducted in the clinical research center in Groningen, consists of a treatment period for which the volunteer is randomly assigned to one of the two groups. Each group contains 15 volunteers. Group 1 receives olesoxime as an oral suspension (10mg/kg), while group 2 receives olesoxime as an oral solution (20mg/kg), in the fed state. Subjects will be dosed once and followed up in the clinic for 48 hours after dosing. Follow-up visits to the clinic are planned for day 5, 8, 12, 16 and 21.

Based on the pharmacokinetic results of this phase of the study, it will be decided if phase 2 will be conducted. This optional part of the study consists of 15 volunteers that will receive a dose of olesoxime that is smaller or equal to 20mg/kg.

Part 2 of the study will consist of 1 period during which the volunteers will receive Olesoxime once, either as a single administration, or divided over 2 or 3 administrations within a 24 hours period. Olesoxime is administered as a drink. There are two different versions of this drink, one with sesame oil and one without. Which version of the drink the volunteers receive and whether they receive it as a single or divided administration will be decided by chance. Regardless of which version of the drink they receive, or how it is administered, they will have to drink between 4 and 40 milliliters in volume.Part 2 of the study will be conducted in groups each containing at least 8 volunteers. They will only participate in one of these groups. The first two clinic groups in Part 2 (Group 4 and Group 5 of the study) will receive the version of the study compound which does not contain sesame oil. Half of the volunteers will receive the drink as a single administration and half of the volunteers will receive the drink divided over 2 administrations.

Intervention

Phase 1: 10mg/kg olesoxime as oral suspension, or 20mg/kg olesoxime as oral solution (randomly assigned)

Study burden and risks

Olesoxime has been studied in a total of 17 completed studies in a total of 1468 healthy volunteers or patients (adults and children). From these subjects or patients, 849 were exposed to daily doses ranging between 50 mg to 1000 mg and treatment duration up to 33 months. In all studies Olesoxime has been shown to be well tolerated at all test dose regimens. No risks were identified following review of the currently available clinical trial data.

At the dose levels used in this study, no serious adverse reactions are to be expected.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

1. Healthy male and female subjects, 18 to 64 years of age, inclusive. Healthy status is defined by absence of evidence of any active or chronic disease following a detailed medical and surgical history and a complete physical examination including vital signs, 12-lead ECG, hematology, blood chemistry, serology, and urinalysis.;2. For women of childbearing potential: agreement to remain abstinent or agreement to use an acceptable birth control method during the treatment period and for at least 90 days after the last dose of olesoxime.;3. A body mass index (BMI) between 18.0 to 30.0 kg/m2, inclusive, with a bodyweight < 100 kg on Day -1.;4. Able to participate and willing to give written informed consent and to comply with the study restrictions.

Exclusion criteria

1. Pregnant (or intending to become pregnant during the study) or lactating women, or positive urine pregnancy test at screening or day -1 (positive urine pregnancy test to be confirmed by a positive serum test).
2. History of any clinically significant gastrointestinal, renal, hepatic, broncho-pulmonary, neurological, psychiatric, cardiovascular, endocrinological, hematological or allergic disease (multiple allergies, seasonal allergy is acceptable), metabolic disorder, cancer, or cirrhosis.
3. In the opinion of the Investigator, any clinically significant major illness within one month before the screening examination or any febrile illness within one week prior to screening and up to first dose administration.
4. Clinically significant abnormalities in laboratory test results (including hepatic and renal panels, complete blood count, chemistry panel, and urinalysis) at screening. In the case of uncertain or questionable results, tests performed during screening may be repeated before randomization to confirm eligibility.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	18-10-2016
Enrollment:	90
Type:	Actual

Medical products/devices used

Product type:	Medicine
Brand name:	Olesoxime
Generic name:	N/A

Ethics review

Approved WMO Date:	29-09-2016
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	07-10-2016
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	26-04-2017
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	04-05-2017
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)

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	EUCTR2016-002661-60-NL
CCMO	NL59229.056.16