A randomized, open-label, two-way crossover study to assess the relative bioavailability of Laquinimod 0.6 mg test tablet versus Laquinimod 0.6 mg reference capsule after single dose administration with a single sequence extension to assess the pharmacokinetics of Laquinimod and its metabolites after single and multiple oral 0.6 mg dose administration in healthy subjects.

Published: 14-09-2016
Last updated: 14-04-2024

The study will be performed in 2 parts, Parts 1 and 2. In Part 1, single doses of laquinimod will be administered whereas in Part 2, multiple doses of laquinimod will be administered. The study will be performed in a maximum of 20 healthy male and...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Central nervous system infections and inflammations
Study type	Interventional

Summary

ID

NL-OMON43112

Source
ToetsingOnline

Brief title
Bioavailability study Laquinimod test tablets

Condition

- Central nervous system infections and inflammations

Synonym
Huntington's Disease and Multiple Sclerose

Research involving
Human

Sponsors and support

Primary sponsor: Teva Pharmaceutical Industries, Ltd
Source(s) of monetary or material Support: Farmaceutische Industrie

Intervention

Keyword: Huntington's disease, Laquinimod, Multiple sclerose

Outcome measures

Primary outcome

The primary objective of this study is to assess the relative bioavailability of 2 formulations of laquinimod, a test formulation of 0.6 mg tablet and a reference formulation of 0.6 mg capsule, in healthy subjects, after a single dose administration in fasted conditions.

Secondary outcome

To assess the pharmacokinetics of laquinimod and 5 of its metabolites (DELAQ, 6-HLAQ, 8-HLAQ, Spiro-LAQ, and DCLAQ) after a 0.6 mg oral administration of laquinimod capsule as a single dose and at steady state.

To determine the safety and tolerability of 2 formulations of laquinimod 0.6 mg in healthy subjects.

Study description

Background summary

Laquinimod is a new investigational compound that may eventually be used for the treatment of multiple sclerosis and Huntington*s disease.

The precise mechanism of action of laquinimod in these diseases is still under investigation. Laquinimod appears to modify the activity of the immune system, also within the central nervous system.

Multiple sclerosis is a chronic disease affecting the central nervous system: the brain and spinal cord. The symptoms are caused by the body's own immune system attacking and damaging the myelin sheaths, which are protective sheets surrounding nerve cells. This causes inflammation within the central nervous system disrupting communication between parts of the nervous system resulting in physical problems (such as paralysis), mental and sometimes psychiatric problems.

Huntington*s disease is a hereditary disease in which certain parts of the brain are affected, which results in involuntary movements that slowly worsen, mental deterioration and a number of psychiatric symptoms. The immune system may play a role in Huntington*s disease.

Laquinimod is in development and is not registered as a drug but has been given to over 3000 humans before.

Study objective

The study will be performed in 2 parts, Parts 1 and 2. In Part 1, single doses of laquinimod will be administered whereas in Part 2, multiple doses of laquinimod will be administered. The study will be performed in a maximum of 20 healthy male and female volunteers of which 6 will participate in Part 1 only and 14 will participate in both Parts 1 and 2.

In Part 1 of this study, 20 volunteers will receive a single dose of a tablet formulation of laquinimod and a single dose of a capsule formulation of laquinimod in 2 separate treatment periods (Periods 1 and 2). It will be investigated how quickly and to what extent laquinimod is absorbed and eliminated from the body (this is called pharmacokinetics). Also, the pharmacokinetics of laquinimod will be compared between the single dose tablet and capsule formulations; this is called relative bioavailability.

In Part 2 of this study, 14 volunteers will receive a laquinimod capsule once daily for 14 days after which pharmacokinetics of multiple laquinimod dosing

can be determined.

In addition, it will be investigated to what extent single (Part 1) and multiple (Part 2) doses of laquinimod are tolerated.

Study design

Part 1 of the study will consist of 2 periods (Periods 1 and 2).
During Period 1 the volunteers will stay in the clinical research center for 5 days (4 nights): from the afternoon of Day -1 (1 day before administration of the study compound; also called admission) to the morning of Day 4 (Day 1 is the day of administration of the study compound).

In Period 1, they are expected at the clinical research center on Day -1 at 14:00 h in the afternoon. They will be required not to have consumed any food or drinks during the 4 hours prior to arrival in the clinical research center (with the exception of water).

In Period 1, they will receive a single dose of either 0.6 milligrams (mg) laquinimod as an oral tablet or 0.6 mg laquinimod as an oral capsule on Day 1. They will leave the clinical research center on Day 4 of Period 1.

If they have received the laquinimod capsule in Period 1, they will have to return to the clinical research center in the morning of Days 6, 8 and 12 so that a blood sample can be collected.

The time interval between dosing in Periods 1 and 2 is at least 20 days.

During Period 2 the volunteers will stay in the clinical research center for 19 days (18 nights): from the afternoon of Day -1 (1 day before first administration of the study compound [Day 1]; also called admission) to the morning of Day 18.

In Period 2, the are expected at the clinical research center on Day -1 at 14:00 h in the afternoon.They will be required not to have consumed any food or drinks during the 4 hours prior to arrival in the clinical research center (with the exception of water).

In Period 2, they will receive a single dose of either 0.6 milligrams (mg) laquinimod as an oral tablet or 0.6 mg laquinimod as an oral capsule on Day 1. From Day 4 to Day 17 (please note that this is actually Part 2 of the study), they will receive a laquinimod capsule of 0.6 mg once daily for 14 days.

They will leave the clinical research center on Day 18 of Period 2.

The volunteers will have to return to the clinical research center in the morning of Days 19, 20, 22, 24 and 30 so that a blood sample can be collected;

they will be informed at what time you will be expected at the clinical research center on these days.

The follow-up visit will take place 17 to 21 days after they have left the clinical research center on Day 18 of Period 2 (Day 37 ± 2 days). The appointment for the follow-up visit will be made during the study.

The participation to the entire study, from pre-study screening until the follow-up visit, will be a maximum of 85 days.

Intervention

Period 1: Day 1 : 0,6 mg laquinimod
Period 2: Day 1 : 0,6 mg laquinimod and Day 4 t/m 17 once daily 0,6 mg laquinimod.

Study burden and risks

Pain, minor bleedings, bruises, possibly an infection.

Contacts

Public
Teva Pharmaceutical Industries, Ltd

Basel St 5
Petach-Tikva 4951033
IL
Scientific
Teva Pharmaceutical Industries, Ltd

Basel St 5
Petach-Tikva 4951033
IL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

healthy male or female
18 - 45 years of age, inclusive
BMI 18.5 - 29.9 kilograms/meter2, inclusive
body weight 50 kilograms or higher
non-smoking

Exclusion criteria

Suffering from hepatitis B, hepatitis C, cancer or HIV/AIDS. In case of participation in another drug study within 90 days before the start of this study or being a blood donor within 60 days from the start of the study. In case of donating more than 1.5 liters of blood in the 10 months prior the start of this study.

Study design

Design

Study type: Interventional

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	05-10-2016
Enrollment:	20
Type:	Actual

Ethics review

Approved WMO Date:	14-09-2016
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	29-09-2016
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	17-11-2016
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	EUCTR2016-003229-40-NL
CCMO	NL59151.056.16