Microdose (i.v.) and oral potential therapeutic dose administration of S 47445 to assess absolute bioavailability and pharmacokinetic parameters of S 47445 in healthy young male volunteers. An open label 1 period study.

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primary:To assess absolute bioavailability of S 47445 after administration of a single oral potential therapeutic dose and to determine the blood and urinary pharmacokinetic parameters of S 47445 after administration of a single i.v. microdose of [...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Cognitive and attention disorders and disturbances
Study type	Interventional

Summary

ID

NL-OMON34318

Source
ToetsingOnline

Brief title
S 47445 microdose and oral therapeutic dose study

Condition

- Cognitive and attention disorders and disturbances

Synonym
Alzheimer's Disease

Research involving

Human

Sponsors and support

Primary sponsor: Institut de Recherches Internationales Servier I.R.I.S
Source(s) of monetary or material Support: Farmaceutische Industrie

Intervention

Keyword: alzheimer, microdose, S 47445

Outcome measures

Primary outcome

plasma and urine S 47445 concentrations, pharmacokinetic parameters.

total radioactivity in plasma and urine

Secondary outcome

adverse events, vital signs, ECG-parameters, laboratory parameters, physical

examination

Study description

Background summary

The drug to be given (S 47445) is a new, investigational compound that may eventually be used for the treatment of Alzheimer*s disease. Alzheimer*s disease is the most prevalent cause of dementia in elderly people. It not only causes memory loss but also difficulties in cognitive function. Alzheimer*s disease is associated with deficiencies in numerous neurotransmitters (molecules that are being exchanged between cells in the brain and nervous system).
S 47445 is developed to enhance the function of one of these pathways. In animal studies S 47445 was found to enhance cognitive function.

Study objective

primary:
To assess absolute bioavailability of S 47445 after administration of a single oral potential therapeutic dose and to determine the blood and urinary

pharmacokinetic parameters of S 47445 after administration of a single i.v. microdose of [14C]-S 47445 and a single oral potential therapeutic dose of S 47445.
The secondary objective of the study is to assess the safety and the tolerability of S 47445 after administration of a single i.v. microdose of [14C]-S 47445 and a single oral potential therapeutic dose of S 47445.

Study design

Procedures and assessments:
Screening and Run-Out Visit:
Clinical laboratory, vital signs, physical examination, 12-lead ECG; at eligibility screening: medical history, CYP2D6 genotyping, standard EEG, drug screen, HBsAg, anti HCV, anti-HIV 1/2; drug screen to be repeated upon admission. Run-out visit at release form the clinical unit.

Treatment period:
Involving administration of a single oral dose S 47445 and a single i.v. microdose [14C] S 47445. One period in clinic from -17 h up to 72 h after drug administration.

Blood Sampling:
for pharmacokinetics of S 47445, radioactivity associated to [14C]-S 47445 and total radioactivity in plasma: pre-dose and 0.25 , 0.5, 1, 1.5, 2, 3, 4, 6, 8, 12, 16, 24, 48 and 72 h post-dose
a single sample for genetic profiling

Urine sampling:
for pharmacokinetics of S 47445, radioactivity associated to [14C]-S 47445 and total radioactivity: pre-dose and intervals 0-12, 12-24, 24-48 and 48-72 h post-dose

Safety assessments:
adverse events: throughout the study, vital signs, Clinical laboratory, 12 lead ECG.

Bioanalysis:
analysis of total radioactivity and radioactivity associated to [14C]-S 47445 in plasma and urine using a validated AMS method by Xceleron under Sponsor responsibility
analysis of S 47445 in plasma using a LC-MS method by Covance UK under Sponsor responsibility
genotyping (CYP2D6) by PRA
genotypeing (general) by Integragen

Intervention

Active substance S47445 and [14C]- S47445

Study burden and risks

As S 47445 will be administered to men for the first time shortly before this study, to date adverse effects in man have not been reported. In previous studies with rats and monkeys, in which S 47445 was administered daily in high doses over a period of 4 weeks, the following adverse effects were observed: increased saliva production, minor changes in blood cell production (extramedullary haemopoiesis) and whitish feaces.
With the dose used in this study no serious adverse effects are 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

healthy male volunteers
Age : 18-45 yrs
BMI : 19.0-28.0 kg/m2

Exclusion criteria

Suffering from: hepatitis B, 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 90 days from the start of the study. In case of donating more than 1.5 liters blood in the 10 months preceding the start of the 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):	09-11-2010
Enrollment:	4
Type:	Actual

Ethics review

Approved WMO

Date:	04-11-2010
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)

Approved WMO Date:	08-11-2010
Application type:	First submission
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	EUCTR2010-022672-31-NL
CCMO	NL34347.056.10