A Microdose Study to Describe the Intravenous Pharmacokinetics of [14C]-GSK2239633 in Healthy Male Subjects.

Published: 28-12-2009
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Primary:To investigate the intravenous pharmacokinetics of [14C]-GSK2239633 in healthy male subjectsTo compare total radioactivity (drug-related material) in plasma relative to parent plasma concentrationTo determine total radioactivity (drug-...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Congenital respiratory tract disorders
Study type	Interventional

Summary

ID

NL-OMON35064

Source
ToetsingOnline

Brief title
[14C]-GSK633 microdose study

Condition

- Congenital respiratory tract disorders

Synonym
Asthma

Research involving
Human

Sponsors and support

Primary sponsor: GlaxoSmithKline
Source(s) of monetary or material Support: Farmaceutische industrie.

Intervention

Keyword: Asthma, GSK2239633

Outcome measures

Primary outcome

Pharmacokinetics : plasma and urine GSK2239633 concentrations, pharmacokinetic

parameters

Radiokinetics : total radioactivity in plasma and urine

Secondary outcome

n/a

Study description

Background summary

The drug to be given GSK2239633 is a new, investigational compound that may eventually be used for the treatment of asthma.
Asthma is characterized by a predisposition to chronic inflammation of the lungs in which, amongst other things, the airways (bronchi) are narrowed. During asthma attacks (exacerbations of asthma), the smooth muscle cells in the bronchi constrict, the airways become inflamed and swollen, and breathing becomes difficult. GSK2239633 is expected to block inflammatory cells which are involved in allergic inflammation and as such may be beneficial for asthma patients.

Study objective

Primary:
To investigate the intravenous pharmacokinetics of [14C]-GSK2239633 in healthy male subjects
To compare total radioactivity (drug-related material) in plasma relative to parent plasma concentration
To determine total radioactivity (drug-related material) in urine

Secondary:
To generate samples that may be used for metabolite profiling under a separate

protocol

Study design

Design:
A single-dose, single period, microdose study in six healthy male volunteers receiving an iv microdose of [14C]-GSK2239633, containing approximately 10 kBq (270.3 nCi) radiocarbon.

Procedures and assessments
Screening and follow-up:
Clinical laboratory, physical examination, ECG, vital signs; at eligibility screening: medical history, drug screen, HBsAg, anti HCV, anti-HIV 1/2; to be repeated upon admission: clinical laboratory, vital signs, alcohol and drug screen and urine cotinine test.

Observation period:
One period in clinic from -17 h up to 48 h after drug administration.

Blood sampling:
For pharmacokinetics of GSK2239633 in plasma and total radioactivity: at screening, upon admission and immediately pre-dose and 0 (immediately after start infusion), 5, 10 and 15 (immediately after completion of iv dosing) minutes after start of infusion and 5, 15, 30, 45 minutes and 1, 1.5, 2, 3, 4, 6, 8, 12, 16, 24, 30, 36 and 48 hours after end of infusion.

Urine sampling:
For pharmacokinetics and total radioactivity: pre dose sample and interval 0-24 h post dose.

Safety assessments:
Adverse events: throughout the study; vital signs pre dose and 45 minutes 12, 24 and 48 h post dose; ECG: pre-dose and 15 minutes after start infusion and 15, 45 minutes and 12 and 48 h after end of infusion; Telemetry from pre dose until 8 h post dose; clinical laboratory pre dose and 24 and 48 h post end of infusion; liver function tests (ALT, AST, alkaline phosphatase, bilirubin) will be taken ~18 hours post-dose for the first subject only so the results can be reviewed prior to dosing subsequent subjects

Bioanalysis:
Analysis of plasma and urine GSK2239633 samples using a validated method by Sponsor.
Analysis of total radioactivity in plasma and urine using a validated method by Sponsor.

Intervention

Active substance: GSK2239633 and [14C]-GSK2239633

Activity: CCR4 antagonist selectively blocking recruitment of TH2 cells which are effectors cells for allergic inflammation

Indication: Asthma
Strength: 10 µg/mL
Dosage form: iv infusion (30 mL)

Treatment: a single 15 min iv infusion of 100 µg [14C]-GSK2239633, containing approximately 10 kBq (270.3 nCi) radiocarbon, on Day 1

Study burden and risks

Procedures:
Pain, light bleeding, heamatoma, possibly an infection.

Medication:
Since GSK2239633 will be administered to man for the first time in this study, to date adverse effects in man have not yet been reported. In previous studies with rats and dogs, in which GSK2239633 was administered in very high single doses, no relevant adverse events were reported. As this study is the first administration to man of GSK2239633, safety and tolerability will be monitored closely.

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 between 18 and 50 years
- body weight is 50 kg or more and BMI is between 18.5 and 29.9 kg/m2
- non smoker (have not smoked for at least 6 months and/or have not smoked for a period of 10 years with a maximum of 10 cigarettes or equivalent per day or a period of 5 years with a maximum of 20 cigarettes or equivalent per day prior to study drug administration

Exclusion criteria

Suffering from: hepatitis B, cancer or HIV/AIDS. In case of participation in another drug study within 60 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):	14-02-2010
Enrollment:	6
Type:	Actual

Ethics review

Approved WMO Date:	28-12-2009
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	08-01-2010
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	EUCTR2009-017584-41-NL
CCMO	NL31048.056.09