A PHASE 1, OPEN-LABEL STUDY OF THE ABSORPTION, DISTRIBUTION, METABOLISM AND EXCRETION OF 14C-LABELED IPI-145 AND THE ABSOLUTE BIOAVAILABILITY OF IPI-145 IN HEALTHY SUBJECTS

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Primary: To evaluate the absorption, distribution, metabolism and excretion of IPI-145 following a single oral dose of 14C0IPI-145.To determine the absolute bioavailability of IPI-145 following a single oral dose of IPI-145 and an intravenous...

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

Summary

ID

NL-OMON38629

Source
ToetsingOnline

Brief title
IPI-145 ADME and absolute bioavailability study

Condition

- Leukaemias
- Immune disorders NEC

Synonym
blood malignancies, Inflammatory diseases

Research involving
Human

Sponsors and support

Primary sponsor: Infinity Pharmaceuticals
Source(s) of monetary or material Support: Farmaceutische industrie

Intervention

Keyword: Inflammatory disease, IPI-145, Pharmacokinetics

Outcome measures

Primary outcome

Pharmacokinetics: blood and plasma concentrations of radioactivity, plasma

concentrations of IPI-145,

metabolite patterns in plasma, excretion of radioactivity, metabolite patterns

in urine and feces, metabolite identity,

absorption of IPI-145

Safety: adverse events, vital signs, ECG and clinical laboratory

Secondary outcome

n/a

Study description

Background summary

IPI-145 is a new investigational compound that may eventually be used for the treatment of inflammatory diseases. The study medication inhibits the action of specific proteins found in white blood cells. As white blood cells play a role in the immune system, IPI 145 may influence specific parts of the immune system. As such, it may be used in the treatment of inflammatory disorders and also of blood malignancies. IPI-145 is not registered as a drug but has been given to humans before.

Study objective

Primary:
To evaluate the absorption, distribution, metabolism and excretion of IPI-145 following a single oral dose of 14C0IPI-145.
To determine the absolute bioavailability of IPI-145 following a single oral dose of IPI-145 and an intravenous microdose of 14C-IPI-145

Secondary:
To assess the safety and tolerability of IPI-145 following a single dose administration

Study design

Procedures and assessments:
Screening and follow-up: physical examination, vital signs (weight, body temperature, blood pressure), pulse rate, clinical laboratory (serum chemistry, haematology and urinalysis), and ECG

Only at screening: demography, medical history, prior and concomitant medication, HBsAg, anti HCV, anti-HIV *, alcohol and drug screen, quantiferon test body height

Repeated at entry op Day -1: alcohol and drug screen, vital signs (body temperature, blood pressure), pulse rate, clinical laboratory (serum chemistry, haematology and urinalysis), ECG

Period 1
Blood samples:
For PK IPI-145: pre-dose and until 3 days post-dose

Period 2
Blood samples:
For PK IPI-145, total radioactivity and metabolite profiles: pre-dose and until 8 days post-dose, with a possible extension up to Day 15 post-dose, maximally

Urine collection:
For PK IPI-145, total radioactivity and metabolite profiles: Day 1-8 with a possible extension up to Day 15 maximally. When discharge criteria are not met on Day 15 a sample should be collected every 2-3 days until the criteria are met.

Feces collection:
For PK IPI-145, total radioactivity and metabolite profiles: Day 1-8 with a possible extension up to Day 15 maximally. When discharge criteria are not met

on Day 15 a sample should be collected every 2-3 days until the criteria are met.

Intervention

Period 1:
A single oral dose of 25 mg IPI-145 as a capsule, followed by a 15-minute IV infusion of 2.8 µg 14C-IPI-145 with a tracer amount of radioactivity (14.8 kBq).

Period 2:
A single oral dose of 25 mg 14C0IPI-145 as oral supsension, containing 3.15 MBq of radioactivity

Study burden and risks

The most important adverse events that were reported in previous studies: rhinitis, headache, myalgia and reactions at injection sites.
Given the expected activity of the study medication you will be watched closely for symptoms of infections though no increase in infections was observed in either of the studies.
In this study, radio-labeled IPI-145 will be used. The amount of radioactivity in the iv medication administered in Period 1 will be 14.8 KBq (KBq = kiloBecquerel, this is a unit to express the amount of radioactivity in the study drug). The amount of radioactivity in the oral medication administered in Period 2 will be 3.15 MBq (MBq = megaBecquerel, this is a unit to express the amount of radioactivity in the study drug, 1000 times the amount of 1 kBq). The average environmental background radiation burden in The Netherlands is approximately 2 mSv per year (mSv = miliSievert, this is the unit which indicates the burden on the human body thus the effect on the human body of the amount of radioactivity administered). The additional radiation burden in this study due to the administration of 14.8 KBq 14C labeled IPI-145 in Period 1 is calculated to be negligible (that is, less than the natural background radiation in one month). The additional radiation burden in this study due to the administration of 3.15 MBq 14C labeled IPI-145 in Period 2 is calculated to be 1 mSv. This is approximately 50 % of the average annual radiation burden.

Procedures: pain, light bleeding, heamatoma, possibly an infection

Registration of adverse effects: During the entire investigation all adverse effects will be documented.

Contacts

Public

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

Age: 18-45 years, inclusive
Gender: Male
BMI: 18.0-30.0 kg/m2

Exclusion criteria

Suffering from: hepatitis B, C, 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 or in case of donating more than 1.5 liter (for men)/ 1.0 liter (for women) 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):	25-02-2013
Enrollment:	6
Type:	Actual

Ethics review

Approved WMO Date:	20-02-2013
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	22-02-2013
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	07-03-2013
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	14-03-2013
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	EUCTR2012-005425-75-NL
CCMO	NL43138.056.13