Pharmacokinetics and metabolism of [14C]BMS-820836 in healthy male subjects

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Primary:- to assess the pharmacokinetics of the study drug and total radioactivity (TRA) and the routes and extent of excretion of drug-derived material after administration of a single 3 mg oral dose of 14C- labeled study drug in healthy male...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Mood disorders and disturbances NEC
Study type	Interventional

Summary

ID

NL-OMON34571

Source
ToetsingOnline

Brief title
[14C] BMS-820836 ADME study

Condition

- Mood disorders and disturbances NEC

Synonym
anxiety disorders, Depression

Research involving
Human

Sponsors and support

Primary sponsor: Bristol-Myers Squibb
Source(s) of monetary or material Support: Farmaceutische Industrie

Intervention

Keyword: ADME, Anxiety disorders, Depression

Outcome measures

Primary outcome

- Radiokinetics

- Pharmacokinetics

- Safety

Secondary outcome

N.a.

Study description

Background summary

The drug to be given is a new, investigational compound that may eventually be used for the treatment of depression and anxiety disorders.
Depressive Disease is defined as a depressive disorder characterized by depressed mood, loss of either interest or pleasure, loss of energy, must have persisted for at least two weeks, associated with significant impairment in functioning. Anxiety disorders is a blanket term covering several different forms of abnormal and pathological fear and anxiety.
Depression and Anxiety disorders are thought to be caused by a malfunctioning in the brain of certain proteins (monoamines like noradrenalin, serotonin and dopamine). The study drug is a potent, and selective triple monoamine reuptake inhibitor which is acting on the three monoamines mentioned before.

Study objective

Primary:
- to assess the pharmacokinetics of the study drug and total radioactivity (TRA) and the routes and extent of excretion of drug-derived material after administration of a single 3 mg oral dose of 14C- labeled study drug in healthy male subjects

Secondary:
- to assess the safety of a single oral 3 mg dose of [14C]-BMS-820836

Exploratory:
- to identify metabolites of BMS-820836 (and, if applicable, estimate their exposures)
- to identify routes of elimination of BMS-820836

Study design

Design:
an open-label, non-randomized, single dose study in six healthy male subjects receiving a single oral dose of 14C-labeled study drug containing approximately 2.95 MBq (80 µCi) of total radioacarbon

Procedures and assessments
Screening and follow-up:
The screening will include a physical examination including measurement of blood pressure, pulse rate, body temperature and respiratory rate, a heart trace (electrocardiogram) recording, and a number of blood and urine tests. Subjects will also be screened for drugs of abuse, Hepatitis B and C, and HIV (= AIDS test).

Observation period:
one period in clinic from -17 h up to 336 h (Day 15) after drug administration with a possible extension to Day 22 if the following discharge criteria are not met: at least 90% of the total dose of radioactivity has been collected and the measurement of combined radioactivity in a 24-hour interval collection of urine and feces is * 1% of the administered radioactivity over the prior 3 consecutive days (based on [14C] radioactivity quick counts)

Blood sampling:
- for pharmacokinetics of the study drug in plasma: pre-dose and 2, 4, 6, 7, 9, 12, 24, 48, 72, 96, 120, 144, 192 and 336 h post dose dose and in case subjects are required to stay in the unit past Day 15 based on the discharge criteria for radioactivity recovery: 504 h post-dose
- for total radioactivity in plasma: pre-dose and 2, 4, 6, 7, 9, 12, 24,48, 72, 96, 120, 144, 168, 192, 216, 240, 264, 288, 312 and 336 h post-dose and in case subjects are required to stay in the unit past Day 15 based on the discharge criteria for radioactivity recovery: 360, 384, 408, 432, 456, 480 and 504 h post-dose

Urine sampling:
for pharmacokinetics, total radioactivity and biotransformation: pre-dose and intervals 0-24, 24-48, 48-72, 72-96, 96-120, 120-144, 144-168, 168-192, 192-216, 216-240, 240-264, 264-288 and 288-312 h post-dose and then every 24 h interval until discharge

Faeces sampling:
for total radioactivity and metabolite profiling : pre-dose and intervals 0-24,

24-48, 48-72, 72-96, 96-120, 120-144, 144-168, 168-192, 192-216, 216-240, 240-264, 264-288 and 288-312 h post-dose and then every 24 h interval until discharge

Safety assessments:
adverse events: throughout the study; physical examination: once on Day 1; vital signs and ECG: 6 h post-dose and once at discharge; body weight and clinical laboratory:once at discharge

Bioanalysis:
analysis of plasma and urine study drug samples using a validated method by Sponsor
analysis of total radioactivity in whole blood, plasma, urine and faeces using a validated method by Sponsor
quick counts by PRA
metabolite profile in plasma, urine and faeces using a validated method by Sponsor

Intervention

Active substance: BMS-820836 and [14C]-BMS-820836

Study burden and risks

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

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

healthy male subjects, up to moderate smoking
Age: 18-45 years
BMI: 18.0-30.0 kg/m2

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 or in case of donating more than 1 liter 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):	27-10-2010
Enrollment:	6
Type:	Actual

Ethics review

Approved WMO Date:	25-10-2010
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	26-10-2010
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	21-12-2010
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	EUCTR2010-021400-22-NL
CCMO	NL34081.056.10