The effect of varying degrees of renal impairment on the single dose pharmacokinetic profile of orally administered lurasidone: a phase I study

Submission date 22/10/2008	Recruitment status No longer recruiting	 Prospectively registered Protocol
Registration date 19/02/2009	Overall study status Completed	 Statistical analysis plan Results
Last Edited 19/02/2009	Condition category Urological and Genital Diseases	 Individual participant data Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s) Scientific

Contact name Ms Shelda Alcock

Contact details

Dainippon Sumitomo Pharma Europe Ltd 1st Floor, Southside 97-105 Victoria Street London United Kingdom SE1E 6QT

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

D1050265

Study information

Scientific Title

Study objectives

Primary hypothesis:

To assess the effect of varying degrees of renal impairment on the pharmacokinetics of lurasidone and its major metabolites.

Secondary hypothesis: To assess the effect of varying degrees of renal impairment on the safety of lurasidone and its major metabolites.

Ethics approval required

Old ethics approval format

Ethics approval(s)

1. Germany: Medical Association of Saxony gave approval on the 29th August 2008 2. Czech Republic: Ethics Committee for Multi-Centric Clinical Trial of the University Hospital Motol gave approval on the 23rd September 2008

Study design

Open-label single dose oral administration study

Primary study design

Interventional

Secondary study design Non randomised controlled trial

Study setting(s) Hospital

Study type(s) Treatment

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied Renal impairment

Interventions All patients will receive a single oral 40 mg dose of lurasidone and be followed up for 7 days.

Intervention Type

Drug

Phase Phase I

Drug/device/biological/vaccine name(s)

Lurasidone

Primary outcome measure

Pharmacokinetics will be assessed as follows:

1. Primary parameters: AUC0-last, Cmax, assessed by PK sampling at 15 timepoints from 0 - 96 hours post-dose

2. Secondary parameters: AUC0-8, CL/F, tmax, t½, Vz/F and lambda z assessed at multiple timepoints until day 7

Secondary outcome measures

Safety will be assessed by using the following endpoints:

- 1. Spontaneous adverse event reporting
- 2. Clinical laboratory tests (clinical chemistry including prolactin, haematology and urinalysis)
- 3. Concomitant medication review
- 4. Vital sign assessments (supine blood pressure, heart rate, body temperature)

5. 12-lead ECG

6. Complete physical examinations

Overall study start date

01/10/2008

Completion date

31/12/2008

Eligibility

Key inclusion criteria

All subjects:

1. Male or female, between 18 and 75 years of age inclusive

2. Body mass index (BMI) between 18 and 32 kg/m^2, and minimum body weight of 50 kg

- 3. Written informed consent
- 4. Able to comply with all aspects of protocol

Renal impairment subjects:

- 5. Renal impairment based on Cockcroft-Gault estimation of creatinine clearance (CrCl)
- 6. Renal disease is deemed stable by investigator
- 7. Pre-study clinical laboratory findings are within normal range

Normal renal function subjects:

8. Subject has normal renal function based on Cockcroft-Gault estimation

9. Subject is in good health as determined by medical history, physical examination, vital signs, electrocardiogram (ECG) and standard laboratory tests

Participant type(s)

Patient

Age group

Adult

Lower age limit

Sex

Both

Target number of participants

24 - 27 patients (with renal impairment); minimum of 9 patients (control group); minimum of 33 (total study)

Key exclusion criteria

- 1. Clinically significant illness in 4 weeks before screening
- 2. Shows evidence of clinical significant underlying medical condition
- 3. End-stage renal disease and is receiving dialysis
- 4. Any disorder which may alter drug absorption, distribution, metabolism and excretion

Date of first enrolment

01/10/2008

Date of final enrolment 31/12/2008

Locations

Countries of recruitment

Czech Republic

England

Germany

United Kingdom

Study participating centre Dainippon Sumitomo Pharma Europe Ltd London United Kingdom SE1E 6QT

Sponsor information

Organisation Dainippon Sumitomo Pharma Europe Ltd (UK)

Sponsor details

1st Floor, Southside 97-105 Victoria Street London United Kingdom SW1E 6QT

Sponsor type

Industry

Website http://www.ds-pharma.co.jp/english

ROR https://ror.org/03sh4z743

Funder(s)

Funder type Industry

Funder Name Dainippon Sumitomo Pharma Co Ltd (Japan)

Alternative Name(s) Dainippon Sumitomo Pharma Co., Ltd.

Funding Body Type Private sector organisation

Funding Body Subtype For-profit companies (industry)

Location Japan

Results and Publications

Publication and dissemination plan Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary Not provided at time of registration