ISRCTN58187635 https://doi.org/10.1186/ISRCTN58187635

Silexan in Healthy Recreational Drug Users

Submission date 24/07/2018	**Recruitment status** No longer recruiting	[_] Prospectively registered [_] Protocol
Registration date 10/09/2018	**Overall study status** Completed	[_] Statistical analysis plan [_] Results
Last Edited 10/09/2018	**Condition category** Other	[_] Individual participant data [_] Record updated in last year

Plain English summary of protocol

Background and study aims?
Drug abuse is when drugs are taken for non-medical reasons, such as to get high, or to alter a person's state of consciousness. CNS depressants are drugs that slow down brain activity, and are often used to treat anxiety disorders. However, people also use these drugs recreationally and may become addicted to or dependent on them, which is drug abuse.
Silexan is a preparation of lavender oil that has been shown in clinical trials to be effective against anxiety. Additionally, no addictive effects were observed during these trials.
The aim of this study was to determine whether Silexan has the potential to be abused, with comparison to Lorazepam, a CNS depressant.

Who can participate?
Healthy male or female volunteers 18-55 years of age (inclusive) who are CNS depressant users

What does the study involve?
Volunteers are examined at Visit 1. At Visit 2, participants are asked to take single doses of placebo and 3 mg Lorazepam during a 3-night stay in the research clinic to test their qualification for the treatment phase. The treatment phase includes 5 separate visits (Visit 3 to 7) at the research clinic. Each treatment visit is a 2-night stay (3 days per visit) and involves taking a different study drug each time (either the placebo, or different doses of Lorazepam or Silexan). Volunteers receive all 5 of the study drugs, 1 at each of the 5 treatment visits, in a random order. There will be at least 4 days between each dose of study drug. During the 5 visits the volunteers complete pen and paper questions, blood is drawn and safety assessments are performed. A follow-up visit (Visit 8) will take place 5 to 10 days after the last dose of study drug.

What are the possible benefits and risks of participating?
The benefit to participants of taking part is that they will receive a comprehensive medical examination. There are no known risks to participants taking part in this study.

Where is the study run from?
INC Research Toronto Inc, Canada

When is study starting and how long is it expected to run for?
September 2012 to February 2016

Who is funding the study?
Dr. Willmar Schwabe GmbH & Co. KG (Germany)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
750201.01.034

Study information

Scientific Title
A Single-Dose, Double-Blind, Randomized, Active- and Placebo-Controlled Crossover Study to Evaluate the Abuse Potential of Silexan in Healthy Recreational Drug Users

Study objectives
The primary objective of this study is to evaluate whether there is an abuse potential of single oral doses of Silexan compared to Lorazepam and placebo in healthy, non-dependent, recreational CNS depressant users.

Ethics approval required
Old ethics approval format

Ethics approval(s)
IRB Services, Ontario, Canada, 09/02/2015, CR00046829

Primary study design
Interventional

Study design
Interventional single-dose double-blind single-center active- and placebo-controlled randomized 5-way crossover trial

Study type(s)
Other

Health condition(s) or problem(s) studied
Recreational CNS depressant use

Interventions
Participants are assigned, in ascending order, a unique randomization number to identify their sequence of study treatments. Subjects receive all 5 treatments in the order specified by the treatment sequence in a double-blind manner. The 5 treatments were single oral doses of 6 capsules of the following:
1. Placebo
2. Silexan (Lavela WS 1265) 80 mg
3. Silexan (Lavela WS 1265) 640 mg
4. Lorazepam (Teva-Lorazepam) 2 mg
5. Lorazepam (Teva-Lorazepam) 4 mg
Visit 1 involves an examination at the clinic. Following this, visit 2 involves a 3 night stay at the research clinic, where volunteers will be asked to take single doses of the placebo and 3mg Lorazepam to determine whether they qualify for the treatment phase. The treatment phase then consists of 5 separate visits (visits 3-7), each of which is a 2 night stay. There will be at least 4 days between each dose of the study drug. At each of these 5 visits, participants will receive 1 of the above drugs. During the visits, participants will be asked to complete questionnaires, blood samples will be taken and safety assessments will be performed. Visit 8 is a follow-up 5-10 days after the last dose of the study drug.

Intervention Type
Drug

Phase
Phase I

Drug/device/biological/vaccine name(s)
Silexan Lorazepam

Primary outcome(s)
The primary endpoint of this study is Emax (maximum effect) on the Drug Liking Visual Analogue Scale (“at this moment”), assessed before taking the study drug and at 30 minutes and 1, 1.5, 2, 2.5, 3, 4, 6, 8, 12, and 24 hours after taking the study drug.

Key secondary outcome(s)
1. Pharmacodynamic endpoints, assessed before and at 30 minutes and 1, 1.5, 2, 2.5, 3, 4, 6, 8, 12, and 24 hours after taking the study drug. This is assessed using the sum of all Visual Analog Scales used in the study (scales for balance of effects, positive subjective effects, negative subjective effects, sedative subjective effects and other drug effects) and the 49-item Addiction Research Center Inventory (ARCI-49)
2. Pharmacokinetic endpoints, including maximum observed plasma concentration, time to maximum observed plasma concentration, area under the plasma concentration, terminal elimination half-life, total systemic clearance and volume of distribution, assessed by taking blood samples about 15 minutes, 30 minutes, 45 minutes and 1, 1.5, 2, 2.5, 3, 4, 5, 6, 8, 12, 14, and 24 hours after taking the study drug
3. Safety endpoints:

3.1. Adverse events, assessed at every visit and in the treatment periods before taking the study drug and at 30 minutes and 1, 1.5, 2, 3, 4, 6, 12, and 24 hours after taking the study drug
3.2. Vital signs, assessed at every visit and in the treatment periods before taking the study drug and at 30 minutes and 1, 1.5, 2, 3, 4, 6, 12, and 24 hours after taking the study drug
3.3. ECG, measured at every visit
3.4. Clinical laboratory tests, completed at every visit
3.5. Physical examination, completed at every visit
3.6. Columbia-Suicide Severity Rating Scale, assessed in every treatment period (day before drug intake and 24 hours after taking the study drug) and in the follow up visit

Completion date
19/02/2016

Eligibility

Key inclusion criteria
1. Healthy
2. Aged 18-55 years
3. Current recreational drug user who has used CNS depressants for recreational, non-therapeutic purposes,:
3.1. At least 10 times in their lifetime, and
3.2. At least 1 time in the 12 weeks before screening
4. Sufficient ability to speak, read and understand English, to allow completion of all study assessments

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
55 Years

Sex
All

Key exclusion criteria
1. Substance or alcohol dependence (excluding nicotine and caffeine) within the past 12 months, as defined by the DSM-IV, and/or subjects who have ever been in a substance or alcohol rehabilitation program to treat their substance or alcohol dependence;
2. History or presence of clinically significant abnormality as assessed by physical examination, medical history, 12-lead ECG, or vital signs, which in the opinion of the investigator would jeopardize the safety of the subject or the validity of the study results

3. Use of a prohibited medication (assessed by the investigator on a case-by-case basis)
4. Positive urine drug screen or positive breath alcohol test
5. Treatment with an investigational drug within 30 days prior to first drug administration
6. Concurrently enrolled in any research

Date of first enrolment
13/04/2015

Date of final enrolment
11/08/2015

Locations

Countries of recruitment
Canada

Study participating centre
INC Research Toronto Inc.
Toronto
Canada
M5V 2T3

Sponsor information

Organisation
Dr. Willmar Schwabe GmbH & Co. KG

ROR
https://ror.org/043rrkc78

Funder(s)

Funder type
Not defined

Funder Name
Dr. Willmar Schwabe GmbH & Co. KG

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available as it was not permitted by the ethics committee and due to legal reasons.

IPD sharing plan summary

Not expected to be made available