Safety and Tolerability of Oral Namisol®, a Tablet Containing Delta-9-Tetrahydrocannabinol, in Elderly Subjects: A randomized Controlled Trial

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Primary objective:- To evaluate the safety and tolerability profiles of three oral doses of Namisol® in a healthy elderly population Secondary objective:- To evaluate the relationship between the pharmacodynamic effects (using VAS-feeling high, TAP-...

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

Summary

ID

NL-OMON37093

Source
ToetsingOnline

Brief title
Safety and Tolerability of Namisol® in the Elderly

Condition

- Other condition

Synonym
NVT

Health condition

NVT. De studiemedicatie wordt gegeven aan gezonde ouderen

Research involving

Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Sint Radboud
Source(s) of monetary or material Support: EFRO subsidie + Provincie Gelderland&Overijssel subsidie

Intervention

Keyword: Delta-9-Tetrahydrocannabinol, Elderly, Namisol®, Safety

Outcome measures

Primary outcome

- Safety and tolerability profiles of three oral doses of Namisol®

Secondary outcome

1- The relationship between VAS-feeling high and the plasma concentrations of THC and its active metabolites 11-OH-THC and THC-COOH in a healthy elderly population at three different doses Namisol®

2- The relationship between TAP- alertness and the plasma concentrations of THC and its active metabolites 11-OH-THC and THC-COOH in a healthy elderly population at three different doses Namisol®

3- The relationship between Body Sway and the plasma concentrations of THC and its active metabolites 11-OH-THC and THC-COOH in a healthy elderly population at three different doses Namisol®

Study description

Background summary

The results of phase I Namisol® study, implicate that Namisol® may have a favorable PK and PD characteristics and is safe to use in people. However, the study included only young adults with a mean age of 21.4 years. Moreover, the results of the study are not to translate well into elderly.
In general, there is a strong concern about the safety and tolerability of THC in the elderly population. This is because, elderly persons in general have higher risk of adverse drug reactions due to a combination of physiological factors such as decreasing in lean body mass, the reduction of renal and hepatic clearance, and medical comorbidity which can lead to polypharmacy and drug-drug interactions. Therefore, it is very important to evaluate the safety and tolerability profiles of different Namisol® doses in the elderly population.
In the current study we will use the following Namisol® doses: 3 mg, 5 mg and 6,5 mg. The doses 5 mg and 6,5 mg had been used in phase I study. The dose 8 mg, will not be investigated in this study due to the high incidence of adverse drug reactions in young adults (9/9 subjects).

Study objective

Primary objective:
- To evaluate the safety and tolerability profiles of three oral doses of Namisol® in a healthy elderly population

Secondary objective:
- To evaluate the relationship between the pharmacodynamic effects (using VAS-feeling high, TAP-alertness and body sway) and the plasma concentrations of THC and its active metabolites 11-OH-THC and THC-COOH in a healthy elderly population at three different doses Namisol®

Study design

A randomized, double-blind, placebo-controlled, cross-over, single-center trial

Intervention

Volunteers will be randomized to receive 3 doses Namisol® (3 mg, 5 mg, 6,5 mg) and placebo during 4 seperatie occasions (visit 1 to 4).

Study burden and risks

The study participants are healthy elderly volunteers who will not benefit from the participation in this clinical trial. They will visit the centre five times: Visit 0: general screening. Visit 1-4: eligible subjects will be admitted to the trial unit for 4,5 hours. Namisol® will be administrated and

blood sampling and test blocks will be undertaken. The total duration of the screening period is 2 hours and the intervention period is 18 hours.

During the trial period, a total of 23 blood samples will be taken [Visit 0: 2 samples and visit 1 - 4: 8 samples for safety screening, 1 for genotyping of cytochrome P450 enzymes and 16 for the plasma concentrations of THC, 11-OH-THC and THC-COOH]. The total volume that will be taken is 166 ml.
To facilitate blood sampling on each intervention visit, an intravenous cannula will be inserted, prior to drug administration. The total duration of the study for each subject from screening until the end of study is 8 weeks.

Possible THC adverse events are: drowsiness, ataxia (loss of coordination), euphoria, and dizziness.

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

- Subject is a healthy old person as established by medical history, physical examination, electrocardiography, results of hematological and biochemical blood tests on screening.
- Age 65 years or older
- Body mass index (BMI) between 18.0 and 30 kg m-2
- Subject is able and willing to sign the Informed Consent Form prior to screening evaluations

Exclusion criteria

- Regular cannabis user defined as: smoking one or more joints per week
- Documented history of sensitivity/idiosyncrasy to cannabis
- Relevant history or presence of severe pulmonary disorders [e.g. COPD GOLD III or IV], serious cardiovascular disorders [e.g. myocardial infarction < 6 months ago; atrial fibrillation; heart failure NYHA III or IV; severe heart valve disease, orthostatic hypotension defined as systolic drop of 20 mm Hg or diastolic drop of 10 mm Hg], seizures, migraine, psychiatric disorders [e.g. depression (based on documented history or GDS-30 on screening >= 10); mania; psychosis; dementia], cognitive impairment [based on documented history or MMSE on screening < 28, significant renal (GFR < 30 ml/min) or hepatic disorders [e.g. cancer, cirrhosis. ALT or AST >= twice the upper limit of normal], diabetes mellitus, coagulation disorders
- Inability to understand the nature and extent of the trial and the procedures required
- Current alcohol abuse or use of more than 2 alcoholic consumptions daily
- History of, or current drug abuse
- Using drugs that are inhibitors of CYP2C9, CYP2C19 and CYP3A4 (see appendix 13.3)
- Participation in a drug trial within 60 days prior to the first intervention day
- Donation of blood within 60 days prior to the first intervention day
- Known lactosis intolerance
- Using more than six units of (methyl)xanthine products per day (e.g. coffee, tea, cola, chocolate)
- Smoking more than ten cigarettes per day
- High fall-risk (based on Body Sway Test)

Study design

Design

Study type:	Interventional
Intervention model:	Crossover
Allocation:	Randomized controlled trial

Masking:	Double blinded (masking used)
Control:	Placebo
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-08-2012
Enrollment:	12
Type:	Anticipated

Medical products/devices used

Product type:	Medicine
Brand name:	Namisol®
Generic name:	Delta-9-Tetrahydrocannabinol

Ethics review

Approved WMO Date:	19-06-2012
Application type:	First submission
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)
Approved WMO Date:	02-08-2012
Application type:	First submission
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)

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	EUCTR2012-001841-42-NL
CCMO	NL40591.091.12
Other	Protocol wordt ingediend bij clinicaltrials.gov, identificatienummer nog onbekend