A two-part, randomized, two-period, two-sequence crossover and placebo-controlled parallel group, phase 1B trial to evaluate the safety and pharmacokinetics of Modafinil administered in combination with Aniracetam in elderly subjects with subjective cognitive decline

Published: 11-09-2019
Last updated: 10-04-2024

The purpose of this study is to investigate how safe modafinil is and how well it is tolerated when it is administered in combination with aniracetam to generally healthy elderly volunteers with subjective cognitive decline. Modafinil and aniracetam…

Ethical review	Approved WMO
Status	Recruiting
Health condition type	Cognitive and attention disorders and disturbances
Study type	Interventional

Summary

ID

NL-OMON48229

Source
ToetsingOnline

Brief title
Safety of Modafinil & aniracetam in healthy elderly with cognitive decline

Condition

- Cognitive and attention disorders and disturbances

Synonym
Subjective cognitive decline

Research involving
Human

Sponsors and support

Primary sponsor: Purdue Pharma L.P.
Source(s) of monetary or material Support: Farmaceutische Industrie.

Intervention

Keyword: Aniracetam, Modafinil, Subjective cognitive decline

Outcome measures

Primary outcome

To assess the safety and tolerability of modafinil, administered in combination with aniracetam, in generally healthy elderly male and female subjects with subjective cognitive decline (SCD)

Secondary outcome

To evaluate the pharmacokinetics (PK) of modafinil, administered alone or in combination with aniracetam, in older generally healthy male and female subjects with SCD.

Study description

Background summary

Modafinil has been on the market in Europe since 1992, and in the US since 1998. In the EU and UK, modafinil is indicated for the treatment of excessive sleepiness in adults with narcolepsy. Aniracetam is a drug that has possible cognition enhancing effects.

Neither of these 2 drugs alone appears potent enough on its own to alleviate the cognitive deficits which are present in elderly adults with subjective

cognitive decline. However, by combining the 2 drugs, improvement of episodic memory (personal important events), executive function (cognitive processes that are necessary for the control of behavior), and motivation can be expected. These cognitive functions are reduced among persons exhibiting age-related cognitive decline and mild cognitive impairment.

Study objective

The purpose of this study is to investigate how safe modafinil is and how well it is tolerated when it is administered in combination with aniracetam to generally healthy elderly volunteers with subjective cognitive decline. Modafinil and aniracetam are not new compounds; they are already available on the market in several dosages and formulations.

It will also be investigated how quickly and to what extent modafinil is absorbed and eliminated from the body. In addition, the effect of modafinil alone or in combination with aniracetam on cognitive function will be investigated.

This study will be performed in 66 generally healthy elderly male and female volunteers with subjective cognitive decline. The study will be performed in 2 parts, Part 1 and Part 2.

The effects of modafinil and aniracetam will be compared to the effects of a placebo.

Study design

Part 1:
The actual study will consist of 2 periods during which the volunteer will stay twice in the research center. In each period, they will stay in the research center for 2 days (1 night). This will be followed by a stay in the research center for 3 days (2 nights) in each period.

In each period, Day 1 is the first day of administration of the study compound(s). The volunteers are expected at the research center at 14:00 h in the afternoon prior to the day of first administration of the study compound. They will leave the research center on Day 1. From Day 2 up to Day 6 they must take the medication at home at a fixed time, staff from the research center will contact them by telephone for each medication moment. The volunteers will return to the research center on Day 6 at 14:00 h for a short stay until Day 8.

Modafinil (200 mg) will be given without or with aniracetam (1500 mg, 2 tablets of 750 mg) as small oral tablets in a capsule with 240 milliliters (mL) of (tap) water once daily for 7 days. The aniracetam will be taken approximately 1 hour and 25 minutes after taking Modafinil. In order to be blinded when taking

modafinil without aniracetam, the volunteers will also receive 2 empty capsules. The study drugs should be swallowed and not be chewed.

Part 2:
The actual study will consist of 1 period during which the volunteers will stay in the research center for 2 days (1 night). This will be followed by an ambulatory visit on Day 7.

Day 1 is the first day of administration of the study compound(s). The volunteers are expected at the research center at 10:00 h in the morning prior to the day of first administration of the study compound. They will leave the research center on Day 1. From Day 2 up to Day 6 they must take the medication at home at a fixed time, staff from the research center will contact them by telephone for each medication moment. The volunteers will return to the research center on Day 6 at 14:00 h for a short stay until Day 7.

Modafinil (200 mg) with aniracetam (1500 mg, 2 tablets of 750 mg), or placebo will be given as small oral tablets in a capsule with 240 milliliters (mL) of (tap) water once daily for 7 days. The aniracetam will be taken approximately 1 hour and 25 minutes after taking modafinil. The study drugs should be swallowed and not be chewed.

Intervention

Part 1:

Treatment A: modafinil 200 mg and 2 empty capsules once a day for 7 days
Treatment B: modafinil 200 mg with aniracetam 1500 mg once a day for 7 days

Part 2:

Modafinil 200 mg and aniracetam 1500 mg once a day for 7 days
Placebo, once a day for 7 days

Study burden and risks

Modafinil
The most commonly observed side effect (in 10% of patients or more) is headache.

Less common side effects (in 1% to 10% of patients) are decreased appetite, nervousness, insomnia, anxiety, depression, confusion, irritability, dizziness, sleepiness, paresthesia, tachycardia, heart palpitations, blurred vision, vasodilation, abdominal pain, nausea, dry mouth, diarrhea, dyspepsia (upset stomach), constipation, chest pain, asthenia, abnormal liver function test, dose-related increases in alkaline phosphatase and glutamyl transferase.

The following have also been reported: Stevens-Johnson syndrome, angioedema, and anaphylactic reaction.

Aniracetam
Aniracetam is generally well tolerated by patients. The most important observed side effects are headache, nervousness, irritability, insomnia, nausea, and vomiting.

The study compound may also have side effects that are still unknown.

Drawing blood and/or insertion of the indwelling cannula may be painful or cause some bruising.

There will taken about 270 mL blood for Part A and 60 mL for Part B.

To make a heart tracing, electrodes will be pasted at specific locations on your arms, chest and legs. Prolonged use of these electrodes can cause skin irritation.

Contacts

Public
Purdue Pharma L.P.

One Stamford Forum, Tresser Boulevard 201
Stamford CT 06901
US
Scientific
Purdue Pharma L.P.

One Stamford Forum, Tresser Boulevard 201
Stamford CT 06901
US

Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

healthy male or female with subjective cognitive decline
65 - 85 years of age
BMI 19.0 - 35.0 kilograms/meter2

Exclusion criteria

Suffering from hepatitis B, hepatitis C, cancer or HIV/AIDS. In case of participation in another drug study within 90 days before the start of this study or being a blood donor within 60 days from the start of the study. Donation or loss of more than 100 mL of blood within 60 days prior to the first drug
administration.

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:	Recruiting
Start date (anticipated):	13-09-2019

Enrollment:	36
Type:	Actual

Medical products/devices used

Product type:	Medicine
Brand name:	Aniracetam
Generic name:	N/A
Product type:	Medicine
Brand name:	Modafinil
Generic name:	N/A

Ethics review

Approved WMO Date:	11-09-2019
Application type:	First submission
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	EUCTR2019-002777-60-NL
CCMO	NL71043.056.19