

A double blind, double dummy, randomized, placebo-controlled, 5 period cross-over study to examine the effect of PF-06273340 on evoked pain endpoints in healthy volunteers using pregabalin and ibuprofen as positive controls

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To investigate the ability of PF-06273340 to demonstrate analgesic properties in healthy subjects for pre-specified primary endpoints using a panel of pain tests.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Neurological disorders NEC
Study type	Interventional

Summary

ID

NL-OMON40922

Source

ToetsingOnline

Brief title

A study to investigate the effects of PF-06273340 on a pain test battery

Condition

- Neurological disorders NEC

Synonym

Chronic pain

Research involving

Human

Sponsors and support

Primary sponsor: Pfizer

Source(s) of monetary or material Support: Pharmaceutical company

Intervention

Keyword: Healthy volunteers, Pain test battery, PF-06273340, Positive control

Outcome measures

Primary outcome

Thermal Pain (Normal Skin): Pain Detection Threshold (PDT).

Thermal Pain (Ultraviolet B (UVB) Skin): Pain Detection Threshold (PDT).

Electrical Stair (pre-cold pressor): Pain Tolerance Threshold (PTT).

Pressure Pain: Pain Tolerance Threshold (PTT).

Cold Pressor: Pain Tolerance Threshold (PTT).

Secondary outcome

Electrical Stair (pre-cold pressor): Pain Detection Threshold (PDT), Area Under the Visual Analogue Scale (VAS) pain Curve (AUC), and post-test VAS.

Electrical Stair (post-cold pressor): PDT, PTT, AUC, and post-test VAS.

Conditioned Pain Modulation Response (change from electrical stair pre- and post coldpressor): PDT, PTT, AUC, and post-test VAS.

Pressure Pain: PDT, AUC, and post-test VAS.

Cold Pressor: PDT, AUC, and post-test VAS.

Plasma PF-06273340 pharmacokinetic parameters: C_{max}, AUC_{last}, T_{max} and t* (if data permits).

Plasma ibuprofen and pregabalin concentrations.

Adverse events, laboratory safety, blood pressure, pulse rate and

electrocardiogram m(ECG).

Study description

Background summary

This is a study to investigate the effects of PF-06273340, a Trk receptor antagonist on a pain test battery. It is expected that it has a profile suitable for the treatment of chronic pain conditions.

Study objective

To investigate the ability of PF-06273340 to demonstrate analgesic properties in healthy subjects for pre-specified primary endpoints using a panel of pain tests.

Study design

This is a double blind, double dummy, single dose, randomized, placebo-controlled, 5-period cross-over study. In this study PF-06273340 is the drug under investigation and pregabalin and ibuprofen are used as a positive controls. Twenty male subjects, between 18 to 55 years of age, attend the clinic on 5 separate occasions to examine the effects of PF-06273340 on evoked pain endpoints included in the PainCart battery.

The study duration for a completed subject is a maximum of 8 weeks.

Intervention

PF-06273340 50 mg
PF-06273340 400 mg
Pregabalin 300 mg
Ibuprofen 600 mg
Placebo

Study burden and risks

Based on our experiences in the FIH trials, no exceptional severe adverse drug reactions are expected and burden/inconvenience for the subjects is considered mild.

Contacts

Public

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NL

Scientific

Pfizer

East 42nd Street 235

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NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

1. Healthy male subjects between the ages of 18 and 55 years, inclusive. Healthy is defined as no clinically relevant abnormalities identified by a detailed medical history, full physical examination, including blood pressure and pulse rate measurement, 12-lead ECG or clinical laboratory tests.
2. Body Mass Index (BMI) of 17.5 to 30.5 kg/m²; and a total body weight >50 kg (110 lbs).
3. Evidence of a personally signed and dated informed consent document indicating that the subject has been informed of all pertinent aspects of the study.
4. Subjects who are willing and able to comply with all scheduled visits, treatment plan, laboratory tests, and other study procedures.

Exclusion criteria

1. Evidence or history of clinically significant hematological, renal, endocrine, pulmonary, gastrointestinal, cardiovascular, hepatic, psychiatric, neurologic, or allergic disease (including drug allergies, but excluding untreated, asymptomatic, seasonal allergies at the time of dosing).
2. Any condition possibly affecting drug absorption (eg, gastrectomy).
3. A positive urine drug screen.
4. History of regular alcohol consumption exceeding 21 drinks/week for males (1 drink = 5 ounces (150 mL) of wine or 12 ounces (360 mL) of beer or 1.5 ounces (45 mL) of hard liquor) within 6 months of Screening.
5. Treatment with an investigational drug within 30 days (or as determined by the local requirement) or 5 half-lives preceding the first dose of study medication (whichever is longer).
6. Screening supine blood pressure ≥ 140 mm Hg (systolic) or ≥ 90 mm Hg (diastolic), following at least 5 minutes of supine rest. If blood pressure (BP) is ≥ 140 mm Hg (systolic) or ≥ 90 mm Hg (diastolic), the BP should be repeated two more times and the average of the three BP values should be used to determine the subject's eligibility.
7. 12-lead ECG demonstrating QTc > 450 msec or a QRS interval > 120 msec at Screening. If QTc exceeds 450 msec, or QRS exceeds 120 msec, the ECG should be repeated two more times and the average of the three QTc or QRS values should be used to determine the subject's eligibility.
8. Any current, clinically significant, known medical condition in particular any existing conditions that would affect sensitivity to cold (such as atherosclerosis, Raynaud's disease, urticaria, hypothyroidism) or pain (paresthesia etc).
9. Subjects indicating nociceptive tests intolerable at screening or achieving tolerance at $> 80\%$ of maximum input insensitivity for any nociceptive test for cold, pressure, heat and electrical tests.
10. Consume on average > 8 units per day of (methyl)xanthenes (eg. coffee, tea, cola, chocolate) and not able to refrain from use during each stay at the CHDR clinic.
11. Subjects with ANY of the following abnormalities in clinical laboratory tests at screening, as assessed by the study-specific laboratory and confirmed by a single repeat, if deemed necessary:
 - Aspartate transaminase (AST)/serum glutamic oxaloacetic transaminase (SGOT) or alanine transaminase (ALT)/serum glutamic pyruvic transaminase (SGPT) $\geq 1 \times$ upper limit of normal (ULN);
 - Total bilirubin $\geq 1.5 \times$ ULN; subjects with a history of Gilbert's syndrome may have a direct (conjugated) bilirubin measured and would be eligible for this study provided the direct bilirubin is \leq ULN.
12. Male subjects with partners currently pregnant; male subjects of childbearing potential who are unwilling or unable to use a highly effective method of contraception as outlined in this protocol for the duration of the study and for 3 months after the last dose of investigational product.
13. Use of prescription or nonprescription drugs and dietary supplements within 7 days or 5 half-lives (whichever is longer) prior to the first dose of study treatment. Herbal supplements must be discontinued at least 28 days prior to the first dose of study medication.

14. Blood donation (excluding plasma donations) of approximately 500 mL or more within 3 months of screening.
15. Known hypersensitivity to the investigational drug or comparator drug or drugs of the same class, or any of the excipients
16. Dark skin (Fitzpatrick skin type V or VI), widespread acne, tattoos or scarring on back.
17. Unwilling or unable to comply with the lifestyle guidelines described in this protocol.
18. Subjects who are investigational site staff members directly involved in the conduct of the study or their family members, site staff members otherwise supervised by the investigator, or subjects who are Pfizer employees directly involved in the conduct of the study.
19. Other severe acute or chronic medical or psychiatric condition or laboratory abnormality that may increase the risk associated with study participation or investigational product administration or may interfere with the interpretation of study results and, in the judgment of the investigator, would make the subject inappropriate for entry into this study.

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):	27-10-2014
Enrollment:	20
Type:	Actual

Medical products/devices used

Product type:	Medicine
Brand name:	Lyrica
Generic name:	Pregabalin

Registration:	Yes - NL outside intended use
Product type:	Medicine
Brand name:	N/A
Generic name:	Ibuprofen
Registration:	Yes - NL outside intended use

Ethics review

Approved WMO	
Date:	07-10-2014
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO	
Date:	16-10-2014
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	EUCTR2014-003553-34-NL
CCMO	NL50838.056.14
Other	to be listed on clinicaltrials.gov