ISRCTN56969091 https://doi.org/10.1186/ISRCTN56969091

Efficacy, safety and tolerability of PSD502 in subjects with premature ejaculation (PE)

Submission date	Recruitment status	[ ] Prospectively registered
05/06/2009	No longer recruiting	[ ] Protocol
Registration date	**Overall study status**	[ ] Statistical analysis plan
18/08/2009	Completed	[ ] Results
Last Edited	**Condition category**	[ ] Individual participant data
21/11/2019	Mental and Behavioural Disorders	[ ] Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

Contact name
Dr Bogdan Stelmach

Contact details
Prowent Stelmach Bogdan
ul.Stoczkowska 13
Warsaw,
Poland
04-147
-
prowent@interia.pl

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
PSD502-PE-005

Study information

Scientific Title
A phase II multicentre double-blind randomised placebo-controlled four-way cross-over dose-range funding study to evaluate efficacy, safety and tolerability of PSD502 in subjects with premature ejaculation (PE)

Study objectives
PSD502 spray consists of lidocaine, prilocaine and norflurane (HFA-134a), which acts as a propellant and solvent. Upon application HFA-134a evaporates from the site (glans penis), leaving a liquid deposit of pure lidocaine and prilocaine. Any excess is wiped off the glans penis. Three sprays are applied to each third of the glans penis to ensure that the whole glans penis is covered with study medication.

The two clinical studies ANAE-059-00 and PSD502-PE-001 show that three sprays of PSD502 applied evenly to the surface of the glans penis result in a desirable prolongation of intravaginal ejaculation latency time (IELT) (efficacious effect), with an acceptably small degree of numbness of the glans penis (pharmacological adverse effect). There is some variability in the actual dose remaining on the glans penis due to the process of spraying a small area (hence not all drug lands on the glans) and wiping off excess drug, so the received dose for each individual is inevitably not precise (in study PSD502-PE-003, the highest received dose was approximately nine-fold greater than lowest received dose after applying as recommended, i.e., glans wiped 5 minutes after application). Despite this variability, numbness in this study did not appear to be directly related to actual received dose.

The aim of this study is to confirm that a higher or lower concentration of PSD502 would not show an improved therapeutic window, that is, significantly improved efficacy and/or reduced numbness or other adverse effects.

The doses chosen for this study were intended to include the clinical dose used in the efficacy studies in the PE programme, plus a dose below and a dose above, with a reasonable dose interval, in order to achieve a dose response curve to help confirm the clinical dose for PE. In view of the variability of drug present on the target organ (glans penis) after spraying with PSD502 (see above), it was considered that a 10-fold dose difference would be optimal to ensure three truly different doses were tested. This was achieved with the lower dose and the middle dose. However, due to technical reasons, it was not possible to achieve a concentration which was 10-fold higher than the middle dose. The highest dose which could be achieved was a little under two-fold higher than the middle dose. The middle dose had been used in the clinical trials to date, so it was important that this dose was included in the trials. Consequently, the top dose was chosen to be the highest dose achievable.

As of 28/01/2010 this record has been updated to include the actual target number of participants; the initial target number of participants was 'approximately 40 randomised subjects to ensure 24 subjects complete the study'.

Ethics approval required
Old ethics approval format

Ethics approval(s)
1. Czech Republic: State Institute for Drug Control SUKL approved on the 29th December 2008 (ref: Sukls127711/2008)

2. Poland: The office for registration of medicinal products, medical devices and biocidal products approved on the 24th April 2009 (ref: 139/UR/CEBK/04/09)

Study design
Multicentre double-blind randomised placebo-controlled four-way cross-over study

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Other

Study type(s)
Treatment

Participant information sheet

Health condition(s) or problem(s) studied
Premature ejaculation

Interventions
Methodology:
The subject and their sexual partner will attend a Screening Visit (Visit 1) at which both will provide written informed consent and will be screened for eligibility. Screening for the subject will involve collection of demographic information, medical history (including history of PE), medication history, physical examination including examination of the glans penis, heart rate (HR), blood pressure (BP), 12-lead electrocardiogram (ECG) and haematology and biochemistry testing. The subject will also be asked to complete questions to enable classification according to the International Index of Erectile Function (IIEF-5).

Subjects that pass the initial screening assessments will then undergo a Baseline Evaluation period of 2 weeks during which they are required to have at least one sexual encounter using the stopwatch with a recorded IELT less than or equal to 1 minute as documented in the diary card. Upon completion of the Baseline Evaluation period, subjects will return to the centre for Visit 2. Adverse event (AE) and concomitant medication information will be collected and the glans penis will be examined.

Eligible subjects will be randomised to the 4 week double-blind treatment phase and dispensed drug (3 mg, 30 mg, 53 mg or placebo) for the first treatment period. The subject will be instructed on how to use the spray and instructed to leave at least 24 hours between each sexual encounter using the spray. During each sexual encounter where the study medication is used, the subject or his sexual partner will time the IELT using a stopwatch. The subject will document efficacy and tolerability and the partner will document tolerability data in respective diary cards.

During the 4 week double-blind treatment phase subjects will return to the centre at weekly intervals between treatment periods (Visits 3, 4, and 5) and receive a new dose of study medication. Subjects are to have at least one sexual encounter using the spray per treatment

period and have at least 24 hours between sexual encounters using the spray. At Visits 3, 4 and 5 the diary card and the previously dispensed medication will be checked, collected and new medication and diary card for the next treatment period will be provided to the subject.

At the end of the double-blind treatment phase, the subject will return to the centre for Visit 6. At this final follow up visit he will undergo physical examination including examination of the glans penis, heart rate (HR), blood pressure (BP) measurement, 12-lead electrocardiogram (ECG), haematology and biochemistry testing. The diary card and the medication dispensed on Visit 5 will be checked and collected. AE and Concomitant Medication enquiries will be made at Visits 2 - 6. AEs for the partner will also be collected throughout the study.

The total duration of the trial is 6 weeks from the point of consent.

Intervention Type
Drug

Phase
Not Applicable

Drug/device/biological/vaccine name(s)
PSD502

Primary outcome measure
Changes in mean IELT from baseline to during each of the 4 treatment periods, which are 7 days +/-4 days in length, and the baseline period, which is 2 weeks +/-4 days in length.

Secondary outcome measures
Evaluation of the safety and tolerability of PSD502 compared with placebo in subjects with PE as measured by adverse event (AE) and serious adverse event (SAE) data for both the subject and his sexual partner, collected throughout the study.

Overall study start date
04/05/2009

Completion date
13/07/2009

Eligibility

Key inclusion criteria
1. Has provided written informed consent
2. Male and aged 18 years and over
3. Diagnosed with lifelong premature ejaculation (PE) according to International Society of Sexual Medicine (ISSM) criteria, that is, he ejaculates always or nearly always prior to or within about one minute of vaginal penetration; and is unable to delay ejaculation on all or nearly all vaginal penetrations; and experiences negative personal consequences, such as distress, bother, frustration and/or the avoidance of sexual intimacy
4. Subject must be in a stable heterosexual and monogamous relationship of at least 3 months duration with his partner
5. Subject has at least documented one sexual encounter in the baseline period

6. IELT less than or equal to 1 minute in at least one sexual encounter in the baseline period
7. Willing and able to comply with the study procedures
8. The subject's sexual partner must provide written informed consent, be aged 18 years or over and willing to comply with the study procedures

Participant type(s)
Patient

Age group
Adult

Lower age limit
18 Years

Sex
Male

Target number of participants
35 randomised to this trial

Key exclusion criteria
1. Subject, or his sexual partner, has received an investigational (non-registered) drug within 30 days of screening
2. Subject has erectile dysfunction, defined as an International Index of Erectile Function-5 (IIEF-5) score of less than or equal to 21, unless the low score is entirely related to PE symptoms in the opinion of the Investigator
3. Subject, or his sexual partner, has any physical or psychological condition that would prevent them from undertaking the study procedures, including, but not limited to, the following:
3.1. Urological disease (e.g. prostatitis, urinary tract infection) or genito-urinary surgery within 8 weeks of screening
3.2. Ongoing significant psychiatric disorder (e.g., bipolar disease, depression/anxiety disorder or schizophrenia) not controlled by medication
4. Subject has safety testing abnormalities at the screening visit, in particular liver function tests, that are indicative of a medical condition that would preclude further participation in the opinion of the Investigator
5. Subjects taking tricyclic antidepressants, monoamine oxidase inhibitors (MAOIs) or selective serotonin reuptake inhibitors (SSRIs), for indications other than PE, where the dose has been changed within 4 weeks of screening and it is planned that the dose will change during the double-blind treatment period
6. Subject has previously received treatment with PSD502 for PE
7. Subject has received any treatment for PE, e.g. anti-depressant therapy, local anaesthetic spray, intra-cavernosal injection or psychotherapy within 4 weeks of screening
8. Subject, or his sexual partner, has a current history of alcohol or drug abuse, in the opinion of the Investigator
9. Subject, or his sexual partner, has known drug sensitivity to amide-type local anaesthetics
10. Subjects with pregnant partners or those not using adequate forms of contraception. These include vasectomy, female hormonal contraception, intra-uterine device (IUD) or cap plus spermicide. The use of condoms is not permitted throughout the baseline and treatment period.
11. Subject, or his sexual partner, has a history of glucose-6-phosphate dehydrogenase (G-6-PD) deficiency or use of medications that would increase susceptibility to methemoglobinemia (e.g. anti-malarial agents)

12. Subject, or his sexual partner, uses class I (e.g. mexiletine, tocainide) or III (e.g. amiodarone, sotalol) anti-arrhythmic drugs

Date of first enrolment
04/05/2009

Date of final enrolment
13/07/2009

Locations

Countries of recruitment
Czech Republic

Poland

Study participating centre
Prowent Stelmach Bogdan
Warsaw,
Poland
04-147

Sponsor information

Organisation
Plethora Solutions Ltd (UK)

Sponsor details
233 High Holborn, 4th Floor
London
United Kingdom
WC1V 7DN
-
mail@plethorasolutions.co.uk

Sponsor type
Industry

Website
http://www.plethorasolutions.co.uk/index.php

ROR
https://ror.org/02y9vw172

Funder(s)

Funder type
Industry

Funder Name
Plethora Solutions Ltd (UK)

Funder Name
Sciele Pharma Ltd (USA)

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