# Evaluation of the effectiveness, safety, and tolerability of tapentadol PR versus a combination of tapentadol PR and pregabalin in subjects with severe chronic low back pain with a neuropathic pain component

Published: 10-12-2010
Last updated: 04-05-2024

Primary objectiveThe primary objective is to evaluate the effectiveness, safety, and tolerability of increasing doses of tapentadol PR (300 mg per day after run in, up titration to 500 mg per day) versus a combination of tapentadol PR (300 mg per…

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

## Summary

### ID

NL-OMON36404

**Source**
ToetsingOnline

**Brief title**
n.a.

### Condition

- Other condition

**Synonym**
neuropatic pain and low back pain

**Health condition**

ernstig chronische lage rugpijn met een neuropatische component

**Research involving**
Human

## Sponsors and support

**Primary sponsor:** Grunenthal
**Source(s) of monetary or material Support:** Grunenthal BV NL

## Intervention

**Keyword:** low back pain, neuropathic, pregabalin, tapentadol

## Outcome measures

### Primary outcome

Primary endpoint

Comparison of the average of 3 days pain intensity score (NRS 3) at the

Baseline Visit versus the average NRS 3 pain intensity score at the Final

Evaluation Visit of treatment arm 1 (increasing doses of tapentadol PR) and

treatment arm 2 (combination of tapentadol PR and pregabalin).

### Secondary outcome

Secondary endpoints

Efficacy and quality of life endpoints

• Change of the pain intensity score on an 11 point NRS 3.

• PainDETECT score.

• NRS 3 pain intensity score for pain radiating towards or into the leg.

• Worst pain (11 point NRS) during the last 24 hours prior to the assessment

visit.

• Subject*s satisfaction with treatment (Verbal Rating Scale). Patient*s Global

Impression of Change.

• Clinician*s Global Impression of Change (CGIC).

• Neuropathic Pain Symptoms Inventory (NPSI).

• Sleep Evaluation Questionnaire (SQ) items.

• Hospital Anxiety and Depression Scale (HADS).

• Short Form 12® Health Survey (SF 12®) scores.

• EuroQol 5 Dimension (EQ 5D) scores.

Safety and tolerability endpoints

• Adverse events and adverse drug reactions.

• Vital signs.

• Clinical laboratory values.

• Medication used to treat the adverse events related to analgesic treatment.

## Study description

**Background summary**

Chronic pain is a major health problem that affects a significant number of subjects, resulting in personal suffering, reduced productivity, and substantial health care costs. Low back pain is among the most common causes of chronic pain. With lifetime prevalence rates of more than 70%, low back pain is currently one of the major health problems of German adults. The estimated prevalence of low back pain in the United States and Europe ranges from 7% to 39% according to different sources and it is considered the most common cause of limited activity in adults younger than 45 years of age.
Both nociceptive and neuropathic components can contribute to low back pain. Since these components require different pain management strategies, correct pain diagnosis before and during treatment is highly desirable.

Chronic pain is a common symptom for many conditions. Pain is often experienced as the most fear side effect. Pain has a direct impact on the quality of life, productivity reduction and significant health costs.

tapentadol is a new analgesic that works on both the mu-receptors (inhibitory) and on the re-uptake of noradrenaline. The effectiviness of tapentadol has been demonstrated in phase II and III trials with indications of low back pain and osteoarthritis of the knee. These studies has shown that tapentadol has a good safety profile and a good gastrointestinal tolerance.

## Study objective

Primary objective
The primary objective is to evaluate the effectiveness, safety, and tolerability of increasing doses of tapentadol PR (300 mg per day after run in, up titration to 500 mg per day) versus a combination of tapentadol PR (300 mg per day after run in) and pregabalin (titrated to 300 mg per day) in subjects requiring additional analgesia after titration to 300 mg per day of tapentadol PR.

Secondary objectives
• To evaluate the impact of tapentadol PR or a combination of tapentadol PR and pregabalin on function and quality of life parameters (subject reported outcomes) in subjects with severe low back pain with a neuropathic pain component.
• To evaluate a subset of subjects satisfied with moderate doses of tapentadol PR (300 mg/day)
• To evaluate responder profiles based on painDETECT sub profiles.

## Study design

Randomized, multicenter, multinational, double blind, active controlled, parallel-arm, Phase IIIb trial with an open label run in period. The planned number of subjects is 500.

## Intervention

Intervention:
All patiënts will receive active study medication (tapentadol and/or Pregabaline)
There are 4 phases during the trial:
Phase 1. Washout period of 3 to 14 days, in wich the patient's current medication is to be down titrated under the supervision of the doctor in at least 3 days.
Phase 2. Week 1 - week 3: titration of tapentadol. Titration of tapentadol to 300mg per day. Patient starts with 100 mg per day, the dosage will be increased to 300 mg tapentadol per day depending on the pain intensity. But at the end of the titration phase the dosage of the tapentadol have to be 300 mg per day.
Phase 3. From week 4, patients are randomly placed in one of two blinded arms with IMP. The patient will be up titrated to max 500mg tapentadol per day,

or the patient receives a combination of tapentadol and Pregabalin, up titrated to 300mg tapentadol + 300mg pregabalin. If the patients is under control after the titration phase, he/she will stay in an open label arm with a fixed dose tapentadol. IF the pateint suffers too many side effects, after randomisation, he/she can enter the open label arm tapentadol with a maximum dosage tapentadol of 400mg per day.
Phase 4. Week 14 and 15 end of trial, the study medication will be down titrated.

**Study burden and risks**

The study will take 15 weeks. The patient wil visit the site at least 10 times, for the other visits the patient will be contacted by telephone. During visit -1 and 12 a blood and urine sample will be taken. Every sample contains 4-8 ml blood. The maximum amount of blood collected during the study is around the 16ml per patient. The Heart frequency, blood pressure, length, wight and physical examination shall be tested 2 times. In total, 8 different questionnaires will be completed during most visits on site. Used questionnaires: 11-point NRS-3 and NRS-24 painscale, NPSI, EuroQol-5, satisfaction questionnaire, SF-12, Sleep questionnair, HADS, PGIC/CGIC, painDETECT. Al questionnaires need to be completed by the patient on site on a "palmtop".

# Contacts

**Public**
Grunenthal

Kosterijland 70-78
3981 AJ Bunnik
NL
**Scientific**
Grunenthal

Kosterijland 70-78
3981 AJ Bunnik
NL

# Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

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

### Inclusion criteria

Signed Informed consent. Male of female older then 18 years with severe chronic low back pain with a neuropathic component, for at least 3 months. Using a step II of III analgetic for at least 2 weeks before enrollment. When treatment with step II analgetics the pain must be 5 or higher for the last 3 days before enrollment. When using a step I analgetic a pain of 6 or higher must be scored.Woman of childbearing potential must be using birthcontrol, must have a negative pregnancy test and no breastfeeding allowed.

### Exclusion criteria

alcohol or drug abuse, presence of systemic or local infections, hypersensitivity of tapentadol, participation in another trial, use of MAO inhibitors within 14 days before enrollment, non-stable dosing SSRI's. Presence of clinically significant disease of laboratory findings that according to the investigator effect safety and efficacy.

## Study design

### Design

| | |
|---|---|
| Study phase: | 3 |
| Study type: | Interventional |
| Intervention model: | Parallel |
| Allocation: | Randomized controlled trial |
| Masking: | Double blinded (masking used) |
| Control: | Placebo |
| Primary purpose: | Treatment |

## Recruitment

NL

| | |
|---|---|
| Recruitment status: | Recruitment stopped |
| Start date (anticipated): | 01-06-2011 |
| Enrollment: | 50 |
| Type: | Actual |

## Medical products/devices used

| | |
|---|---|
| Product type: | Medicine |
| Brand name: | Lyrica |
| Generic name: | pregabalin |
| Registration: | Yes - NL intended use |
| Product type: | Medicine |
| Brand name: | na |
| Generic name: | tapentadol PR |

# Ethics review

| | |
|---|---|
| Approved WMO Date: | 10-12-2010 |
| Application type: | First submission |
| Review commission: | MEC-U: Medical Research Ethics Committees United (Nieuwegein) |
| Approved WMO Date: | 15-02-2011 |
| Application type: | First submission |
| Review commission: | MEC-U: Medical Research Ethics Committees United (Nieuwegein) |
| Approved WMO Date: | 07-04-2011 |
| Application type: | Amendment |
| Review commission: | MEC-U: Medical Research Ethics Committees United (Nieuwegein) |
| Approved WMO Date: | 04-05-2011 |

| | |
|---|---|
| Application type: | Amendment |
| Review commission: | MEC-U: Medical Research Ethics Committees United (Nieuwegein) |
| Approved WMO Date: | 27-05-2011 |
| Application type: | Amendment |
| Review commission: | MEC-U: Medical Research Ethics Committees United (Nieuwegein) |
| Approved WMO Date: | 31-05-2011 |
| Application type: | Amendment |
| Review commission: | MEC-U: Medical Research Ethics Committees United (Nieuwegein) |

# 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 | EUCTR2010-019998-14-NL |
| CCMO | NL33802.060.10 |