

For the use only of a Registered Medical Practitioner or a Hospital or a Laboratory Only

PREGABA GEL/ PREGALIN GEL

1. Generic Name

Pregabalin Gel 8 % w/w

2. Qualitative and quantitative composition

Pregabalin I.P. 8.% w/w

Gel Base q.s.

Preservatives:

Methyl Paraben I.P. 0.2% w/w

Propyl Paraben I.P..... 0.02% w/w

The excipients used are Cetostearyl alcohol, Cetomacrogol 1000, Light Liquid Paraffin, White Soft Paraffin, Propylene glycol, Disodium EDTA, Acrypol 980, Butylated hydroxyl toluene, Methyl paraben, Propyl paraben, Triethanolamine.

3. Dosage form and strength

Dosage form: Gel

Strength: 8% w/w

4. Clinical particulars

4.1 Therapeutic indication

For the treatment of Diabetic neuropathic pain.

4.2 Posology and method of administration

To be applied as a thin film over effected area twice a day as directed by Physician.

4.3 Contraindications

Known hypersensitivity to Pregabalin or any of its components of the Topical Pregabalin Gel.

4.4 Special warnings and precautions for use

The absorption of Pregabalin from Topical Pregabalin gel into the systemic circulation is expected to be minimal. Hence serum concentrations of Pregabalin after Topical application are expected to be very low as compared to oral Pregabalin. Hence, Pregabalin Gel is expected to be well tolerated.

However, the following precautions are mentioned for oral Pregabalin.

Angioedema (e.g. swelling of the throat, head and neck) can occur and may be associated with life-threatening respiratory compromise requiring emergency treatment. Discontinue Pregabalin immediately in these cases.

- Hypersensitivity reactions (e.g., hives, dyspnea, and wheezing) can occur. Discontinue Pregabalin immediately in these patients.
- Increased seizure frequency or other adverse reactions may occur if Oral Pregabalin is rapidly discontinued. Withdraw Pregabalin gradually over a minimum of 1week.
- Antiepileptic drugs, including Oral Pregabalin increase the risk of suicidal thoughts or behaviour.

- Oral Pregabalin may cause peripheral edema. Exercise caution when co-administering Oral Pregabalin and thiazolidinedione antidiabetic agents.
- Oral Pregabalin may cause dizziness and somnolence and impair patients' ability to drive or operate machinery.

4.5 Drug-Interaction

The absorption of Pregabalin from the Pregabalin Topical Gel into the systemic circulation is expected to be minimal. Hence serum concentrations of Pregabalin after Topical application are expected to be very low as compared to oral Pregabalin. Hence drug interactions of Topical Pregabalin are expected to be low or minimal. However, oral Pregabalin use has the following data available regarding drug interactions.

Since oral Pregabalin is predominantly excreted unchanged in the urine, undergoes negligible metabolism in humans (less than 2% of a dose recovered in urine as metabolites), and does not bind to plasma proteins, its pharmacokinetics are unlikely to be affected by other agents through metabolic interactions or protein binding displacement.

Pregabalin co-administration did not have any drug interactions with oxycodone, lorazepam, or ethanol. Although no pharmacokinetic interactions were seen, additive effects on cognitive and gross motor functioning were seen when Pregabalin was co-administered with these drugs.

4.6 Use in special populations (such as pregnant women, lactating women, paediatric patients, geriatric patients etc.)

The absorption of Pregabalin from the Pregabalin Topical Gel into the systemic circulation is expected to be minimal. Hence serum concentrations of Pregabalin after Topical application are expected to be very low as compared to oral Pregabalin. Hence adverse effects observed after systemic administration of Pregabalin are expected to be low or minimal.

However, oral Pregabalin use has the following data available regarding use in special patient populations.

Pregnancy: May cause fetal harm. Advise of potential risk to the fetus.

Lactation: Breastfeeding is not recommended.

Pediatric population: Safety and effectiveness in pediatric patients have not been established.

Geriatric population: Because Pregabalin is eliminated primarily by renal excretion, adjust the dose for elderly patients with renal impairment.

Renal impairment: Pregabalin is eliminated primarily by renal excretion and dose adjustment is recommended for adult patients with renal impairment.

4.7 Effects on ability to drive and use machines

Oral Pregabalin may cause dizziness and somnolence and impair patients' ability to drive or operate machinery. Blood concentrations of Pregabalin are expected to be low after topical application of Pregabalin gel. However, caution must be exercised when driving or operating machinery.

4.8 Undesirable effects

In the phase III Clinical trial of Topical Pregabalin, it was observed that Topical Pregabalin was well tolerated. In comparison with Topical Pregabalin patients treated with oral Pregabalin reported dizziness and somnolence.

- **Reporting of side effects**

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via any point of contact of Torrent Pharma available at:

https://www.torrentpharma.com/index.php/site/info/adverse_event_reporting

4.9 Overdose

The absorption of Pregabalin from Topical gel formulation into the systemic circulation is expected to be minimal. Hence serum concentrations of Pregabalin after Topical application are expected to be very low as compared to oral Pregabalin. There is no data available regarding overdosage with Topical Pregabalin Gel. However, symptomatic and supportive measures are recommended. Wash the area where Pregabalin Gel has been applied and initiate symptomatic and supportive measures.

5. Pharmacological properties

5.1 Mechanism of Action

The mechanism of action of Topical Pregabalin may involve an increase in the synthesis of Nitric Oxide and the release of endogenous opioids. It may be hypothesized that Pregabalin may increase the synthesis of nitric oxide, which in turn may increase the release of endogenous opioids to attenuate neuropathic pain.

5.2 Pharmacodynamic properties

Pregabalin has been reported to be effective in reducing tactile allodynia and mechanical hyperalgesia and reduces neuropathic pain. In preclinical studies conducted in sixty-four Sprague-Dawley rats, Topical application of Pregabalin (10 %) for 4 consecutive days after 7 days of surgical nerve injury is reported to reduce neuropathic orofacial pain intensity in an infraorbital nerve injury model.

5.3 Pharmacokinetic properties

Preclinical studies have demonstrated effective penetration of topical pregabalin up to the dermis. The absorption of Pregabalin from Topical gel formulation into the systemic circulation is expected to be minimal. Hence serum concentrations of Pregabalin after Topical application are expected to be very low as compared to oral Pregabalin.

6. Nonclinical properties

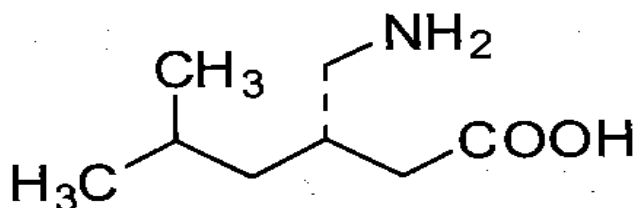
6.1 Animal Toxicology or Pharmacology

Acute dermal toxicity study of "Pregabalin Gel 8% w/w" in Wistar Rats was carried out. Single dermal application of 'Pregabalin Gel 8% w/w' in female Wistar rats at a dose level up to 2000 mg/kg body weight did not produce any toxicity and any mortality.

Sub-acute 28- day's dermal toxicity study of "Pregabalin Gel 8% w/w" in Wistar Rats and New Zealand white rabbits was carried out. 'Pregabalin Gel 8% w/w' did not show any local reaction like signs of erythema and edema and did not produce any systemic toxicity or adverse effects up to the highest dose level (93mg /10cm²) when applied topically for 28 consecutive days.

7. Description

Pregabalin is (S)-4-amino-3-(2-methylpropyl) butyric acid. having molecular formula of $C_8H_{17}NO_2$ molecular weight is 159.2 the chemical structure is:



Pregabalin Gel is white to off white homogenous gel. The excipients used are Cetostearayi alcohol, Cetomacrogol 1000, Light Liquid Paraffin, White Soft Paraffin, Propylene glycol, Disodium EDTA, Acrypol 980, Butylated hydroxyl toluene, Methyl paraben, Propyl paraben, Triethanolamine

8. Pharmaceutical particulars

8.1 Incompatibilities

Not applicable.

8.2 Shelf-life

Do not use later than the date of expiry.

8.3 Packaging information

Pregaba Gel/ Pregalin Gel are packed in 30 gm tube.

8.4 Storage and handing instructions

Store below 30°C. Do not freeze. Protect from light.

9. Patient Counselling Information

Ask the patients to inform the treating physicians in case of any of the below:

- Have any allergies
- Have kidney or liver problems
- Are pregnant or plan to become pregnant
- Are breastfeeding or plan to breastfeed
- Have any serious illness
- Are taking any medicines (prescription, over-the-counter, vitamins, or herbal products).

10. Details of manufacturer

Manufactured by:

Lyka Labs Limited
Plot No. 4801/B & 4802/A,
GIDC Industrial Estate, Ankleshwar-393 002,
Dist: Bharuch, Gujarat. INDIA.

11. Details of permission or licence number with date

Mfg Lic No. G/632 issued on 09.10.2024

12. Date of revision

NA

MARKETED BY



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