## 1.3.1

LPI

## **Summary of Product Characteristics (SmPC)**

TRAMADOL HYDROCHLORIDE INJECTION 50 MG/ML



#### 1. Name of the medicinal Product

#### 1.1 Name of the medicinal Product

Tramadol Hydrochloride Injection 50 mg/ml

#### 1.2 Strength

Each ml contains: Tramadol Hydrochloride BP 50 mg Water For Injections BP Q.S.

#### 2. Qualitative and Quantitative Composition

#### 2.1 Qualitative Declaration

Tramadol Hydrochloride BP

#### 2.2 Quantitative Declaration

Sr. No.	Ingredients Chemical Name	Specification	Standard Quantity (mg/ml)	Reason for Inclusion
01	Tramadol Hydrochloride (A)	BP	50.00	Opioid Analgesic
02	Sodium Acetate (Inj.) (AR grade)	BP	4.00	Buffering agent
03	Water for injections	BP	Q.S. to 1 ml	Sterile Vehicle

#### 3. Pharmaceutical Form

Solution For Injection,

A clear colourless solution filled in glass ampoule.

#### 4. Clinical Particulars

#### 4.1 Therapeutic Indications

TRAMAGEN Injection is indicated for the management of moderate to severe pain.



#### 4.2 Posology and Method of Administration

Adult and Children over 12 years, by IV or IM (Over 2-3 minutes) or by Intravenous Infusion, 50 - 100 mg every 4-6 Hours. Postoperative pain, 100 mg initially then 50 mg every 10- 20 minutes if necessary during first hour to total max. 250 mg (including initial dose) in first hour, then 50- 100 mg every 4- 6 hours; max. 600 mg daily.

#### 4.3 Contraindications

TRAMAGEN Injection should be avoided in patients with

Acute respiratory depression,

A risk of paralytic ileus,

Uncontrolled epilepsy

Acute porphyria.

Raised intracranial pressure and in head injury (it interfere with pupillary responses vital for neurological assessment).

Comatose patients should not be treated with Tramadol Hydrochloride.

Hypersensitivity to Tramadol hydrochloride or opioids.

Pregnancy and lactation.

#### 4.4 Special Warnings and Special Precautions for Use

Used with caution in patients with impaired consciousness; excessive bronchial secret ions, impaired respiratory function (avoid in chronic obstructive pulmonary disease), asthma (avoid during an acute attack), hypotension, shock, myasthenia gravis, prostatic hypertrophy, obstructive or inflammatory bowel disorders, diseases of the biliary tract, and convulsive disorders.

A reduced dose is recommended in elderly or injured patients, in hepatic impairment (avoid if severe), renal impairment (avoid if severe), in hypothyroidism, and in adrenocortical insufficiency.

Repeated use of opioid analgesics is associated with the development of psychological and physical dependence; although this is rarely a problem with therapeutic use, caution is advised if prescribing for patients with a history of drug dependence. Avoid abrupt withdrawal after long-term treatment.

Avoid its use during pregnancy and breast-feeding,

Not suitable as a substitute in opioid-dependent patients.



**General anaesthesia:** Not recommended for analgesia during potentially light planes of general anaesthesia (possibly increased intra-operative recall reported).

#### 4.5 Interaction with other medicinal products and other forms of interaction

TRAMAGEN Injection should not be combined with MAO inhibitors because of its inhibitory effect on serotonin uptake.

Concomitant administration of TRAMAGEN Injection with other centrally acting drugs, including alcohol, may potentiate CNS depressant effects.

TRAMAGEN Injection may increase the potential for both selective serotonin reuptake inhibitors (SSRJs) and tricyclic antidepressants (TCAs) to cause convulsions.

Theoretically there is a possibility that Tramadol could interact with lithium. There have been no reports of this potential interaction.

**Serotonergic drugs**: Co-administration with serotonergic drugs, e.g. SSRJs or triptans, may lead to an increase of serotonin-associated effects, which can include serotonin syndrome.

There have been isolated reports of interaction with coumarin anticoagulants resulting in an increased INR and so care should be taken when commencing treatment with Tramadol in patients on anticoagulants.

The simultaneous administration of carbamazepine with TRAMAGEN Injection markedly decreases serum concentrations of Tramadol to an extent that a decrease in analgesic effectiveness and a shorter duration of action may occur.

#### 4.6 Fertility, Pregnancy and Lactation

Avoid its use during pregnancy and breast-feeding,

#### 4.7 Effects on ability To Drive and use Machines

Tramadol injection may lead to dizziness, muzziness and blurred vision and therefore affect the patient's reactions. Patients should be warned not to drive a car or another vehicle, not to use electric tools or operate machinery and not to work without a firm hold, if affected.

#### 4.8 Undesirable Effects

**Most common side-effects:** nausea and vomiting (particularly in initial stages), constipation, diarrhoea; dry mouth, and biliary spasm; larger doses produce muscle rigidity, hypotension, and respiratory depression.



**Other common side-effects:** bradycardia, tachycardia, palpitation, oedema, postural hypotension, hallucinations, vertigo, euphoria, fatigue, dysphoria, mood changes, dependence, dizziness, confusion, drowsiness, sleep disturbances, headache, sexual dysfunction, difficulty with micturition, urinary retention, ureteric spasm, miosis, visual disturbances, sweating, flushing, rash, urticaria, and pruritus.

Less common side effects: retching, gastritis, and flatulence; rarely anorexia, syncope, hypertension, bronchospasm, dyspnoea, wheezing, seizures, paraesthesia, and muscle weakness; blood disorders.

#### 4.9 Overdose

Tramadol overdoses arc associated with agitation, hypertension, respiratory depression, seizures, and death. Tramadol-induced seizures are common, and naloxone is ineffective in reversing the seizures. Treatment remains supportive. Dependence during chronic therapy and withdrawal symptoms upon discontinuation have been reported with Tramadol.

#### 5. Pharmacological Properties

#### 5.1 Pharmacodynamics Properties

#### **Opioid Analgesic**

Tramadol and its active metabolite (M1) binds to  $\mu$ -Opiate receptors in the CNS causing inhibition of ascending pain pathways, altering the perception of and response to pain; also inhibits the reuptake of norepinephrine and serotonin, which also modifies the ascending pain pathway.

#### 5.2 Pharmacokinetic Properties

After intramuscular injection of 50 mg tramadol, the bioavailability is approximately 100%, and the peak serum level is attained after 45 minutes (range 50 to 90). Tramadol hydrochloride is primarily metabolized in the liver (90%) with one of its metabolites, mono-0-desmethyhramadol (M 1), and being 2 to 4 times as potent as the parent compound. Tramadol hydrochloride has a linear pharmacokinetic profile within the therapeutic dosage range. Tramadol hydrochloride and its metabolites are excreted mainly in the urine. The elimination half-life is 5 to 7 hours, but is prolonged in impaired hepatic and renal function.

Tramadol hydrochloride crosses the blood-brain and placental barrier. Small amounts are excreted in breast milk unchanged or as the metabolite M1.



5.3 Preclinical Safety Data

Not Applicable

#### 6 Pharmaceutical Particulars

#### 6.1 List of Excipients

Sodium Acetate (Inj.) (AR Grade) Water For Injections BP

#### 6.2 Incompatibilities

None.

#### 6.3 Shelf Life

36 months

#### 6.4 Special Precautions for Storage

Store below  $30^{\circ}$ C. Protect from light.

#### 6.5 Nature and Contents of Container

A clear colourless solution filled in 2 ml clear glass ampoule. Such 5 ampoules are packed in Printed Alu-PVC Blister pack. Such 1 blister pack is packed in a printed carton with packing insert.

#### 6.6 Special precaution for disposal and other handling

Any unused product or waste material should be disposed of in accordance with local requirements.

#### 7. Registrant (Marketing Authorization Holder And Manufacturing Site Addresses)

# 7.1 Name and Address of Marketing Authorization Holder GENERICS AND SPECIALITIES LTD. 31, AWONIYI ELEMO STREET, OFF LATEEF SALAMI STREET. AJAO ESTATE, LAGOS, NIGERIA.



E-mail: info@zolonhealthcare.com

#### 7.2 Name and Address of manufacturing site(s)

Lincoln Parenteral Limited 11, Trimul Estate, Khatraj, Taluka: Kalol, District: Gandhinagar Gujarat, India. Telephone no.: +91-02764-665000 Fax: +91-02764-281809 Email: info@lincolnpharma.com Website: www.lincolnpharma.com

#### 7.3 Marketing Authorization Number

To be included after obtaining first registration.

#### 7.4 Date of First <Registration> / Renewal of The <Registration>

It will be applicable after registration of this product.

#### 8. Date of Revision of the Text

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### 9. Dosimetry (If Applicable)

Not Applicable

#### **10.** Instructions for preparation of radiopharmaceuticals (if Applicable) Not Applicable