## **Product Sheet for Stadium**

#### **Generic Name:**

Dexketoprofen trometamol.

#### **Pharmaceutical Form and Formulation:**

Injectable solution. Each ampoule contains: Dexketoprofen trometamol equivalent to 50 mg of dexketoprofen. Vehicle q.s. 2 ml.

# **Therapeutic Indications:**

Non-narcotic analgesic. STADIUM® Injectable is indicated for the symptomatic treatment of acute moderate to severe pain of various etiologies.

# Pharmacokinetics and Pharmacodynamics:

Pharmacodynamic Properties: Dexketoprofen is a non-steroidal anti-inflammatory drug (NSAID) with analgesic, anti-inflammatory, and less antipyretic activity. Its analgesic effect is achieved at a dose 10 times lower than that needed to reduce inflammation. STADIUM® (dexketoprofen) is the trometamol salt of the S-(+)-2-(3 benzoylphenyl) propionic acid. STADIUM® inhibits the synthesis of prostaglandins by specifically inhibiting the transformation of arachidonic acid into cyclic endoperoxides PGG2 and PGH2, which produce prostaglandins PGE1, PGE2, PGF2a, and PGD2; prostacyclin PGI2, and thromboxanes TxA2 and TxB2.

**Pharmacokinetic Properties:** Intramuscular administration reaches peak concentration in 20 minutes (range between 10 and 45 minutes). Intravenous administration achieves peak plasma concentration in 12.6 minutes. It has a 99% plasma protein binding rate and an average volume of distribution below 0.25 L/kg. The primary route of elimination is renal, with more than 80% of the drug excreted as glucuronide conjugate. Multiple-dose kinetic studies have not demonstrated drug accumulation.

#### **Contraindications:**

STADIUM® should not be administered in cases of hypersensitivity to dexketoprofen or any other NSAID, gastrointestinal ulcer, Crohn's disease, bleeding disorders, coagulation disorders, or in patients taking anticoagulants; asthma, moderate to severe heart failure, severe renal or hepatic insufficiency, pregnancy, and lactation; children under 12 years.

### **General Precautions:**

The safety in children has not been established. STADIUM® may cause gastrointestinal mucosal lesions and bleeding. Elderly patients are more predisposed to gastrointestinal bleeding and/or perforation, which are often dose-dependent and can occur without symptoms or prior history at any time during treatment. In case of gastrointestinal bleeding or ulceration, treatment should be discontinued immediately.

**Renal Effects:** STADIUM® should be used with caution in patients with moderate to severe renal dysfunction and those predisposed to fluid retention, diuretics, or hypovolemia.

Other Alterations: Isolated cases of anaphylaxis and facial edema have been reported. As with other NSAIDs, aseptic meningitis may occur, particularly in patients with systemic lupus erythematosus or mixed connective tissue disease; hematological reactions (purpura, aplastic and/or hemolytic anemia) and rarely agranulocytosis and bone marrow hypoplasia. It may produce mild to moderate effects on the ability to drive vehicles or operate machinery due to the possibility of dizziness or drowsiness. STADIUM® should not be used in combination with other NSAIDs.

**Elderly Patients (over 65 years):** As with all NSAIDs, the risk of side effects is higher in elderly patients. A dose of 50 mg/day is recommended due to the longer plasma half-life and lower plasma clearance. The concomitant use of low molecular weight heparin did not show effects on coagulation; however, patients receiving additional therapy that interferes with hemostasis should be monitored.

# **Restrictions on Use During Pregnancy and Lactation:**

STADIUM® should not be administered during pregnancy and lactation. NSAIDs can block uterine contractions and delay labor. They can induce intrauterine constriction or closure of the ductus arteriosus, leading to neonatal pulmonary hypertension and respiratory failure. NSAIDs can depress fetal platelet function and inhibit fetal renal function, resulting in oligohydramnios and neonatal anuria. It is unknown if dexketoprofen is excreted in breast milk.

#### **Side Effects and Adverse Reactions:**

Reported events are classified by frequency.

Common (1 to 10%): Nausea, vomiting, abdominal pain, diarrhea, injection site pain.

**Uncommon (0.1 to 1%):** Headache, dizziness, sleep disorders, anxiety, vertigo, tinnitus, constipation, dry mouth, skin rash, pruritus, hypotension, blurred vision, fatigue, palpitations, flatulence, and gastritis.

Rare (0.01 to 0.1%): Paresthesia, peripheral edema, peptic ulcer, melena, anorexia, urticaria, menstrual and prostatic disorders.

**Isolated Reports (<0.01%):** Neutropenia, thrombocytopenia, tachycardia, bronchospasm, and photosensitivity reactions.

## **Drug Interactions and Other Interactions:**

Non-recommended Combinations: Using with other NSAIDs increases the risk of gastrointestinal bleeding due to synergistic effects. With oral anticoagulants and prophylactic doses of parenteral heparin, the risk of bleeding and gastrointestinal mucosal damage increases. NSAIDs increase blood lithium levels, requiring careful monitoring at treatment initiation. High doses of methotrexate (≥ 15 mg/week) increase hematotoxicity by decreasing renal clearance. It may increase the toxic effects of hydantoins and sulfonamides.

**Combinations Requiring Caution:** The combined use of NSAIDs with ACE inhibitors and diuretics is associated with the risk of renal failure in dehydrated patients and may reduce

their antihypertensive action. With pentoxifylline and zidovudine, the risk of bleeding increases. With sulfonylureas, it may increase the hypoglycemic effect.

Combinations to be Considered: β-blockers associated with NSAIDs may reduce their antihypertensive action; probenecid may increase plasma concentrations of dexketoprofen; with cyclosporine, nephrotoxicity may occur; with thrombolytics, the risk of bleeding increases; with cardiac glycosides, plasma glycoside concentrations may increase. In animals, the use of high doses of quinolones with NSAIDs may increase the risk of developing seizures.

# **Alterations in Laboratory Test Results:**

Like any NSAID, it may increase plasma urea nitrogen and creatinine levels. It may also cause slight and transient increases in SGOT and SGPT and interfere with some 17-ketosteroid tests.

# Precautions Regarding Carcinogenesis, Mutagenesis, Teratogenesis, and Fertility:

In animals, fetal sequelae were observed at high doses. STADIUM® may block uterine contractions and delay labor. It can induce intrauterine constriction or closure of the ductus arteriosus, leading to neonatal pulmonary hypertension and respiratory failure.

# **Dosage and Administration Route:**

STADIUM® Injectable can be administered undiluted by intramuscular or intravenous injection.

**Dosage:** 1 ampoule of 50 mg every 8-12 hours, not exceeding a daily dose of 150 mg. If necessary, a second ampoule can be administered 6 hours after the first. In elderly patients and those with renal or hepatic insufficiency, the total daily dose should not exceed 50 mg.

**Intramuscular Use:** STADIUM® Injectable should be administered by deep and slow injection into the muscle.

**Intravenous Use:** STADIUM® Injectable should be diluted in 30 to 100 ml of saline, glucose, or Ringer's lactate solution. It should be administered slowly over 10 to 30 minutes.

**Intravenous Bolus:** STADIUM® Injectable can be administered as a slow intravenous bolus in no less than 15 seconds. STADIUM® Injectable is compatible when combined in small volumes (in a syringe) with heparin, lidocaine, morphine, and theophylline. It should not be combined with dopamine, promethazine, pentazocine, pethidine, or hydroxyzine.

## **Overdose or Accidental Ingestion Management:**

In case of accidental or excessive ingestion, symptomatic treatment should be instituted immediately. Dexketoprofen is dialyzable.

#### **Presentation:**

(50 mg) Carton box with 3 ampoules labeled 2ml of 50mg/2ml.

# **Storage Recommendations:**

Store at room temperature not exceeding 25°C. Protect from light.

## **Protection Legends:**

Literature exclusive for physicians. Requires medical prescription. Do not use during pregnancy, lactation, or in children under 18 years. Keep out of reach of children. If the entire product is not administered, discard the remainder. Do not use if the solution is not clear or contains suspended particles or sediment. Do not use after the expiration date indicated on the package.

## **Frequently Asked Questions:**

- 1.- What is the generic name of STADIUM? The generic name of STADIUM is Dexketoprofen trometamol.
- 2.- In what pharmaceutical forms is STADIUM presented, and what are its dosages? STADIUM is presented as an injectable solution. Each ampoule contains Dexketoprofen trometamol equivalent to 50 mg of dexketoprofen in a total volume of 2 ml.
- 3.- For what therapeutic indications is STADIUM recommended? STADIUM is indicated as a non-narcotic analgesic for the symptomatic treatment of acute moderate to severe pain of various etiologies.
- 4.- How does dexketoprofen, the active ingredient of STADIUM®, work in the body? Dexketoprofen acts as a non-steroidal anti-inflammatory drug. It inhibits the synthesis of prostaglandins by specifically blocking the transformation of arachidonic acid into cyclic endoperoxides and their subsequent conversion into prostaglandins and thromboxanes.
- 5.- What is the difference in absorption and elimination of dexketoprofen when administered intramuscularly or intravenously compared to oral administration? Intramuscular administration of dexketoprofen reaches its peak concentration in 20 minutes, while intravenous administration achieves peak plasma concentration in 12.6 minutes. The primary elimination route is renal, mostly as a glucuronide conjugate.
- 6.- What specific contraindications does STADIUM have? STADIUM is contraindicated in patients with hypersensitivity to dexketoprofen or other NSAIDs, gastrointestinal ulcer, Crohn's disease, bleeding disorders, coagulation disorders, use of anticoagulants; asthma, severe heart failure, renal or hepatic insufficiency, pregnancy, lactation, and in children under 12 years.
- 7.- What are the general precautions when administering STADIUM? Precautions include the risk of gastrointestinal mucosal lesions and bleeding, especially in elderly patients. It should be used with caution in patients with renal dysfunction and those predisposed to fluid retention. It may affect the ability to drive or operate machinery.
- 8.- What is the recommended dosage of STADIUM for elderly patients or those with renal or hepatic insufficiency? In elderly patients and those with renal or hepatic insufficiency, the total daily dose should not exceed 50 mg.

- 9.- Why should STADIUM not be used during pregnancy and lactation? STADIUM can block uterine contractions, delay labor, cause intrauterine constriction or closure of the ductus arteriosus, neonatal pulmonary hypertension, respiratory failure, and affect fetal platelet and renal function.
- 10.- What are the most common side effects and adverse reactions associated with STADIUM? The most common reactions include nausea, vomiting, abdominal pain, diarrhea, injection site pain, headache, dizziness, sleep disorders, anxiety, vertigo, tinnitus, constipation, dry mouth, skin rash, pruritus, hypotension, blurred vision, fatigue, palpitations, flatulence, and gastritis.
- 11.- With which medications or groups of medications should the combination with STADIUM be avoided? Its use should be avoided with other NSAIDs, oral anticoagulants, heparin, lithium, high-dose methotrexate, hydantoins, sulfonamides, ACE inhibitors, diuretics, pentoxifylline, zidovudine, sulfonylureas,  $\beta$ -blockers, probenecid, cyclosporine, thrombolytics, cardiac glycosides, and quinolones.
- 12.- How can STADIUM® affect laboratory test results? It can increase plasma levels of urea nitrogen and creatinine, cause slight and transient increases in SGOT and SGPT, and interfere with 17-ketosteroid tests.
- 13.- What precautions should be taken regarding the effects of carcinogenesis, mutagenesis, teratogenesis, and fertility with the use of STADIUM? In animal studies, fetal effects were observed at high doses. STADIUM may have teratogenic effects, such as intrauterine constriction or closure of the ductus arteriosus.
- 14.- How should an overdose or accidental ingestion of STADIUM be managed? In case of overdose, immediate symptomatic treatment should be provided. Dexketoprofen is dialyzable.
- 15.- What specific information about storage and legal warnings is provided for STADIUM? Store at room temperature, not exceeding 25°C, and protect from light. It is for medical use only and requires a prescription. Do not use during pregnancy, lactation, or in children under 18 years. Discard any remainder if the entire product is not used, and do not use if the solution is not clear or contains particles or sediment. Do not use after the expiration date.