

PN- Relif

(Nimesulide and Paracetamol Tablets)

Composition :

Each uncoated tablet contains:

Nimesulide BP.....100mg
Paracetamol IP.....325mg
Excipients.....q.s.

Clinical Pharmacology:

Nimesulide: Nimesulide is a non-steroidal anti-inflammatory drug (NSAID) that works by inhibiting the enzyme cyclooxygenase-2 (COX-2). This enzyme is involved in the synthesis of prostaglandins, which are compounds that promote inflammation, pain, and fever. By selectively inhibiting COX-2, nimesulide reduces inflammation and pain with less effect on COX-1, which is associated with stomach protection. However, it may still pose gastrointestinal risks, and liver toxicity has been reported in some cases.

Paracetamol (Acetaminophen): Paracetamol acts primarily as an antipyretic (fever reducer) and analgesic (pain reliever). Its exact mechanism is not fully understood, but it is believed to inhibit the COX enzymes in the brain, particularly COX-3 (a variant of COX-1). This action reduces the production of prostaglandins in the central nervous system, which lowers fever and relieves pain. Unlike NSAIDs, paracetamol.

Indications:

- Musculoskeletal pain (e.g., arthritis, sprains)
- Dental pain (after procedures or toothache)
- Post-operative pain
- Headaches and migraine relief
- Fever when associated with pain and inflammation
- Dysmenorrhea (painful menstruation)

Contraindications:

- **Liver Dysfunction:** Nimesulide is associated with liver toxicity, and paracetamol can also have hepatotoxic effects at high doses. Therefore, this combination is contraindicated in patients with hepatic impairment or pre-existing liver conditions.

- **Kidney Dysfunction:** Both drugs can adversely affect the kidneys, so patients with severe renal impairment should avoid this combination.
- **Gastrointestinal Disorders:** Nimesulide, being an NSAID, can increase the risk of gastric ulcers, bleeding, and perforation. Hence, it is contraindicated in individuals with active peptic ulcer disease or a history of gastrointestinal bleeding.
- **Hypersensitivity:** Patients allergic to NSAIDs, Aspirin, or Paracetamol should not use this combination due to the risk of severe allergic reactions.
- **Pregnancy and Lactation:** Nimesulide is not recommended during pregnancy, particularly in the third trimester, as it can harm the fetus. Similarly, it is contraindicated during breastfeeding.
- **Cardiovascular Disorders:** Nimesulide can increase the risk of heart-related conditions such as hypertension.

Precautions and Warnings:

Taking more than daily doses of paracetamol causes serious liver damage or allergic reactions. Use of Nimesulide should ordinarily be restricted to 10 days. Clinical use is warranted if liver function test should be assessed periodically.

SCHEDULE H PRESCRIPTION DRUG CAUTION: Not be sold by retail without the prescription of a registered Medical Practitioner.

Drug Interactions:

- **Alcohol:** Combining alcohol with nimesulide or paracetamol increases the risk of liver toxicity. This combination should be avoided as both alcohol and these drugs can have hepatotoxic effects.
- **Anticoagulants (e.g., Warfarin):** Nimesulide, being an NSAID, can enhance the effects of anticoagulants, increasing the risk of bleeding. Caution should be taken when co-administered with anticoagulant medications.
- **Other NSAIDs or Corticosteroids:** Concurrent use with other NSAIDs or corticosteroids increases the risk of gastrointestinal ulcers and bleeding. It is advised to avoid combining multiple NSAIDs.
- **Methotrexate:** Nimesulide may increase the blood levels of methotrexate, a drug used for cancer and autoimmune conditions, potentially leading to toxicity.
- **Antihypertensive Drugs:** NSAIDs like nimesulide can reduce the effectiveness

of antihypertensive medications (e.g., beta-blockers, ACE inhibitors), leading to an increase in blood pressure.

- **Cytochrome P450 Enzyme Inhibitors/Inducers:** Drugs that influence cytochrome P450 enzymes may alter the metabolism of paracetamol or nimesulide, affecting their efficacy and safety. For example, phenytoin (an inducer) may reduce paracetamol effectiveness, while cimetidine (an inhibitor) may increase its toxicity.
- **Diuretics:** Nimesulide can decrease the effectiveness of diuretics, leading to reduced fluid elimination and potentially worsening conditions like hypertension.

Adverse Effects:

- **Gastrointestinal Issues:**

Nausea, vomiting, dyspepsia (indigestion), and diarrhoea are common with nimesulide use. It may also lead to gastric ulcers, gastrointestinal bleeding, or perforation in severe cases.

- **Allergic Reactions:**

Both drugs may cause hypersensitivity reactions, such as rashes, itching, urticaria, or, in severe cases, angioedema and anaphylaxis.

- **Kidney Dysfunction:**

Acute renal failure and other kidney-related problems are potential risks, particularly in patients with pre-existing renal impairment.

- **Central Nervous System Effects:**

Patients may experience dizziness, headache, drowsiness, and confusion. These effects are more common in older patients or with prolonged use.

- **Blood Disorders:**

Thrombocytopenia (low platelet count), anaemia, and other blood dyscrasias can occur, particularly with long-term use.

- **Cardiovascular Effect:**

Nimesulide may increase the risk of hypertension, edema, and, in rare cases, serious cardiovascular events like heart attack or stroke.

- **Skin Reactions:**

Severe skin reactions such as Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis (TEN), and erythema multiforme can occur, although these are rare.

Overdosage:

Nimesulide Overdose:

- Symptoms: Overdosing on nimesulide can lead to severe gastrointestinal symptoms like nausea, vomiting, abdominal pain, and gastric bleeding. It may also cause drowsiness, dizziness, headache, high blood pressure, and respiratory depression. In severe cases, nimesulide overdose can lead to acute kidney failure or liver toxicity.
- Management: In case of an overdose, gastric lavage and administration of activated charcoal may be recommended to limit drug absorption. Symptomatic treatment and monitoring of liver and kidney functions are also required

Storage: Store protected from light and moisture, at a temperature not exceeding 25 degrees.

Dosage: As directed by the Physician.

Presentation: Each strip contains 10x10 Tablets.



PNS
ALPENA PHARMACEUTICALS PVT. LTD.
Serve Better, Serve Mankind