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

# Zaltoprofen 80 mg and Paracetamol 325 mg Tablets **Zott<sup>®</sup>P**

#### COMPOSITION Each film coated tablet contains: Zaltoprofen J.P. ...... 80mg Paracetamol I.P. ..... 325mg Excipients . a.s.

Colours

Lake Tartrazine, Lake Sunset Yellow and Titanium Dioxide I.P.

#### DOSAGE FORM Film Coated Tablet

#### INDICATIONS

For anti-inflammatory and analgesic activity in rheumatoid arthritis, osteoarthritis, low back pain, periarthritis of shoulder, cervicobrachial syndrome, postoperative, post trauma, and post dental extraction Carefully consider the potential benefits and risks of combination of Zaltoprofen and Paracetamol before deciding the use.

#### DOSAGE AND METHOD OF ADMINISTRATION

e recommended adult oral dosage of ZOTT P (FDC of Zaltoprofen and Paracetamol IP) is one tablet three times daily or as directed by physician.

#### USE IN SPECIAL POPULATIONS

Pregnancy and Lactation The FDC of Zaltoprofen and Paracetamol should be used during pregnancy and lactation only after weighing the benefits and risks as suggested by the physician.

Zaltoprofen:

- A pregnant woman or a woman who may be pregnant should be administered only when the therapeutic benefits are judged to outweigh the risks. "The safety of the administration during pregnancy has not been established.
- Experiments administered to rats at the end of pregnancy, the vascular contraction of the fetus has been reported. It is preferable to avoid administering to a nursing mother. Animal experiments (rats) have been reported to migrate in milk.
- Paracetamol:

Epidemiological studies in human pregnancy have shown no ill effects due to paracetamol used in the recommended dosage, but patients should follow the advice of the doctor regarding its use. Paracetamol is excreted in breast milk but not in a clinically significant amount. Available published data do not contraindicate breast feeding.

#### Renal impairment-

Special care is advised for the use of FDC of Zaltoprofen and Paracetamol in patients with renal impairment.

Zaltoprofen Zaltoprofen should be administered carefully to the patients with renal disorder.

Care is advised in the administration of paracetamol to patients with renal impairment.

#### Liver impairment-

Care is advised in patients with hepatic impairment Zaltoprofen.

Zaltoprofen should be administered carefully to the patients with hepatopathy.

#### Paracetamol

Care is advised in the administration of paracetamol to patients with hepatic impairment. The hazard of overdose is greater in those with noncirrhotic alcoholic liver disease

#### Elderly

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Caution should be exercised in treating the elderly (65 years and older).

Zaltoprofen have a high plasma protein binding rate, and is mainly excreted from the kidney, in the elderly, it is often that the plasma albumin is reduced, renal function may also be lowered, because there is a possibility that the high blood concentration persists, while observing the state of the patient, such as gastrointestinal symptoms, Reduce the number of doses (for example, one tablet twice a day) or be administered carefully.

#### Pediatric Use

The safety and efficacy of FDC of Zaltoprofen and Paracetamol in children and adolescents aged below 18 years have not been established

#### CONTRAINDICATIONS

- FDC of Zaltoprofen and Paracetamol is contraindicated in Patients sensitive to Zaltoprofen and/or Paracetamol or to any of the excipients of the product
  - Patients with Active peptic ulcer or GI bleeding or history of peptic ulcer disease or peptic ulcer due to chronic administration of non-steroidal
- anti-inflammatory drug • Patients with severe blood abnormalities as it may worsen blood abnormalities
- Patients with severe liver impairment as it may worsen liver damage.
- Patients with severe renal impairment as it may worsen renal impairment. Patients with severe heart failure or cardiac dysfunction as it may worsen "cardiac dysfunction."
- Patients with ulcerative colitis and Crohn's disease
- Patients who have experienced asthma, urticaria, or other allergic type reactions after taking aspirin or other NSAIDs

#### WARNINGS & PRECAUTIONS

- Zaltoprofei
  - The treatment with anti-inflammatory painkillers is only symptomatic. When using this drug for chronic diseases (rheumatoid arthritis, osteoarthritis, etc.), consider the following considerations: Periodic clinical examination (urine test, blood test, and liver function inspection, etc.) are performed in case of long-term administration. In addition, if an abnormality is recognized, the appropriate measures can be taken.
- To consider other therapies other than drug therapy.
  When using this drug for acute diseases, consider the following matters:
- Take into account the degree of acute inflammation, pain and fever. Avoid long-term administration of the same drug in principle.
- Observe the condition of the patient sufficiently and keep the expression of side effects in mind. It is desirable to avoid combination with other anti-inflammatory painkillers.
- Care should be given to the elderly with special attention to the expression of side effects and to minimize the use.

#### Paracetamol

Care is advised in the administration of paracetamol to patients with renal or hepatic impairment. The hazard of overdose is greater in those with non-cirrhotic alcoholic liver disease.

Do not exceed the stated dose.

Patients should be advised to consult their doctor if their headaches become persistent.

Patients should be advised not to take other paracetamol-containing products concurrently. Patients should be advised to consult a doctor if they suffer from non-serious arthritis and need to take painkillers every day. If symptoms persist consult your doctor. Keep out of the sight and reach of children

#### DRUG INTERACTIONS Zaltoprofei

als- Concomitant use of antibacterials with Zaltoprofen may trigger convulsion. The dose may have to be adjusted in such Quinolone and

#### Back

discontinue administration and take appropriate measures.

Haemolytic anaemia, aplastic anaemia: Since it is reported that haemolytic anaemia and aplastic anaemia appear in other non-steroidal anti-inflammatory analgesics, observe thoroughly by conducting blood tests, etc. If abnormality is observed, discontinue the administration immediately and take appropriate measures.

	Frequency Unknown
Digestive system	Stomach discomfort, stomach pain, diarrhea, heavy stomach, heartburn, dry mouth (thirst)
Mental nervous system	Drowsiness, dizziness, headaches, numbness (feeling)
Hypersensitivity	Photosensitivity, rashes, eczema
Blood	Hemoglobin decrease, decrease in hematocrit value, red blood cell reduction, eosinophilia, increase in blood platelets, increase in leukocytes
Liver	ALT (GPT) increase, AST (GOT) increase.
Kidney	Increased BUN, elevated blood creatinine, hematuria
Other	Hot Flush, Frequent urination, edema, malaise, urination pain, urination disorder, fever

If such symptoms appear, discontinue the administration.

#### Paracetar

Adverse events of paracetamol from historical clinical trial data are both infrequent and from small patient exposure. Accordingly, events reported from extensive post-marketing experience at therapeutic/labelled dose and considered attributable are tabulated above by system class. Due to limited clinical trial data, the frequency of these adverse events is not known (cannot be estimated from available data), but post-marketing experience indicates that adverse reactions to paracetamol are rare and serious reactions are very rare.

#### Post marketing data

Body System Undesirable effect: Blood and lymphatic system disorders, Thrombocytopenia, Agranulocytosis, Immune system disorders, Anaphylaxis, Cutaneous hypersensitivity reactions including skin rashes, Angioedema and Stevens Johnson syndrome/toxic epidermal necrolysis, Respiratory, thoracic and mediastinal disorders, Bronchospasm, Hepatobiliary disorders, Hepatic dysfunction \* There have been cases of bronchospasm with paracetamol, but these are more likely in asthmatics sensitive to aspirin or other NSAIDs.

## If serious adverse reactions occur, ZOTT P Tablets should be discontinued.

OVERDOSE There is no experience of overdose with FDC of Zaltoprofen and Paracetamol. Signs and symptoms of overdose are expected to be in line with exaggerated pharmacological effects of individual ingredient.

#### Zaltoprofen.

No human data available on the consequences of Zaltoprofen overdosage. The therapeutic measures to be taken are: absorption should be prevented, as soon as possible after overdosage by means of gastric lavage and treatment with activated charcoal; supportive and systematic reatment should be given for complications such as hypotension, renal failure, convulsion, gastrointestinal irritation and respiratory depression. Specific therapies such as forced divresis, dialysis or harmoperfusion are probably of no help in eliminating NSAIDs due to their high rate of protein binding and extensive metabolism

#### Paracetamo

Liver damage is possible in adults who have taken 10g or more of paracetamol. Ingestion of 5g or more of paracetamol may lead to liver damage if the patient has risk factors (see below).

#### Risk Factors If the patient

a) Is on long term treatment with carbamazepine, phenobarbitone, phenytoin, primidone, rifampicin, St John's Wort or other drugs that induce liver enzymes.

#### b) Regularly consumes ethanol in excess of recommended amounts.

c) Is likely to be glutathione depleted e.g. eating disorders, cystic fibrosis, HIV infection, starvation, cachexia.

### Symptoms

Symptoms of paracetamol overdosage in the first 24 hours are pallor, nausea, vomiting, anorexia and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. Abnormalities of glucose metabolism and metabolic acidosis may occur. In severe poisoning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema, and death. Acute renal failure with acute tubular necrosis, strongly suggested by loin pain, haematuria and proteinuria, may develop even in the absence of severe liver damage. Cardiac arrhythmias and pancreatitis have been reported.

#### Management

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Immediate treatment is essential in the management of paracetamol overdose. Despite a lack of significant early symptoms, patients should be referred to hospital urgently for immediate medical attention. Symptoms may be limited to nausea or vomiting and may not reflect the severity of overdose or the risk of organ damage. Management should be in accordance with established treatment guidelines.

Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour. Plasma paracetamol concentration should be measured at 4 hours or later after ingestion (earlier concentrations are unreliable).

Treatment with N-acetyl cysteine may be used up to 24 hours after ingestion of paracetamol however; the maximum protective effect is obtained up to 8 hours post indestion

If required the patient should be given Intravenous-N-acetyl cysteine, in line with the established dosage schedule. If vomiting is not a problem, oral methionine may be a suitable alternative for remote areas, outside hospital.

#### PHARMACODYNAMIC AND PHARMACOKINETIC PROPERTIES

#### Pharmacodynamics Zaltoprofer

Zaltoprofen is (±)-2-(10,11-dihydro-10-oxodibenzo [b, f] thiepin-2-yl) propionic acid, belongs to the therapeutic class of nonsteroidal anti-inflammatory drugs (NSAIDs) that exhibits anti-inflammatory, analgesic and antipyretic activities. Zaltoprofen is a COX-2 preferential inhibitor. The main mechanism of Zaltoprofen is prostaglandin biosynthesis inhibitory action due to the COX

inhibition in the arachidonic acid metabolism system. Besides this, membrane stabilizing action such as leukocyte migration inhibitory action and lysosomal enzyme inhibitory action are also observed with Zaltoprofen. Experimental studies have shown that Prostaglandin biosynthesis inhibitory action in the stomach tissue is weaker with Zaltoprofen than in case of indomethacin.

Zaltoprofen possesses novel anti-nociceptive mechanism by inhibiting B2-type bradykinin (BK) receptor function in nerve endings and selectively inhibiting PGE2 production at inflammatory sites and exhibits a powerful anti-inflammatory effect with a good safety margin and stronger inhibitory effect on BK-nociception than other NSAIDs.

#### Paracetamol

Analgesic – the mechanism of analgesic action has not been fully determined. Paracetamol may act predominantly by inhibiting prostaglandin synthesis in the central nervous system (CNS) and to a lesser extent, through a peripheral action by blocking pain-impulse generation. The peripheral action may also be due to inhibition of prostaglandin synthesis or to inhibition of the synthesis or actions of other substances that sensitize pain receptors to mechanical or chemical stimulation.

Antipyretic - paracetamol probably produces antipyresis by acting centrally on the hypothalamic heat-regulation centre to produce peripheral vasodilation resulting in increased blood flow through the skin, sweating and heat loss. The central action probably involves inhibition of prostaglandin synthesis in the hypothalamus.

#### Pharmacokinetics Zaltoprofen

After oral administration. Zaltoprofen is well absorbed (82%) in the GIT. About 98% of the administered drug is bound to plasma proteins. After oral administration, 62% of the dose is excreted as conjugate in the urine and only 3% is excreted as unchanged compound by this route. No systemic accumulation has been reported. Zaltoprofen has biological half-life of 2.8 hr.

Coumarin anticoagulant agent- dose may have to be adjusted as there may be intensification in the anticoagulant action. Sufonylura anticidabetic agents. The dose may have to be adjusted as there may be an intensification in the hypoglycemic action Lithium- The dose of lithium may have to be adjusted as there may be intensification in the lithium action.

Methotrexate- Since there is a report that it will enhance the action of methotrexate, care should be taken to adjust the dose of methotrexate Paracetamol

The speed of absorption of paracetamol may be increased by metoclopramide or domperidone and absorption reduced by Cholestyramine. The anticoagulant effect of warfarin and other coumarins may be enhanced by prolonged regular daily use of paracetamol with increased risk of bleeding; occasional doses have no significant effect.

#### UNDESIRABLE EFFECTS

Zaltoprofen Major side effects such as rashes, skin irritation, stomach discomfort, stomachache, the digestive symptoms, such as heart pain, diarrhea, and hearburn, shock as a serious side effect, anaphylactic-like symptoms, acute renal failure, nephrotic syndrome, hepatic dysfunction, digestive crushing indemnity, small intestine / colon ulcer, hemorrhagic colitis, atherosclerosis, leukopenia, thrombocytopenia may occur. Also, as a serious side effect of drugs, skin mucosal ocular syndrome (Stevens-Johnson syndrome), toxic epidermal necrosis (Lyell syndrome), hemolytic anemia, aplastic anemia have been reported to appear.

#### Serious side effects (Frequency unknown)

- Shock, anaphylactoid symptoms: Shock, anaphylactoid-like symptoms may occur, cold sweat, chills, rash, itching, flushing, facial edema, measles, etc. appear. If so, discontinue administration and take appropriate measures.
- Acute renal failure, nephrotic syndrome: Acute renal failure, nephrotic syndrome and other kidney problems, increase BUN · blood creatinine rise, oliguria, edema, proteinuria may occur, so observe thoroughly. If abnormalities such as hematoses are observed, discontinue administration and take appropriate measures. Liver function disorder: AST (GOT) elevation, ALT (GPT) elevation, AI - P elevation, γ - GTP elevation may occur, so observe thoroughly
- and if abnormality is found take appropriate measures, such as discontinue administration. Peptic ulcer cancer, small intestine / colon ulcer cancer, hemorrhagic colitis: digestive ulcer and small intestine / colon ulcer (which
- may accompany bleeding and perforation), hemorrhagic colitis may appear, observe adequately, if abnormalities are observed discontinue administration and take appropriate measures.
- Leukocytopenia, thrombocytopenia: Granulocytosis, leucopenia, thrombocytopenia may occur, so observe thoroughly, regular blood tests and abnormalities are observed. If so, discontinue administration and take appropriate measures
- Skin mucosa ocular syndrome, toxic epidermal necrosis: It is reported that other non-steroidal anti-inflammatory analgesics, skin mucosa ocular syndrome (Stevens-Johnson syndrome), toxic epidermal necrosis (Lyell syndrome) appears. Therefore, in such a case,

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Mfg. Location:P to P-AEON FORMULATIONS PVT. SAP Code : 127052 Product Name : Zott P Country : Domestic Packaging Material : Leaflet Existing / Reference A/W : NA Version No.:2 Date: 19.08.2019 Size after Folding :70 x 24 mm (± 1 mm) Dimension :380 x 140 mm (±1 mm) Core Dia :NA Reel Dia : NA Varnish / Lamination :NA Folding pattern : 1 Vertical fold & 4 Horizontal folds Packaging Material Specification (For Supplier only) : ITC Fine Print Paper Colours : Black Grammage : 40 ± 5% gm/m<sup>2</sup> Thickness : NA Reason for Change : New Artwork J. B. CHEMICALS & PHARMACEUTICALS LTD. File Path : X:\Artworks\Kiran\AS PER DCGI GUIDELINE\Zott P\Open File\ 127052 Zott P Tablet Leaflet Artist: Gajanan Khade Initiated by Checked by Approved by Approved by Sign & Date Designation Executive - PDD Sr. Manager - PDD Regulatory Affairs V. P. (Supply Chain)

he Zaltoprofen is predominantly metabolized by CYP2C9 and UGT2B7 in liver. Zaltoprofen is also biotransfo ned to S-oxide Zaltoproten (M-2) 10-hydroxy Zaltoprofen (M-3) and S-oxide-10-hydroxy-Zaltoprofen (M-5) in humans, and conjugate of M-2 and M-3 are excreted in urine, although urinary level of each of these metabolites account for less than 10% of the dose. There is a biphasic reduction in plasma concentration. (t<sub>12</sub>o around 0.9hours and t. . ß around 9 hours).

#### Paracetamol

Paracetamol is rapidly and almost completely absorbed from the gastrointestinal tract. The concentration in plasma reaches a peak in 30 to 60 minutes and the plasma half-life is 1 - 4 hours after therapeutic doses. Paracetamol is relatively uniformly distributed throughout most body fluids. Binding of the drug to plasma proteins is variable; 20 to 30% may be bound at the concentrations encountered during acute intoxication. Following therapeutic doses 90 - 100% of the drug may be recovered in the urine within the first day. However, practically no paracetamol is excreted unchanged and the bulk is excreted after hepatic conjugation.

#### INCOMPATIBILITIES None known

#### PACKAGING INFORMATION Blister of 4 Tablets & 10 Tal

STORAGE AND HANDLING INSTRUCTIONS Store in a cool, dry & dark place. Keep out of reach of children.

Manufactured in India by: **M/s. AEON FORMULATIONS PVT.LTD.,** R.S.No.515/1, 515/2 & 514, No.152/7, Vinayagar Koil Street, Thirubuvanaipalayam, Mannadipet Commune, Puducherry - 605 107



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