

# Meth

Methotrexate USP 2.5 mg & 10 mg Tablet

## COMPOSITION

**Meth-2.5** : Each film coated tablet contains Methotrexate USP 2.5 mg.

**Meth-10** : Each film coated tablet contains Methotrexate USP 10 mg.

## INDICATION

**Meth** (Methotrexate) is used as maintenance therapy for childhood acute lymphoblastic leukaemia. Other uses include choriocarcinoma, and a number of solid tumours. It is used alone or in combination with other anticancer agents in the treatment of breast cancer, epidermoid cancers of the head and neck, advanced mycosis fungoides, and lung cancer, particularly squamous cell and small cell types. It is also used in combination with other chemotherapeutic agents in the treatment of advanced stage non-Hodgkin's lymphomas. It is indicated in moderate to severe rheumatoid arthritis, malignant disease and psoriasis. It is also indicated in the management of children with active polyarticular-course juvenile idiopathic arthritis, who had an insufficient therapeutic response to, or are intolerant of adequate trial of first line therapy including full dose non-steroidal anti-inflammatory agents (NSAIDs).

## DOSAGE & ADMINISTRATION

**In the treatment of rheumatoid arthritis:** By mouth, 7.5 mg once weekly as a single dose or divided into 3 doses of 2.5 mg given at intervals of 12 hours, adjusted according to response; maximum total weekly dose 20 mg.

**In juvenile idiopathic arthritis :** Starting dose is 10 mg/m<sup>2</sup>/wk increasing up to 20-25 mg/m<sup>2</sup>/wk in refractory disease. An alternative dosing regimen is 0.3 mg/kg/wk increasing to 0.5 mg/kg/wk after 6 weeks and up to 1 mg/kg/wk if necessary.

**Leukaemia in children (maintenance):** By mouth, 15 mg/m<sup>2</sup> body surface weekly in combination with other drugs.

**Maintenance therapy of acute lymphoblastic leukaemia:** A common dose of 15 - 30 mg/m<sup>2</sup> body surface, once or twice weekly by mouth with other agents.

**Choriocarcinoma:** Treated with doses of 15 - 30 mg daily by mouth for 5 days at intervals of 1 - 2 weeks for 3 - 5 courses. Doses of 10 - 16 mg/m<sup>2</sup> have also been employed in the treatment of breast cancer, often in combination with Cyclophosphamide & Fluorouracil.

**In the treatment of psoriasis:** Single weekly doses of 10 - 25 mg may be given by mouth, adjusted according to response. Or, as directed by the registered physicians.

**SIDE EFFECT** The most common side effects of **Meth** (Methotrexate) are on the bone marrow and gastro intestinal epithelium. Bone marrow depression can occur abruptly and leucopenia, thrombocytopenia & anaemia may also occur. Megaloblastic anaemia has also been reported. Ulceration of the mouth and gastro intestinal disturbances are also early signs of toxicity. Stomatitis & diarrhoea are signs for which treatment should be interrupted, otherwise haemorrhagic enteritis, intestinal perforation and death may follow. In patients who experience mucosal or gastro-intestinal side effects with **Meth** (Methotrexate), Folic Acid 5 mg every week may help to reduce the frequency of such side effects. **Meth** (Methotrexate) therapy is associated with liver damage, both acute (notably after high doses) and more seriously, chronic (generally after long term administration). Hepatic fibrosis & cirrhosis may develop without obvious signs hepatotoxicity and have lead to eventual death. Other adverse effects include renal failure and tubular necrosis following high doses, pulmonary reactions including life threatening interstitial lung disease, skin reactions, alopecia, osteoporosis, arthralgia, myalgia, ocular irritation & precipitation of diabetics.

## CONTRAINDICATIONS

It is contraindicated in significant renal impairment because it is excreted primarily by the kidney. It is also contraindicated in patients with severe hepatic impairment, pregnancy (following administration to a woman or a man, avoid conception for at least 3 months after stopping), breast-feeding, severe infection and immuno-deficiency syndromes.

## Use In Pregnancy And Lactation

Pregnancy Category X. **Meth** (Methotrexate) should be avoided during pregnancy. It is teratogenic and fertility may be reduced during therapy but this may be reversible. Following administration to a woman or a man, avoid conception for at least 3 months after stopping. Breast-feeding should be discontinued.

**DRUG INTERACTION** Analgesics: Excretion of **Meth** (Methotrexate) probably reduced by NSAIDs (increased risk of toxicity); excretion also reduced by Aspirin and Azapropazone (avoid concomitant use). Antibacterials: Excretion of **Meth** (Methotrexate) possibly reduced by Ciprofloxacin (possibly increased risk of toxicity); Antifolate effect of **Meth** (Methotrexate) increased by Sulfamethoxazole (as Cotrimoxazole) and Sulphonamides (as Trimethoprim) - avoid concomitant use; risk of **Meth** (Methotrexate) toxicity increased by Sulphonamides, Doxycycline or Tetracycline; excretion of **Meth** (Methotrexate) reduced by Penicillins (increased risk of toxicity).

Antiepileptics: Antifolate effect of **Meth** (Methotrexate) increased by Phenytoin; Cytotoxics reduce absorption of Phenytoin.

Antimalarials: Antifolate effect increased by Pyrimethamine.

Cyclosporin : Increased toxicity.

Corticosteroids: Increased risk of haematological toxicity.

Uricosurics : Excretion of **Meth** (Methotrexate) reduced by Probenecid (increased risk of toxicity). Retinoids: Plasma concentration of **Meth** (Methotrexate) increased by Acitretin (also increased risk of hepatotoxicity)- avoid concomitant use.

Ulcer-Healing drugs: Excretion of **Meth** (Methotrexate) possibly reduced by Omeprazole (possibly increased risk of toxicity).

## PRECAUTIONS

It should be used with caution in hepatic & renal impairment and porphyria. Full blood counts (including differential white cell count and platelet count), renal and liver function tests are required before starting treatment and repeated weekly until therapy stabilized, thereafter patients should be monitored every 2-3 months. Extreme caution should be exercised in blood disorders (avoid if severe), peptic ulceration, ulcerative colitis, diarrhoea, ulcerative stomatitis (withdraw if stomatitis develops) and porphyria. It should be avoided if a significant pleural effusion or ascites is present because it tends to accumulate in these fluids, and its subsequent return to the circulation will be associated with myelosuppression.

## OVER DOSAGE

Leucopenia, thrombocytopenia, anemia, pancytopenia, bone marrow suppression, mucositis, stomatitis, oral ulceration, nausea, vomiting, gastrointestinal ulceration and gastrointestinal bleeding.

## STORAGE

Store at 25°C in a dry place.

## PACKAGING

**Meth-2.5** : Each box contains 28 tablets in blister pack.

**Meth-10** : Each box contains 28 tablets in blister pack.



**DRUG INTERNATIONAL LTD.**  
UNIT-2  
TONGI, GAZIPUR