

# METHOTREXATE

**Brand names** Maxtrex, Metoject  
**Used in the following combined preparations** None

## GENERAL INFORMATION

Methotrexate is an anticancer drug used, together with other anticancer drugs, in the treatment of leukaemia, lymphoma, and solid cancers such as those of the breast, bladder, head, and neck. It is also used alone to treat inflammatory conditions such as severe uncontrolled psoriasis, rheumatoid arthritis, and Crohn's disease.

As with most anticancer drugs, methotrexate affects both healthy and

cancerous cells, so that its usefulness is limited by its adverse effects and toxicity. Folic acid supplements may reduce its toxicity, and when methotrexate is given in high doses, it is usually given with folic acid to prevent it from destroying bone marrow cells. Because of its toxicity and adverse effects it is very important that you do not take methotrexate more often than prescribed by your doctor.

## QUICK REFERENCE

**Drug group** Anticancer drug (p.112)  
**Overdose danger rating** High  
**Dependence rating** Low  
**Prescription needed** Yes  
**Available as generic** Yes

## INFORMATION FOR USERS

**Your drug prescription is tailored for you. Do not alter dosage without checking with your doctor.**

### How taken/used



Tablets, injection.

### Frequency and timing of doses

**Cancer** Single dose once weekly or every 3 weeks.

**Other conditions** Single dose once weekly.

### Adult dosage range

**Cancer** Dosage is determined individually according to the nature of the condition, body weight, and response.

**Rheumatoid arthritis** 7.5-20mg weekly.

**Psoriasis** 10-25mg weekly.

### Onset of effect

30-60 minutes.

### Duration of action

Short-term effects last up to 24 hours.

### Diet advice

None.

### Storage

Keep in original container at room temperature out of the reach of children. Wash your hands after handling the tablets.

### Missed dose

Take as soon as you remember and consult your doctor.

### Stopping the drug

Do not stop taking the drug without consulting your doctor. Stopping the drug may lead to worsening of the underlying condition.

## OVERDOSE ACTION



Seek immediate medical advice in all cases. Take emergency action if breathing problems or loss of consciousness occur.

See **Drug poisoning emergency guide (p.510)**.

## SPECIAL PRECAUTIONS

### Be sure to tell your doctor if:

- You have liver or kidney problems.
- You have porphyria.
- You have a problem with alcohol abuse.
- You have a peptic or other digestive-tract ulcer.
- You are taking other medicines, especially NSAIDs or antibiotics.



### Pregnancy

Not prescribed. Methotrexate may cause birth defects in the unborn baby.



### Breast-feeding

Not advised. The drug passes into the breast milk and may affect the baby adversely.



### Infants and children

For cancer treatment only. Reduced dose necessary.



### Over 60

Increased likelihood of adverse effects. Reduced doses necessary.



### Driving and hazardous work

No special problems.



### Alcohol

Avoid. Alcohol may increase the adverse effects of methotrexate.

## POSSIBLE ADVERSE EFFECTS

Nausea and vomiting may occur within a few hours of taking methotrexate. Diarrhoea and

mouth ulcers are also common side effects occurring a few days after starting treatment.

Symptom/effect	Frequency		Discuss with doctor		Stop taking drug now	Call doctor now
	Common	Rare	Only if severe	In all cases		
Dry cough/chest pain	●		●			
Nausea/vomiting	●			●		
Diarrhoea	●			●		
Mouth/gum ulcers/inflammation	●			●	●	●
Mood changes/confusion		●		●		
Rash		●		●	●	
Jaundice		●		●	●	●
Sore throat/fever		●		●	●	●
Easy bruising/bleeding		●		●	●	●
Breathlessness		●		●	●	●

## INTERACTIONS

**General note** Many drugs, including NSAIDs, diuretics, ciclosporin, phenytoin, and probenecid, may increase blood levels and toxicity of methotrexate.

**Co-trimoxazole, trimethoprim, and certain antimalarial drugs** These drugs may enhance the effects of methotrexate.

## PROLONGED USE

Long-term treatment may be needed for rheumatoid arthritis. Once the condition is controlled, the drug is reduced as much as possible to the lowest effective dose. Long-term methotrexate treatment may occasionally lead to breathing problems due to scarring of the lungs or, rarely, unusual respiratory infections, such as pneumocystis pneumonia.

**Monitoring** Full blood counts and kidney and liver function tests will be performed before treatment starts and at intervals during treatment.