

## **ETHAMBUTOL (EMB) Fact Sheet**

Ethambutol is a fairly simple nitrogen-based molecule.

Dose: 15 – 25 mg/kg/day, or 50 mg/kg/day twice weekly.

Administration: Oral; absorption not affected by food.

Excretion: 50-80% unchanged in urine.

Distribution: Crosses placenta, low concentration in CSF, can penetrate intracellularly.

### **Adverse Reactions**

#### Retrobulbar Neuritis

1. Toxicity is dose related and occurs in up to 5% of patients taking 25 mg/kg/day for 2 months or more. Toxicity occurs rarely when EMB is dosed at 15 mg/kg/day.
2. Symptoms include blurred vision, central scotomata, color blindness and constriction of visual fields. Advise patients to report immediately any change in visual acuity or color vision.
3. Toxicity is usually completely reversible if EMB is stopped.
4. Use EMB with caution when renal insufficiency is present.
5. Blindness can occur if EMB is continued after the development of visual symptoms or a change in color vision or visual acuity.
6. Young infants and children who cannot be tested for color vision should not receive EMB therapy.

#### Other toxicities

1. Rash and joint pain may occur.
2. Peripheral neuritis is rare.
3. Rare reports of hepatotoxicity, nephrotoxicity and hypersensitivity.

### **Monitoring**

1. Regular assessment of ocular symptoms.
2. Visual acuity and color vision evaluation baseline and monthly. If changes have occurred monitor monthly after therapy is discontinued until vision is stable.