SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Ethambutol 400 mg film-coated tablets

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each film-coated tablet contains 400 mg of Ethambutol hydrochloride.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Film-coated tablet.

Grey, circular, biconvex, coated tablets plain on both sides with an approximate diameter of 12.60 mm.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

The primary treatment and re-treatment of tuberculosis and for prophylaxis in cases of inactive tuberculosis or large tuberculin positive reaction. Ethambutol should only be used in conjunction with other anti-tuberculous drugs to which the patient's organisms are susceptible.

4.2 Posology and method of administration

Posology

The dosage of Ethambutol must be adjusted according to the body weight of the patient.

Adults

For primary treatment and prophylaxis: Ethambutol should be administered in a single daily oral dose of 15mg/kg, concomitant drugs being maintained at their recommended dosage levels.

For re-treatment: For the first 60 days of treatment, Ethambutol should be administered in a single daily oral dose of 25mg/kg. Thereafter the dosage should be reduced to 15mg/kg, concomitant drugs being maintained at their recommended dosage levels.

Children
For primary treatment and re-treatment: For the first 60 days of treatment, a single daily oral dose of 25mg/kg. Thereafter the dosage should be reduced to 15mg/kg, concomitant drugs being maintained at their recommended dosage levels.

For prophylaxis: A single daily oral dose of 15mg/kg, concomitant drugs being used at their recommended dosage levels.

Elderly

As for adults: However, patients with decreased renal function may need to have the dosage adjusted as determined by blood levels of Ethambutol.

In order to obtain maximum effect due to high serum levels, drug administration should be once daily.

Renal Impairment
Renal function should be checked before treatment with antituberculous drugs and appropriate dosage adjustments made. Ethambutol should preferably be avoided in patients with renal impairment

If used, where creatinine clearance is less than 30mL/minute, use 15–25 mg/kg (max. 2.5 g) 3 times a week and plasma Ethambutol concentration should be monitored.

Method of administration: Oral

4.3 Contraindications

Hypersensitivity to the active substance(s) or to any of the excipients listed in section 6.1.
It is also contra-indicated in patients with known optic neuritis and poor vision unless clinical judgement determines that it may be used.

4.4 Special warnings and precautions for use

Skin and subcutaneous tissue disorders
Severe cutaneous adverse reactions (SCARs) including Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis (TEN), drug reaction with eosinophilia and systemic symptoms (DRESS), which can be life-threatening or fatal, have been reported post-marketing in association with ethambutol treatment.

At the time of prescription patients should be advised of the signs and symptoms and monitored closely for skin reactions.

If signs and symptoms suggestive of these reactions appear, ethambutol should be withdrawn immediately and an alternative treatment considered (as appropriate).

If the patient has developed a serious reaction such as SJS, TEN or DRESS with the use of ethambutol, treatment with ethambutol must not be restarted in this patient at any time.

In children, the presentation of a rash can be mistaken for the underlying infection or an alternative infectious process, and physicians should consider the possibility of a reaction to ethambutol in children that develop symptoms of rash and fever during therapy with ethambutol.

Renal Function:

Toxic effects are more common if renal function is impaired.

Ocular toxicity:

Ethambutol may produce a unique type of visual impairment which is generally reversible and which appears to be due to optic neuritis and to be related to dose and duration of treatment.

Less than 1% of patients undergoing treatment with the higher dose regimen of 25mg/kg/day for two months, and 15mg/kg/day thereafter, have exhibited decrease in visual acuity. It is recommended that patients undergo a full ophthalmic examination before starting treatment. This should include visual

acuity, colour vision, perimetry and ophthalmoscopy. Any change may be unilateral or bilateral and hence both eyes should be tested individually.

Routine ophthalmological examination for adults is not thereafter necessary, but patients should be informed the importance of reporting any change in vision.

Routine ophthalmological examinations may be considered desirable when treating young children.

Any negative effects on vision are generally reversible when administration of the drug is discontinued promptly and recovery of visual acuity has usually occurred over a period of weeks to months after the drug was discontinued. Patients have then received Ethambutol at lower dosages without toxicity.

In rare cases, recovery may be delayed for up to one year or more or the effects may be irreversible.

Hepatic impairment:
Liver function tests should be performed in patients who develop symptoms suggestive of hepatitis or who become generally unwell during treatment.

Other Warnings:
Consideration should be given to current clinical guidance on the appropriate use of antituberculous drugs.

4.5 Interaction with other medicinal products and other forms of interaction

Aluminium hydroxide may impair the absorption of Ethambutol. Therefore antacids containing this ingredient should be avoided during treatment with Ethambutol.

4.6 Fertility, pregnancy and lactation

Pregnancy
There are no or limited data from the use of Ethambutol in pregnant women. Studies in animals have shown reproductive toxicity. The potential risk for humans is unknown.

Ethambutol is not recommended during pregnancy and in women of childbearing potential unless the potential benefit to the mother is considered to outweigh any possible risks.

Breast-feeding
Ethambutol/metabolites have been identified in breastfed newborns/infants of treated women. There is insufficient information on the effects of Ethambutol in newborns/infants.

Breast-feeding is not recommended during Ethambutol treatment unless the benefit of breast-feeding to the child is considered to outweigh any possible risks.

4.7 Effects on ability to drive and use machines

Patients who suffer from visual impairment during treatment with Ethambutol should not drive or operate machinery.

Numbness, paraesthesia, dizziness, disorientation are also among possible side effects that may affect a patient's ability to drive or operate machinery, if affected, patients should not drive or operate machinery.

4.8 Undesirable effects

In this section, frequencies of undesirable effects are defined as follows: Frequency: very common (>1/10); common (>1/100, <1/10); uncommon (>1/1,000, <1/100); rare (>1/10,000, <1/1,000), very rare (<1/10,000); Not known: frequency cannot be estimated from the available data.

Blood & lymphatic system disorders:
Rare: Thrombocytopenia
Very rare: Leucopenia, neutropenia

Immune system disorders:
Very rare: Hypersensitivity, anaphylactoid reactions, (see also Skin and subcutaneous tissue disorders)

Metabolic & nutrition disorders:
Uncommon: Hyperuricaemia
Very rare: Gout

Nervous system disorders:
Rare: Peripheral neuropathy, numbness, paraesthesia of the extremities
Very rare: headache, dizziness, disorientation

Psychiatric disorders:
Very rare: mental confusion, hallucinations

Eye disorders
Uncommon: Optic neuritis (decreased visual acuity, loss of vision, scotoma, colour blindness, visual disturbance, visual field defect, eye pain)

Respiratory, thoracic & mediastinal disorders:
Very rare: Pneumonitis, pulmonary infiltrates, with or without eosinophilia

Gastrointestinal disorders:
Gastrointestinal disorders such as anorexia, nausea, vomiting, abdominal pain and diarrhoea have been noted in patients on multiple drug anti-tuberculosis therapy including Ethambutol although not in test patients receiving Ethambutol as sole therapy.

Hepatobiliary disorders:
Hepatic reactions with hepatitis, jaundice, abnormal liver function test values, and very rarely, hepatic failure, have been reported in patients treated with multiple drug therapy including Ethambutol. Liver function tests should be performed in patients who develop symptoms suggestive of hepatitis or who become generally unwell during treatment.

Skin & subcutaneous tissue disorders:
Rare: Rash, pruritus, urticaria
Very rare: photosensitive lichenoid eruptions, bullous dermatitis, Stevens-Johnson syndrome, epidermal necrolysis
Not known: drug reaction with eosinophilia and systemic symptoms (DRESS) (see section 4.4)

Musculoskeletal and connective tissue disorders:
Very rare: Joint pains

Renal & urinary disorders
Very rare: Interstitial nephritis

General disorders and administration site conditions:

Very rare: Malaise, pyrexia

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Symptoms: Gastrointestinal disturbances, vomiting, fever, headache, anorexia, dizziness, hallucinations and/or visual disturbances.

Management: No specific antidote, but gastric lavage should be employed if necessary.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Antimycobacterial, ATC code: J04AK02.

Ethambutol is bacteriostatic. It is effective against Mycobacterium tuberculosis and M. bovis with an MIC of 0.5 - 8 µg per ml. While it has activity against some atypical mycobacteria including M. Kansarii, activity against other micro-organisms has not yet been reported.

It is effective against tubercle bacilli resistant to other tuberculostatics. Cross-resistance has not yet been reported.

Primary resistance to Ethambutol is uncommon but resistant strains of M. tuberculosis are readily produced if Ethambutol is used alone.

5.2 Pharmacokinetic properties

Absorption

Ethambutol is readily absorbed after oral administration and this absorption is not significantly impaired by food. After a single dose of 25mg/kg body weight, within 4 hours peak plasma concentrations of up to 5µg/ml are obtained, by 24 hours the concentration decreases to less than 1µg/ml.

Distribution

Ethambutol readily diffuses into red blood cells and into the cerebrospinal fluid when the meninges are inflamed. It has also been reported to cross the placenta.

Elimination

Most of a dose is excreted unchanged in the urine and up to 20% in faeces, within 48 hours. From 8 - 15% of a dose appears in urine as inactive metabolites.

5.3 Preclinical safety data

Nothing further of relevance to prescriber.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Tablet core:

Povidone
Microcrystalline cellulose
Crospovidone
Croscarmellose sodium
Colloidal anhydrous silica
Purified talc
Magnesium stearate
Hypromellose

Film coating:

Polyvinyl alcohol-part. hydrolyzed
Talc
Titanium dioxide
Mono and diglycerides
Sodium lauryl sulphate
Black iron oxide
Brilliant blue FCF aluminum lake

6.2 Incompatibilities

None.

6.3 Shelf life

2 years
After first opening the plastic container: 60 days

6.4 Special precautions for storage

Do not store above 25°C.

6.5 Nature and contents of container

Ethambutol Tablets are available in Alu-Alu blister, Alu-PVC/PE/PVdC blister and HDPE container with polypropylene cap.

Pack sizes:
10, 14, 20, 28, 30, 56, 60, 84, 90, 100 and 112 tablets in blister pack (Alu-Alu)

10, 14, 20, 28, 30, 56, 60, 84, 90, 100 and 112 tablets in blister pack (Alu-PVC/PE/PVdC)

1000 tablets in HDPE container with polypropylene cap

Not all pack sizes may be marketed.

6.6 Special precautions for disposal and other handling

None

7. MARKETING AUTHORISATION HOLDER

Brown & Burk UK Limited
5, Marryat Close,
Hounslow West,
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United Kingdom

8. MARKETING AUTHORISATION NUMBER(S)

PL 25298/0274

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

11/06/2025

10. DATE OF REVISION OF THE TEXT

11/06/2025