

diately and to stop ethambutol pending visual evaluation.

Ethambutol should be given in reduced dosage to patients with renal impairment and dosage adjustments may need to be made according to serum concentrations. The *BNF* recommends peak concentrations of 2 to 6 mg/L and trough concentrations of less than 1 mg/L.

Ethambutol may precipitate attacks of gout.

Although ethambutol crosses the placenta and may be teratogenic in *animals*, problems in humans have not been documented. It is generally considered that the benefits of ethambutol in the treatment of tuberculosis outweigh any potential risks in pregnancy.

Breast feeding. Ethambutol distributes into breast milk to produce concentrations similar to those in plasma. However, no adverse effects have been seen in breast-fed infants whose mothers were receiving ethambutol, and the American Academy of Pediatrics considers¹ that it is therefore usually compatible with breast feeding.

1. American Academy of Pediatrics. The transfer of drugs and other chemicals into human milk. *Pediatrics* 2001; **108**: 776–89. Correction. *ibid.*; 1029. Also available at: <http://aappolicy.aappublications.org/cgi/content/full/pediatrics%3b108/3/776> (accessed 03/10/07)

Children. Due to the possible difficulty of evaluating changes in visual acuity that may be induced in children receiving ethambutol, the *BNFC* advises that it should be used with caution in children under 5 years of age and unable to report visual changes accurately, whereas in the USA licensed product information has advised against use in those under 13 years of age.

The authors of a review of the use of ethambutol in children concluded that no extra precautions were necessary in children aged 5 years or more, and that it could also be used in younger children without undue fear of adverse effects.¹ Another review suggested that visual toxicity is not a particular problem except perhaps when CNS infection is involved.² A literature review³ on the use of ethambutol in children reported almost no ocular toxicity at daily doses of 15 to 30 mg/kg. Ethambutol is therefore considered safe in children of all ages at a daily dose of 20 mg/kg (range 15 to 25 mg/kg) or a three times weekly dose of 30 mg/kg.

- Trébuq A. Should ethambutol be recommended for routine treatment of tuberculosis in children? A review of the literature. *Int J Tuberc Lung Dis* 1997; **1**: 12–15.
- Graham SM, et al. Ethambutol in tuberculosis: time to reconsider? *Arch Dis Child* 1998; **78**: 274–8.
- WHO. *Ethambutol efficacy and toxicity: literature review and recommendations for daily and intermittent dosage in children*. Geneva: WHO, 2006. Available at: http://whqlibdoc.who.int/hq/2006/WHO_HTM_TB_2006.365_eng.pdf (accessed 03/10/07)

Antimicrobial Action

Ethambutol is active against *Mycobacterium tuberculosis* and some other mycobacteria. Resistant strains of *M. tuberculosis* are readily produced if ethambutol is used alone.

Pharmacokinetics

About 80% of an oral dose of ethambutol is absorbed from the gastrointestinal tract. Absorption is not significantly impaired by food (but see also Bioavailability, below). After a single dose of 25 mg/kg peak plasma concentrations of up to 5 mg/L appear within 4 hours, and are less than 1 mg/L by 24 hours.

Ethambutol is distributed to most tissues, including the lungs, kidneys, and erythrocytes. About 10 to 50% may diffuse into the CSF when the meninges are inflamed. It has been reported to cross the placenta and is distributed into breast milk. The elimination half-life after oral doses is about 3 to 4 hours.

Ethambutol is partially metabolised in the liver to the aldehyde and dicarboxylic acid derivatives which are inactive and then excreted in the urine. Most of a dose appears in the urine within 24 hours as unchanged drug and 8 to 15% as the inactive metabolites. About 20% of the dose is excreted unchanged in the faeces.

Bioavailability. Although the absorption of ethambutol is not generally regarded as being impaired by food, a study in 14 healthy subjects¹ suggested that giving it with a high-fat meal or an antacid could delay absorption and reduce the maximum plasma concentration.

- Peloquin CA, et al. Pharmacokinetics of ethambutol under fasted conditions, with food, and with antacids. *Antimicrob Agents Chemother* 1999; **43**: 568–72.

HIV-infected patients. Malabsorption of ethambutol and other antituberculous drugs may occur in patients with HIV infection and tuberculosis, and may contribute to acquired drug resistance and reduced efficacy of tuberculosis treatment. For further information on the absorption of antituberculous drugs in HIV-infected patients see under Rifampicin, p.328.

Pregnancy and breast feeding. Ethambutol crosses the placenta and is present in fetal tissue in amounts of at least 74.5% of the maternal serum concentration.¹ Ethambutol distributes into breast milk to produce concentrations similar to those in plasma.²

- Holdiness MR. Transplacental pharmacokinetics of the antituberculous drugs. *Clin Pharmacokinet* 1987; **13**: 125–9.
- Snider DE, Powell KE. Should women taking antituberculous drugs breast-feed? *Arch Intern Med* 1984; **144**: 589–90.

Uses and Administration

Ethambutol is used with other antituberculous drugs in the primary treatment of pulmonary and extrapulmonary tuberculosis (p.196) to suppress emergence of resistance to the other drugs used in the regimens. It is also used as a component of regimens for the treatment of nontuberculous mycobacterial infections (p.181).

In the treatment of tuberculosis, ethambutol is given, as the hydrochloride, usually with isoniazid, rifampicin, and pyrazinamide in the initial 8-week phase and sometimes in the continuation phase. It is given orally in a single daily dose of 15 mg/kg, or 30 mg/kg three times weekly. Initial doses of ethambutol 25 mg/kg daily for 60 days may be given to patients who have previously had antimycobacterial therapy, reduced to 15 mg/kg daily thereafter.

For details of doses in infants, children, and adolescents, see below. If it is used in patients with renal impairment, doses should be adjusted according to serum concentrations (see Precautions, above).

Fixed-dose combination products have been developed in order to improve patient compliance and avoid monotherapy, thereby decreasing the risk of acquired drug resistance. Combination products containing ethambutol with isoniazid, isoniazid and rifampicin, and isoniazid, rifampicin, and pyrazinamide are available in some countries.

Administration in children. For the treatment of *drug-resistant* tuberculosis in infants, children, and adolescents the American Academy of Pediatrics suggests a dose of ethambutol 15 to 25 mg/kg daily or 50 mg/kg twice weekly (to a maximum of 2.5 g) by mouth.

For *congenitally acquired* tuberculosis in neonates the *BNFC* suggests a dose of 15 mg/kg once daily. For the treatment of children 1 month and older a dose of 15 mg/kg once daily or 30 mg/kg three times a week for the 2 month initial treatment phase is suggested.

See also Children, under Precautions above

Preparations

BP 2008: Ethambutol Tablets;

USP 31: Ethambutol Hydrochloride Tablets; Rifampin, Isoniazid, Pyrazinamide, and Ethambutol Hydrochloride Tablets.

Proprietary Preparations (details are given in Part 3)

Austral.: Myambutol; **Austria:** Etibi; Myambutol; **Belg.:** Myambutol; **Canada:** Etibi; **Cz.:** Sural; **Denm.:** Myambutol; **Fin.:** Onibutol; **Fr.:** Myambutol; **Ger.:** EMB; Myambutol; **Gr.:** Dexambutol; Myambutol; **Hong Kong:** EMB; Myambutol; **Hung.:** Sural; **India:** Combuto; Myambutol; Mycobact; Mycobuto; Rifacomb; E-Z; Themibuto; Tibitol; **Indon.:** Aristam; Bacbutol; Cetabuto; Corsabuto; ETH Ciba; Parabuto; Santibi; Tibigon; Tibitol; **Ital.:** Etapiam; Miambutol; **Mex.:** Apo-Probuto; Dovaleim; Myambutol; Tambute; **Neth.:** Myambutol; **NZ:** Myambutol; **Philipp.:** Danbutol; Odebutol; **Port.:** Turesis; **Rus.:** Ebutol (Эбютро); Ethambusin (Этамбусин); Upbutol (Анбурол); **S.Afr.:** Puderale; **Singapore:** E-Butol; **Spain:** Myambutol; **Swed.:** Myambutol; **Switz.:** Myambutol; **Thai.:** Conbutol; Etham; Ethbutol; Lambuto; Myambutol; Myrin-P; Myrin; Servambutol; Tobuto; **Turk.:** Miambutol; **USA:** Myambutol.

Multi-ingredient: **Austria:** Myambutol-INH; **Denm.:** Rimstar; **Fin.:** Rimstar; **Ger.:** EMB-INH; Myambutol-INH; **India:** Akt-3; Akt-4; Bicox-E; Combunex; Coxina-3; Coxina-4; Cx-4; Cx-5; Gocox-4; Inabuto Forte; Myconex RH-Z-Plus; Rifa E; Wokex-3; Wokex-4; Xeed-3E; Xeed-4; **Indon.:** bacbutlNH; Erabuto Plus; Mediam-6; Mycothambin-INH; Niazitol; Pulna; Rimstar; Santibi Plus; **Ital.:** Etanicozid B6; Miazide B6; **Mex.:** Myambutol-INH; **Philipp.:** 4D; Continukit; Continukit Plus; Econokit; Econokit-MDR; Ethamid; Eth; 400; Fixcom 3; Fixcom 4; Myrin; Myrin-P; Quadtab; Rimstar; Shamidize; SVM-Polypac-A; Tres; Tritab; Viper; **Rus.:** Iscomb (Изокомб); Lomecomb (Ломекомб); Pthizioetham (Фтизоэтам); Protioicomb (Протиоикомб); Repin B (Репин В); Rimstar 4-FDC (Римстар 4-ФДЦ); **S.Afr.:** Myrin Plus; Myrin; Rifafour; Rimstar; **Spain:** Rimstar; **Swed.:** Rimstar; **Switz.:** Myambutol-INH; **Thai.:** Rifafour; Rimstar.

Ethionamide (BAN, USAN, rINN)

Ethionamid; Éthionamid; Ethionamidum; 2-Ethylthioisonicotinamide; Etionamid; Etionamida; Etionamidas; Etionamide; Etionamid; 1314-TH. 2-Ethylpyridine-4-carbothioamide.

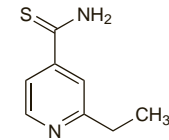
Этионамид

$C_8H_{10}N_2S$ = 166.2.

CAS — 536-33-4.

ATC — J04AD03.

ATC Vet — QJ04AD03.



Pharmacopoeias. In *Eur.* (see p.vii), *Int.*, *Jpn.*, and *US*.

Ph. Eur. 6.2 (Ethionamide). Small yellow crystals or a yellow crystalline powder. Practically insoluble in water; sparingly soluble in alcohol; soluble in methyl alcohol.

USP 31 (Ethionamide). A bright yellow powder having a faint to moderate sulfide-like odour. Slightly soluble in water, in chloroform, and in ether; sparingly soluble in alcohol and in propylene glycol; soluble in methyl alcohol. pH of a 1% slurry in water is between 6.0 and 7.0. Store in airtight containers.

Adverse Effects and Treatment

Many patients cannot tolerate therapeutic doses of ethionamide and have to stop treatment. The most common adverse effects are dose-related gastrointestinal disturbances, including nausea, vomiting, diarrhoea, anorexia, excessive salivation, a metallic taste, stomatitis, and abdominal pain. Tolerance may be improved by reducing the dose, adjusting the timing of dosage, or giving an antiemetic.

Mental disturbances including depression, anxiety, and psychosis have been provoked. Dizziness, drowsiness, headache, postural hypotension, and asthenia may also occur occasionally. Peripheral and optic neuropathy, diplopia and blurred vision, and a pellagra-like syndrome have occurred. Pyridoxine or nicotinamide have been suggested for the treatment or prevention of neurotoxic effects. Hepatitis may occur occasionally, with or without jaundice. The incidence of hepatotoxicity is increased when ethionamide is given with rifampicin.

Other adverse effects reported include hypersensitivity reactions, thrombocytopenia and purpura, alopecia, dermatitis (including photodermatitis), endocrine disturbances, hypoglycaemia, and hypothyroidism with or without goitre.

Teratogenic effects have been reported in *animals*.

Effects on the liver. Use of ethionamide or prothionamide with rifampicin for the treatment of multibacillary leprosy has been associated with a high incidence of hepatotoxicity. A hepatitis incidence of 4.5 to 5% has been reported for patients on ethionamide or prothionamide, rifampicin, and either dapson or clofazimine.^{1,2} In these studies, diagnosis of hepatitis was based on clinical assessment. When laboratory monitoring was used, an incidence of 13% was reported with a regimen of ethionamide or prothionamide with rifampicin and dapson.³ A regimen of prothionamide, dapson, rifampicin, and clofazimine has been associated with a 22% incidence based on laboratory monitoring.⁴ Use of ethionamide with pyrazinamide has also resulted in a high incidence of abnormal liver function tests.⁵

In the above studies rifampicin was given daily during part or all of the regimens. The incidence of hepatotoxicity when ethionamide or prothionamide is used with once-monthly rifampicin may be lower; hepatotoxicity was not reported in patients receiving monthly rifampicin and daily prothionamide, isoniazid, and dapson.⁶

- Pattyn SR, et al. Hepatotoxicity of the combination of rifampin-ethionamide in the treatment of multibacillary leprosy. *Int J Lepr* 1984; **52**: 1–6.
- Pattyn SR, et al. Combined regimens of one year duration in the treatment of multibacillary leprosy—II: combined regimens with rifampicin administered during 6 months. *Lepr Rev* 1989; **60**: 118–23.
- Cartel J-L, et al. Hepatitis in leprosy patients treated by a daily combination of dapson, rifampin, and a thioamide. *Int J Lepr* 1983; **51**: 461–5.
- Ji B, et al. Hepatotoxicity of combined therapy with rifampicin and daily prothionamide for leprosy. *Lepr Rev* 1984; **55**: 283–9.
- Schless JM, et al. The use of ethionamide in combined drug regimens in the re-treatment of isoniazid-resistant pulmonary tuberculosis. *Am Rev Respir Dis* 1965; **91**: 728–37.
- Ellard GA, et al. Long-term prothionamide compliance: a study carried out in India using a combined formulation containing prothionamide, dapson and isoniazid. *Lepr Rev* 1988; **59**: 163–75.

Precautions

Ethionamide should not be used in severe hepatic impairment. Liver function tests should be carried out before, and regularly during, treatment with ethionamide.

Caution is necessary in patients with depression or other psychiatric illness. Difficulty may be experienced in the management

of diabetes mellitus. Periodic monitoring of blood glucose, thyroid function, and visual function is desirable.

Ethionamide is teratogenic in *animals*.

Porphyria. Ethionamide is considered to be unsafe in patients with porphyria because it has been shown to be porphyrinogenic in *animals* or *in-vitro* systems.

Interactions

The adverse effects of other antimycobacterials may be increased when ethionamide is used (see Effects on the Liver, above, and under Cycloserine, Interactions, p.260).

Alcohol. A psychotic reaction has been reported in a patient receiving ethionamide after excessive intake of alcohol.¹

1. Lansdown FS, *et al.* Psychotoxic reaction during ethionamide therapy. *Am Rev Respir Dis* 1967; **95**: 1053–5.

Antimicrobial Action

Ethionamide is active only against mycobacteria including *Mycobacterium tuberculosis*, *M. kansasii*, *M. leprae*, and some strains of *M. avium* complex.

Resistance develops rapidly if used alone and there is complete cross-resistance between ethionamide and protonamide. Cross-resistance has been reported *in vitro* with isoniazid or with thioacetazone.

Pharmacokinetics

Ethionamide has been given as a sugar-coated tablet or more recently as a more stable film-coated tablet. Both formulations are readily absorbed from the gastrointestinal tract: after an oral dose of 250 mg, sugar-coated tablets produce a peak plasma concentration of about 1.5 micrograms/mL after 1.5 hours, while film-coated tablets give a peak plasma concentration of 2.16 micrograms/mL after about 1 hour. Distribution of ethionamide from the film-coated tablet into body tissues and fluids has not been studied, but is expected to be similar to that of the sugar-coated tablets. Ethionamide from sugar-coated tablets is widely distributed throughout body tissues and fluids. It crosses the placenta and penetrates the uninfamed meninges, appearing in the CSF in concentrations equivalent to those in serum. It is about 30% bound to plasma proteins. The half-life for the sugar-coated tablet is reported to be 2 to 3 hours and 1.92 hours for the film-coated tablet. Ethionamide is extensively metabolised, probably in the liver, to the active sulfoxide and other inactive metabolites and less than 1% of a dose appears in the urine as unchanged drug.

Distribution. After single oral doses of ethionamide 15 or 20 mg/kg in children with tuberculous meningitis, the peak spinal fluid concentration was reached in 1/ to 2/ hours.* A wide range of concentrations was reported but doses of 20 mg/kg were more likely to produce spinal fluid concentrations above 2.5 micrograms/mL, the concentration considered by the authors to be essential for therapeutic success.

1. Donald PR, Seifart HI. Cerebrospinal fluid concentrations of ethionamide in children with tuberculous meningitis. *J Pediatr* 1989; **115**: 483–6.

Uses and Administration

Ethionamide is a thioamide derivative considered to be interchangeable with protonamide. It is used with other antituberculous drugs for the treatment of tuberculosis (p.196) when resistance to primary drugs has developed. It has also been used, as a substitute for clofazimine, in regimens for the treatment of leprosy (p.176) but less toxic alternatives are now preferred.

In the treatment of resistant tuberculosis, adults may be given 15 to 20 mg/kg daily (maximum 1 g daily) orally. Ethionamide may be given in divided doses with meals, or as a single daily dose after the evening meal, or at bedtime, to minimise gastrointestinal adverse effects. For details of doses in infants, children, and adolescents, see below.

Similar doses were used for the treatment of leprosy.

Ethionamide has also been used as rectal suppositories; the hydrochloride has been given intravenously.

Administration in children. For the treatment of drug-resistant tuberculosis in infants, children, and adolescents the American Academy of Pediatrics suggests an oral dose of ethionamide 15 to 20 mg/kg (to a maximum of 1 g) daily, given in 2 to 3 divided doses.

Preparations

USP 31: Ethionamide Tablets.

Proprietary Preparations (details are given in Part 3)

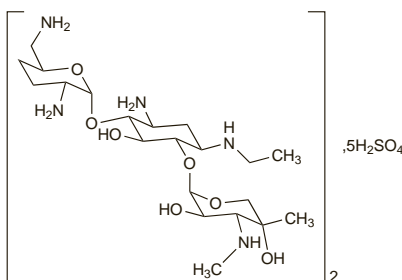
Gr.: Trecator; **India:** Ethide; Myobid; **S.Afr.:** Ethatyl; **Thai.:** Eton; **Turk.:** Etyomid; **USA:** Trecator.

Etimicin Sulfate

Antibiotic 89-07; E-402. 1-N-Ethyl gentamicin C₁₈ sulfate.

(C₂₁H₄₃N₅O₇)₂·5H₂SO₄ = 1445.6.

CAS — 59711-96-5 (*etimicin*); 362045-44-1 (*etimicin sulfate*).



Pharmacopoeias. In *Chin*.

Profile

Etimicin, a derivative of gentamicin C_{1a}, is an aminoglycoside antibacterial with actions similar to those of gentamicin (p.282). It is given intravenously as the sulfate.

References.

1. Zhao C, *et al.* A randomized controlled clinical trial on etimicin, a new aminoglycoside antibiotic, versus netilmicin in the treatment of bacterial infections. *Chin Med J (Engl)* 2000; **113**: 1026–30.

Faropenem Sodium (*rINN*)

ALP-201; Faropenem sódico; Faropénem Sodique; Fropenem Sodium; Furopenem; Natrii Faropenemum; SUN-5555; SY-5555; WY-49605; YM-044. Sodium (+)-(5R,6S)-6-[(1R)-1-hydroxyethyl]-7-oxo-3-[(2R)-tetrahydro-2-furyl]-4-thia-1-azabicyclo[3.2.0]hept-2-ene-2-carboxylate.

Натрий Фаропенем

C₁₂H₁₄NaNO₅S = 307.3.

CAS — 106560-14-9 (*faropenem*); 141702-36-5 (*faropenem medoxomil*); 122547-49-3 (*faropenem sodium*).

Pharmacopoeias. *Jpn* includes the hemipentahydrate.

Profile

Faropenem is a penem antibacterial that is given orally as the sodium salt for the treatment of susceptible infections.

Faropenem medoxomil (*USAN*) (Bay-56-6854) is being investigated for the treatment of respiratory-tract infections and uncomplicated skin and skin structure infections. NOTE. Faropenem medoxomil has also been referred to as faropenem daloxate although such use of the term daloxate is not in keeping with *INN* nomenclature conventions.

References.

1. Critchley IA, *et al.* Activities of faropenem, an oral β-lactam, against recent US isolates of *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Moraxella catarrhalis*. *Antimicrob Agents Chemother* 2002; **46**: 550–5.
2. von Eiff C, *et al.* Comparative in vitro activity of faropenem against staphylococci. *J Antimicrob Chemother* 2002; **50**: 277–80.
3. Milatovic D, *et al.* In vitro activity of faropenem against 5460 clinical bacterial isolates from Europe. *J Antimicrob Chemother* 2002; **50**: 293–9.
4. Wexler HM, *et al.* In vitro activities of faropenem against 579 strains of anaerobic bacteria. *Antimicrob Agents Chemother* 2002; **46**: 3669–75.
5. Jones ME, *et al.* Activity of faropenem, a new furanem, against European respiratory pathogens collected during 2000-2001: a comparison with other beta-lactam agents. *J Antimicrob Chemother* 2003; **51**: 196–9.
6. Gettig JP, *et al.* Faropenem medoxomil. *Ann Pharmacother* 2008; **42**: 80–90.

Preparations

Proprietary Preparations (details are given in Part 3)

Jpn: Farom.

Floxacin (*BAN, USAN, rINN*)

AM-833; Fleroksasiini; Fléroxacine; Fleroxacino; Fleroxacinum; Ro-23-6240; Ro-23-6240/000. 6,8-Difluoro-1-(2-fluoroethyl)-1,4-dihydro-7-(4-methyl-1-piperazinyl)-4-oxo-3-quinolinecarboxylic acid.

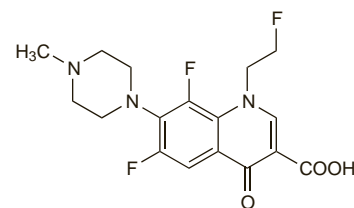
Флероксацин

C₁₇H₁₈F₃N₃O₃ = 369.3.

CAS — 79660-72-3.

ATC — J01MA08.

ATC Vet — QJ01MA08.



Pharmacopoeias. In *Chin*.

Profile

Floxacin is a fluoroquinolone antibacterial with actions and uses similar to those of ciprofloxacin (p.243), but is reported to have greater systemic bioavailability and a longer half-life. It is given orally for the treatment of susceptible infections in usual doses of 200 to 300 mg once daily. It has also been given by intravenous infusion.

The incidence of adverse effects associated with floxacin has been relatively high.

General references.

1. Balfour JA, *et al.* Floxacin: a review of its pharmacology and therapeutic efficacy in various infections. *Drugs* 1995; **49**: 794–850.

Adverse effects. References to adverse effects associated with floxacin.

1. Bowie WR, *et al.* Adverse reactions in a dose-ranging study with a new long-acting fluoroquinolone, floxacin. *Antimicrob Agents Chemother* 1989; **33**: 1778–82.
2. Geddes AM. Safety of floxacin in clinical trials. *Am J Med* 1993; **94** (suppl 3A): 201S–203S.
3. Kimura M, *et al.* Photosensitivity induced by floxacin. *Clin Exp Dermatol* 1996; **21**: 46–7.

Breast feeding. The American Academy of Pediatrics¹ states that floxacin is usually compatible with breast feeding. However, in a study,² in which women were given a single 400-mg dose and breast feeding was withheld for 48 hours, it was concluded that although a breast-fed infant would only receive a moderate amount (maximum 10 mg daily), floxacin should not be used in breast-feeding mothers due to the potential for adverse effects such as arthropathy in the infant.

1. American Academy of Pediatrics. The transfer of drugs and other chemicals into human milk. *Pediatrics* 2001; **108**: 776–89. Correction. *ibid.*; 1029. Also available at: <http://aappolicy.aappublications.org/cgi/content/full/pediatrics%3b108/3/776> (accessed 26/05/04)
2. Dan M, *et al.* Penetration of floxacin into breast milk and pharmacokinetics in lactating women. *Antimicrob Agents Chemother* 1993; **37**: 293–6.

Preparations

Proprietary Preparations (details are given in Part 3)

Ger.: Quinodist; **Jpn:** Megalocin.

Flomoxef Sodium (*rINN*)

Flomoxef sódico; Flomoxef Sodique; Natrii Flomoxefum; 6315-S. 7R-7-[2-(Difluoromethylthio)acetamido]-3-[1-(2-hydroxyethyl)-1H-tetrazol-5-ylthiomethyl]-7-methoxy-1-oxa-3-cephem-4-carboxylic acid sodium.

Натрий Фломоксэф

C₁₅H₁₇F₂N₆NaO₇S₂ = 518.4.

CAS — 99665-00-6 (*flomoxef*); 92823-03-5 (*flomoxef sodium*).

Pharmacopoeias. In *Jpn*.

Profile

Flomoxef is an oxacephalosporin or oxacephem antibacterial with properties similar to latamoxef (p.292). It is given intravenously as the sodium salt and doses are expressed in terms of flomoxef; 1.04 g of flomoxef sodium is equivalent to about 1 g of flomoxef. The usual dose is 1 to 2 g daily in two divided doses.

Preparations

Proprietary Preparations (details are given in Part 3)

Jpn: Flumarin.