# 1284 Cardiovascular Drugs

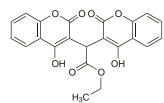
## Profile

Ethacizine, an analogue of moracizine (p.1344), is reported to be a class Ic antiarrhythmic. It is used in the treatment of ventricular and supraventricular arrhythmias and has been given orally in doses starting at 50 mg three times daily, increased if necessary to a maximum of 100 mg three times daily. It has also been given intravenously.

## Ethyl Biscoumacetate (BAN, rINN)

Aethylis Biscoumacetas; Biscumacetato de etilo; Ethyldicoumarol; Éthyle, Biscoumacétate d'; Ethylis Biscoumacetas; Neodicumarinum. Ethyl bis(4-hydroxycoumarin-3-yl)acetate

Этил Бискумацетат  $C_{22}H_{16}O_8 = 408.4.$  CAS - 548-00-5. ATC - B01AA08.ATC Vet - QB01AA08.



#### Profile

Ethyl biscoumacetate is an oral coumarin anticoagulant with actions similar to those of warfarin (p.1432). It has been used in the management of thromboembolic disorders.

#### Preparations

Proprietary Preparations (details are given in Part 3) Cz.: Pelentan+; Pelentanettae+

## Etilefrine Hydrochloride (BANM, rINNM) 🛇

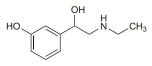
Ethyladrianol Hydrochloride; Ethylnorphenylephrine Hydrochloride; Etilefriinihydrokloridi; Étiléfrine, chlorhydrate d'; Etilefrin-hidroklorid; Etilefrin-hydrochlorid; Etilefrinhydroklorid; Etilefrini hydrochloridum; Etilefrino hidrochloridas; Hidrocloruro de etilefrina; M-I-36. 2-Ethylamino-I-(3-hydroxyphenyl)ethanol hydrochloride

Этилэфрина Гидрохлорид

 $C_{10}H_{15}NO_2, HCI = 217.7$ 

CAS -– 709-55-7 (etilefrine); 943-17-9 (etilefrine hydrochloride) ATC - COICAOI

ATC Vet - QC01CA01.



#### (etilefrine)

# Pharmacopoeias. In Eur. (see p.vii) and Jpn.

Ph. Eur. 6.2 (Etilefrine Hydrochloride). A white or almost white, crystalline powder or colourless crystals. Freely soluble in water; soluble in alcohol; practically insoluble in dichloromethane. Store in airtight containers. Protect from light.

## Profile

Etilefrine is a direct-acting sympathomimetic (p.1407) with beta1-agonist properties, and some alpha- and beta2-agonist actions. It is used for the treatment of hypotensive states (p.1174). It is given orally as the hydrochloride in usual doses of 5 or 10 mg three times daily: modified-release dosage forms may be given in doses of 25 mg once or twice daily. Etilefrine hydrochloride can also be given parenterally.

Etilefrine polistirex has been used in the management of rhinitis.

Priapism. Priapism is a common complication of sickle-cell disease (p.1044) and is often treated with intracavernosal alpha agonists (see under Uses of Metaraminol, p.1333). There have also been reports of the successful use of etilefrine, both by intracavernosal injection for acute treatment,<sup>1,2</sup> and orally for prophylaxis.<sup>1,3</sup>

- 1. Virag R. et al. Preventive treatment of priapism in sickle cell disease with oral and self-administered intracavernous injection of etilefrine. Urology 1996; **47:** 777–81.
- Gbadoé AD, et al. Management of sickle cell priapism with etile frine. Arch Dis Child 2001; 85: 52–3.
- Okpala I, et al. Etilefrine for the prevention of priapism in adult sickle cell disease. Br J Haematol 2002; 118: 918–21.

# Preparations

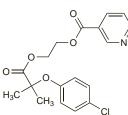
Proprietary Preparations (details are given in Part 3) Arg.: Corcanfol<sup>+</sup>; Effortil; Etil Adrianol<sup>+</sup>; Menegradl<sup>+</sup>; Austria: Aglo<sup>+</sup>; Cir-cupon; Effortil; Belg.: Effortil; Braz.: Efortil; Etilefnil; Chile: Effortil; Fin: Effortil; Fi: Effortil; Ger.: Adrenan<sup>+</sup>; Bioflutin; Cardanat; Cardialgine<sup>+</sup>; Cir-cuvit E<sup>+</sup>; Effortil; He.: Adrenan<sup>+</sup>; Bioflutin; Cardanat; Cardialgine<sup>+</sup>; Cir-cuvit E<sup>+</sup>; Effortil; Peren<sup>+</sup>; Etil; Pholdyston; Thomasin; Gr.: Effortil; Ital.: Effortil; Jpn: Effortil; Mex.: Effortil; Norw.: Effortil; Pol.: Effortil; Port.: Effortil; Saffr: Effortil; Spain: Efortil; Sweit.: Effortil; Switz.: Effortil; Thai.: Effortil; Efsine<sup>+</sup>; Hyprosia; Yenez.: Effontil.

Multi-ingredient: Austria: Agilan; Amphodyn; Effortil comp; Hypodyn; Influbene; Ger.: Agit plus†; Amphodyn†; Dihydergot plus; Effortil plus; Er-golefrin; Ergomimet plus†; Switz.: Dihydergot plus; Effortil plus.

## Etofibrate (rINN)

Étofibrate; Etofibrato; Etofibratum. 2-Nicotinoyloxyethyl 2-(4chlorophenoxy)-2-methylpropionate.

Этофибрат  $C_{18}H_{18}CINO_5 = 363.8.$ CAS — 31637-97-5. ATC — C10AB09. ATC Vet - QCIOAB09.



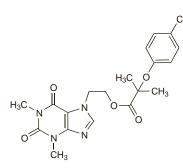
Etofibrate, a derivative of clofibrate (p.1246) and nicotinic acid (p.1957), is a lipid regulating drug used in the treatment of hyperlipidaemias (p.1169). The usual oral dose is 500 mg daily.

# Preparations

Proprietary Preparations (details are given in Part 3) Austria: Lipo-Merz; Braz.: Tricerol; Chile: Lipo-Merz; Ger.: Lipo-Merz; Hong Kong: Lipo-Merz; Malaysia: Lipo-Merz; Tricerol; Port.: Lipo-Merz; Singapore: Lipo-Merz; Switz.: Lipo-Merz

# Etofylline Clofibrate (rINN)

Clofibrato de etofilina; Étofylline, Clofibrate d'; Etofyllini Clofibras; ML-1024; Theofibrate (USAN). 2-(Theophyllin-7-yl)ethyl 2-(4chlorophenoxy)-2-methylpropionate.



## Profile

Etofylline clofibrate, a fibric acid derivative (see Bezafibrate, p.1232), is a lipid regulating drug used in the treatment of hyperlipidaemias (p.1169). The usual oral dose is 250 mg two or three times daily

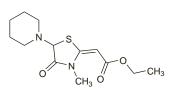
#### Preparations

Proprietary Preparations (details are given in Part 3) Austria: Duolip; Cz.: Duolip; Ger.: Duolip; Hong Kong: Duolip; Malay-sia: Duolip†; Switz.: Duolip†.

## Etozolin (USAN, rINN) (

Etozolina; Étozoline; Etozolinum; Gö-687; W-2900A. Ethyl (3methyl-4-oxo-5-piperidinothiazolidin-2-ylidene)acetate. Этозолин

C<sub>13</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>S = 284.4. CAS — 73-09-6. ATC — C03CX01. ATC Vet - QC03CX01.



#### Profile

Etozolin is a loop diuretic with properties similar to those of furosemide (p.1292), but with a longer duration of action. It has been used in the treatment of oedema and hypertension (p.1171). Etozolin is reported to be rapidly metabolised to ozolinone which also has diuretic activity.

## ◊ References.

- 1. Knauf H, et al. Pharmacodynamics and kinetics of etozo-lin/ozolinone in hypertensive patients with normal and impaired kidney function. *Eur J Clin Pharmacol* 1984; **26**: 687–93.
  Beermann B, Grind M. Clinical pharmacokinetics of some newer
- diuretics. Clin Pharmacokinet 1987; 13: 254-66.

## Preparations

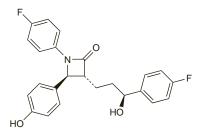
Proprietary Preparations (details are given in Part 3) Ital.: Elkapin

# Ezetimibe (BAN, USAN, rINN)

Ezetimiba; Ézétimibe; Ezetimibum; Sch-58235. (3R,4S)-1-(p-Fluorophenyl)-3-[(3S)-3-(p-fluorophenyl)-3-hydroxypropyl]-4-(p-hydroxyphenyl)-2-azetidinone. Эзетимиб

 $C_{24}H_{21}F_2NO_3 = 409.4.$ CAS - 163222-33-1. ATC - CIOAX09.

ATC Vet - QCIOAX09



## Adverse Effects and Precautions

Ezetimibe is generally well tolerated. The most common adverse effects include headache, abdominal pain, and diarrhoea; other gastrointestinal disorders, hypersensitivity reactions including rash and angioedema, fatigue, chest pain, and arthralgia have also been reported. Rare adverse effects include raised liver enzymes or hepatitis, pancreatitis, thrombocytopenia, cholelithiasis, and cholecystitis. Myalgia has occurred in patients taking ezetimibe either alone or when added to a statin (see below). Ezetimibe should be stopped if myopathy is suspected or creatine phosphokinase increases significantly.

Ezetimibe should be avoided in patients with moderate or severe hepatic impairment.

Reviews.

- 1. Jacobson TA, et al. Safety considerations with gastrointestinally active lipid-lowering drugs. Am J Cardiol 2007; 99 (Issue 6 sup-pl 1): 47C–55C.
- 2. Kashani A, *et al.* Review of side-effect profile of combination czetimibe and statin therapy in randomized clinical trials. Am J Cardiol 2008: **101:** 1606–13.

Effects on the liver. Ezetimibe may cause an increase in liver enzymes and there have also been reports of acute hepatitis, sometimes developing after addition of exetimibe to long-term statin therapy.<sup>23</sup> Both auto-immune<sup>2,3</sup> and cholestatic hepatitis<sup>3</sup> have been described. In some patients,<sup>1,2</sup> symptoms resolved and liver enzymes normalised when ezetimibe was stopped, and in 1 patient a statin was successfully restarted.<sup>2</sup> However, of 2 pa-tients who had been receiving ezetimibe and atorvastatin, 1 required treatment with corticosteroids,3 while the other3 had persistent liver changes 4 months later, despite both drugs being stopped in each case.

Liu Q, et al. Drug-induced liver injury associated with ezetimibe therapy. Dig Dis Sci 2007; 52: 602–5.

Этофиллина Клофибрат

 $C_{19}H_{21}CIN_4O_5 = 420.8.$ CAS — 54504-70-0.

