patients with spinal cord injuries,[1] and it is sometimes used in palliative care to control night sweats. The *BNF* notes that propantheline may be used for gustatory sweating in patients with diabetic neuropathy.

1. Canaday BR, Stanford RH. Propantheline bromide in the management of hyperhidrosis associated with spinal cord injury. *Ann Pharmacother* 1995; **29:** 489–92.

Urinary incontinence. In the UK, guidelines issued by NICE suggest that propantheline should not be recommended for the treatment of urinary incontinence (p.2180) or overactive bladder in women; other antimuscarinics are preferred.[1]

1. National Institute for Health and Clinical Excellence. Urinary incontinence: the management of urinary incontinence in women (issued October 2006). Available at: http://www.nice.org.uk/nicemedia/pdf/CG40fullguideline.pdf (accessed 03/07/08)

Preparations

BP 2008: Propantheline Tablets;
USP 31: Propantheline Bromide Tablets.

Proprietary Preparations (details are given in Part 3)
Austral.: Pro-Banthine; ***Canad.:*** Propanthel†; ***Denm.:*** Erconil; ***India:*** Pro-Banthine; ***Indon.:*** Pro-Banthine; ***Mex.:*** Propantel†; ***NZ:*** Pro-Banthine; ***S.Afr.:*** Pro-Banthine; ***UK:*** Pro-Banthine; ***USA:*** Pro-Banthine.

Multi-ingredient: ***Indon.:*** Methaphyllin; ***Ital.:*** Lexil.

Prune

Ameixa; Ciruela; Prunus.

Слива Домашняя (*Prunus domestica*)

Profile

Prune is the dried ripe fruits of the plum *Prunus domestica* and some other species of *Prunus* (Rosaceae). It has laxative and demulcent properties.

◊ References.

1. Stacewicz-Sapuntzakis M, *et al.* Chemical composition and potential health effects of prunes: a functional food? *Crit Rev Food Sci Nutr* 2001; **41:** 251–86.

Preparations

Proprietary Preparations (details are given in Part 3)
Mex.: Viviolax†.

Multi-ingredient: ***Arg.:*** Cirulaxia; Mermelax; ***Austral.:*** Neo-Cleanse; Prolax†; ***Canad.:*** Fruitatives†; ***Chile:*** Tamarine; ***Fr.:*** Carres Parapsyllium; Laxarine; ***Mex.:*** Ciruelax Jalea; Laxacaps.

Rabeprazole Sodium *(BANM, USAN, rINNM)*

E-3810; LY-307640; Natrii Rabeprazolum; Rabeprazol sódico; Rabeprazol Sodyum; Rabéprazole sodique; Rabeprazolum natricum; Sodium Pariprazole. 2-({[4-(3-Methoxypropoxy)-3-methyl-2-pyridyl]methyl}sulfinyl)-1*H*-benzimidazole sodium.

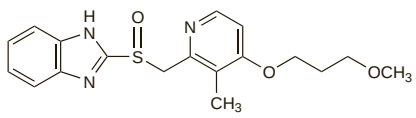
Натрий Рабепразол

$C_{18}H_{20}N_3NaO_3S$ = 381.4.

CAS — 117976-89-3 (rabeprazole); 117976-90-6 (rabeprazole sodium).

ATC — A02BC04.

ATC Vet — QA02BC04.



(rabeprazole)

Adverse Effects and Precautions

As for Omeprazole, p.1753.

Effects on the endocrine system. For cases of gynaecomastia associated with rabeprazole see p.1753.

Effects on the kidneys. For reports of interstitial nephritis associated with rabeprazole see p.1753.

Effects on the nervous system. For a report of neuropsychiatric symptoms associated with rabeprazole, see under Omeprazole, p.1754.

Interactions

As for Omeprazole (p.1755) but clinically significant interactions with diazepam, phenytoin, theophylline, or warfarin have not been found in healthy subjects.

Pharmacokinetics

Rabeprazole is rapidly absorbed and peak plasma concentrations are reached about 3.5 hours after an oral dose. The oral bioavailability is about 52% with the enteric-coated tablet formulation, because of first-pass metabolism, and does not appear to vary after single or repeated doses. Rabeprazole is about 97% bound to plasma proteins. It is extensively metabolised in the liver by cytochrome P450 isoenzymes CYP2C19 and CYP3A4 to the thioether, thioether carboxylic acid, sulfone, and desmethylthioether. Metabolites are excreted principally in the urine (about 90%) with the remainder in the faeces. The plasma half-life is about 1 hour, increased two to threefold in hepatic impairment, 1.6 times in CYP2C19 slow metabolisers (see also Metabolism under Omeprazole, p.1755), and by 30% in the elderly.

◊ References.

1. Yasuda S, *et al.* Comparison of the kinetic disposition and metabolism of E3810, a new proton pump inhibitor, and omeprazole in relation to S-mephenytoin 4-hydroxylation status. *Clin Pharmacol Ther* 1995; **58:** 143–54.
2. Keane WF, *et al.* Rabeprazole: pharmacokinetics and tolerability in patients with stable, end-stage renal failure. *J Clin Pharmacol* 1999; **39:** 927–33.

Uses and Administration

Rabeprazole is a proton pump inhibitor with actions and uses similar to those of omeprazole (p.1755). It is given orally as rabeprazole sodium in the form of enteric-coated tablets. It is normally taken in the morning.

In the treatment of severe (erosive or ulcerative) **gastro-oesophageal reflux disease** (p.1696), the usual dose of rabeprazole sodium is 20 mg once daily for 4 to 8 weeks; in the USA, a further 8-week course is permitted for healing of erosive oesophagitis. Thereafter, maintenance therapy can be continued with 10 or 20 mg daily depending on the response. For symptomatic disease without erosive or ulcerative oesophagitis a dose of 10 or 20 mg may be given once daily for 4 weeks; in the USA, a further 4-week course is permitted. Once symptoms have resolved, a dose of 10 mg once daily may be given as necessary.

For the treatment of active **peptic ulcer disease** (p.1702), 20 mg daily is given for 4 to 8 weeks for duodenal ulcer and 6 to 12 weeks for gastric ulcer. For the eradication of *Helicobacter pylori* rabeprazole sodium may be combined with two antibacterials in a 1-week **triple therapy** regimen. Effective regimens include 20 mg twice daily combined with clarithromycin 500 mg twice daily and amoxicillin 1 g twice daily, or combined with clarithromycin 250 mg twice daily and metronidazole 400 mg twice daily.

For **Zollinger-Ellison syndrome** (p.1704), the starting dose is 60 mg once daily, adjusted according to response. Doses up to 120 mg daily have been given; when the daily dose is more than 100 mg it should be given in 2 divided doses.

◊ Reviews.

1. Prakash A, Faulds D. Rabeprazole. *Drugs* 1998; **55:** 261–7.
2. Anonymous. Rabeprazole. *Med Lett Drug Ther* 1999; **41:** 110–12.
3. Carswell CI, Goa KL. Rabeprazole: an update of its use in acid-related disorders. *Drugs* 2001; **61:** 2327–2356.

Preparations

Proprietary Preparations (details are given in Part 3)
Arg.: Pariet; Rabec; ***Austral.:*** Pariet; ***Austria:*** Pariet; ***Belg.:*** Pariet; ***Braz.:*** Pariet; ***Canad.:*** Pariet; ***Chile:*** Gastrodine; ***Denm.:*** Pariet; ***Fin.:*** Pariet; ***Fr.:*** Pariet; ***Ger.:*** Pariet; ***Gr.:*** Pariet; ***Hong Kong:*** Pariet; ***Hung.:*** Pariet; ***India:*** Odirab; Rabeloc; Rabicip; ***Indon.:*** Pariet; ***Irl.:*** Pariet; ***Ital.:*** Pariet; ***Jpn:*** Pariet; ***Malaysia:*** Pariet; ***Mex.:*** Pariet; ***Neth.:*** Pariet; ***Philipp.:*** Pariet; ***Pol.:*** Pariet; ***Port.:*** Pariet; ***Rus.:*** Pariet (Париет); ***S.Afr.:*** Pariet; ***Singapore:*** Pariet; ***Spain:*** Aciphex; Pariet; ***Swed.:*** Pariet; ***Switz.:*** Pariet; ***Thai.:*** Pariet; ***Turk.:*** Pariet; ***UK:*** Pariet; ***USA:*** Aciphex; ***Venez.:*** Pariet.

Racecadotril *(rINN)*

Acetorphan; Racécadotril; Racecadotrilo; Racecadotrilum. (±)-*N*-{2-[(Acetylthio)methyl]-1-oxo-3-phenylpropyl}glycine phenylmethyl ester; *N*-[(*R,S*)-3-acetylthio-2-benzylpropanoyl]glycine benzyl ester; (±)-*N*-[α-(Mercaptomethyl)hydrocinnamoyl]glycine benzyl ester acetate.

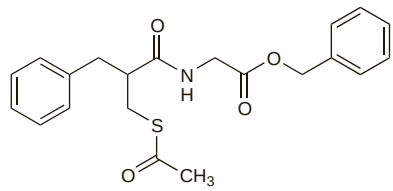
Рацекадотрил

$C_{21}H_{23}NO_4S$ = 385.5.

CAS — 81110-73-8.

ATC — A07XA04.

ATC Vet — QA07XA04.



Pharmacopoeias. In *Eur.* (see p.vii).
Ph. Eur. 6.2 (Racecadotril). A white or almost white powder. Practically insoluble in water; freely soluble in methyl alcohol and in dichloromethane.

Profile

Racecadotril is an enkephalinase inhibitor that inhibits the breakdown of endogenous opioids, thus reducing intestinal secretions. It is given orally in doses of 100 mg three times daily before meals for up to 7 days for the symptomatic management of acute diarrhoea (p.1694).

The *S*-form of racecadotril (sinorphan, ecadotril—see Natriuretic Peptides, p.1347) has been investigated for hypertension and heart failure.

◊ References.

1. Baumer P, *et al.* Effects of acetorphan, an enkephalinase inhibitor, on experimental and acute diarrhoea. *Gut* 1992; **33:** 753–8.
2. Roge J, *et al.* The enkephalinase inhibitor, acetorphan, in acute diarrhoea: a double-blind, controlled clinical trial versus Loperamide. *Scand J Gastroenterol* 1993; **28:** 352–4.
3. Beaugerie L, *et al.* Treatment of refractory diarrhoea in AIDS with acetorphan and octreotide: a randomized crossover study. *Eur J Gastroenterol Hepatol* 1996; **8:** 485–9.
4. Salazar-Lindo E, *et al.* Racecadotril in the treatment of acute watery diarrhea in children. *N Engl J Med* 2000; **343:** 463–7.
5. Matheson AJ, Noble S. Racecadotril. *Drugs* 2000; **59:** 829–35.
6. Alam NH, *et al.* Efficacy and tolerability of racecadotril in the treatment of cholera in adults: a double blind, randomised, controlled clinical trial. *Gut* 2003; **52:** 1419–23.
7. Wang H-H, *et al.* A blind, randomized comparison of racecadotril and loperamide for stopping acute diarrhea in adults. *World J Gastroenterol* 2005; **11:** 1540–3.
8. Szajewska H, *et al.* Systematic review: racecadotril in the treatment of acute diarrhoea in children. *Aliment Pharmacol Ther* 2007; **26:** 807–13.

Preparations

Proprietary Preparations (details are given in Part 3)
Braz.: Tiorfan; ***Fr.:*** Tiorfan; ***Ger.:*** Tiorfan; ***Gr.:*** Hidrasec; ***Indon.:*** Hidrasec; ***Mex.:*** Hidrasec; ***Port.:*** Tiorfan; ***Spain:*** Tiorfan; ***Thai.:*** Hidrasec†; ***Venez.:*** Hidrasec.

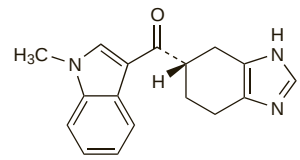
Ramosetron Hydrochloride *(rINNM)*

Hidrocloruro de ramosetrón; Ramosétron, Chlorhydrate de; Ramosetroni Hydrochloridum; YM-060. (–)-(*R*)-1-Methylindol-3-yl 4,5,6,7-tetrahydro-5-benzimidazolyl ketone hydrochloride.

Рамосетрона Гидрохлорид

$C_{17}H_{17}N_3O,HCl$ = 315.8.

CAS — 132036-88-5 (ramosetron); 132907-72-3 (ramosetron hydrochloride).



(ramosetron)

Profile

Ramosetron is a 5-HT_3 antagonist with general properties similar to those of ondansetron (p.1756). Ramosetron hydrochloride is given for its antiemetic properties in the management of nausea and vomiting induced by cancer chemotherapy in usual doses of 300 micrograms once daily intravenously, or 100 micrograms once daily by mouth. Ramosetron is also under investigation in the management of diarrhoea-predominant irritable bowel syndrome.

Preparations

Proprietary Preparations (details are given in Part 3)
Indon.: Nasea; ***Jpn:*** Nasea; ***Philipp.:*** Nasea; ***Thai.:*** Nasea.