Profile
The aerial parts of oregano, *Origanum onites* (Lamiaceae), or *O. vulgare* or its subspecies, are used as a culinary herb and in herbal preparations.

There is some confusion over the naming of origanum oils. Oil from *O. vulgare* has been used medicinally. Origanum Oil is the oil obtained from *Coridothymus capitatus* (*Thymus capitatus*) but oils from other related species may also be referred to as origanum oils, and Oil of Origanum was also given as a synonym for Thyme Oil in BPC 1949. Preparations listed in *Martindale* as containing origanum oil may contain an oil from any of these related species.

Preparations
Proprietary Preparations (details are given in Part 3)

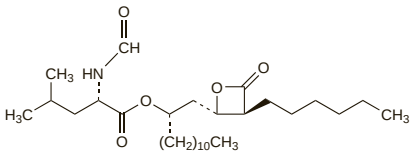
Multi-ingredient: ***Austral.:*** Gartech; ***Austria:*** Asthmatee EF-EM-ES; Baby Luuf; ***Cz.:*** Bronchosan; Fytokliman Planta; Melaton†; ***Pol.:*** Herbolen; Herbolen D; ***Spain:*** Pazbronquial; ***Switz.:*** Demonatur Capsules contre les refroidissements.

Orlistat *(BAN, USAN, rINN)*

Orlipastat; Orlistaatti; Orlistatum; Ro-18-0647; Ro-18-0647/002; Tetrahydrolipstatin. *N*-Formyl-L-leucine, ester with (3*S*,4*S*)-3-hexyl-4-[(2*S*)-2-hydroxytridecyl]-2-oxetanone; (*S*)-1-[(2*S*,3*S*)-3-Hexyl-4-oxo-oxetan-2-ylmethyl]dodecyl *N*-formyl-L-leucinate.

Орлистат

$C_{29}H_{53}NO_5$ = 495.7.
CAS — 96829-58-2.
ATC — A08AB01.
ATC Vet — QA08AB01.



Adverse Effects
Gastrointestinal disturbances, including faecal urgency and incontinence, flatulence, and fatty stools or discharge, are the most frequently reported adverse effects during treatment with orlistat. They may be minimised by limiting the amount of fat in the diet. Other reported effects have included headache, anxiety, fatigue, and menstrual irregularities. There have been concerns about an increased risk of breast cancer in patients taking orlistat but the manufacturers consider that there is no evidence of a causal link.

Effects on the cardiovascular system. A report of hypertension associated with orlistat therapy.[1] Blood pressure decreased on stopping orlistat and increased again on rechallenge. The authors noted that 13 cases of hypertension associated with orlistat had been reported to the manufacturers.

1. Persson M, *et al.* Orlistat associated with hypertension. *BMJ* 2000; **321:** 87.

Effects on the skin. Lichenoid drug eruption affecting the vulva, feet, and axillae has been reported in a woman during orlistat treatment.[1] Symptoms resolved on stopping orlistat with only the vulval lesions requiring topical treatment with mometasone furoate 0.1%.

1. Sergeant A, *et al.* Lichenoid eruption associated with orlistat. *Br J Dermatol* 2006; **154:** 1020–21.

Precautions
Orlistat should not be given to patients with chronic malabsorption syndrome or cholestasis and should be given with caution to patients with a history of hyperoxaluria or calcium oxalate nephrolithiasis. Adjustments to dosage of hypoglycaemics may be necessary in patients with type II diabetes because of improved metabolic control after weight loss in these patients. Supplements of fat-soluble vitamins may be necessary during long-term therapy, but they should be taken at least 2 hours before or after an orlistat dose or at bedtime. Hormonal contraceptive failure may occur in the event of severe diarrhoea with orlistat, and patients are advised to use an additional contraceptive method.

Interactions
Orlistat may reduce the absorption of fat-soluble vitamins. Licensed product information recommends that it not be taken with acarbose. In patients taking warfarin, international normalised ratio should be monitored during treatment with orlistat. A reduction in ciclosporin concentrations to subtherapeutic levels has been reported in transplant recipients given orlistat (see p.1826). Orlistat may also reduce the absorption of propafenone. For the possibility of hormonal contraceptive failure with orlistat see Precautions, above.

Pharmacokinetics
Orlistat is minimally absorbed after oral doses.

Uses and Administration
Orlistat is a gastric and pancreatic lipase inhibitor that limits the absorption of dietary fat. It is used together with dietary modification in the management of obesity (p.2149), i.e. in patients with a BMI of 30 kg/m^2 or greater. It may also be used in overweight patients with a BMI of 27 kg/m^2 or more if there are associated risk factors. Orlistat is given in a usual dose of 120 mg orally three times daily, immediately before, during, or up to 1 hour after meals. If a meal is missed or contains no fat, the dose should be omitted. Orlistat therapy should be stopped if the patient does not lose at least 5% of their body-weight during the first 12 weeks of therapy.

◊ References.

1. NICE. Guidance on the use of orlistat for the treatment of obesity in adults (issued March 2001). Available at: http://www.nice.org.uk/nicemedia/pdf/orlistatguidance.pdf (accessed 06/08/08)
2. Lucas KH, Kaplan-Machlis B. Orlistat—a novel weight loss therapy. *Ann Pharmacother* 2001; **35:** 314–28.
3. Keating GM, Jarvis B. Orlistat: in the prevention and treatment of type 2 diabetes mellitus. *Drugs* 2001; **61:** 2107–21.
4. Snider LJ, Malone M. Orlistat use in type 2 diabetes. *Ann Pharmacother* 2002; **36:** 1210–18.
5. Torgerson JS, *et al.* XENical in the prevention of diabetes in obese subjects (XENDOS) study: a randomized study of orlistat as an adjunct to lifestyle changes for the prevention of type 2 diabetes in obese patients. *Diabetes Care* 2004; **27:** 155–61.
6. Guy-Grand B, *et al.* Effects of orlistat on obesity-related diseases—a six-month randomized trial. *Diabetes Obes Metab* 2004; **6:** 375–83.
7. Chanoine J-P, *et al.* Effect of orlistat on weight and body composition in obese adolescents: a randomized controlled trial. *JAMA* 2005; **293:** 2873–83. Correction. *ibid.*; **294:** 1491.
8. Henness S, Perry CM. Orlistat: a review of its use in the management of obesity. *Drugs* 2006; **66:** 1625–56.
9. Filippatos TD, *et al.* Orlistat-associated adverse effects and drug interactions: a critical review. *Drug Safety* 2008; **31:** 53–65.

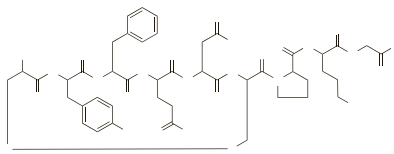
Preparations
Proprietary Preparations (details are given in Part 3)
Arg.: Crisplus; Fingras; Xenical; Xeniplus; Xinplex; ***Austral.:*** Xenical; ***Austria:*** Xenical; ***Belg.:*** Xenical; ***Braz.:*** Xenical; ***Canad.:*** Xenical; ***Chile:*** Viplena; Xenical; ***Cz.:*** Xenical; ***Denm.:*** Xenical; ***Fin.:*** Xenical; ***Fr.:*** Xenical; ***Ger.:*** Xenical; ***Gr.:*** Xenical; ***Hong Kong:*** Xenical; ***Hung.:*** Xenical; ***Indon.:*** Xenical; ***Irl.:*** Xenical; ***Israel:*** Xenical; ***Ital.:*** Xenical; ***Malaysia:*** Xenical; ***Mex.:*** Redustat; Xenical; ***Neth.:*** Xenical; ***Norw.:*** Xenical; ***NZ:*** Xenical; ***Philipp.:*** Xenical; ***Pol.:*** Xenical; ***Port.:*** Xenical; ***S.Afr.:*** Xenical; ***Singapore:*** Xenical; ***Spain:*** Xenical; ***Swed.:*** Xenical; ***Switz.:*** Xenical; ***Thai.:*** Xenical; ***Turk.:*** Xenical; ***UK:*** Xenical; ***USA:*** Alli; Xenical; ***Venez.:*** Xenical.

Ornipressin *(rINN)*

Ornipresina; Ornipressine; Ornipressinum. [8-Ornithine]-vasopressin.

Орнипрессин

$C_{45}H_{63}N_{13}O_{12}S_2$ = 1042.2.
CAS — 3397-23-7.
ATC — H01BA05.
ATC Vet — QH01BA05.



Profile
Ornipressin is a synthetic derivative of vasopressin (p.2411) with similar actions. It is reported to be a strong vasoconstrictor with only weak antidiuretic properties and is used to reduce bleeding during surgery. A solution containing up to 5 units in 20 to 60 mL of sodium chloride 0.9% is infiltrated into the area involved. Ornipressin is also used for bleeding oesophageal varices (under Monoethanolamine, p.2346) in a dose of 20 units diluted in 100 mL of sodium chloride 0.9% given as a continuous intravenous infusion over 48 hours.

◊ References.

1. Kam PC, Tay TM. The pharmacology of ornipressin (POR-8): a local vasoconstrictor used in surgery. *Eur J Anaesthesiol* 1998; **15:** 133–9.
2. De Kock M, *et al.* Ornipressin (Por 8): an efficient alternative to counteract hypotension during combined general/epidural anesthesia. *Anesth Analg* 2000; **90:** 1301–7.

Adverse effects. Acute pulmonary oedema occurred in a patient after infiltration of ornipressin (12 units in 40 mL isotonic saline) as a local vasoconstrictor during surgery.[1] It was suggested that no more than 100 milliunits/kg should be given in this manner.

1. Borgeat A, *et al.* Acute pulmonary oedema following administration of ornithine-8-vasopressin. *Br J Anaesth* 1990; **65:** 548–51.

Hepatorenal syndrome. Ornipressin has been found to be of benefit[1-4] in the hepatorenal syndrome, a form of renal insufficiency associated with cirrhosis of the liver, and thought to be due to severe renal vasoconstriction secondary to systemic arterial vasodilatation. However, caution in its use has been urged[2] because of the risk of ischaemic complications.

1. Lenz K, *et al.* Ornipressin in the treatment of functional renal failure in decompensated liver cirrhosis: effects on renal hemodynamics and atrial natriuretic factor. *Gastroenterology* 1991; **101:** 1060–7.
2. Guevara M, *et al.* Reversibility of hepatorenal syndrome by prolonged administration of ornipressin and plasma volume expansion. *Hepatology* 1998; **27:** 35–41.
3. Gülberg V, *et al.* Long-term therapy and retreatment of hepatorenal syndrome type 1 with ornipressin and dopamine. *Hepatology* 1999; **30:** 870–5.
4. Restuccia T, *et al.* Effects of treatment of hepatorenal syndrome before transplantation on posttransplantation outcome: a case-control study. *J Hepatol* 2004; **40:** 140–6.

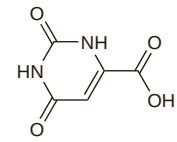
Preparations
Proprietary Preparations (details are given in Part 3)
Austral.: POR 8; ***Austria:*** POR 8; ***NZ:*** POR 8; ***S.Afr.:*** POR 8.

Orotic Acid *(BAN, pINN)*

Acide Orotique; Ácido orótico; Acidum Oroticum; Animal Galactose Factor; Oroottihappo; Orotsyra; Uracil-6-carboxylic Acid; Vitamin B_{13}; Vitamina B_{13}; Whey Factor. 1,2,3,6-Tetrahydro-2,6-dioxopyrimidine-4-carboxylic acid.

Оротовая Кислота

$C_5H_4N_2O_4$ = 156.1.
CAS — 65-86-1 (anhydrous orotic acid); 50887-69-9 (orotic acid monohydrate).



Profile
Orotic acid, an intermediate in the biosynthesis of pyrimidine nucleotides, occurs naturally in the body and is also found in milk. Orotic acid and its calcium, carnitine, choline, lithium, lysine, and potassium salts have been used in liver disorders. Some of these salts, as well as chromium, cyproheptadine, deanol, magnesium, and zinc orotates have been given as tonics or dietary supplements.

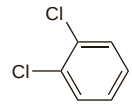
Preparations
Proprietary Preparations (details are given in Part 3)
Cz.: Magnerot; Zinkorotat-POS; ***Ger.:*** magnerot Classic; Magnesorot; Power Orot; Zinkorot; ***Hung.:*** Magnerot; ***Rus.:*** Magnerot (Магнерот).

Multi-ingredient: ***Arg.:*** Bil 13; Zimerol; ***Austral.:*** Bioglan Bioage Peripheral; Mag-Oro; Magnesium Plus†; Potasi; ***Austria:*** Lemazol; ***Hong Kong:*** Hepatofalk; Lipochol; Tres Orix Forte; ***Mex.:*** Lipovitasi-Or; ***Philipp.:*** Godex; ***Port.:*** Oraica†; ***S.Afr.:*** Hepabionta; ***Spain:*** Hepadif; Hepato Fardi†; Tres Orix Forte†; ***Switz.:*** Kawaform†; Magnesium Complexe; Vigoran†; ***Thai.:*** Lipochol; ***UK:*** Sugar Bloc.

Orthodichlorobenzene

Ortodiclorobenceno. 1,2-Dichlorobenzene.

$C_6H_4Cl_2$ = 147.0.
CAS — 95-50-1.



Profile
Orthodichlorobenzene has been used as an ingredient of solutions for dissolving ear wax. It has also been used as a wood and furniture preservative. Orthodichlorobenzene is an irritant volatile liquid; lens opacities have occurred.

Preparations
Proprietary Preparations (details are given in Part 3)
Multi-ingredient: ***Austral.:*** Cerumol; ***Switz.:*** Cerumenol.

Oryzanol

Gamma Oryzanol; Orizanol; γ-Oryzanol; γ-OZ. Triacontanyl 3-(4-hydroxy-3-methoxyphenyl)prop-2-enoate.

$C_{40}H_{58}O_4$ = 602.9.
CAS — 11042-64-1.

Profile
Oryzanol is a substance extracted from rice bran oil and rice embryo bud oil. It has been given orally in the treatment of hyperlipidaemias. It has also been used for its supposed effects on autonomic and endocrine function.

◊ References.

1. Cicero AF, Gaddi A. Rice bran oil and gamma-oryzanol in the treatment of hyperlipoproteinaemias and other conditions. *Phytother Res* 2001; **15:** 277–89.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: ***Fr.:*** Cosmodex Depigmenten†; ***Ital.:*** Anasterol; Lenirose†; Mavipiu†; ***Jpn:*** Q & P; Sin Q & P Gold; ***Singapore:*** Gin-Vita.

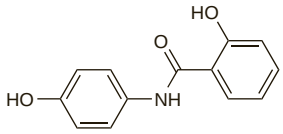
Osalmid *(rINN)*

L-1718; Osalmida; Osalmide; Osalmidum; Oxaphenamide. 4′-Hydroxysalicylanilide.

Осальмид

$C_{13}H_{11}NO_3$ = 229.2.

CAS — 526-18-1.



Profile

Osalmid has been used as a choleretic.

Otilonium Bromide *(BAN, rINN)*

Bromuro de otilonio; Octylonium Bromide; Otilonii Bromidum; Otilonium, Bromure d'; SP-63. Diethylmethyl{2-[4-(2-octyloxybenzamido)benzoyloxy]ethyl}ammonium bromide.

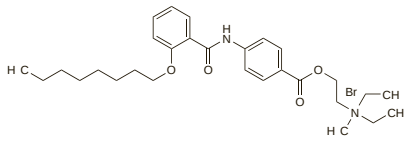
Отилония Бромид

$C_{29}H_{43}BrN_2O_4$ = 563.6.

CAS — 26095-59-0.

ATC — A03AB06.

ATC Vet — QA03AB06.



Profile

Otilonium bromide is used in the symptomatic treatment of gastrointestinal disorders associated with smooth muscle spasms in oral doses up to 120 mg daily. It has also been given rectally and by nebuliser.

◊ References.

1. Battaglia G, *et al*. Otilonium bromide in irritable bowel syndrome: a double-blind, placebo-controlled, 15-week study. *Aliment Pharmacol Ther* 1998; **12:** 1003–10.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Pasminox; Spasmoctyl; ***Belg.:*** Spasmomen; ***Braz.:*** Lonium; ***Cz.:*** Spasmomen; ***Gr.:*** Doralin; ***Hong Kong:*** Spasmomen; ***Hung.:*** Spasmomen; ***Indon.:*** Spasmomen; ***Ital.:*** Spasen; Spasmomen; ***Port.:*** Spasmomen; ***Spain:*** Spasmoctyl.

Multi-ingredient: ***Arg.:*** Pasminox Somatico; ***Ital.:*** Spasen Somatico; Spasmomen Somatico.

Oxaceprol *(rINN)*

Acetylhydroxyproline; C061; Oxacéprol; Oxaceprolum. (–)-1-Acetyl-4-hydroxy-L-proline.

Оксацепрол

$C_7H_{11}NO_4$ = 173.2.

CAS — 33996-33-7.

ATC — D11AX09; M01AX24.

ATC Vet — QD11AX09; QM01AX24.

Profile

Oxaceprol is reported to affect connective tissue metabolism and has been used in dermatology, to promote wound healing, and in rheumatic disorders. Adverse effects have included gastric pain, nausea, diarrhoea, dizziness, headache, and skin rashes.

◊ References.

1. Bauer HW, *et al*. Oxaceprol is as effective as diclofenac in the therapy of osteoarthritis of the knee and hip. *Clin Rheumatol* 1999; **18:** 4–9.
2. Herrmann G, *et al*. Oxaceprol is a well-tolerated therapy for osteoarthritis with efficacy equivalent to diclofenac. *Clin Rheumatol* 2000; **19:** 99–104.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Joint†; ***Fr.:*** Jonctum; ***Ger.:*** AHP 200; ***Spain:*** Tejuntivo.

Multi-ingredient: ***Spain:*** Robervital.

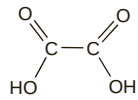
Oxalic Acid

Kwas szczawiowy; Oxálico, ácido.

$HO_2C,CO_2H,2H_2O$ = 126.1.

CAS — 144-62-7 (anhydrous oxalic acid); 6153-56-6 (oxalic acid dihydrate).

ATC Vet — QP53AG03.



Adverse Effects

On ingestion, severe gastroenteritis is produced by the corrosive action of oxalic acid and its soluble salts on the gastrointestinal tract. Burning of the mouth, throat, and oesophagus with ulceration may also occur. Hypoxia may occur in the presence of laryngeal oedema, and shock and hypotension may arise in severe cases. Oxalates can chelate body calcium following systemic absorption, and may produce symptoms of hypocalcaemia such as tetany, convulsions, and, in some cases, ventricular fibrillation. Oxalate crystals may be deposited in the blood vessels, brain, heart, liver, and lungs; deposition in the renal tubules leads to acute renal failure. The mean fatal dose of oxalates has been reported to be about 15 to 30 g, although death has occurred with much lower doses. Death may occur within a few hours of ingestion.

◊ Fatalities have resulted from intravenous administration of sodium oxalate[1] or ingestion of oxalic acid.[2]

Crystals of calcium oxalate present in the sap of daffodils[3] or *Agave tequilana* plants[4] have been reported to contribute to the rash experienced by workers coming into contact with these plants.

1. Dvořáčková I. Tödliche Vergiftung nach intravenöser Verabreichung von Natriumoxalat. *Arch Toxikol* 1966; **22:** 63–7.
2. Farré M, *et al*. Fatal oxalic acid poisoning from sorrel soup. *Lancet* 1989; **ii**: 1524.
3. Julian CG, Bowers PW. The nature and distribution of daffodil pickers' rash. *Contact Dermatitis* 1997; **37:** 259–62.
4. Salinas ML, *et al*. Irritant contact dermatitis caused by needle-like calcium oxalate crystals, raphides, in Agave tequilana among workers in tequila distilleries and agave plantations. *Contact Dermatitis* 2001; **44:** 94–6.

Treatment of Adverse Effects

After ingestion of oxalic acid, a dilute solution of any soluble calcium salt should be given to precipitate the oxalate; alternatively milk may be given. Oral activated charcoal has also been suggested if ingestion has occurred within 1 hour. Gastric lavage is contra-indicated by some centres given the corrosive nature of oxalic acid. Calcium gluconate 10% should be given intravenously to prevent tetany. Acute renal failure should be anticipated in surviving patients and calls for careful fluid management. Haemodialysis or peritoneal dialysis have also been suggested for the removal of oxalate in primary oxalosis in an attempt to prevent acute renal failure and correct hypocalcaemia.

Uses

Oxalic acid has varied industrial uses and has been used in escharotic preparations. Oxalic acid salts have been given orally and the urinary excretion of oxalate used as a screening test for lipid malabsorption.

Diagnostic use. References.

1. Rampton DS, *et al*. Screening for steatorrhoea with an oxalate loading test. *BMJ* 1984; **288:** 1419. Correction. *ibid.*; 1728.
2. Sangaletti O, *et al*. Urinary oxalate recovery after oral oxalic acid load: an alternative method to the quantitative determination of stool fat for the diagnosis of lipid malabsorption. *J Int Med Res* 1989; **17:** 526–31.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: ***Cz.:*** Solcogyn†; ***Ger.:*** Solco-Derman; ***Hong Kong:*** Solcoderm; ***Malaysia:*** Solcoderm†; ***Pol.:*** Solcogyn; ***Rus.:*** Solcoderm (Солкодерм); Solcovagin (Солковагин); ***Switz.:*** Solcoderm; Solcogyn.

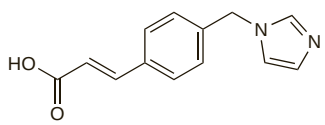
Ozagrel *(rINN)*

OKY-046 (ozagrel hydrochloride); Ozagrelum. (*E*)-*p*-(Imidazol-1-ylmethyl)cinnamic acid.

Озагрел

$C_{13}H_{12}N_2O_2$ = 228.2.

CAS — 82571-53-7.



Profile

Ozagrel is a thromboxane synthetase inhibitor that has been given orally as the hydrochloride for the treatment of asthma in doses of 200 mg twice daily. It has also been given as the sodium salt by intravenous infusion for the treatment of cerebrovascular disorders in a dose of 80 mg.

Preparations

Proprietary Preparations (details are given in Part 3)

Jpn: Cataclot; Domenan; Xanbon.

Palifermin *(USAN, rINN)*

AMJ-9701; Palifermina; Palifermine; Paliferminum; rHu-KGF. 24-163 Fibroblast growth factor 7 (human).

Палифермин

CAS — 162394-19-6; 178254-26-7.

ATC — V03AF08.

ATC Vet — QV03AF08.

Adverse Effects

Adverse reactions reported with palifermin therapy have included rash, erythema, oedema, pruritus, perioral dysaesthesia, tongue discoloration and thickening, and altered taste. Fever, and gastrointestinal and respiratory disturbances have also been reported. The safety and efficacy of palifermin in patients given treatment for non-haematological neoplasms has not been established; stimulation and growth of tumour cell lines have been found in *animal* and *in-vitro* models of non-haematopoietic human tumours.

Pharmacokinetics

The pharmacokinetics of palifermin were approximately dose-linear after a single intravenous dose in healthy subjects given larger than usual doses. The terminal elimination half-life is about 4.5 hours.

◊ References.

1. Zia-Amirhosseini P, *et al*. Pharmacokinetics, pharmacodynamics, and safety assessment of palifermin (rHuKGF) in healthy volunteers. *Clin Pharmacol Ther* 2006; **79:** 558–69.
2. Gillespie B, *et al*. Effect of renal function on the pharmacokinetics of palifermin. *J Clin Pharmacol* 2006; **46:** 1460–8.

Uses and Administration

Palifermin is a human recombinant keratinocyte growth factor (KGF) used to reduce the incidence and duration of severe oral mucositis (p.640) in patients with haematological neoplasms who receive myelotoxic chemotherapy, with or without radiotherapy, followed by haematopoietic stem cell transplantation. The recommended course of palifermin is 6 doses of 60 micrograms/kg, by intravenous bolus injection. A dose is given on each of 3 consecutive days before, and 3 consecutive days after, myelotoxic therapy. Palifermin should not be given during, or for 24 hours before or after, myelotoxic therapy. Thus, the third pre-chemotherapy dose of palifermin should be given 24 to 48 hours before myelotoxic therapy, and the first post-chemotherapy dose of palifermin should be given after, but on the same day as, the haematopoietic stem cell infusion, and at least 4 days after the third pre-myelotoxic dose.

Mucositis. Palifermin is a human recombinant keratinocyte growth factor (KGF) that binds to KGF receptors and repairs damaged epithelium by stimulating the proliferation, differentiation, and migration of epithelial cells.[1,2] Controlled studies have shown it to be effective in reducing the severity and duration of oral mucositis (p.640) in patients receiving myelotoxic therapy for haematological neoplasms and requiring haematopoietic stem cell support.[3,4] It has also shown benefit compared with placebo in reducing the incidence of oral mucositis and diarrhoea in patients receiving fluorouracil and leucovorin for metastatic colorectal cancer.[5]

1. Siddiqui MAA, Wellington K. Palifermin: in myelotoxic therapy-induced oral mucositis. *Drugs* 2005; **65:** 2139–46.
2. McDonnell AM, Lenz KL. Palifermin: role in the prevention of chemotherapy- and radiation-induced mucositis. *Ann Pharmacother* 2007; **41:** 86–94.
3. Spielberger R, *et al*. Palifermin for oral mucositis after intensive therapy for hematologic cancers. *N Engl J Med* 2004; **351:** 2590–8.
4. Stiff PJ, *et al*. Palifermin reduces patient-reported mouth and throat soreness and improves patient functioning in the hematopoietic stem-cell transplantation setting. *J Clin Oncol* 2006; **24:** 5186–93.
5. Rosen LS, *et al*. Palifermin reduces the incidence of oral mucositis in patients with metastatic colorectal cancer treated with fluorouracil-based chemotherapy. *J Clin Oncol* 2006; **24:** 5194–5200.

Preparations

Proprietary Preparations (details are given in Part 3)

Austral.: Kepivance; ***Cz.:*** Kepivance; ***Fin.:*** Kepivance; ***Fr.:*** Kepivance; ***Gr.:*** Kepivance; ***Hung.:*** Kepivance; ***Irl.:*** Kepivance; ***Neth.:*** Kepivance; ***Pol.:*** Kepivance; ***Port.:*** Kepivance; ***Swed.:*** Kepivance; ***UK:*** Kepivance; ***USA:*** Kepivance.

Palmarosa

Profile

Palmarosa (*Cymbopogon martini*, Poaceae) is a source of palmarosa oil (Indian geranium oil, Turkish geranium oil). Palmarosa oil is used in perfumery and in aromatherapy.