

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 Luif; **Cz:** Bronchosan; Fytokliman Planta; Melaton; **Pol:** Herbolon; Herbolon D; **Spain:** Pazbronquial; **Switz:** Demonatur Capsules contre les refroidissements.

Orlistat (BAN, USAN, rINN)

Orlipastat; Orlistaat; Orlistatum; Ro-18-0647; Ro-18-0647/002; Tetrahydrolipstatin. N-Formyl-L-leucine, ester with (3S,4S)-3-hexyl-4-[(2S)-2-hydroxytridecyl]-2-oxetanone; (5S)-1-[(2S,3S)-3-Hexyl-4-oxo-oxetan-2-ylmethyl]dodecyl N-formyl-L-leucinate.

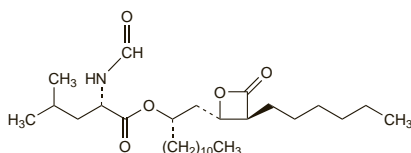
Орлистат

$C_{29}H_{53}NO_5 = 495.7$.

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 furate 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/m² or greater. It may also be used in overweight patients with a BMI of 27 kg/m² 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. Hennessy S, Perry CM. Orlistat: a review of its use in the management of obesity. *Drugs* 2006; **66**: 1625–56.
9. Filipatos 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; Xeniplex; Ximplex; **Austral:** Xenical; **Austria:** Xenical; **Belg:** Xenical; **Braz:** Xenical; **Canad:** Xenical; **Chile:** Viplena; **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; **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.

Ornippresin (rINN)

Ornippresina; Ornippresine; Ornippresinum. [8-Ornithine]-vasopressin.

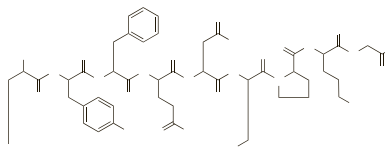
Орнипрессин

$C_{45}H_{63}N_{13}O_{12}S_2 = 1042.2$.

CAS — 3397-23-7.

ATC — H01BA05.

ATC Vet — QH01BA05.

**Profile**

Ornippresin 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. Ornippresin 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 ornippresin (POR-8): a local vasoconstrictor used in surgery. *Eur J Anaesthesiol* 1998; **15**: 133–9.
2. De Kock M, *et al.* Ornippresin (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 ornippresin (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. Ornippresin 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 urged² because of the risk of ischaemic complications.

1. Lenz K, *et al.* Ornippresin 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 ornippresin and plasma volume expansion. *Hepatology* 1998; **27**: 35–41.
3. Gülbarg V, *et al.* Long-term therapy and retreatment of hepatorenal syndrome type 1 with ornippresin 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.

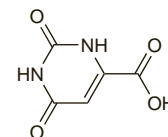
Orotic Acid (BAN, pINN)

Acide Orotique; Ácido orótico; Acidum Oroticum; Animal Galactose Factor; Oroottihappo; Orotsyra; Uracil-6-carboxylic Acid; Vitamin B₁₃; Vitamina B₁₃; Whey Factor. 1,2,3,6-Tetrahydro-2,6-dioxypyrimidine-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 (Magnepot).

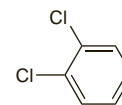
Multi-ingredient: **Arg:** Bil 13; Zimerol; **Austral:** Bioglan Bioage Peripheral; Mag-Oro; Magnesium Plus; Potasi; **Austria:** Lemazol; **Hong Kong:** Hepatofalk; Lipochol; Tres Orix Forte; **Mex:** Lipovitalis-Or; **Philipp:** Gode; **Port:** Oraica; **S.Afr:** Hepabionta; **Spain:** Hepadif; Hepato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

Orthodichlorobenzene

Ortodichlorobenceno. 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. Triacetyl 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.