poultice. Linseed is the source of linseed oil, below. Linseed has also been tried as a dietary supplement to improve postmenopausal symptoms.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: ***Chile:*** Aloelax; Instalax; ***Ger.:*** Duoventrin; Pascomag†; ***Pol.:*** Laxantol; ***Singapore:*** Tofupill†; ***Switz.:*** Linoforce; LinoMed; ***UK:*** Salinum.

Linseed Oil

Aceite de Linaza; Flaxseed Oil; Huile de Lin; Leinöl; Lenolaj; Lin, huile de; Linaza, aceite de; Lini oleum; Linolja; Lněný olej; Oleum Lini; Pellavaöljy; Sėmenų aliejus.

ATC — A06AC05.
ATC Vet — QA06AC05.

Pharmacopoeias. In *Eur.* (see p.vii).

Ph. Eur. 6.2 (Linseed Oil, Virgin). The oil obtained by cold expression from ripe seeds of *Linum usitatissimum*. A suitable antoxidant may be added. A clear, yellow or brownish-yellow liquid. It turns dark and gradually thickens on exposure to air. When cooled, it becomes a soft mass at about –20°. Relative density about 0.931. Very slightly soluble in alcohol; miscible with petroleum spirit. Store in airtight containers. Protect from light.

Profile

Linseed oil is used in veterinary medicine as a purgative for horses and cattle. In man, linseed oil is included in topical preparations for a variety of skin disorders. It has been tried as a vegetable source of omega-3 fatty acids (p.1362).

Boiled linseed oil ('boiled oil') is linseed oil heated with litharge, manganese resinate, or other driers, to a temperature of about 150° so that metallic salts of the fatty acids are formed and cause the oil to dry more rapidly. It must not be used for medicinal purposes.

Preparations

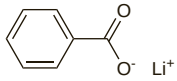
Proprietary Preparations (details are given in Part 3)
Chile: Linna-Oil; ***Mex.:*** Omelina.

Multi-ingredient: ***Austria:*** Dermowund; ***Canad.:*** Prostate Ease; ***India:*** Buta-Proxyvon; Duoflam Gel; Nicip Super; Nimulid Nugel; ***Rus.:*** Dicloran Plus (Диклоран Плюс); ***Switz.:*** Epithelial†; Malvedrin; ***UK:*** Nine Rubbing Oils.

Lithium Benzoate ⊗

Litio, benzoato de.

$C_7H_5LiO_2$ = 128.1.
CAS — 553-54-8.



Profile

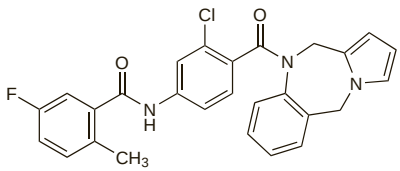
Lithium benzoate has been used as a diuretic and urinary disinfectant. Its use cannot be recommended because of the pharmacological effect of the lithium ion (p.401). Each g contains 7.8 mmol of lithium.

Lixivaptan *(USAN, rINN)* ⊗

Lixivaptán; Lixivaptanum; VPA-985; WAY-VPA-985. 3′-Chloro-5-fluoro-4′-(5*H*-pyrrolo[2,1-*c*][1,4]benzodiazepin-10(11*H*)-ylcarbonyl)-*o*-toluanilide.

Ликсиваптан

$C_{27}H_{21}ClFN_3O_2$ = 473.9.
CAS — 168079-32-1.



Profile

Lixivaptan is a selective vasopressin V_2-receptor antagonist under investigation for the treatment of hyponatraemia in patients with heart failure.

◊ References.

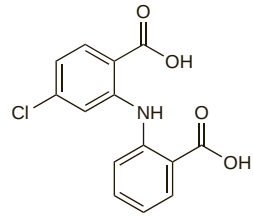
1. Abraham WT, *et al*. Aquaretic effect of lixivaptan, an oral, nonpeptide, selective V2 receptor vasopressin antagonist, in New York Heart Association functional class II and III chronic heart failure patients. *J Am Coll Cardiol* 2006; **47:** 1615–21.

Lobenzarit Sodium *(USAN, rINNM)*

CCA; Lobenzarit sódico; Lobenzarit Sodique; Natrii Lobenzaritum. 4-Chloro-2,2′-iminodibenzoate disodium.

Натрий Лобензарит

$C_{14}H_8ClNNa_2O_4$ = 335.7.
CAS — 63329-53-3 (lobenzarit); 64808-48-6 (lobenzarit sodium).



(lobenzarit)

Profile

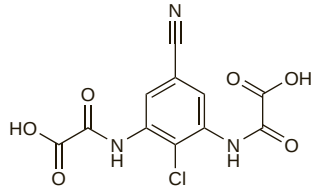
Lobenzarit sodium has been used as an immunomodulator in rheumatoid arthritis.

Lodoxamide *(BAN, rINN)*

Lodoksamidi; Lodoxamid; Lodoxamida; Lodoxamidum; U-42585. *N,N*′-(2-Chloro-5-cyano-*m*-phenylene)dioxamic acid.

Лодоксамид

$C_{11}H_6ClN_3O_6$ = 311.6.
CAS — 53882-12-5.
ATC — S01GX05.
ATC Vet — QS01GX05.



Lodoxamide Ethyl *(BANM, USAN, rINNM)*

Ethylum Lodoxamidum; Lodoxamida etilo; Lodoxamide Ethyle; U-42718. Diethyl *N,N*′-(2-Chloro-5-cyano-*m*-phenylene)dioxamate.

Этил Лодоксамид

$C_{15}H_{14}ClN_3O_6$ = 367.7.
CAS — 53882-13-6.

Lodoxamide Trometamol *(BANM, rINNM)*

Lodoksamid Trometamin; Lodoxamida trometamol; Lodoxamide Trométamol; Lodoxamide Tromethamine *(USAN)*; Lodoxamidum Trometamolum; U-42585E. *N,N*′-(2-Chloro-5-cyano-*m*-phenylene)dioxamic acid compound with trometamol.

Лодоксамид Трометамол

$C_{11}H_6ClN_3O_6.2C_4H_{11}NO_3$ = 553.9.
CAS — 63610-09-3.
ATC — S01GX05.
ATC Vet — QS01GX05.

Adverse Effects

Lodoxamide eye drops may cause local irritation. Reported effects include burning or stinging, and itching. Flushing and dizziness have also been reported.

Uses and Administration

Lodoxamide has a stabilising action on mast cells resembling that of sodium cromoglicate (p.1136). Lodoxamide trometamol is used in eye drops for allergic conjunctivitis (p.564), particularly vernal keratoconjunctivitis; a concentration equivalent to 0.1% of lodoxamide is used, 1 or 2 drops usually being instilled into the eye four times daily.

Lodoxamide has also been studied for its prophylactic effect in the treatment of asthma, but has not proved to be of benefit; it has usually been given orally as the ethyl ester or by inhalation as the trometamol salt.

Conjunctivitis. Lodoxamide is an effective treatment for vernal keratoconjunctivitis.[1,2] There is some evidence that it may be more effective than sodium cromoglicate for this purpose (see p.1138).

1. Anonymous. Lodoxamide for vernal keratoconjunctivitis. *Med Lett Drugs Ther* 1994; **36:** 26.
2. Lee S, Allard TRFK. Lodoxamide in vernal keratoconjunctivitis. *Ann Pharmacother* 1996; **30:** 535–7.

Preparations

Proprietary Preparations (details are given in Part 3)
Arg.: Alomide; ***Austral.:*** Lomide; ***Austria:*** Alomide†; ***Belg.:*** Alomide; ***Braz.:*** Alomide; ***Canad.:*** Alomide; ***Chile:*** Alomide; ***Cz.:*** Alomide; ***Denm.:*** Alomide; ***Fin.:*** Alomide; ***Fr.:*** Almide; ***Ger.:*** Alomide; ***Gr.:*** Alomide; Thilomide; ***Hong Kong:*** Alomide; ***Hung.:*** Alomide; ***Indon.:*** Alomide; ***Irl.:*** Alomide; ***Israel:*** Alomide; ***Ital.:*** Alomide; ***Malaysia:*** Alomide; ***Mex.:*** Alomide; ***Norw.:*** Alomide; ***NZ:*** Lomide; ***Philipp.:*** Alconmide; ***Pol.:*** Alomide; ***Port.:*** Alomide; ***Rus.:*** Alomide (Аломид); ***S.Afr.:*** Alomide; ***Singapore:*** Alomide; ***Spain:*** Alomide; ***Switz.:*** Alomide†; ***Thai.:*** Alomide; ***Turk.:*** Alomide; Thilomide; ***UK:*** Alomide; ***USA:*** Alomide; ***Venez.:*** Alomide.

Lomifylline *(rINN)*

Lomifilina; Lomifyllinum. 7-(5-Oxohexyl)theophylline.

Ломифиллин

$C_{13}H_{18}N_4O_3$ = 278.3.
CAS — 10226-54-7.

Profile

Lomifylline is a theophylline derivative that has been used in preparations for cerebrovascular disorders.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: ***Arg.:*** Cervilane; Micerfin; ***Braz.:*** Norogil; ***Chile:*** Cervilane; ***Mex.:*** Cervilan; ***Port.:*** Cervilane†.

Loosestrife

Fackelblomster; Kyprejová nať; Lythri herba; Purple Loosestrife; Rantakukka; Raudoklių žolė; Réti fűzényfű; Salicaire.

NOTE. Do not confuse with yellow willowherb, *Lysimachia vulgaris* which is also known as loosestrife.

Pharmacopoeias. In *Eur.* (see p.vii).

Ph. Eur. 6.2 (Loosestrife; Lythri Herba). The dried flowering tops, whole or cut, of *Lythrum salicaria*. It contains not less than 5.0 % of tannins, expressed as pyrogallol and calculated with reference to the dried drug. Protect from light.

Profile

Purple loosestrife, *Lythrum salicaria* (Lythraceae), is used in herbal medicine for the treatment of diarrhoea. It is also used for its astringent and antimicrobial properties.

Preparations

Proprietary Preparations (details are given in Part 3)
Fr.: Salicairine.

Multi-ingredient: ***Fr.:*** Saugella; ***Ital.:*** Gynegella P†; ***Spain:*** Natusor Astringel†.

Lorenzo's Oil

Lorenzo, aceite de.

Glyceryl Trierucate

Trierucin. 1,2,3-Propanetriol tri(13-docosenoate).

$C_{69}H_{128}O_6$ = 1053.8.
CAS — 2752-99-0.

Glyceryl Trioleate

Triolein. 1,2,3-Propanetriol tri(9-octandecenoate).

$C_{57}H_{104}O_6$ = 885.4.
CAS — 122-32-7.

Profile

Lorenzo's oil is a liquid containing glyceryl trierucate (a source of erucic acid) and glyceryl trioleate (a source of oleic acid), in the ratio 1 part to 4 parts respectively. It has been used with dietary modification for the treatment of adrenoleucodystrophy, a genetic disorder characterised by demyelination, adrenal cortical insufficiency, and accumulation of saturated 'very-long-chain fatty acids'.

Adrenoleucodystrophy. Adrenoleucodystrophy is a rare X-linked metabolic disorder in which accumulation of saturated very-long-chain fatty acids results in diffuse and multifocal demyelination of the nervous system and adrenocortical insufficiency. The most common form usually affects children and is characterised primarily by cerebral demyelination; it is usually fatal within a few years. In the adult variant, called adrenomyeloneuropathy, demyelination of the spinal cord and peripheral neuropathy progress slowly over many years.[1,2]

There appears to be no effective treatment for adrenoleucodystrophy or its variants. A high dietary intake of long-chain monounsaturated fatty acids, as provided by the mixture Lorenzo's oil (glyceryl trierucate with glyceryl trioleate), has been tried, the idea being to monopolise the specific enzyme involved in the conversion of long-chain fatty acids to very-long-chain fatty acids. Although dietary therapy with Lorenzo's oil has reduced plasma concentrations of saturated very-long-chain fatty acids, there is no evidence that this improves or delays progression of adrenoleucodystrophy or adrenomyeloneuropathy.[3-6] However, it has been suggested that these disorders may not respond to correction of the biochemical abnormality once neurological damage has occurred.[5] The effectiveness of treatment before the