that intermittent oral terbinafine could be effective for seborrhoeic dermatitis, at least in severe or recalcitrant forms. It has also been tried topically as a 1% cream.[4]

1. Scaparro E, *et al*. Evaluation of the efficacy and tolerability of oral terbinafine (Daskil) in patients with seborrhoeic dermatitis: a multicentre, randomized, investigator-blinded, placebo-controlled trial. *Br J Dermatol* 2001; **144:** 854–7.
2. Faergemann J. Treatment of seborrhoeic dermatitis with oral terbinafine? *Lancet* 2001; **358:** 170.
3. Cassano N, *et al*. Oral terbinafine for the treatment of seborrheic dermatitis in adults. *Int J Dermatol* 2002; **41:** 821–2.
4. Gündüz K, *et al*. Efficacy of terbinafine 1% cream on seborrhoeic dermatitis. *J Dermatol* 2005; **32:** 22–5.

Preparations

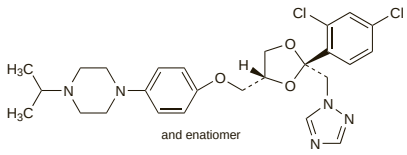
Proprietary Preparations (details are given in Part 3)
Arg.: Fungueal; Lamisil; Maditez; Piecidex NF; Tacna; Terbi-Derm; Terekol; Terfin; ***Austral.:*** Lamisil; SolvEasy; Tamsil; Zabel; ***Austria:*** Daskil; Lamisil; ***Belg.:*** Lamisil; ***Braz.:*** Binafin†; Finex†; Funtyl; Lamisil; Micosil; ***Canad.:*** Lamisil; ***Chile:*** Dermoxyl; Dicil; Elater; Finex; Lamisil; Micoset; Micostop†; Terfex; ***Cz.:*** Atifan; Brinaf†; Lamisil; Mycodekan; Onychon; Tefine; Terbihexal; Terbisil; Terbistad; Terfimed; Verbinaf; ***Denm.:*** Lamisil; ***Fin.:*** Lamisil; ***Fr.:*** Lamisil; Lamisilate; LamisilDermgel; ***Ger.:*** Amiada; Dermatin; Lamisil; Myconormin; Onymax; Terbiderm; Terbigalen; ***Gr.:*** Anaplas; Chemiderm; Demsil; Drogenil; Ealk; Flixid; Frezylin; Fungitherapy; Lamigen; Lamisil; Mycutol; Optimus; Pavlinox; Pro-Misil; Romiver; Seralon; Soluteb; Terbafin; Terbigram; Terbin; Terbiprol; Terbiskin; Terbisol; Terfinil; Terfinor; Termisil; Thateron; Vifaderm; ***Hong Kong:*** Lamisil; Terbifin; ***Hung.:*** Lamisil; Terbigen; Terbisil; Terfin; Tineal; ***India:*** Exifine; Lamisil†; Terbifin; ***Indon.:*** Interbi; Lamisil; Termisil; ***Irl.:*** Fungafine; Fungasil; Lamisil; Lanafine; Nailderm; Ternaf; ***Israel:*** Lamisil; ***Ital.:*** Daskil; Lamisil; ***Malaysia:*** Dermafin; Exifine; Lamisil; Lisim; ***Mex.:*** Binafex; Erbitrax; Fyterdin; Lamisil; Losil-T; Mycelvan; Unasal; Xilatril; ***Neth.:*** Binanidda; Finanidda; Finavita†; Fungitif; Lamisil; Niddafin; Niddavita; Terbiderm; Terbinavita; Terfungin; Tiebinafin; Vitabin; ***Norw.:*** Lamisil; ***NZ:*** Lamisil†; Terbafin; ***Philpp.:*** Lamifen; Lamisil; ***Pol.:*** Afugin; Lamisil; Lamisilatt; Myconafine; Onymax; Tenasil; Terbiderm; TerbiGen; Terbisil; ***Port.:*** Daskyl; Lamisil; ***Rus.:*** Binafin (Бинафин); Exifine (Экзифин); Fungoterbine (Фунготербин); Lamican (Ламикан); Lamisil (Ламизил); Medofloran (Медофлоран); Terbinox (Тербинокс); Terbisil (Тербизил); Termicon (Термикон); ***S.Afr.:*** Dermax; Lamisil; Terbicil; ***Singapore:*** Lamisil; ***Spain:*** Lamicosil; Lamisil; ***Swed.:*** Lamisil; ***Switz.:*** Lamisil; Myconormin; Onymax; Terbifil; Tineafine; ***Thai.:*** EU 2000; Lamisil; ***Turk.:*** Lamisil; Mycocur; Terafin; Terbin; Terbisil; Tigal; ***UK:*** Lamisil; ***USA:*** DesenexMax; Lamisil; ***Venez.:*** Exifine†; Funtopic†; Lamisil; Nafina; Terfex.

Terconazole *(BAN, USAN, rINN)*

R-42470; Terconazol; Terconazolum; Terkonatsoli; Terkonazol; Terkonazolas; Triaconazole. 1-{4-[[2-(2,4-Dichlorophenyl)-*r*-2-(1*H*-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-*c*-4-yl]methoxy]phenyl}-4-isopropylpiperazine.

Терконазол

$C_{26}H_{31}Cl_2N_5O_3$ = 532.5.
CAS — 67915-31-5.
ATC — G01AG02.
ATC Vet — QG01AG02.



Pharmacopoeias. In *Eur.* (see p.vii).
Ph. Eur. 6.2 (Terconazole). A white or almost white powder. It exhibits polymorphism. Practically insoluble in water; sparingly soluble in alcohol; soluble in acetone; freely soluble in dichloromethane. Protect from light.

Adverse Effects

Local reactions including burning and itching have been reported with vaginal use of terconazole. Other adverse effects have included dysmenorrhoea and genital, body, and abdominal pain. A flu-like syndrome with headache, fever, chills, and hypotension has been reported in some patients and may be more prevalent with vaginal pessaries providing doses larger than 80 mg.

Flu-like syndrome. References.

1. Moebius UM. Influenza-like syndrome after terconazole. *Lancet* 1988; **ii:** 966–7.

Precautions

Intravaginal preparations of terconazole may damage latex contraceptives and additional contraceptive measures are therefore necessary during local application.

For a discussion of the caution needed when using azole antifungals during pregnancy, see under Pregnancy in Precautions of Fluconazole, p.532.

Antimicrobial Action

Terconazole is a triazole derivative that is thought to disrupt normal fungal cell membrane permeability. Terconazole is active *in vitro* against *Candida* spp. and other fungi. It has some antibacterial activity *in vitro* but not against usual vaginal flora such as lactobacilli.

Pharmacokinetics

After intravaginal use, 5 to 16% of terconazole is absorbed. Systemically absorbed drug is metabolised by the liver and excreted in urine and faeces.

Uses and Administration

Terconazole is a triazole antifungal used in the local treatment of vulvovaginal candidiasis (p.518). Intravaginal dosage regimens are terconazole 40 mg (as 0.8% vaginal cream) or 80 mg (as a pessary) at bedtime for 3 nights or 20 mg (as 0.4% cream) at bedtime for 7 nights.

Preparations

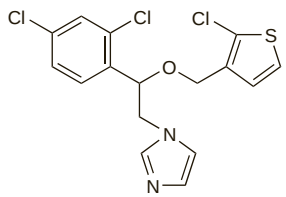
Proprietary Preparations (details are given in Part 3)
Belg.: Gyno-Terazol†; ***Braz.:*** Ginconazol†; Gyno-Fungix; ***Canad.:*** Terazol; ***Mex.:*** Fungistat; ***S.Afr.:*** Terazol; ***Switz.:*** Gyno-Terazol; ***USA:*** Terazol; Zazole; ***Venez.:*** Fungistat.

Tioconazole *(BAN, USAN, rINN)*

Tioconazol; Tioconazolum; Tiokonatsoli; Tiokonazol; Tiokonazolas; UK-20349. 1-[2,4-Dichloro-β-(2-chloro-3-thenyloxy)phenethyl]imidazole.

Тиоконазол

$C_{16}H_{13}Cl_3N_2OS$ = 387.7.
CAS — 65899-73-2.
ATC — D01AC07; G01AF08.
ATC Vet — QD01AC07; QG01AF08.



Pharmacopoeias. In *Eur.* (see p.vii) and *US*.
Ph. Eur. 6.2 (Tioconazole). A white or almost white crystalline powder. Very slightly soluble in water; freely soluble in alcohol; very soluble in dichloromethane. Protect from light.
USP 31 (Tioconazole). Store in airtight containers.

Adverse Effects and Precautions

Local reactions to tioconazole including burning, itching, and erythema have been reported.

Intravaginal preparations of tioconazole may damage latex contraceptives and additional contraceptive measures are therefore necessary during local application.

For a discussion of the caution needed when using azole antifungals during pregnancy, see under Pregnancy in Precautions of Fluconazole, p.532.

Hypersensitivity. Tioconazole, an imidazole antifungal widely used in Finland, appeared to be an important cause of contact allergy in that country, since an incidence of more than 1% was reported in patients undergoing routine patch testing.[1] There may be cross-reactivity with other commonly used imidazole derivatives.

1. Heikkilä H, *et al.* A study of 72 patients with contact allergy to tioconazole. *Br J Dermatol* 1996; **134:** 678–80.

Antimicrobial Action

Tioconazole is an imidazole antifungal with a broad spectrum of activity including action against dermatophytes, *Malassezia furfur*, and *Candida albicans*. Tioconazole is active *in vitro* against some Gram-positive bacteria.

Uses and Administration

Tioconazole is an imidazole antifungal used in the treatment of superficial candidiasis (p.518), and dermatophytoses and pityriasis versicolor (see Skin Infections, p.521).

For vaginal candidiasis it is used as pessaries or vaginal ointment usually as a single 300-mg dose.

It has been used topically as a 1% cream, lotion, or powder in the treatment of superficial fungal infections. Tioconazole has also been used for nail infections as a 28% w/w topical solution, although systemic treatment is generally preferred.

Preparations

BP 2008: Tioconazole Cream; Tioconazole Nail Solution.

Proprietary Preparations (details are given in Part 3)
Arg.: Honguil; Niofen; Tiomicol; Trosyd; ***Austria:*** Trosyd; ***Braz.:*** Gino Conazol; Gino Tralen; Neo Tionazol; Tioconax; Tionazen; Tralen; ***Canad.:*** Gynecure†; Trosyd†; ***Chile:*** Telset; ***Fin.:*** Gyno-Trosyd; Trosyd; ***Fr.:*** Gyno-Trosyd; Trosyd; ***Ger.:*** Mykontral; ***Gr.:*** Cotinazin; ***Hong Kong:*** Gyno-Trosyd; Trosyd; ***Indon.:*** Prodermal; Trosyd; ***Irl.:*** Trosyl; ***Ital.:*** Gino-Trosyd†; Trosyd; ***Malaysia:*** Gyno-Trosyd; Trosyd; ***NZ:*** Gyno-Trosyd†; ***Philipp.:*** Trosyd; ***Port.:*** Gino-Trosyd; Trosyd; ***S.Afr.:*** Gyno-Trosyd; Trosyd; ***Singapore:*** Gyno-Trosyd; Trosyd; ***Spain:*** Trosderm; Trosid; ***Switz.:*** Gyno-Trosyd; Trosyd; ***Thai.:*** Trosyd; ***Turk.:*** Dermo-Rest; Dermo-Trosyd; Gyno-Trosyd; Tiocan; Tiocell; ***UK:*** Trosyl; ***USA:*** Vagistat-1; ***Venez.:*** Gino-Tralen; Tralen.

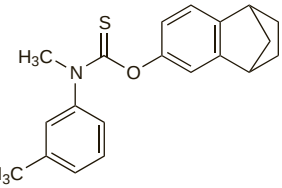
Multi-ingredient: ***Braz.:*** Cartrax; Duozol; Gynomax; Gynopac; Seczol; Takil; Travogyn; ***Fin.:*** Trosycort; ***Mex.:*** Fasigyn VT; ***Switz.:*** Trosyd†.

Tolciclate *(USAN, rINN)*

K-9147; KC-9147; Tolciclato; Tolciclatum. *O*-(1,2,3,4-Tetrahydro-1,4-methano-6-naphthyl) *m,N*-dimethylthiocarbanilate.

Тольциклат

$C_{20}H_{21}NOS$ = 323.5.
CAS — 50838-36-3.
ATC — D01AE19.
ATC Vet — QD01AE19.



Profile

Tolciclate is an antifungal with activity against *Epidermophyton*, *Microsporum*, and *Trichophyton* spp. It is used topically as a 1% cream or lotion, or as a 0.5% powder in the treatment of various dermatophyte infections and in pityriasis versicolor.

Preparations

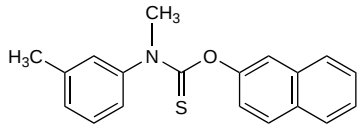
Proprietary Preparations (details are given in Part 3)
Braz.: Tolmicol†; ***Ger.:*** Fungifos†; ***Gr.:*** Tolmicil†; ***Ital.:*** Tolmicen†; ***Mex.:*** Kilmicen†; ***NZ:*** Tolmicen; ***Port.:*** Tolmicen†.

Tolnaftate *(BAN, USAN, rINN)*

Sch-10144; Tolnaftaatti; Tolnaftát; Tolnaftat; Tolnaftatas; Tolnaftato; Tolnaftatum. *O*-2-Naphthyl *m,N*-dimethylthiocarbanilate.

Тольнафтат

$C_{19}H_{17}NOS$ = 307.4.
CAS — 2398-96-1.
ATC — D01AE18.
ATC Vet — QD01AE18.



Pharmacopoeias. In *Eur.* (see p.vii), *Jpn*, and *US*.
Ph. Eur. 6.2 (Tolnaftate). A white or yellowish-white powder. Practically insoluble in water; very slightly soluble in alcohol; freely soluble in acetone and in dichloromethane. Protect from light.
USP 31 (Tolnaftate). A white to creamy-white, fine powder, with a slight odour. Practically insoluble in water; slightly soluble in alcohol; freely soluble in acetone and in chloroform; sparingly soluble in ether. Store in airtight containers.

Adverse Effects

Skin reactions occur rarely with tolnaftate and include irritation and contact dermatitis.

Antimicrobial Action

Tolnaftate inhibits the growth of the dermatophytes *Epidermophyton*, *Microsporum*, *Trichophyton* spp., and *Malassezia furfur*, but is not active against *Candida* spp. or bacteria.

Uses and Administration

Tolnaftate is an antifungal used topically as a 1% gel, solution, powder, ointment, or cream in the treatment or prophylaxis of superficial dermatophyte infections and of pityriasis versicolor (see Skin Infections, p.521). Tolnaftate is applied twice daily for 2 to 6 weeks. Repeat treatment may be required.

Preparations

USP 31: Tolnaftate Cream; Tolnaftate Gel; Tolnaftate Topical Aerosol; Tolnaftate Topical Powder; Tolnaftate Topical Solution.

Proprietary Preparations (details are given in Part 3)
Arg.: Athletes Foot†; Tinaderm†; ***Austral.:*** Antifungal Foot Deodorant†; Curatin; Ringworm Ointment; Tinaderm; Tineafax; ***Canad.:*** Absorbine Jr Antifungal; Footworks; Pitrex; Scholl Athlete's Foot; Tinactin; ZeaSorb AF; ***Chile:*** Tinaderm; ***Fr.:*** Sporiline†; ***Ger.:*** Tinatox; Tonoftal; ***Hong Kong:*** Aftate; ***Hung.:*** Athletes Foot†; Chinofungin; Digifungin; ***India:*** Tinaderm; Tolnaderm; ***Indon.:*** Naftate; ***Irl.:*** Mycil; Tinaderm†; ***Israel:*** Athletes Foot; Pitrex; Tinasol; ***Ital.:*** Tinaderm†; ***Malaysia:*** Dermoplex Antifungal; Myco-Aid; Tinaderm†; Tolnaderm; ***Mex.:*** Excelsior†; Tinaderm; Tinoxal; ***NZ:*** Tinaderm†; ***Philipp.:*** Tinactin; Tolnaderm; ***Port.:*** Tinaderme; ***S.Afr.:*** Tinaderm; ***Singapore:*** Tinaderm†; ***Spain:*** Micoisdin†; Tinaderm; ***Thai.:*** Ezon-T; Tono; ***Turk.:*** Mikoderm; ***UK:*** Mycil; Scholl Athlete's Foot; Tinaderm;

USA: Aftate; Blis-To-Sol; Dr Scholl's Athlete's Foot; Genaspor; Lamisil AF Defense; Podactin; Quinsana Plus; Tinactin; ***Venez.:*** Tinaderm; Tolnaftan.

Multi-ingredient: ***Arg.:*** Bacticort Complex; Cevaderm; Quadriderm†; ***Austral.:*** Mycil Healthy Feet; ***Braz.:*** Cremederme; Permut; Poliderms; Quadriderm; Quadrikin; Quadrilon; Quadriplus; Qualiderm; Tetraderm; ***Hong Kong:*** Alber T†; Dermafacte; Mycil; Quadriderm; Triditol-G; ***India:*** Fourderm; Quiss; ***Irl.:*** Mycil; Tinaderm-M; ***Israel:*** Phytoderm Compositum; ***Malaysia:*** Elan-Forte; ***Philipp.:*** Quadriderm; Quadrotopic; ***S.Afr.:*** Duoderm†; Quadriderm; ***Singapore:*** Quadriderm†; ***Spain:*** Cuatroderm; ***Switz.:*** Quadriderm; ***Thai.:*** Alber T; Ezon-T; ***UK:*** Mycil; Tinaderm-M; ***USA:*** Absorbine Athletes Foot Care; Dermasept Antifungal.

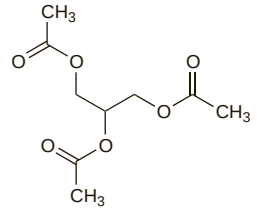
Triacetin *(rINN)*

E1518; Glicerin-triacetát; Glycerol Triacetate; Glycerolum Triacetas; Glyceryl Triacetate; Triacetina; Triacetinas; Triacétine; Triacetinum; Triacetyna; Triasetiini. 1,2,3-Propanetriol triacetate.

Триацетин

$C_9H_{14}O_6$ = 218.2.

CAS — 102-76-1.



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

Ph. Eur. 6.2 (Triacetin). A clear, colourless, slightly viscous, oily liquid. Soluble in water; miscible with dehydrated alcohol and with toluene. Store in well-filled containers.

USP 31 (Triacetin). A colourless, somewhat oily liquid with a slight, fatty odour. Soluble in water; slightly soluble in carbon disulfide; miscible with alcohol, with chloroform, and with ether. Store in airtight containers.

Profile

Triacetin is reported to possess fungistatic properties based on the liberation of acetic acid. It has been applied topically in the treatment of superficial dermatophyte infections. It has also been used as a plasticiser in oral preparations.

Triacetin may destroy rayon fabric. It should not come into contact with metals.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: ***Braz.:*** Micosan†; ***Hong Kong:*** Alber T†; ***Thai.:*** Alber T; Ezon-T.

Trimetrexate Glucuronate *(BANM, USAN, rINNM)*

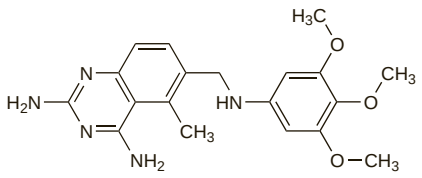
CI-898 (trimetrexate); Glucuronato de trimetrexato; JB-11 (trimetrexate); NSC-352122; NSC-249008 (trimetrexate); NSC-328564 (trimetrexate); Trimétrexate, Glucuronate de; Trimetrexati Glucuronatum. 5-Methyl-6-(3,4,5-trimethoxyanilinomethyl)quinazolin-2,4-diyldiamine mono-D-glucuronate.

Триметрексата Глюкуронат

$C_{19}H_{23}N_5O_3.C_6H_{10}O_7$ = 563.6.

CAS — 52128-35-5 (trimetrexate); 82952-64-5 (trimetrexate glucuronate).

ATC — P01AX07.



(trimetrexate)

Incompatibility. Trimetrexate is reported to be incompatible with foscarnet. Trimetrexate should not be mixed with folinic acid or chloride ions, since precipitation occurs instantly.

Adverse Effects, Treatment, and Precautions

Trimetrexate is a dihydrofolate reductase inhibitor and therefore adverse effects and precautions are similar to those of methotrexate, p.745. It must be given with folinic acid, which should be continued for 72 hours after the last dose of trimetrexate.

Interactions

Studies in *animals* suggest that cimetidine and imidazole antifungals such as clotrimazole and ketoconazole may inhibit trimetrexate metabolism, and there is a risk of possible interactions with all drugs that affect hepatic cytochrome P450 systems.

Antimicrobial Action

Trimetrexate is an inhibitor of dihydrofolate reductase and consequently prevents formation of the active coenzyme tetrahydrofolate and production of DNA and RNA precursors, leading to cell death. At therapeutic doses the selective transport of trimetrexate, but not folinic acid, into *Pneumocystis jirovecii* allows folinic acid to protect normal host cells from the cytotoxicity of trimetrexate without inhibiting its antifungal activity. *In-vitro* trimetrexate has shown dose-related inhibition of growth of the trophozoite stage of *P. jirovecii*.

Pharmacokinetics

The pharmacokinetics of intravenous trimetrexate have been described as both biphasic and triphasic, with a terminal elimination half-life of about 16 to 18 hours. After use with folinic acid a biphasic disposition with a terminal half-life of 11 hours has also been reported. It is extensively protein bound; reports suggest that it is 95 to 98% bound at low serum concentrations, but that binding is saturable, with free fraction increasing at plasma concentrations above 1 microgram/mL. Trimetrexate is excreted mainly in the urine, as unchanged drug and metabolites, some of which may be active. The major metabolic pathway appears to be oxidative O-demethylation followed by conjugation to the sulfate or glucuronide.

Uses and Administration

Trimetrexate is a dihydrofolate reductase inhibitor with general properties similar to those of methotrexate (p.749). It is used in the management of moderate to severe pneumocystis pneumonia in immunocompromised patients, notably patients with AIDS, where other therapy has proved ineffective (see also p.521). It has also been tried as an antineoplastic in the management of various solid tumours.

Trimetrexate is given as the glucuronate but doses are stated in terms of trimetrexate. Trimetrexate glucuronate 1.53 mg is equivalent to about 1 mg of trimetrexate. It is given by intravenous infusion, over 60 to 90 minutes. The schedule in pneumocystis pneumonia is 45 mg/m^2 daily for 21 days, in association with folinic acid rescue for 24 days. The dosage of trimetrexate and folinic acid should be adjusted according to the results of blood tests, which should be performed at least twice a week during therapy. Renal and hepatic function and haemoglobin values should also be monitored. Treatment with zidovudine and other myelosuppressive drugs should be interrupted to allow full doses of trimetrexate to be given.

◊ Reviews.

1. Fulton B, *et al*. Trimetrexate: a review of its pharmacodynamic and pharmacokinetic properties and therapeutic potential in the treatment of Pneumocystis carinii pneumonia. *Drugs* 1995; **49:** 563–76.

Preparations

Proprietary Preparations (details are given in Part 3)

Hong Kong: Neutrexin†; ***Irl.:*** Neutrexin†; ***Spain:*** Neutrexin†; ***Thai.:*** Neutrexin†; ***USA:*** Neutrexin†.

Undecenoic Acid

Acide Undécylénique; Acidum undecylenicum; 10-Hendecenoic Acid; Kyselina undecylenová; Undecilénico, ácido; Undecileno rūgštis; Undecilénsav; Undecylenic Acid; Undecylensyra; Undesenoatlar; Undesilenatlar; Undesyleenihappo. Undec-10-enoic acid.

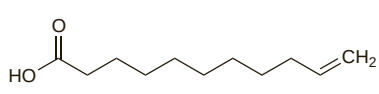
Ундеценовая Кислота

$C_{11}H_{20}O_2$ = 184.3.

CAS — 112-38-9.

ATC — D01AE04.

ATC Vet — QD01AE04.



Pharmacopoeias. In *Chin., Eur.* (see p.vii), and *US.*

Ph. Eur. 6.2 (Undecylenic Acid; Undecenoic Acid BP 2008). A colourless or pale yellow liquid or a white or very pale yellow crystalline mass. Practically insoluble in water; freely soluble in alcohol and in fatty and essential oils. Store in nonmetallic containers. Protect from light.

USP 31 (Undecylenic Acid). A clear, colourless to pale yellow liquid with a characteristic odour. Practically insoluble in water; miscible with alcohol, with chloroform, with ether, with benzene, and with fixed and volatile oils. Store in airtight containers. Protect from light.

Calcium Undecenoate

Calcium Undecylenate *(USAN)*; Undecilenato de calcio. Calcium di(undec-10-enoate).

Ундециленат Кальция

$(C_{11}H_{19}O_2)_2Ca$ = 406.6.

ATC — D01AE04.

ATC Vet — QD01AE04.

Pharmacopoeias. In *US.*

USP 31 (Calcium Undecylenate). A fine white powder with a characteristic odour and no grit. Practically insoluble in water, in cold alcohol, in acetone, in chloroform, and in ether; slightly soluble in hot alcohol.

Zinc Undecenoate

Cinko undecilenatas; Çinko Undesilenat; Cink-undecilenát; Sinkkiundesylenaatti; Undecilenato de zinc; Undecilinato de Zinco; Undecylenan zinečnatý; Zinc Undecylenate; Zinc, undécylénate de; Zinci undecylenas; Zinkundecylenat. Zinc di(undec-10-enoate).

Ундециленат Цинка

$(C_{11}H_{19}O_2)_2Zn$ = 431.9.

CAS — 557-08-4.

ATC — D01AE04.

ATC Vet — QD01AE04.

Pharmacopoeias. In *Chin., Eur.* (see p.vii), and *US.*

Ph. Eur. 6.2 (Zinc Undecylenate; Zinc Undecenoate BP 2008). A fine white or almost white powder. Practically insoluble in water and in alcohol. Protect from light.

USP 31 (Zinc Undecylenate). A fine, white powder. Practically insoluble in water and in alcohol.

Adverse Effects

Irritation may rarely occur after the topical application of undecenoic acid or its salts.

Antimicrobial Action

Undecenoic acid and its derivatives are active against some pathogenic fungi, including the dermatophytes *Epidermophyton, Trichophyton*, and *Microsporum* spp.

Uses and Administration

Undecenoic acid and its zinc salt are applied topically in the prophylaxis and treatment of superficial dermatophytoses, particularly tinea pedis (p.521). Typical concentrations are undecenoic acid 2 to 5% and zinc undecenoate 20%. They are used in creams, ointments, solutions, or powders, often with each other. Calcium undecenoate is used as a 10 or 15% powder.

Several other salts and derivatives of undecenoic acid including methyl, phenyl, and propyl undecenoate, disodium sulfosuccinated undecenoic acid monoethanolamide, and undecenoic acid monoethanolamide and diethanolamide have been used similarly.

◊ A systematic review[1] of topical treatments for fungal skin or nail infections considered undecenoates to be effective, although comparative studies with other classes of topical antifungal were largely lacking.

1. Crawford F, Hollis S. Topical treatments for fungal infections of the skin and nails of the foot. Available in The Cochrane Database of Systematic Reviews; Issue 3. Chichester: John Wiley; 2007 (accessed 07/07/08).

Preparations

USP 31: Compound Undecylenic Acid Ointment.

Proprietary Preparations (details are given in Part 3)

Arg.: Bentophyto; Sinamida Pies; Umasam; ***Austria:*** Crino Cordes; Mayfung; Pelsana Med; ***Canad.:*** Desenex; ***Cz.:*** Mykoseptin; ***Fr.:*** Mycodecyl; ***Hung.:*** Lubex; ***Indon.:*** Decyline; Topix; Undecyl; ***Irl.:*** Caldesene; Desenex; ***Israel:*** Undecyl; ***Mex.:*** Derman; ***Pol.:*** Mykodermina; Unguentum Undecylenicum; ***Rus.:*** Mykoseptin (Микосептин); ***S.Afr.:*** Mycota; ***Switz.:*** Fungex; Lubex; Turexan Creme; Turexan Douche; ***Turk.:*** Undo-Pate; Utalk; ***UK:*** Mycota; ***USA:*** Blis-To-Sol; Caldesene; Cruex; Decylenes; Desenex; Elon Dual Defense; Protectol; Undelenic.

Multi-ingredient: ***Arg.:*** Bacteroskin†; Bentophyto; Bifena; Champuacid; Cicatrol; Clevosan; Dettonjab; Farm-X; Fungicida†; Fungocop; Hipoglos Cicatrizante; Laurinol Plus; LB Jabon con Purcelin†; Novo Miconol; Novofarma Champu; Piecidex†; Plusderm†; Tersoderm Anticaspa†; ***Austral.:*** Mycoderm†; Pedoz; Sebitar; Seborrol†; ***Austria:*** Dequafungan; Mycopol; Pelsana Med; Salvyl; ***Braz.:*** Andriodermol; Micosan†; Micotox†; Micoz†; ***Chile:*** Fittig; Hansaplast Footcare†; Lady Fittig†; NP-27; ***Cz.:*** Hexadecyl†; ***Fr.:*** Paps; ***Ger.:*** Gehwol Fungizid†; Gehwol Nagelpilz†; Skinman Soft; ***Gr.:*** Ekzegamma†; ***Hong Kong:*** Acnederm; Fungifax†; Mycoderm†; Sebitar; ***Hung.:*** Squa-med; ***Indon.:*** Decyline; Mikorex; Skintex; ***Irl.:*** Ceanel†; ***Israel:*** Fungimon; Pedisol; Pitrisan; ***Ital.:*** Balta Intimo†; Foot Zeta; Genisol; Micofoot; Propast; ***Malaysia:*** Acnederm†; Sebitar; ***Mex.:*** Micotex; ***NZ:*** Acnederm†; Egomycol†; Grans Remedy; Sebitar; Seborrol†; ***Pol.:*** Undofen; ***Port.:*** Edoltar†; Micaveen; ***S.Afr.:*** AF; Mycota†; ***Singapore:*** Sebitar; ***Switz.:*** Crimanex; Ederphyt; Fungex; Pelsano; Pruri-med; Sebo Shampooing; Trosyd†; Turexan Emulsion†; ***Turk.:*** Fungecyl; Undo-Talk; ***UK:*** Ceanel; Healthy Feet; Monphytol†; Mycota; ***USA:*** Breezee Mist Foot Powder; Dermasept Antifungal; Gordochom; Phicon-F; ***Venez.:*** Diodonato†.