Supplementary Drugs and Other Substances

This chapter includes some drugs not easily classified, herbal medicines, new drugs whose place in therapy is not yet clear, and drugs no longer used clinically but still of interest. There are also monographs on toxic substances, the effects of which may require drug therapy.

Abrus

Abrus Seed; Indian Liquorice; Jequirity Bean; Jumble Beads; Prayer Beads; Regaliz americano; Rosary Beans.

Profile

Abrus consists of the seeds of *Abrus precatorius* (Leguminosae), one of whose constituents is abrin. Abrin, which is closely related to ricin, is considered responsible for the toxic effects of the seeds. Children have died from eating one or more seeds. Toxicity may be less likely to occur if the seeds are swallowed whole, than if they are chewed, because of the hard seed coat. Toxic effects may occur within a few hours or may be delayed for several days after ingestion. Signs and symptoms of abrin poisoning are similar to those described for ricin, p.2379.

Abrus has been used as an oral contraceptive in herbal medicine.

Homoeopathy. Abrus has been used in homoeopathic medicines.

◊ References.

1. Aslam M, Shaw JMH. Abrus in Asian medicine. *Pharm J* 1998; **261:** 822–4.
2. Fernando C. Poisoning due to Abrus precatorius (jequirity bean). *Anaesthesia* 2001; **56:** 1178–80.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: ***Indon.:*** Enkasari; Ika Sariawan.

Absinthium

Absinthe; Absinthii herba; Ajenjo; Assenzio; Fehér ürömfű; Karčiųjų kiečių žolė; Losna; Mali, Koiruoho; Malört; Pelin; Pelyňková nať; Wermutkraut; Wormwood; Ziele piołunu.

CAS — 546-80-5 (α-thujone); 471-15-8 (β-thujone).

NOTE. The following terms have been used as 'street names' (see p.vi) or slang names for various forms of absinthium:
Green Fairy; Green Goddess; La Fée Verte.

Pharmacopoeias. In *Eur.* (see p.vii).
Ph. Eur. 6.2 (Wormwood). The leaves or flowering tops, or a mixture of these dried, whole or cut organs of wormwood, *Artemisia absinthium*. It contains not less than 2 mL/kg of essential oil, calculated with reference to the dried drug. Protect from light.

Profile

Absinthium has been used as a bitter. It is also used in small quantities as a flavour in alcoholic beverages, although it is considered in some countries to be unsafe for use in foods, beverages, or drugs. Habitual use or large doses cause absinthism, which is characterised by restlessness, vomiting, vertigo, tremors, and convulsions. Thujone, related to camphor, is the major constituent of the essential oil derived from absinthium.

Homoeopathy. Absinthium has been used in homoeopathic medicines under the following names: Artemisia absinthium; Artemisia absinthium ex herba siccata; Absinth.

◊ References.

1. Weisbord SD, *et al*. Poison on line—acute renal failure caused by oil of wormwood purchased through the Internet. *N Engl J Med* 1997; **337:** 825–7.
2. Skyles AJ, Sweet BV. Wormwood. *Am J Health-Syst Pharm* 2004; **61:** 239–42.

Preparations

Proprietary Preparations (details are given in Part 3)

Cz.: Nat Pelynku Praveho.

Multi-ingredient: ***Austria:*** Abdomilon N; Eryval; Magentee St Severin; Mariazeller; Sigman-Haustropfen; Virgilocard; ***Braz.:*** Camomila; ***Cz.:*** Abdomilon†; Contraspan†; Eugastrin†; Original Schwedenbitter; Zaludecni Cajova Smes; ***Fr.:*** Tisane Hepatique de Hoerdt; ***Ger.:*** Abdomilon N; Amara-Pascoe; Amara-Tropfen; Anore X N†; Aristochol N†; Floradix Multipretten N; Gallemolan forte; Gallemolan G†; Gallexier; Gastralon N†; Gastritol; Gastrol S†; Hepaticum novo†; Leber-Galle-Tropfen 83†; Lomatol†; Majocarmin forte†; Majocarmin mite†; Marianon†; Nervosana†; Neurochol C†; Pascopankreat; Presselin Blahungs K 4 N†; Presselin Dyspeptikum†; rohasal†; Stomachysat N†; Stovalid N†; Stullmaton†; Unex Amarum†; ventriloges N; ***India:*** Toniazol†; ***Ital.:*** Assenzio (Specie Composta)†; Genziana (Specie Composta)†; ***Pol.:*** Artemisol; Krople Zoladkowe; ***Rus.:*** Maraslavin (Мараславин); Original Grosser Bittner Balsam (Оригинальный Большой Бальзам Биттнера); ***S.Afr.:*** Amara; ***Switz.:*** Baume†; Kernosan Heidelberger Poudre; Phytomed Hepato†; Pommade au Baume.

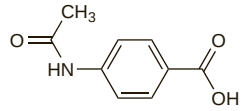
Acedoben *(pINN)*

Acedobén; Acédobène; Acedobenum. *p*-Acetamidobenzoic acid.

Ацедобен

$C_9H_9NO_3$ = 179.2.

CAS — 556-08-1.



Profile

Acedoben is a component of inosine pranobex (p.884), and has been given orally as the potassium salt in the treatment of skin disorders. Acedoben and its sodium salt have been applied topically.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: ***Spain:*** Amplidermis; Hongosan.

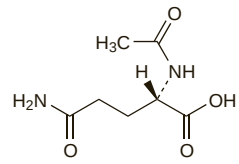
Aceglutamide *(rINN)*

Aceglutamida; Acéglutamide; Aceglutamidum. N^2-Acetyl-L-glutamine; 2-Acetylamino-L-glutaramic acid.

Ацеглутамид

$C_7H_{12}N_2O_4$ = 188.2.

CAS — 2490-97-3.



Profile

Aceglutamide has been given in an attempt to improve memory and concentration. Aceglutamide aluminium (p.1704) is used as an antacid.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: ***Ital.:*** Acutil Fosforo; Memovisus†; Tonoplus†.

Acemannan *(USAN, rINN)*

Acemanán; Acémannan; Acemannanum; Polymanoacetate.

Ацеманнан

CAS — 110042-95-0.

Profile

Acemannan is a highly acetylated, polydispersed, linear mannan obtained from the mucilage of *Aloe vera* (*A. barbadensis*). It has immunomodulating properties and is an ingredient of topical wound dressing products including those formulated for the oral mucosa.

Preparations

Proprietary Preparations (details are given in Part 3)

USA: Carrasyn; DiaB Gel; Oral Wound Rinse; RadiaGel; SaliCept; Ultrex.

Acetic Acid

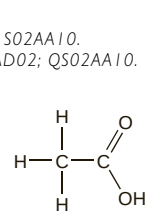
Acide acétique; Ácido acético; Ácido etanóico; Acidum aceticum; Acto rūgštis; Asetik Asit; Ättiksyra; E260; Ecetsav; Eisessig (glacial acetic acid); Essigsäure; Etanoico; Ethanoic Acid; Etikkahappo; Kwas octowy; Kyselina octová.

$C_2H_4O_2$ = 60.05.

CAS — 64-19-7.

ATC — G01AD02; S02AA10.

ATC Vet — QG01AD02; QS02AA10.



NOTE. The nomenclature of acetic acid often leads to confusion over whether concentrations are expressed as percentages of glacial acetic acid ($C_2H_4O_2$) or of a diluted form. In *Martindale*, the percentage figures given against acetic acid represent the amount of $C_2H_4O_2$.

Pharmacopoeias. Glacial acetic acid is included in *Chin.*, *Eur.* (see p.vii), *Int.*, *Jpn*, and *US*.
Solutions containing about 30 to 37% are included in *Br.* (33%), *Chin.* (36 to 37%), *Int.*, *Jpn* (30 to 32%), and *Swiss* (30%). Also in *USNF* (36 to 37%).
Dilute acetic acid (6%) is included in *Br.* and *Int.* Also in *USNF*.
Ph. Eur. 6.2 (Acetic Acid, Glacial; Acidum Aceticum Glaciale). A crystalline mass or a clear colourless volatile liquid. F.p. not lower than 14.8°. Miscible with water, with alcohol, and with dichloromethane. Store in airtight containers.
BP 2008 (Acetic Acid (33 per cent)). It contains 32.5 to 33.5% w/w of $C_2H_4O_2$. It is a clear colourless liquid with a pungent odour. Miscible with water, with alcohol, and with glycerol.
BP 2008 (Acetic Acid (6 per cent)). It contains 5.7 to 6.3% w/w of $C_2H_4O_2$. It is prepared by diluting Acetic Acid (33 per cent).
USP 31 (Glacial Acetic Acid). A clear colourless liquid with a pungent characteristic odour. B.p. about 118°. Miscible with water, with alcohol, and with glycerol. Store in airtight containers.
USNF 26 (Acetic Acid). It contains 36 to 37% w/v of $C_2H_4O_2$. It is a clear colourless liquid with a strong characteristic odour. Miscible with water, with alcohol, and with glycerol. Store in airtight containers.
USNF 26 (Diluted Acetic Acid). It contains 5.7 to 6.3% w/v of $C_2H_4O_2$. It is prepared by diluting Acetic Acid. Store in airtight containers.

Adverse Effects and Treatment

Local or topical application of acetic acid preparations may produce stinging or burning. Ingestion of glacial acetic acid can produce similar adverse effects to those of hydrochloric acid (p.2322), which may be treated similarly.

Uses and Administration

Glacial acetic acid has been used as an escharotic. Diluted forms have been used as an antibacterial (it is reported to be effective against *Haemophilus* and *Pseudomonas* spp.), antifungal, and antiprotozoal in vaginal gels and douches, irrigations, topical preparations for the skin and nails, and in ear drops. Diluted forms have also been used as an expectorant, an astringent lotion, and as treatments for warts (p.1584), callosities, and for certain jellyfish stings (see below). Solutions have also been used to soften ear wax (p.1725) and in the treatment of otitis externa (p.182). Visual inspection of the uterine cervix with acetic acid (VIA) is being investigated as a screening method for cervical cancer, particularly where facilities for cytological methods may be limited.

A solution containing 4% w/v $C_2H_4O_2$ is known as artificial vinegar or non-brewed condiment. Vinegar is a product of fermentation.

Jellyfish sting. Vinegar or acetic acid 3 to 10% is applied to box jellyfish stings to inactivate any fragments of adherent tentacle[1,2] (see p.2220). Acetic acid solutions have been reported to be useful in stings by related species[3] although they may produce further discharge of venom in some jellyfish.[4]

1. Hartwick RJ, *et al*. Disarming the box jellyfish. *Med J Aust* 1980; **1:** 15–20.
2. Fenner PJ, Williamson JA. Worldwide deaths and severe envenomation from jellyfish stings. *Med J Aust* 1996; **165:** 658–61.
3. Fenner PJ, *et al*. "Morbakka", another cubomedusan. *Med J Aust* 1985; **143:** 550–5.
4. Fenner PJ, Fitzpatrick PF. Experiments with the nematocysts of Cyanea capillata. *Med J Aust* 1986; **145:** 174.

Wounds and burns. Infection of wounds (p.1585) and burns (p.1578) with *Pseudomonas aeruginosa* may delay healing. Acetic acid has been used, in concentrations of up to 5%, to eradicate these infections.[1]

1. Milner SM. Acetic acid to treat Pseudomonas aeruginosa in superficial wounds and burns. *Lancet* 1992; **340:** 61.

Preparations

BP 2008: Strong Ammonium Acetate Solution;
USP 31: Acetic Acid Irrigation; Acetic Acid Otic Solution; Hydrocortisone and Acetic Acid Otic Solution.

Proprietary Preparations (details are given in Part 3)

Arg.: Ecoshampoo†; Hexa-Defital Crema Enjuague; Otopreven; Pelo Libre Protectora; Pil-G Uso†; ***Austral.:*** Summers Eve Disposable; ***Chile:*** Soft Kilnits†; ***Fr.:*** Para Lentes; ***Gr.:*** Instaret; ***Irl.:*** Aci-Jel†; ***UK:*** Aci-Jel†; EarCalm; Meltus Baby; ***USA:*** Feminique; Massengill Disposable; Summers Eve Disposable; ***Venez.:*** Duvagin; Fem Ducha.

Multi-ingredient: ***Arg.:*** Aglio; Callicida; Detebencil Nit; Fuera Bicho; Hexa-Defital Plus; Microsona Otica; Uze Active; Yalu†; ***Austral.:*** Aci-Jel†; Aqua Ear; Ear Clear for Swimmer's Ear; ***Belg.:*** Aporil; ***Braz.:*** A Curitybina; Kalostop†; Lacto Vagin†; ***Canad.:*** SH-206; Viron Wart Lotion; VoSoL HC†; ***Chile:*** Summer's Eve Vinagre y Agua†; ***Cz.:*** Solcogyn†; ***Fr.:*** Nitrol; Ysol 206; ***Ger.:*** Gehwol Huhneraugen-Tinktur; Solco-Derman; ***Gr.:*** Otocort; ***Hong Kong:*** Baby Cough with Antihistamine; Solcoderm; ***India:*** Otek-AC†; Perfocyn; ***Irl.:*** Phytex; ***Ital.:*** Oleo Calcarea†; ***Malaysia:*** Solcoderm†; ***Neth.:*** Buckleys Kinderhoestsiroop; ***NZ:*** Aci-Jel†; Aqua Ear†; VoSoL; ***Pol.:*** Acifungin; Solcogyn; ***Rus.:*** Bubil (Бубил); Solcoderm (Солкодерм); Solcovagin (Солковагин); ***Spain:*** Callicida Cor Pik; Callicida Rojo; Keranin; Nitroina; Quocin; ***Switz.:*** Coruzol†; Solcoderm; Solcogyn; Waruzol; ***Thai.:*** Baby Cough Syrup Atlantic; Baby Cough with Antihistamine; ***Turk.:*** Dilan; Tuba;

UK: Ellimans; Goddards Embrocation; Phytex; Potters Gees Linctus; Sanderson's Throat Specific; ***USA:*** Acetasol; Acetasol HC; Acid Jelly; Auralgan; Borofair Otic; Burow's; Fem pH; Klout; Otic Domeboro; Star-Otic; Tridesilon†; VoSoL HC†; VoSoL†; ***Venez.:*** Gynovit; Kayivis; Saxacid.

Acetohydroxamic Acid *(USAN, rINN)*

N-Acetyl Hydroxyacetamide; Acide Acétohydroxamique; Ácido acetohidroxámico; Acidum Acetohydroxamicum; AHA.

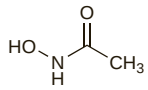
Ацетогидроксамовая Кислота

$C_2H_5NO_2$ = 75.07.

CAS — 546-88-3.

ATC — G04BX03.

ATC Vet — QG04BX03.



Pharmacopoeias. In *US*.

USP 31 (Acetohydroxamic Acid). White, slightly hygroscopic, crystalline powder. Freely soluble in water and in alcohol; very slightly soluble in chloroform. Store in airtight containers at a temperature between 8° and 15°.

Adverse Effects and Precautions

Phlebitis, thromboembolism, haemolytic anaemia, and iron-deficiency anaemia have occurred. Bone-marrow depression has been reported in *animal* studies. Other adverse effects include headache, gastrointestinal disturbances, alopecia, rash (particularly after ingestion of alcohol), trembling, and mental symptoms including anxiety and depression. Blood counts and renal function should be monitored regularly during treatment. Patients with acute renal failure should not be given acetohydroxamic acid.

Pregnancy. Studies in *animals* indicate that acetohydroxamic acid is teratogenic.

Interactions

Acetohydroxamic acid chelates iron given orally, resulting in reduced absorption of both. Ingestion with alcohol may precipitate skin rash.

Pharmacokinetics

Acetohydroxamic acid is rapidly absorbed from the gastrointestinal tract with peak serum concentrations being reached within 1 hour. The plasma half-life is reported to be up to 10 hours, but may be longer in patients with impaired renal function. Acetohydroxamic acid is partially metabolised to acetamide, which is inactive; up to about two-thirds of a dose may be excreted unchanged in the urine.

Uses and Administration

Acetohydroxamic acid acts by inhibiting bacterial urease, thus decreasing urinary ammonia concentration and alkalinity. It is used in the prophylaxis of struvite renal calculi (p.2181) and as an adjunct in the treatment of chronic urinary-tract infections (p.199).

Acetohydroxamic acid is given orally in a usual dose of 250 mg three or four times daily. The total dose should not exceed 1.5 g daily. Children have been given 10 mg/kg daily in 2 or 3 divided doses. Dosage should be adjusted in patients with renal impairment (see below).

Administration in renal impairment. Acetohydroxamic acid should not be given to patients with serum-creatinine concentrations in excess of about 220 micromoles/litre. If the concentration is between 160 and 220 micromoles/litre, the maximum daily dose should be 1 g and the dosing interval should be extended to every 12 hours.

Preparations

USP 31: Acetohydroxamic Acid Tablets.

Proprietary Preparations (details are given in Part 3)

Spain: Uronefrex; ***USA:*** Lithostat.

Acetylleucine *(rINN)*

Acetileucina; Acétylleucine; Acetylleucinum; RP-7542. *N*-Acetyl-DL-leucine.

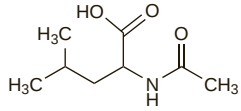
Ацетилейцин

$C_8H_{15}NO_3$ = 173.2.

CAS — 99-15-0.

ATC — N07CA04.

ATC Vet — QN07CA04.



Profile

Acetylleucine has been used in the treatment of vertigo (p.565) in usual oral doses of up to 2 g daily, in divided doses, or 1 g daily by intravenous injection. Higher doses have occasionally been used.

Preparations

Proprietary Preparations (details are given in Part 3)

Fr.: Tanganil.

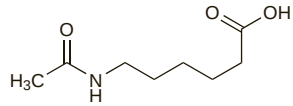
Acexamic Acid *(BAN, rINN)*

Acide Acexamique; Ácido acexámico; Acidum Acexamicum; CY-153; Epsilon Acetamidocaproic Acid. 6-Acetamidohexanoic acid.

Ацексамовая Кислота

$C_8H_{15}NO_3$ = 173.2.

CAS — 57-08-9 (acexamic acid); 70020-71-2 (zinc acexamate).



Pharmacopoeias. *Eur.* (see p.vii) includes Zinc Acexamate.

Profile

Acexamic acid is related structurally to the antifibrinolytic agent aminocaproic acid (p.1053). Acexamic acid, usually as the calcium or sodium salt, has been used topically or systemically to promote the healing of ulcers and various other skin lesions. Zinc acexamate has been given for peptic ulcer disease.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Plastenan; Restaurene; ***Belg.:*** Plastenan; ***Fr.:*** Plastenan†; ***Mex.:*** Recoveron; ***Port.:*** Plastesol†; ***Spain:*** Copinal.

Multi-ingredient: ***Arg.:*** Bagoderm; Cicatrizol; Lisoderma; Plastenan con Neomicina; ***Fr.:*** Trofoseptine†; ***Mex.:*** Dermatolona; Recoveron N; Recoveron NC; ***Port.:*** Plastenan Neomicina†; ***Spain:*** Plaskine Neomicina; Unitul Complex†.

Achillea

Achillée millefeuille; Aquilea; Cickafarkfű; Kraujažolių žolė; Milfoil; Millefolii herba; Řebříčková nať; Rölleka; Schafgarbe; Siankärsämö; Yarrow; Ziele krwawnika.

CAS — 8022-07-9 (yarrow root oil).

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

Ph. Eur. 6.2 (Yarrow). The whole or cut, dried flowering tops of yarrow, *Achillea millefolium*. It contains not less than 2 mL/kg of essential oil and not less than 0.02% of proazulenes, expressed as chamazulene ($C_{14}H_{16}$ = 184.3), both calculated with reference to the dried drug. Protect from light.

Profile

Achillea has been used in herbal medicine. It has been stated to have diaphoretic, anti-inflammatory, and other miscellaneous properties. It has been reported to cause contact dermatitis.

Yarrow root oil is used in aromatherapy.

Homoeopathy. Achillea has been used in homoeopathic medicines under the following names: Achillea millefolium; Millefolium; Achillea ex herba; Millef.

◊ References.

1. Phillipson JD, Anderson LA. Herbal remedies used in sedative and antirheumatic preparations: part 2. *Pharm J* 1984; **233:** 111–15.
2. Chandler RF. Yarrow. *Can Pharm J* 1989; **122:** 41–3.
3. Anonymous. Final report on the safety assessment of yarrow (Achillea millefolium) extract. *Int J Toxicol* 2001; **20** (suppl 2): 79–84.

Preparations

Proprietary Preparations (details are given in Part 3)

Cz.: Gallentee†; Nat Rebricku; Rebrickovy Caj, Rebrickova Nat; ***Mex.:*** Blancaler.

Multi-ingredient: ***Austral.:*** Diaco; Flavons; ***Austria:*** Abfuhrtee St Severin; Amersan; Gallen- und Lebertee St Severin; Mariazeller; Menodoron; ***Canad.:*** Original Herb Cough Drops; ***Cz.:*** Amersan; Cajova Smes pri Redukcni Diete†; Cicaderma; Hemoral†; Hertz- und Kreislauftee†; Kamillan Plus†; Perospir†; Projimava; Species Urologicae Planta; Stomatosan†; Ungolen†; Zaludecni Cajova Smes; ***Fr.:*** Cicaderma; Gonaxine; Menoxine; Tisane Hepatique de Hoerdt; ***Ger.:*** Alasenn; Amara-Tropfen; Aristochol N†; Cheiranthol†; Floradix Multipretten N; Gallexier; Kamillan Plus†; Marianon†; Nervosana†; Sedovent; Stomachysat N†; Tonsilgon; ***Hung.:*** Hemorid; Noditran†; ***Ital.:*** Forticrin; Lozione Same Urto; Pik Gel; ***Pol.:*** Amarosal; Artecholin; Artecholwex; Cholavisol; Dyspepsin; Enterosol; Gastrobonisol; Hemorol; Liv 52; Nefrobonisol; Reumosol; Salviasept; Sanofil; ***Port.:*** Cicaderma; Fade Cream†; ***Rus.:*** Liv 52 (Лив 52); Original Grosser Bittner Balsam (Оригинальный Большой Бальзам Биттнера); Tonsilgon N (Тонзилгон Н); ***S.Afr.:*** Amara; Clairo; Menodoron; ***Spain:*** Jaquesor†; Menstrunat†; Natusor Circusil†; Natusor Gastrolen†; Natusor Jaquesan†; ***Switz.:*** Baume†; Gastrosan; Kernosan Heidelberger Poudre; Pommade au Baume; Tisane hepatique et biliaire; Tisane pour l'estomac; ***UK:*** Catarrheeze; Rheumatic Pain Remedy; Tabritis; Wellwoman.

Acid Alpha Glucosidase

Acid Maltase; α-Glucosidasa; Lysosomal α-glucosidase.

Alglucosidase Alfa *(USAN, rINN)*

Alglucosidasa alfa; Alglucosidasum Alfa; rhGAA.

Альглюкозидаза Альфа

CAS — 420784-05-0.

ATC — A16AB07.

ATC Vet — QA16AB07.

Profile

Alglucosidase alfa is a recombinant form of human acid alpha glucosidase given as enzyme replacement therapy for the treatment of the lysosomal storage disease Pompe disease (glycogen storage disease type II). This is a rare fatal autosomal recessive disorder caused by a deficiency of acid α-glucosidase, which cleaves α-1,4- and α-1,6-glucosidic linkages in lysosomal glycogen to liberate glucose. Glycogen accumulation results in progressive myopathy, especially of the skeletal muscles and heart.

Alglucosidase alfa is given intravenously using an infusion pump in doses of 20 mg/kg once every 2 weeks. The total volume of fluid, which is determined by the patient's body-weight, should be infused over about 4 hours. The infusion rate should be increased gradually: the initial rate should not exceed 1 mg/kg per hour; once the patient can tolerate this rate, it may be increased every 30 minutes by 2 mg/kg per hour with monitoring of vital signs before each increase; the maximum infusion rate is 7 mg/kg per hour.

Infusion reactions are common with alglucosidase alfa; symptoms may resolve on decreasing the infusion rate, temporarily stopping the infusion, and/or use of antihistamines and/or antipyretics, which may also be given as pre-treatment. Severe reactions may require stopping the infusion immediately. Serious hypersensitivity reactions, including anaphylactic shock, have also been reported during infusion of alglucosidase alfa.

◊ References.

1. Amalfitano A, *et al.* Recombinant human acid alpha-glucosidase enzyme therapy for infantile glycogen storage disease type II: results of a phase I/II clinical trial. *Genet Med* 2001; **3:** 132–8.
2. Van den Hout JM, *et al.* Enzyme therapy for Pompe disease with recombinant human alpha-glucosidase from rabbit milk. *J Inherit Metab Dis* 2001; **24:** 266–74.
3. Kishnani PS, Howell RR. Pompe disease in infants and children. *J Pediatr* 2004; **144** (suppl): S35–S43.
4. Hunley TE, *et al.* Nephrotic syndrome complicating alpha-glucosidase replacement therapy for Pompe disease. Abstract: *Pediatrics* 2004; **114:** 1080. Full version: http://www.pediatrics.org/cgi/content/full/114/4/e532 (accessed 17/01/06)
5. Kishnani PS, *et al.* Chinese hamster ovary cell-derived recombinant human acid α-glucosidase in infantile-onset Pompe disease. *J Pediatr* 2006; **149:** 89–97.
6. van der Beek NA, *et al.* Pompe disease (glycogen storage disease type II): clinical features and enzyme replacement therapy. *Acta Neurol Belg* 2006; **106:** 82–6.
7. Kishnani PS, *et al.* Recombinant human acid α-glucosidase: major clinical benefits in infantile-onset Pompe disease. *Neurology* 2007; **68:** 99–109.
8. Fukuda T, *et al.* Acid alpha-glucosidase deficiency (Pompe disease). *Curr Neurol Neurosci Rep* 2007; **7:** 71–7.
9. Rossi M, *et al.* Long-term enzyme replacement therapy for Pompe disease with recombinant human alpha-glucosidase derived from Chinese hamster ovary cells. *J Child Neurol* 2007; **22:** 565–73.

Preparations

Proprietary Preparations (details are given in Part 3)

Cz.: Myozyme; ***Fr.:*** Myozyme; ***Port.:*** Myozyme; ***UK:*** Myozyme; ***USA:*** Myozyme.

Multi-ingredient: ***Austral.:*** Digestaid; ***Canad.:*** Digesta.

Acid Fuchsine

Acid Magenta; Acid Roseine; Acid Rubine; CI Acid Violet 19; Colour Index No. 42685; Fucsina ácida.

Profile

Acid fuchsine is the disodium or diammonium salt of the trisulfonic acid of magenta. It is used as a microscopic stain and a pH indicator.