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.

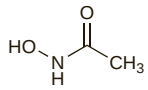
Ацетогидроксамовая Кислота

$C_2H_5NO_2$ = 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.

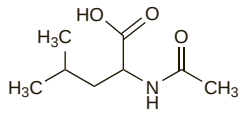
Ацетилейцин

$C_8H_{15}NO_3$ = 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.

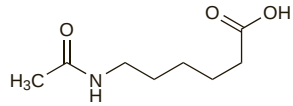
Acexamic Acid *(BAN, rINN)*

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.