Rimonabant is also being studied as an aid to smoking cessation but a systematic review 12 of randomised controlled studies concluded that although rimonabant 20 mg daily may be of benefit in stopping smoking, the evidence in maintaining abstinence is inconclusive.

- Boyd ST, Fremming BA. Rimonabant—a selective CB1 antagonist. *Ann Pharmacother* 2005; 39: 684–90.
 Gelfand EV, Cannon CP. Rimonabant: a cannabinoid receptor
- type 1 blocker for management of multiple cardiometabolic risk factors. *J Am Coll Cardiol* 2006; **47:** 1919–26.
- 3. Henness S, *et al.* Rimonabant. *Drugs* 2006; **66:** 2109–19. 4. Patel PN, Pathak R. Rimonabant: a novel selective cannabinoid-1 receptor antagonist for treatment of obesity. *Am J Health-Syst Pharm* 2007; **64:** 481–9.

 5. Xie S, *et al.* The endocannabinoid system and rimonabant: a
- new drug with a novel mechanism of action involving cannabi-noid CB receptor antagonism or inverse agonism as po-tential obesity treatment and other therapeutic use. J Clin Pharm Ther 2007; 32: 209–31.
- 6. Van Gaal LF, et al. Effects of the cannabinoid-1 receptor blocker rimonabant on weight reduction and cardiovascular risk factors in overweight patients: 1-year experience from the RIO-Europe study. *Lancet* 2005; **365**: 1389–97. Correction. *ibid.* **366**: 370.
- Pi-Sunyer FX, et al. Effect of rimonabant, a cannabinoid-1 receptor blocker, on weight and cardiometabolic risk factors in overweight or obese patients: RIO-North America: a randomized controlled trial. JAMA 2006; 295: 761–75.
- Després J-P, et al. Effects of rimonabant on metabolic risk factors in overweight patients with dyslipidemia. N Engl J Med 2005; 353: 2121–34.
- 9. Scheen AJ, et al. RIO-Diabetes Study Group. Efficacy and tolerability of rimonabant in overweight or obese patients with type 2 diabetes: a randomised controlled study. *Lancet* 2006; **368**: 1660–72.
- 10. Christensen R, et al. Efficacy and safety of the weight-loss drug rimonabant: a meta-analysis of randomised trials. Lancet 2007; 370: 1706–13.
- Curioni C, André C. Rimonabant for overweight or obesity. Available in The Cochrane Database of Systematic Reviews; Issue 4. Chichester: John Wiley; 2006 (accessed 14/02/08).
- Cahill K, Ussher M. Cannabinoid type 1 receptor antagonists (rimonabant) for smoking cessation. Available in The Cochrane Database of Systematic Reviews; Issue 4. Chichester: John Wiley; 2007 (accessed 14/02/08).

Preparations

Proprietary Preparations (details are given in Part 3) Arg.: Acomplia; Resibant; Cz.: Acomplia†; Zimulti; Fr.: Acomplia†; Gr.: Acomplia† Port.: Zimulti; UK: Acomplia†.

Rociverine (rINN)

LG-30158; Rociverina; Rocivérine; Rociverinum. 2-Diethylamino-I-methylethyl cis-I-hydroxy(bicyclohexyl)-2-carboxylate.

Роциверин

 $C_{20}H_{37}NO_3 = 339.5.$ CAS - 53716-44-2. ATC - A03AA06.ATC Vet - QA03AA06.

Rociverine is an antispasmodic that has been given orally in doses of 30 to 40 mg or rectally in doses of 50 to 75 mg daily. It has also been given by injection.

Preparations

Proprietary Preparations (details are given in Part 3) Ital.: Rilaten

Rose Bengal Sodium

CI Acid Red 94; Colour Index No. 45440; Rosa de bengala sódico; Rose Bengal; Sodium Rose Bengal. The disodium salt of 4,5,6,7-tetrachloro-2',4',5',7'-tetraiodofluorescein .

 $C_{20}H_2CI_4I_4Na_2O_5 = 1017.6.$

CAS — 11121-48-5 (rose bengal); 632-69-9 (rose bengal disodium).

ATC — Ś01JA02.

ATC Vet - QS01/A02.

NOTE. The name Rose Bengale has been applied to the substance described in this monograph as well as to dichlorotetraiodofluo-rescein (CI Acid Red 93; Ext. D & C Reds Nos. 5 and 6; Colour Index No. 45435), a compound used as its disodium or dipotas-

sium salt as a colouring agent.
ROS is a code approved by the BP 2008 for use on single unit doses of eye drops containing rose bengal sodium where the in-dividual container may be too small to bear all the appropriate labelling information.

Rose bengal sodium stains devitalised conjunctival and corneal epithelial cells as well as mucus and is used as an aid in the diagnosis of dry eye. It is used to detect or assess ocular damage resulting from Sjögren's syndrome or from ill-fitting contact lenses, and for keratitis, squamous cell carcinomas, and detection of foreign bodies. Rose bengal sodium is applied as 1% eye drops or as sterile papers impregnated with the dye.

Instillation of this dye may be painful, especially in dry eyes. Rose bengal sodium can stain exposed skin, clothing, and soft contact lenses. Rose bengal sodium should not be used before taking swabs as it possesses some antiviral activity.

Rose bengal sodium is taken up by the liver and excreted in the bile; the iodine-131-labelled compound (p.2054) has been used as a diagnostic aid in the determination of hepato-biliary func-

Preparations

Proprietary Preparations (details are given in Part 3)

Canad.: Ak-Rose; USA: Rosets.

Rose Fruit

Brier Fruit; Csipkerózsa áltermés; Cynorrhodon; Cynosbati Fructus; Cynosbati Pseudofructus; Dog Rose Fruits; Églantier; Erškėčių vaisiai; Escaramujo; Hips; Hypanthium Rosae; Nypon; Rosae Fructus; Rosae pseudo-fructus; Rose Hips; Ruusunmarja;

Pharmacopoeias. In Eur. (see p.vii) and Jpn.

Ph. Eur. 6.2 (Dog Rose). The rose hips made up by the receptacle and the remains of the dried sepals of Rosa canina, R. pendulina, and other Rosa spp., with the achenes removed. It contains not less than 0.3% of ascorbic acid, calculated with reference to the dried drug. Protect from light.

Profile

The fruits of various Rosa species, in particular the dog rose, R. canina, are used as a source of vitamin C (p.1983). Rose fruit is included in herbal preparations for constipation and urinary-tract disorders.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: Arg.: Vitamina C-Complex; Austral.: Bio C, Bioglan Mega C; Bioglan Super Cal C; C Supa + Bioflavonoids†; Flavons; Glycyrrhiza Complex†; Plantiodine Plus†; Sustained Release C; Austria: Amersan; Chile: Calcio 520; Natursel-C; Reduc-Te; Romox-ARL; Cz.: Amersan; Bronchicum Hustensirup†; Prudušková; Stoffwechseltee N†; Ger.: Nephnonrm med†; **Ital.**: Angiorex Complex; Golapiol C; Longevital; Nepiros; Sambuco (Specie Composta)†; **Molaysia**: Nat-C; **Philipp**: Delrosa; **Pol.**: Cholesof; Diabetofort; Diges-Tonic; Echinasal; Sedomix; Tiliros **Rus.**: Bron-chicum Husten (Бронжикум Сироп от Кашля); **Switz.**: A Vogel Capsules polyvitaminees†; Tisane contre les refroidissements; **Thal**: Nat-C Medicarfs; **UK**: GlucOsamax, Top C; **USA**: Amino-Opt-C; C Factors "1000" Plus; Ester-C Plus; Ester-C Plus Multi-Mineral; **Venez.**: Ro-C-Var.

Rose Oil

Attar of Rose; Esencia de Rosa; Oleum Rosae; Otto of Rose; Rosa, aceite esencial de,

Pharmacopoeias. In USNF.

USNF 26 (Rose Oil). A volatile oil distilled with steam from the fresh flowers of Rosa gallica, R. damascena, R. alba, R. centifolia, and varieties of these species (Rosaceae). It is a colourless or yellow liquid, having the characteristic odour of rose. At 25° it is a viscous liquid. On gradual cooling, it changes to a translucent, crystalline mass, easily liquefied by warming. Miscible with an equal volume of chloroform. Store in well-filled airtight containers.

Rose oil is largely employed in perfumery and toilet preparations and has been used as a flavour. It is also used in aromatherapy. It contains citronellol. Hypersensitivity reactions have been report-

Preparations

USNF 26: Stronger Rose Water; USP 31: Rose Water Ointment.

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: Arg.: Estri-Atlas; Chile: Cicapost; Ger.: Rosatum Heil-

Rosemary

Romarin; Romarin (rosemary leaf); Roris Marini; Rosmariininlehti (rosemary leaf); Rosmarin; Rosmarinblad (rosemary leaf); Rosmarini folium (rosemary leaf); Rozmaringlevél (rosemary leaf); Rozmarinų lapai (rosemary leaf); Rozmarýnový list (rosemary

Pharmacopoeias. Eur. (see p.vii) includes the dried leaf. Ph. Eur. 6.2 (Rosemary Leaf; Rosmarini Folium). The whole, dried leaf of Rosmarinus officinalis. It contains not less than 1.2% v/w of essential oil and not less than 3% of total hydroxycinnamic derivatives, expressed as rosmarinic acid $(C_{18}H_{16}O_8 = 360.3)$ both with reference to the anhydrous drug.

Profile

Rosemary (Rosmarinus officinalis, Lamiaceae) has rubefacient and mild analgesic activity when applied topically, and is included in external preparations for rheumatic and circulatory disorders. It is also reported to have carminative, spasmolytic, and diuretic effects and is included in herbal preparations for gastrointestinal, cardiovascular, and urinary-tract disorders.

Rosemary is a source of rosemary oil (below).

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: Arg.: Acnetrol; Sequals G; Austral.: Avena Complex; Multi-ingredient: Arg.: Acnetrol; Sequals G; Australz. Avena Complex; Garlic Allium Complex; Vitanox Austria: Euka; Chile: Rhus Opodeldoc; Romox-ARL; Cz.: Hertz- und Kreislauftee†; Naturland Grosser Swedenbitter†; Fr.: Depuratum; Hepax; Mediflor Tisane Contre la Constipation Passagere No 7; Mediflor Tisane Hepatique No 5; Romarene; Ger.: Canephron; JuViton†; Melissengeist; Seda-Plantina†; Mon.: Romarinex; Pol.: Cardiactiv; Rus.: Canephron N (Kaнeфpon H); Spain: Linimento Naion; Mesatll†; Natusor Hepavesical†; Natusor Low Blood Pressure†; Natusor Sinulan†; Resolutivo Regium; Switz.: Phytomed Cardio; Venez.: Floraden Cardio; **Venez.:** Flocadep.

Rosemary Oil

Esencia de Romero; Essence de Romarin; Essência de Alecrim; Oleum Roris Marini: Oleum Rosmarini: Romarin, huile essentielle de; Romero, aceite esencial de; Rosmariiniöliy; Rosmarini aetheroleum; Rosmarini Etheroleum; Rosmarinöl; Rosmarinolja; Rozmaringolaj; Rozmarinų eterinis aliejus; Rozmarýnová silice.

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

Ph. Eur. 6.2 (Rosemary Oil). The essential oil obtained by steam distillation from the flowering aerial parts of Rosmarinus officinalis. It is available as Spanish type rosemary oil and Moroccan and Tunisian type rosemary oil. Spanish type rosemary oil contains 2.0 to 4.5% borneol, 0.5 to 2.5% bornyl acetate, 8.0 to 12.0% camphene, 13.0 to 21.0% camphor, 16.0 to 25.0% cineole, 1.0 to 2.2% *p*-cymene, 2.5 to 5.0% limonene, 1.5 to 5.0% βmyrcene, 18 to 26% α-pinene, 2.0 to 6.0% β-pinene, 1.0 to 3.5% α-terpineol, and 0.7 to 2.5% verbenone. Moroccan and Tunisian type rosemary oil contains 1.5 to 5.0% borneol, 0.1 to 1.5% bornyl acetate, 2.5 to 6.0% camphene, 5.0 to 15.0% camphor, 38.0 to 55.0% cineole, 0.8 to 2.5% p-cymene, 1.5 to 4.0% limonene, 1.0 to 2.0% β-myrcene, 9.0 to 14.0% α-pinene, 4.0 to 9.0% βpinene, 1.0 to 2.6% α-terpineol, and a maximum of 0.4% verbenone.

A clear, mobile, colourless to pale yellow liquid with a characteristic odour. Store in well-filled airtight containers at a temperature not exceeding 25°. Protect from light.

Profile

Rosemary oil is carminative and mildly irritant. It is used in perfumery and as a flavour and has been employed in hair lotions. inhalations, and liniments. It is also used in aromatherapy.

Proprietary Preparations (details are given in Part 3)

Ger.: Caprisanat: Rosapinol.

Multi-ingredient: Arg.: Bano Liquido con Eucalipto†; Austral.: Bacopa Complex: Bosisto's Vaporising Ointment; Euky Bearub; Tixylix Chest Rub†; Austria: Berggeist; Carl Baders Divinal; Criniton; Opino; Pulmex; Rheuma; Rowalind; Salhumin; Belg.: Perubore; Pulmex; Pulmex Baby, Braz.: Alivioi; Analgen†; Benegel; Geliflex; Gelol†; Gelonevral†; Mialgex†; Nevrol; Chile: Agua del Carmen; Agua Melisa Carminativa; Lefkaflam; Pulmex†; Cz.: Pul-Analgen; Benegei; Gelliex; Geloir; Gelonevral; Mialgex; Nevroi; ChrieAgua del Carmeri, Agua Melisa Carminativa; Lefkaflam; Pulmex; Cz.: Pulmex Babyt; Pulmex; Thrombocid; Fr.: Aromasol; Dinacode†; Item Lentes;
Maghora; Perubore; Ger.: Arthrodeformat P†; Arthrodynat P†; Cor-Vel;
Crinton†; Dolo-cyl; Hingfong-Essenz Hofmanns; Leukona-Kreislauf-Bad†;
Leukona-Rheumasalbe†; Polio-elan; Retterspitz Ausserlich; Retterspitz
Quick Rheuma Bad; Rosarthron†; Tetsespt Badekonzentrat Rheuma Bad†;
Thrombocid; Top-Sabona†; Vaxicum NA†; Weleda-Rheumasalbe M; Gr.:
Opino-jel; Indon.: Opino; Ikal.: Calyptol; Cinarepa; Neuralta Migren; Valda
Propoli; Vicks Baby Balsam†; Maloysia: Purporent†; NZ: Electric Blue
Headlice; Toylix Chest Rub; Vicks Baby Balsam; Pol.: Argol Rheuma: Aromagel; Depulol; Pulmex Baby, Port.: Thrombocid; Rus.: Carmolis Fluid
(Кармомис Жидкостъ)†; Pulmex (Пумьмекс); Pulmex Baby (Пумьмекс
Бэби); Theraflu Bro (Терафио Бро); S.Afr.: Arnica Massage Oli; Balsem
Vita GEEL; Balsem Vita ROOI; Entressdruppels HM; Oleum Salviae Comp;
Rooilavental; Studiruppels; Spain: Beta Romero; Dolokey; Linimento Klari†;
Masagil; Tonimax; Switz.: Carmol; Carmol Plus†; Frigoplasma†; Frixo-Dragon Vert†; Liberol Bain†; Nasobol N; Novital; Perskindol Classic; Perubare†;
Pulmex; Pulmex Baby, Spagyrom; Thrombocid; Wolo Medicinal bain
antirhumatismal; Ziegella; UK; Adiantine; Arnica Massage Balm; Medicated
Extract of Rosemary; Soothol.

Roxarsone (BAN, USAN, rINN)

NSC-2101; Roxarsona; Roxarsonum. 4-Hydroxy-3-nitrophenylarsonic acid.

Роксарсон

 $C_6H_6AsNO_6 = 263.0$ CAS - 121-19-7.

Pharmacopoeias. In *US* for veterinary use only.

USP 31 (Roxarsone). A pale yellow, crystalline powder. Slightly soluble in cold water; soluble in boiling water; freely soluble in dehydrated alcohol, in acetic acid, in acetone, in methyl alco-