9. Klieser E, *et al.* Randomized, double-blind, controlled trial of risperidone versus clozapine in patients with chronic schizophrenia. *J Clin Psychopharmacol* 1995; **15** (suppl 1): 45S–51S.
10. Gilbody SM, *et al.* Risperidone versus other atypical antipsychotic medication for schizophrenia. Available in The Cochrane Database of Systematic Reviews; Issue 3. Chichester: John Wiley; 2000 (accessed 30/05/05).
11. Csernansky JG, *et al.* A comparison of risperidone and haloperidol for the prevention of relapse in patients with schizophrenia. *N Engl J Med* 2002; **346:** 16–22.
12. Hosalli P, Davis JM. Depot risperidone for schizophrenia. Available in The Cochrane Database of Systematic Reviews; Issue 4. Chichester: John Wiley; 2003 (accessed 30/05/05).

Stuttering. Risperidone 0.5 to 2 mg daily was found to be of benefit in the management of stuttering in a placebo-controlled study[1] involving 16 patients but there has also been a case report[2] of a patient whose stuttering returned during treatment with risperidone.

1. Maguire GA, *et al.* Risperidone for the treatment of stuttering. *J Clin Psychopharmacol* 2000; **20:** 479–82.
2. Lee H-J, *et al.* A case of risperidone-induced stuttering. *J Clin Psychopharmacol* 2001; **21:** 115–16.

Tourette's syndrome. When drug treatment is required for tics and behavioural disturbances in Tourette's syndrome (see Tics, p.954) haloperidol or pimozide are commonly used but atypical antipsychotics, especially risperidone, are being increasingly tried.[1-3]

1. Bruun RD, Budman CL. Risperidone as a treatment for Tourette's syndrome. *J Clin Psychiatry* 1996; **57:** 29–31.
2. Bruggeman R, *et al.* Risperidone versus pimozide in Tourette's disorder: a comparative double-blind parallel-group study. *J Clin Psychiatry* 2001; **62:** 50–6.
3. Scahill L, *et al.* A placebo-controlled trial of risperidone in Tourette syndrome. *Neurology* 2003; **60:** 1130–5.

Preparations

USP 31: Risperidone Tablets.

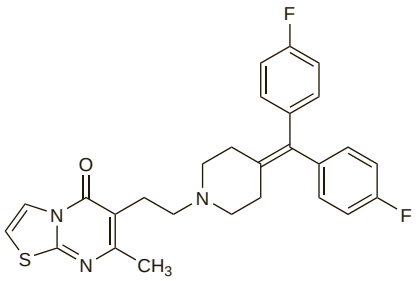
Proprietary Preparations (details are given in Part 3)
Arg.: Dozic; Dropicine; Edalen; Restelea; Riatul; Risper; Risperdal; Risperin; Rispex; Sequinan; ***Austral.:*** Risperdal; ***Austria:*** Belivon†; Risperdal; Rispolin; ***Belg.:*** Risperdal; ***Braz.:*** Respidon; Risperdal; Viverdal; Zargus; ***Canad.:*** Risperdal; ***Chile:*** Dagotil; Goval; Radigen; Risperdal; Spiron; ***Cz.:*** Apo-Risper; Medorisper; Ridoner; Rigenin; Rileptid; Ripetomar; Risepro; Rispadim; Rispedep; Rispedolet; Rispedospes; Rispemar; Rispen; Rispera; Risperdal; Risperinin; Risperit; Rispimed; Rispolux; Risset; Rorendo; ***Denm.:*** Risperdal; ***Fin.:*** Risperdal; ***Fr.:*** Risperdal; ***Ger.:*** Risperdal; ***Gr.:*** Adovia; Axelabron; Depolan; Depredon; Dixine; Helposper; Isipredon; Lassen; Lucipral; Nerve; Novoris; Preridon; Rifocus; Ripepral; Risenar; Risgal; Risidral; Rispalm; Rispefar; Risperascol; Risperdal; Risperom; Risperoprol; Rispogen; Wisperdon; Zafitral; ***Hong Kong:*** Risperdal; ***Hung.:*** Hunperdal; Perdox; Ripedon; Risperdal; Rispolux; Rispons; Ronkal; Rosipin; Torendo; Ziperid; ***India:*** Respidon; Risnia; Risperdal; Rispid†; Rozidal; Sizorisp†; ***Indon.:*** Neripros; Persidal; Risperdal; Rizodal; Zofredal; ***Irl.:*** Risperdal; ***Israel:*** Risperdal; ***Ital.:*** Belivon; Risperdal; ***Jpn:*** Risperdal; ***Malaysia:*** Risperdal; ***Mex.:*** Risperdal; ***Neth.:*** Belivon; Risperdal; Rispimed; Rispimedica; ***Norw.:*** Risperdal; ***NZ:*** Ridal; Risperdal; ***Philipp.:*** Risperdal; ***Pol.:*** Lioxam; Mepharis; Rispen; Risperatio; Risperiwin; Risperon; Rispolept; Rispolux; Risset; Ryspolit; Speridan; Ziperid; ***Port.:*** Belivon†; Perdin; Risperdal; ***Rus.:*** Rileptid (Рилептид); Risdonal (Рисдонал); Rispolept (Рисполепт); Risset (Риссет); Speridan (Сперидан); ***S.Afr.:*** Risperdal; ***Singapore:*** Risperdal; ***Spain:*** Arketin; Diaforin; Risfarmal; Risperdal; ***Swed.:*** Risperdal; ***Switz.:*** Risperdal; ***Thai.:*** Risperdal; ***Turk.:*** Risperdal; ***UK:*** Risperdal; ***USA:*** Risperdal; ***Venez.:*** Ridal; Risperdal; Risperid.

Ritanserin *(BAN, USAN, rINN)*

R-55667; Ritanserina; Ritansérine; Ritanserinum. 6-{2-[4-(4,4′-Difluorobenzhydrylidene)piperidino]ethyl}-7-methyl[1,3]thiazolo[3,2-*a*]pyrimidin-5-one.

Ритансерин

$C_{27}H_{25}F_2N_3OS$ = 477.6.
CAS — 87051-43-2.



Profile

Ritanserin is a serotonin antagonist that has been studied in a variety of disorders including anxiety disorders, depression, and schizophrenia. It is reported to have little sedative action.

Action. Ritanserin is a relatively selective antagonist at serotonin (5-hydroxytryptamine, 5-HT) receptors of the 5-HT_2 subtype, although it also has appreciable affinity for 5-HT_{1C} receptors.[1] Unlike ketanserin (p.1320), it does not block α_1-adrenergic receptors. Ritanserin has anxiolytic activity; it also hastens the onset of slow-wave sleep although sleep may be impaired on withdrawal.

Ritanserin may interfere with platelet function[2,3] but has been reported to have no significant effect on blood pressure, blood flow, or heart rate in patients with hypertension.[2,4] Features characteristic of class III antiarrhythmic activity have also been noted.[2]

1. Marsden CA. The pharmacology of new anxiolytics acting on 5-HT neurones. *Postgrad Med J* 1990; **66** (suppl 2): S2–S6.
2. Stott DJ, *et al.* The effects of the 5HT antagonist ritanserin on blood pressure and serotonin-induced platelet aggregation in patients with untreated essential hypertension. *Eur J Clin Pharmacol* 1988; **35:** 123–9.
3. Wagner B, *et al.* Effect of ritanserin, a 5-hydroxytryptamine - receptor antagonist, on platelet function and thrombin generation at the site of plug formation in vivo. *Clin Pharmacol Ther* 1990; **48:** 419–23.
4. Chau NP, *et al.* Comparative haemodynamic effects of ketanserin and ritanserin in the proximal and distal upper limb circulations of hypertensive patients. *Eur J Clin Pharmacol* 1989; **37:** 215–20.

Substance dependence. Despite some encouraging preliminary data[1] suggesting that ritanserin might influence the desire to drink alcohol, subsequent studies[2,3] have failed to support a role for ritanserin in patients with *alcohol* dependence (p.1626).

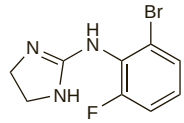
1. Meert TF. Ritanserin and alcohol abuse and dependence. *Alcohol Alcohol* 1994; **2** (suppl): 523–30.
2. Johnson BA, *et al.* Ritanserin Study Group. Ritanserin in the treatment of alcohol dependence—a multi-center clinical trial. *Psychopharmacology (Berl)* 1996; **128:** 206–15.
3. Wiesbeck GA, *et al.* The effects of ritanserin on mood, sleep, vigilance, clinical impression, and social functioning in alcohol-dependent individuals. *Alcohol Alcohol* 2000; **35:** 384–9.

Romifidine *(BAN, rINN)*

Romifidiini; Romifidin; Romifidina; Romifidinum; STH-2130. 2-Bromo-6-fluoro-*N*-(1-imidazolin-2-yl)aniline.

Ромифидин

$C_9H_9BrFN_3$ = 258.1.
CAS — 65896-16-4.
ATC Vet — QN05CM93.



Profile

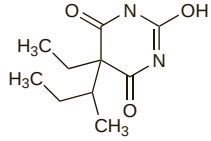
Romifidine is an α_2-adrenoceptor agonist with sedative, muscle relaxant, and analgesic properties and is used in veterinary medicine.

Secbutabarbital *(rINN)*

Butabarbital; Butabarbitone; Secbutabarbitalum; Secbutobarbital *(BAN)*; Secbutobarbitone. 5-sec-Butyl-5-ethylbarbituric acid.

Секбутабарбитал

$C_{10}H_{16}N_2O_3$ = 212.2.
CAS — 125-40-6.



NOTE. Butabarbital should be distinguished from Butobarbital (p.967).

Pharmacopoeias. In *US*.
USP 31 (Butabarbital). A white, odourless, crystalline powder. Very slightly soluble in water; soluble in alcohol, in chloroform, in ether, and in aqueous solutions of alkali hydroxides and carbonates. Store in airtight containers.

Secbutabarbital Sodium *(rINNM)*

Butabarbital Sodium; Natrii Secbutabarbitalum; Secbutabarbital sódico; Secbutabarbital Sodique; Secbutobarbital Sodium *(BANM)*; Secbutobarbitone Sodium; Secumalnatrium; Sodium Butabarbital. Sodium 5-sec-butyl-5-ethylbarbiturate.

Натрий Секбутабарбитал

$C_{10}H_{15}N_2NaO_3$ = 234.2.
CAS — 143-81-7.

Pharmacopoeias. In *US*.
USP 31 (Butabarbital Sodium). A white powder. Soluble 1 in 2 of water, 1 in 7 of alcohol, and 1 in 7000 of chloroform; practically insoluble in absolute ether. pH of a 10% solution in water is between 10.0 and 11.2. Store in airtight containers.

Profile

Secbutabarbital is a barbiturate with general properties similar to those of amobarbital (p.961). It was used as a hypnotic and sedative although barbiturates are no longer considered appropriate for such purposes. For the short-term management of insomnia (p.957) it was usually given as the sodium salt in oral doses of 50 to 100 mg at night; as a sedative 15 to 30 mg has been given 3 or 4 times daily. Secbutabarbital base has also been given.

Preparations

USP 31: Butabarbital Sodium Elixir; Butabarbital Sodium Tablets.

Proprietary Preparations (details are given in Part 3)
USA: Butisol.

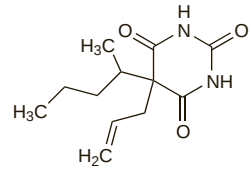
Multi-ingredient: ***USA:*** Butibel; Phenazopyridine Plus; Urelief Plus; ***Venez.:*** Butropina; Eumidral.

Secobarbital *(rINN)*

Meballymal; Quinalbarbitone; Sécobarbital; Secobarbitalum; Secobarbitone; Sekobarbitaali. 5-Allyl-5-(1-methylbutyl)barbituric acid.

Секобарбитал

$C_{12}H_{18}N_2O_3$ = 238.3.
CAS — 76-73-3.
ATC — N05CA06.
ATC Vet — QN05CA06; QN51AA02.



NOTE. The following terms have been used as 'street names' (see p.vi) or slang names for various forms of secobarbital: F-40s; Marshmallow reds; M&Ms; Mexican reds; Pink ladies; Pink lady; Pinks; RDs; Red birds; Red bullets; Red devil; Red devils; Red dolls; Red lillies; Reds; Seccies; Seccy; Seco; Seggy.

Pharmacopoeias. In *US*.
USP 31 (Secobarbital). A white amorphous or crystalline odourless powder. Very slightly soluble in water; freely soluble in alcohol, in ether, and in solutions of fixed alkali hydroxides and carbonates; soluble in chloroform; soluble 1 in 8.5 of 0.5N sodium hydroxide. A saturated solution in water has a pH of about 5.6. Store in airtight containers.

Secobarbital Sodium *(BAN, rINNM)*

Meballymalnatrium; Natrii Secobarbitalum; Quinalbarbitone Sodium; Secobarbital sódico; Sécobarbital Sodique; Secobarbitalum Natricum; Secobarbitone Sodium. Sodium 5-allyl-5-(1-methylbutyl)barbiturate.

Натрий Секобарбитал

$C_{12}H_{17}N_2NaO_3$ = 260.3.
CAS — 309-43-3.
ATC — N05CA06.
ATC Vet — QN05CA06.

Pharmacopoeias. In *Chin.* and *US*.
USP 31 (Secobarbital Sodium). A white odourless hygroscopic powder. Very soluble in water; soluble in alcohol; practically insoluble in ether. pH of a 10% solution in water is between 9.7 and 10.5. Solutions decompose on standing, heat accelerating the decomposition. Store in airtight containers.

Incompatibility. Secobarbital may be precipitated from preparations containing secobarbital sodium depending on the concentration and pH. Secobarbital sodium has, therefore, been reported to be incompatible with many other drugs, particularly acids and acidic salts.

Dependence and Withdrawal

As for Amobarbital, p.962.

Adverse Effects, Treatment, and Precautions

As for Amobarbital, p.962.

Breast feeding. No adverse effects have been seen in breast-fed infants whose mothers were receiving secobarbital, and the American Academy of Pediatrics considers[1] that it is therefore usually compatible with breast feeding. However, for the view that barbiturates should not be used in women who are breast feeding, see under Amobarbital, p.962.

1. American Academy of Pediatrics. The transfer of drugs and other chemicals into human milk. *Pediatrics* 2001; **108:** 776–89. Correction. *ibid.*; 1029. Also available at: http://aappolicy.aappublications.org/cgi/content/full/pediatrics%3b108/3/776 (accessed 28/04/04)

Industrial exposure. Exposure to secobarbital sodium among 6 workers in the pharmaceutical industry resulted in absorption of substantial amounts of the drug, with blood concentrations approaching those expected after a therapeutic dose.[1] There continued to be evidence of absorption, despite protective masks to reduce inhalation, and it appeared that substantial absorption was taking place through the skin.

1. Baxter PJ, *et al.* Exposure to quinalbarbitone sodium in pharmaceutical workers. *BMJ* 1986; **292:** 660–1.