

Hyponatraemia, possibly as a result of inappropriate secretion of antidiuretic hormone, has been associated with the use of antidepressants, particularly in the elderly.

**Effects on the CNS.** Episodes of sleepwalking (somnambulism) were seen in an 18-year-old woman several weeks after starting reboxetine (at an initial dose of 2 mg daily gradually increased to 8 mg daily).<sup>1</sup> The patient had a history of childhood somnambulism that had resolved spontaneously; these particular episodes ceased after the dose of reboxetine was reduced to 4 mg daily.

1. Künzel HE, *et al.* Sleepwalking associated with reboxetine in a young female patient with major depression: a case report. *Pharmacopsychiatry* 2004; **37**: 307–8.

**Effects on the endocrine system.** Hyponatraemia thought to be associated with reboxetine therapy and to be due to the syndrome of inappropriate antidiuretic hormone secretion, has been reported in an elderly patient.<sup>1</sup>

1. Ranieri P, *et al.* Reboxetine and hyponatremia. *N Engl J Med* 2000; **342**: 215–16.

**Effects on sexual function.** The Australian Adverse Drug Reactions Advisory Committee has received 130 reports of adverse reactions associated with reboxetine use;<sup>1</sup> of these, 22 described male sexual dysfunction including ejaculation disorder (7), erectile dysfunction (4), and testicular pain or swelling (10). In addition there were 2 reports of increased libido in women.

1. Adverse Drug Reactions Advisory Committee (ADRAC). Genitourinary symptoms with reboxetine. *Aust Adverse Drug React Bull* 2005; **24**: 10. Also available at: <http://www.tga.gov.au/adr/aadr/aadr0506.pdf> (accessed 24/11/05)

**Effects on the urinary system.** The Australian Adverse Drug Reactions Advisory Committee has received 26 reports of urinary symptoms such as hesitancy, reduced urine flow, and retention in patients taking reboxetine.<sup>1</sup> Although the majority of cases occurred in male patients, 6 reports mentioned such symptoms in women.

1. Adverse Drug Reactions Advisory Committee (ADRAC). Genitourinary symptoms with reboxetine. *Aust Adverse Drug React Bull* 2005; **24**: 10. Also available at: <http://www.tga.gov.au/adr/aadr/aadr0506.pdf> (accessed 24/11/05)

### Treatment of Adverse Effects

Symptomatic and supportive therapy should be given as required; activated charcoal may be given to adults who have ingested more than 40 mg of reboxetine, and to children, if they present within 1 hour of ingestion. Heart rhythm should be monitored if changes in blood pressure occur.

**Genito-urinary disorders.** Tamsulosin has been used successfully in the treatment of urinary hesitancy and painful ejaculation associated with reboxetine (see p.2197).

### Precautions

Reboxetine should be used with caution in patients with renal or hepatic impairment. It should also be used under close supervision in patients with bipolar disorder, urinary retention, benign prostatic hyperplasia, glaucoma, or a history of epilepsy or cardiac disorders.

Patients should be closely monitored during early therapy until significant improvement in depression is observed because suicide is an inherent risk in depressed patients. For further details, see under Depression, p.373. Suicidal thoughts and behaviour may also develop during early treatment with antidepressants for other disorders; the same precautions observed when treating patients with depression should therefore be observed when treating patients with other disorders.

Ability to perform tasks requiring motor or cognitive skills or judgement may be impaired by reboxetine and patients, if affected, should not drive or operate machinery.

**Children.** Reboxetine has not been studied for the treatment of depression in children and consequently its use in such patients is not recommended by UK licensed product information. In addition, other antidepressants have been shown to increase the risk of suicidal thoughts and behaviour in children and adolescents (see Effects on Mental State, under Fluoxetine, p.392).

**The elderly.** Reboxetine is not recommended by UK licensed product information for use in elderly patients, because of a lack of experience in this patient group. However, reboxetine 2 mg twice daily by mouth was well tolerated in a study in 16 elderly patients (mean age 77.5 years) with post-stroke depression.<sup>1</sup>

1. Rampello L, *et al.* An evaluation of efficacy and safety of reboxetine in elderly patients affected by "retarded" post-stroke depression: a random, placebo-controlled study. *Arch Gerontol Geriatr* 2005; **40**: 275–85.

The symbol † denotes a preparation no longer actively marketed

### Interactions

Reboxetine should not be taken with, or within 2 weeks of stopping, an MAOI; at least one week should elapse after stopping reboxetine therapy before starting any drug liable to provoke a serious reaction (e.g. phenelzine). Caution should be exercised when reboxetine is given with other drugs that lower blood pressure because orthostatic hypotension has occurred with reboxetine. However, the use of reboxetine with ergot derivatives may cause an increase in blood pressure. The possibility of hypokalaemia if reboxetine is given with potassium-depleting diuretics should also be considered.

Reboxetine is primarily metabolised by the cytochrome P450 isoenzyme CYP3A4 and potent inhibitors of this isoenzyme may limit the elimination of reboxetine. Consequently, reboxetine should not be given with drugs known to inhibit CYP3A4 such as azole antifungals (e.g. ketoconazole), macrolide antibacterials (e.g. erythromycin) or fluvoxamine. Reboxetine in high concentrations has also been shown *in vitro* to inhibit CYP3A4 and CYP2D6; however studies *in vivo* have suggested that interactions with drugs metabolised by these isoenzymes are unlikely.

**Antifungals.** Plasma levels of reboxetine were significantly increased when given with ketoconazole.<sup>1</sup> The interaction was said to have involved the inhibition of the cytochrome P450 isoenzyme CYP3A4 by ketoconazole.

1. Herman BD, *et al.* Ketoconazole inhibits the clearance of the enantiomers of the antidepressant reboxetine in humans. *Clin Pharmacol Ther* 1999; **66**: 374–9.

### Pharmacokinetics

Reboxetine is well absorbed from the gastrointestinal tract with peak plasma levels occurring after about 2 hours. Plasma protein binding is about 97% (92% in elderly subjects). *In-vitro* studies indicate that reboxetine is metabolised by the cytochrome P450 isoenzyme CYP3A4; the main metabolic pathways identified are dealkylation, hydroxylation, and oxidation followed by glucuronide or sulfate conjugation. Elimination is mainly via urine (78%) with 10% excreted as unchanged drug. The plasma elimination half-life is 13 hours. Data from *animal* studies indicate that reboxetine crosses the placenta and is distributed into breast milk.

#### References

- Dostert P, *et al.* Review of the pharmacokinetics and metabolism of reboxetine, a selective noradrenaline reuptake inhibitor. *Eur Neuropsychopharmacol* 1997; **7** (suppl 1): S23–S35.
- Fleishaker JC. Clinical pharmacokinetics of reboxetine, a selective norepinephrine reuptake inhibitor for the treatment of patients with depression. *Clin Pharmacokinet* 2000; **39**: 413–27.
- Coulomb F, *et al.* Pharmacokinetics of single-dose reboxetine in volunteers with renal insufficiency. *J Clin Pharmacol* 2000; **40**: 482–7.
- Poggesi I, *et al.* Pharmacokinetics of reboxetine in elderly patients with depressive disorders. *Int J Clin Pharmacol Ther* 2000; **38**: 254–9.

### Uses and Administration

Reboxetine is a selective and potent inhibitor of the reuptake of noradrenaline; it also has a weak effect on serotonin reuptake. Reboxetine has no significant affinity for muscarinic receptors. It is given orally as the mesilate for the treatment of depression with doses expressed as the base. Reboxetine mesilate 5.2 mg is equivalent to about 4 mg of reboxetine. The dose of reboxetine is 4 mg twice daily, which may be increased after 3 to 4 weeks, if necessary, to 10 mg daily; the maximum daily dose should not exceed 12 mg. Reduced doses should be given in hepatic or renal impairment, see below. Reboxetine is not recommended for use in elderly patients (see under Precautions, above).

Antidepressants should be withdrawn gradually to reduce the risk of withdrawal symptoms.

**Administration in hepatic or renal impairment.** Lower initial oral doses equivalent to 2 mg of reboxetine twice daily are recommended by UK licensed product information in hepatic or renal impairment; doses may be increased thereafter according to tolerance.

**Anxiety disorders.** Reboxetine has been tried with some benefit in panic disorder (p.952) although it may be less effective than the SSRIs.

### References

- Versiani M, *et al.* Reboxetine, a selective norepinephrine reuptake inhibitor, is an effective and well-tolerated treatment for panic disorder. *J Clin Psychiatry* 2002; **63**: 31–7.
- Seedat S, *et al.* Reboxetine and citalopram in panic disorder: a single-blind, cross-over, flexible-dose pilot study. *Int Clin Psychopharmacol* 2003; **18**: 279–84.
- Bertani A, *et al.* Comparison of the treatment with paroxetine and reboxetine in panic disorder: a randomized, single-blind study. *Pharmacopsychiatry* 2004; **37**: 206–10.

**Depression.** As discussed on p.373, there is very little difference in efficacy between the different groups of antidepressant drugs, and choice is often made on the basis of adverse effect profile. Reboxetine, a selective inhibitor of noradrenaline reuptake, has a slightly different biochemical profile from both the tricyclics and the SSRIs; however, like the SSRIs, reboxetine appears to have fewer unpleasant adverse effects and to be safer in overdose in comparison with the older tricyclics.

#### References

- Versiani M, *et al.* Reboxetine, a unique selective NRI, prevents relapse and recurrence in long-term treatment of major depressive disorder. *J Clin Psychiatry* 1999; **60**: 400–406.
- Holm KJ, Spencer CM. Reboxetine: a review of its use in depression. *CNS Drugs* 1999; **12**: 65–83.
- Scates AC, Doraiswamy PM. Reboxetine: a selective norepinephrine reuptake inhibitor for the treatment of depression. *Ann Pharmacother* 2000; **34**: 1302–12.
- Versiani M, *et al.* Double-blind, placebo-controlled study with reboxetine in inpatients with severe major depressive disorder. *J Clin Psychopharmacol* 2000; **20**: 28–34.
- Ferguson JM, *et al.* Effects of reboxetine on Hamilton Depression Rating Scale factors from randomized, placebo-controlled trials in major depression. *Int Clin Psychopharmacol* 2002; **17**: 45–51.
- Andreoli V, *et al.* Reboxetine, a new noradrenaline selective antidepressant, is at least as effective as fluoxetine in the treatment of depression. *J Clin Psychopharmacol* 2002; **22**: 393–9.
- Montgomery S, *et al.* The antidepressant efficacy of reboxetine in patients with severe depression. *J Clin Psychopharmacol* 2003; **23**: 45–50.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Arg.:** Prolift†; **Austral.:** Edronax; **Austria:** Edronax; **Belg.:** Edronax; **Braz.:** Prolift; **Chile:** Prolift; **Cz.:** Edronax†; **Denm.:** Edronax; **Fin.:** Edronax; **Ger.:** Edronax; **Hung.:** Edronax; **India:** Narebox; **Irl.:** Edronax; **Israel:** Edronax; **Ital.:** Davedax; **Edronax. Mex.:** Mex.; **Norw.:** Edronax; **NZ:** Edronax; **Pol.:** Edronax; **Port.:** Edronax; **S.Afr.:** Edronax; **Spain:** Irenor; **Norebox. Swed.:** Edronax; **Switz.:** Edronax; **Turk.:** Edronax; **UK:** Edronax; **Venez.:** Prolift†.

## Sertraline Hydrochloride

(BANM, USAN, rINN/M)

CP-51974-01; CP-51974-1; Hidrocloruro de sertralina; Sertraline, chlorhydrate de; Sertralini hydrochloridum. (1S,4S)-4-(3,4-Dichlorophenyl)-1,2,3,4-tetrahydro-1-naphthyl(methyl)amine hydrochloride.

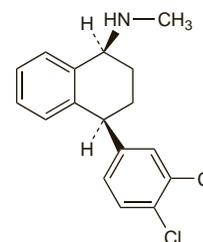
Сертралина Гидрохлорид

C<sub>17</sub>H<sub>17</sub>Cl<sub>2</sub>N.HCl = 342.7.

CAS — 79617-96-2 (sertraline); 79559-97-0 (sertraline hydrochloride).

ATC — N06AB06.

ATC Vet — QN06AB06.



(sertraline)

NOTE. The following terms have been used as 'street names' (see p.vi) or slang names for various forms of sertraline: Z's; Zloft; Zoomers.

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

**Ph. Eur. 6.2** (Sertraline Hydrochloride). A white or almost white, crystalline powder. It exhibits polymorphism. Slightly soluble in water; freely soluble in anhydrous alcohol; slightly soluble in acetone and in isopropyl alcohol. Protect from light.

### Adverse Effects, Treatment, and Precautions

As for SSRIs in general (see Fluoxetine, p.391). Menstrual irregularities and, rarely, erythema multiforme and pancreatitis have also been reported.

Sertraline should be used with caution in patients with hepatic or renal impairment; reduced doses should be considered in patients with hepatic impairment.

**Breast feeding.** For comments on the use of SSRIs in breast feeding patients, see under Precautions for Fluoxetine, p.394.

**Children.** SSRIs are associated with an increased risk of potentially suicidal behaviour when used for the treatment of depression in children and adolescents under 18 years old; for further details, see under Effects on Mental State in Fluoxetine, p.392.

### Interactions

For interactions associated with SSRIs, see Fluoxetine, p.396.

### Pharmacokinetics

Sertraline is slowly absorbed from the gastrointestinal tract with peak plasma concentrations occurring about 4.5 to 8.4 hours after ingestion. It undergoes extensive first-pass metabolism in the liver. The main pathway is demethylation to inactive *N*-desmethylsertraline, a process that appears to involve multiple cytochrome P450 isoenzymes; further metabolism and glucuronide conjugation occurs. Sertraline is widely distributed throughout body tissues and is about 98% bound to plasma proteins. The plasma elimination half-life of sertraline is reported to be about 26 hours; steady-state concentrations are achieved after about one week with regular oral doses. Sertraline is excreted in about equal amounts in the urine and faeces, mainly as metabolites. Sertraline is distributed into breast milk (see Breast Feeding under Precautions in Fluoxetine, p.394).

#### References

1. Preskorn SH, ed. Sertraline: a pharmacokinetic profile. *Clin Pharmacokinet* 1997; **32** (suppl 1): 1–55.
2. Hiemke C, Härter S. Pharmacokinetics of selective serotonin reuptake inhibitors. *Pharmacol Ther* 2000; **85**: 11–28.
3. Wang J-H, et al. Pharmacokinetics of sertraline in relation to genetic polymorphism of CYP2C19. *Clin Pharmacol Ther* 2001; **70**: 42–7.
4. DeVane CL, et al. Clinical pharmacokinetics of sertraline. *Clin Pharmacokinet* 2002; **41**: 1247–66.
5. Obach RS, et al. Sertraline is metabolized by multiple cytochrome P450 enzymes, monoamine oxidases, and glucuronyl transferases in human: an in vitro study. *Drug Metab Dispos* 2005; **33**: 262–70.

### Uses and Administration

Sertraline, a naphthaleneamine derivative, is an SSRI with actions and uses similar to those of fluoxetine (p.397). It is given orally as sertraline hydrochloride as a single dose in the morning or evening. Doses are expressed in terms of the base; sertraline hydrochloride 56 mg is equivalent to about 50 mg of sertraline.

In the treatment of **depression**, the usual initial dose of sertraline is 50 mg daily increased, if necessary, in increments of 50 mg at intervals of at least a week to a maximum of 200 mg daily.

The usual initial dose of sertraline in **obsessive-compulsive disorder** is 50 mg daily. In the treatment of **panic disorder** with or without agoraphobia, **social anxiety disorder**, and **post-traumatic stress disorder**, the usual initial dose is 25 mg daily increased after one week to 50 mg daily. Thereafter, doses in all these disorders may be increased, if necessary, in increments of 50 mg at intervals of at least a week to a maximum of 200 mg daily.

Sertraline is also given for the treatment of obsessive-compulsive disorder in *children and adolescents* aged 6 years and over. In children aged 6 to 12 years the usual initial dose is 25 mg once daily; adolescents may be started on 50 mg once daily. Increases in doses, if necessary, are similar to those in adults; however, the lower body-weights of children should be considered in order to avoid excessive doses.

In the treatment of **premenstrual dysphoric disorder**, sertraline is given in an initial dose of 50 mg daily either throughout the menstrual cycle or during the luteal phase only, as appropriate. Doses may be increased by 50 mg each menstrual cycle up to a maximum of 150 mg daily for continuous dosing or 100 mg daily when dosing during the luteal phase only. Those patients who require 100 mg daily during luteal phase-only dosing should initially be given 50 mg daily for the first 3 days of each luteal phase dosing period.

Once the optimal therapeutic response is obtained dosage should be reduced to the lowest effective level for maintenance.

Reduced doses are recommended in patients with hepatic impairment, see below.

Sertraline should be withdrawn gradually to reduce the risk of withdrawal symptoms.

**Administration in hepatic impairment.** The clearance of sertraline was reduced in patients with liver cirrhosis, in a single-dose pharmacokinetic study.<sup>1</sup> US licensed product information states that in a small group of patients with chronic mild impairment (Child-Pugh scores of 5 to 8), given 50 mg daily for 21 days, exposure to sertraline was about 3 times that found in subjects with normal hepatic function. It also states that the effects of sertraline have not been studied in moderate and severe impairment. If sertraline is to be used in patients with hepatic impairment, it suggests that the drug should be used with caution and given at a lower dose or less frequently. UK product information considers sertraline to be contra-indicated in significant hepatic impairment, because of insufficient clinical experience.

1. Démolis J-L, et al. Influence of liver cirrhosis on sertraline pharmacokinetics. *Br J Clin Pharmacol* 1996; **42**: 394–7.

**Anxiety disorders.** Sertraline has been given in a variety of anxiety disorders (p.952) including obsessive-compulsive disorder (p.952), panic disorder (p.952), social anxiety disorder (see under Phobic Disorders, p.953), and post-traumatic stress disorder (p.953).

#### References

1. March JS, et al. Sertraline in children and adolescents with obsessive-compulsive disorder: a multicenter randomized controlled trial. *JAMA* 1998; **280**: 1752–6.
2. Lundborg PD, et al. Sertraline in the treatment of panic disorder. A multi-site, double-blind, placebo-controlled, fixed-dose investigation. *Br J Psychiatry* 1998; **173**: 54–60.
3. Brady K, et al. Efficacy and safety of sertraline treatment of posttraumatic stress disorder: a randomized controlled trial. *JAMA* 2000; **283**: 1837–44.
4. Walker JR, et al. Prevention of relapse in generalized social phobia: results of a 24-week study in responders to 20 weeks of sertraline treatment. *J Clin Psychopharmacol* 2000; **20**: 636–44.
5. Rynn MA, et al. Placebo-controlled trial of sertraline in the treatment of children with generalized anxiety disorder. *Am J Psychiatry* 2001; **158**: 2008–14.
6. Rapaport MH, et al. Sertraline treatment of panic disorder: results of a long-term study. *Acta Psychiatr Scand* 2001; **104**: 289–98.
7. Rapaport MH, et al. Posttraumatic stress disorder and quality of life: results across 64 weeks of sertraline treatment. *J Clin Psychiatry* 2002; **63**: 59–65.
8. Koran LM, et al. Efficacy of sertraline in the long-term treatment of obsessive-compulsive disorder. *Am J Psychiatry* 2002; **159**: 88–95.
9. Zohar J, et al. Double-blind placebo-controlled pilot study of sertraline in military veterans with posttraumatic stress disorder. *J Clin Psychopharmacol* 2002; **22**: 190–5.
10. Liebowitz MR, et al. Efficacy of sertraline in severe generalized social anxiety disorder: results of a double-blind, placebo-controlled study. *J Clin Psychiatry* 2003; **64**: 785–92.
11. Allgulander C, et al. Efficacy of sertraline in a 12-week trial for generalized anxiety disorder. *Am J Psychiatry* 2004; **161**: 1642–9.

**Depression.** As discussed on p.373, there is very little difference in efficacy between the different groups of antidepressant drugs, and choice is often made on the basis of adverse effect profile. SSRIs such as sertraline are widely used as an alternative to the older tricyclics as they have fewer adverse effects and are safer in overdose.

#### References

1. Stowe ZN, et al. Sertraline in the treatment of women with postpartum major depression. *Depression* 1995; **3**: 49–55.
2. Keller MB, et al. Maintenance phase efficacy of sertraline for chronic depression: a randomized controlled trial. *JAMA* 1998; **280**: 1665–72.
3. Baca E, et al. Sertraline is more effective than imipramine in the treatment of non-melancholic depression: results from a multicentre, randomized study. *Prog Neuropsychopharmacol Biol Psychiatry* 2003; **27**: 493–500.
4. Lepine JP, et al. A randomized, placebo-controlled trial of sertraline for prophylactic treatment of highly recurrent major depressive disorder. *Am J Psychiatry* 2004; **161**: 836–42.
5. Moscovitch A, et al. A placebo-controlled study of sertraline in the treatment of outpatients with seasonal affective disorder. *Psychopharmacology (Berl)* 2004; **171**: 390–7.

**Headache.** For reference to the use of SSRIs, including sertraline, in the management of various types of headache, see under Fluoxetine, p.398.

**Premenstrual syndrome.** Sertraline throughout the menstrual cycle has produced beneficial effects in controlling both the psychological and somatic symptoms of women with premenstrual syndrome (p.2099).<sup>1–3</sup> Giving sertraline solely during the luteal phase was also of benefit.<sup>3–6</sup>

1. Yonkers KA, et al. Sertraline in the treatment of premenstrual dysphoric disorder. *Psychopharmacol Bull* 1996; **32**: 41–6.
2. Yonkers KA, et al. Symptomatic improvement of premenstrual dysphoric disorder with sertraline treatment: a randomized controlled trial. *JAMA* 1997; **278**: 983–8.
3. Freeman EW, et al. Continuous or intermittent dosing with sertraline for patients with severe premenstrual syndrome or premenstrual dysphoric disorder. *Am J Psychiatry* 2004; **161**: 343–51.

4. Young SA, et al. Treatment of premenstrual dysphoric disorder with sertraline during the luteal phase: a randomized, double-blind, placebo-controlled crossover trial. *J Clin Psychiatry* 1998; **59**: 76–80.
5. Jermain DM, et al. Luteal phase sertraline treatment for premenstrual dysphoric disorder: results of a double-blind, placebo-controlled, crossover study. *Arch Fam Med* 1999; **8**: 328–32.
6. Halbreich U, et al. Efficacy of intermittent, luteal phase sertraline treatment of premenstrual dysphoric disorder. *Obstet Gynecol* 2002; **100**: 1219–29.

**Sexual dysfunction.** Impotence or ejaculatory problems have been reported as adverse effects of SSRIs; for the use of these effects as a potential form of management for premature ejaculation see Fluoxetine, p.399.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Arg.:** Anilar; Atenic; Bicromil; Celsonal; Deprecal; Inserter; Inradial; Serlina; Servantax; Vunot; Zolof; **Austral.:** Eleva; Setrona; Xydep; Zolof; **Austria:** Gladem; Sertrix; Tresleen; **Belg.:** Serlain; **Braz.:** Assert; Novativ; Sercerin; Serenata; Seronip; Tolres; Zolof; **Canada.:** Zolof; **Chile:** Altruline; Deprax; Eleva; Emergen; Implicane; Lowfin; Sedoran; Serivo; Seronex; Sertac; Traliner; **Cz.:** Adujvin; Apo-Sertral; Asentra; Serlift; Setalof; Stimuloton; Zolof; **Denm.:** Zolof; **Fin.:** Zolof; **Fr.:** Zolof; **Ger.:** Gladem; Sertra; Zolof; **Gr.:** Certoron; Enidap; Neurosedine; Zolof; Zolotrin; **Hong Kong:** Stimuloton; Zolof; **Hung.:** Asentra; Gerotalrin; Serlift; Serlosane; Sertadepi; Sertagen; Serwint; Stimuloton; Zolof; **India:** Inosert; Serdep; Sertax; Xsert; **Indon.:** Antipres; Deptral; Fatral; Fridpe; Nudep; Serlof; Sernade; Zerlin; Zolof; **Ir.:** Depreger; Lusert; Lustral; Senmel; Serlan; Sertraniche; **Israel:** Lustral; **Ital.:** Tatig; Zolof; **Malaysia:** Serlift; Zolof; **Mex.:** Aleva; Altruline; Aluprex; Deptral; Proserint; Serolux; Sertex; **Neth.:** Asentra; Zolof; **Norw.:** Zolof; **NZ:** Zolof; **Philipp.:** Serenata; Zolof; **Pol.:** Asentra; Luxeta; Sertahexal; Setalof; Setaratio; Stimuloton; Zolof; Zotal; **Port.:** Zolof; **Rus.:** Asentra (Асентра); Serenata (Серената); Stimuloton (Стимултон); Торин (Торин); Золот (Золот); **S.Afr.:** Serdep; Serlift; Sertzol; Zolof; **Singapore:** Zolof; **Spain:** Altisben; Arenis; Bestran; Depesert; Sealdin; **Swed.:** Zolof; **Switz.:** Gladem; Zolof; **Thai.:** Zolof; **Turk.:** Lustral; Selectra; Seralin; Serdep; **UK:** Lustral; **USA:** Zolof; **Venez.:** Conexine; Lusedan; Satil; Serline; Serolux; Tialin; Zolof.

**Multi-ingredient India:** Restyl Forte; Restyl Plus.

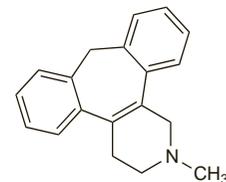
### Setiptiline (rINN)

Setiptilina; Sétiptiline; Setiptilinum; Teciptiline. 2,3,4,9-Tetrahydro-2-methyl-1H-dibenzo[3,4,6,7]cyclohepta[1,2-c]pyridine.

#### СЕТИПТИЛИН

C<sub>19</sub>H<sub>19</sub>N = 261.4.

CAS — 57262-94-9 (setiptiline); 85650-57-3 (setiptiline maleate).



### Profile

Setiptiline is an antidepressant that has been used as the maleate in the treatment of depression.

### Preparations

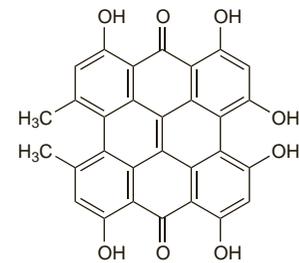
**Proprietary Preparations** (details are given in Part 3)

**Jpn:** Tecipul.

### St John's Wort

Hiperico; Hiperikum; Hyperici herba; Hypericum; Johannesört; Johanniskraut; Jonažolij žolē; Mäkikuisma; Millepertuis; Orbánc-fű; Třezalková nat; Ziele dziurawca.

CAS — 548-04-9 (hypericin).



(hypericin)

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

*Eur.* also includes a form for homeopathic preparations. *Swiss* also includes monographs for hypericum (fresh flowering tops) and hypericum oil.

**Ph. Eur. 6.2** (St. John's Wort). The whole or cut, dried flowering tops of *Hypericum perforatum* gathered during flowering. It con-