# Paxil CR

Versión GDSv50-IPIv29



# Paxil CR

# Paroxetine hydrochloride hemihydrate

# **Qualitative and Quantitative Composition**

PAXIL CR 12.5 mg tablets: Yellow, round, biconvex tablets with GSK engraved on one side and 12.5 on the other side. PAXIL CR 25 mg tablets: Pink, round, biconvex tablets with GSK engraved on one side and 25 on the other side. Each PAXIL CR (controlled release) tablet contains paroxetine hydrochloride hemihydrate equivalent to 12.5 mg or 25 mg paroxetine free base.

# **Clinical Information**

# Indications

### Adults

### Major Depressive Disorder:

PAXIL CR tablets are indicated for the treatment of major depressive disorder (MDD).

# Panic Disorder:

PAXIL CR tablets have been shown to be effective in the treatment of panic disorder with or without agoraphobia.

# Premenstrual Dysphoric Disorder:

PAXIL CR tablets are indicated for the treatment of premenstrual dysphoric disorder (PMDD).

# Social Anxiety Disorder/Social Phobia:

PAXIL CR tablets have been shown to be effective in the treatment of Social Anxiety Disorder/Social Phobia.

The effectiveness of PAXIL CR tablets in the long-term treatment of Social Anxiety Disorder/Social Phobia has not been evaluated. Therefore, if PAXIL CR tablets are to be administered for extended periods in the treatment of Social Anxiety Disorder/Social Phobia, the physician should periodically re-evaluate the long-term usefulness of PAXIL CR for the individual patient.

# Children and Adolescents (Less than 18 Years)

### All Indications:

PAXIL CR is not indicated for use in children or adolescents aged less than 18 years (see Warnings and Precautions).

The efficacy of PAXIL CR tablets has not been studied in children or adolescents aged less than 18 years; however, controlled clinical studies with PAXIL IR (immediate release) tablets in children and adolescents with major depressive disorder failed to demonstrate efficacy, and do not support the use of PAXIL in the treatment of depression in this population (see Warnings and Precautions).

The safety and efficacy of PAXIL in children aged less than 7 years has not been studied.

### **Dosage and Administration**

Pharmaceutical form: Controlled release tablets

### Adults

PAXIL CR tablets should be administered as a single daily dose, usually in the morning, with or without food. Patients should be informed that PAXIL CR tablets should not be chewed or crushed, and should be swallowed whole.

### Major Depressive Disorder:

The recommended initial dose is 25 mg/day. Some patients not responding to a 25 mg dose may benefit from dose increases in 12.5 mg/day increments, up to a maximum of 62.5 mg/day according to patient response. Dose changes should occur at intervals of at least 1 week.

As with all antidepressant drugs, dosage should be reviewed and adjusted if necessary within 2 to 3 weeks of initiation of therapy and thereafter as judged clinically appropriate.

Patients with depression should be treated for a sufficient period to ensure that they are free from symptoms. This period may be several months.

### Panic Disorder:

Patients should begin treatment on 12.5 mg/day and the dose increased weekly in 12.5 mg/day increments according to patient response. Some patients may benefit from having their dose increased up to a maximum of 75 mg/day.

A low initial starting dose is recommended to minimise the potential worsening of panic symptomatology which is generally recognised to occur early in the treatment of this disorder.

Patients with panic disorder should be treated for a sufficient period to ensure that they are free from symptoms. This period may be several months or even longer.

# Premenstrual Dysphoric Disorder:

The recommended initial dose is 12.5 mg/day. Some patients not responding to a 12.5 mg dose may benefit from having their dose increased to 25 mg/day. Dose changes should occur at intervals of at least 1 week.

Paroxetine CR may be administered daily throughout the menstrual cycle or limited to intermittent dosing in the luteal phase of the menstrual cycle, depending on physician assessment.

Patients with PMDD should be periodically assessed to determine the need for continual treatment.

# Social Anxiety Disorder/Social Phobia:

The recommended initial dose is 12.5 mg daily. Some patients not responding to a 12.5 mg dose may benefit from having dose increases in 12.5 mg/day increments as required, up to a maximum of 37.5 mg/day according to the patient's response. Dose changes should occur at intervals of at least 1 week.

# **General Information**

## Other Populations

### Elderly:

Increased plasma concentrations of paroxetine occur in elderly subjects, but the range of concentrations overlaps with that observed in younger subjects.

Dosing should commence at 12.5 mg/day and may be increased up to 50 mg/daily.

### Children and Adolescents (Less than 18 Years):

PAXIL CR is not indicated for use in children or adolescents aged less than 18 years (see Indications, Warnings and Precautions).

### **Renal/Hepatic Impairment:**

Increased plasma concentrations of paroxetine occur in patients with severe renal impairment (creatinine clearance <30 mL/min) or in those with hepatic impairment. Therefore, dosage should be restricted to the lower end of the Dosage ranee.

### **Discontinuation of PAXIL**

As with other psychoactive medications, abrupt discontinuation should generally be avoided (see Warnings and Precautions and Adverse Reactions). The taper phase regimen used in recent clinical trials involved a decrease in the daily dose by 10 mg/day (equivalent to 12.5 mg/day CR tablets) at weekly intervals. When a daily dose of 20 mg/day (equivalent to 25 mg/day CR tablets) was reached, patients were continued on this dose for 1 week before treatment was stopped. If intolerable symptoms occur following a decrease in the dose or upon discontinuation of treatment, then resuming the previously prescribed dose may be considered. Subsequently, the physician may continue decreasing the dose, but at a more gradual rate.

# Contraindications

Known hypersensitivity to paroxetine and excipients.

PAXIL CR tablets should not be used in combination with monoamine oxidase (MAO) inhibitors (including linezolid, an antibiotic which is a reversible non-selective MAO inhibitor and methylthioninium chloride (methylene blue)) or within two weeks of terminating treatment with MAO inhibitors. Likewise, MAO inhibitors should not be introduced within two weeks of cessation of therapy with PAXIL CR tablets (see Interactions).

PAXIL CR should not be used in patients receiving medications that can prolong QT interval and are also metabolised by CYP450 2D6, such as thioridazine or pimozide (see Interactions).

# Warnings and Precautions

# Children and Adolescents (Less than 18 Years)

Treatment with antidepressants is associated with an increased risk of suicidal thinking and behaviour in children and adolescents with Major Depressive Disorder (MDD) and other psychiatric disorders. In clinical trials of *PAXIL* in children and adolescents, adverse events related to suicidality (suicide attempts and suicidal thoughts) and hostility (predominantly aggression, oppositional behaviour and anger) were more frequently observed in patients treated with *PAXIL* compared to those treated with placebo (*see Adverse Reactions*). Long-term safety data in children and adolescents concerning growth, maturation and cognitive and behavioural development are lacking.

### **Clinical Worsening and Suicide Risk in Adults**

Young adults, especially those with MDD, may be at increased risk for suicidal behaviour during treatment with *PAXIL* CR. An analysis of placebo controlled trials of adults with psychiatric disorders showed a higher frequency of suicidal behaviour in young adults (prospectively defined as aged 18 to 24 years) treated with paroxetine compared with placebo (17/776 [2.19%] versus 5/542 [0.92%]), although this difference was not statistically significant. In the older age groups (aged 25 to 64 years and 265 years), no such increase was observed. In adults with MDD (all ages), there was a statistically significant increase in the frequency of suicidal behaviour in patients treated with paroxetine compared with placebo (11/3455 [0.32%] versus 1/1978 [0.05%]; all of the events were suicide attempts). However, the majority of these attempts for paroxetine (8 of 11) were in younger adults aged 18 to 30 years. These MDD data suggest that the higher frequency observed in the younger adult population across psychiatric disorders may extend beyond the age of 24.

Patients with depression may experience worsening of their depressive symptoms and/or the emergence of suicidal ideation and behaviours (suicidality) whether or not they are taking antidepressant medications. This risk persists until significant remission occurs. It is general clinical experience with all antidepressant therapies that the risk of suicida may increase in the early stages of recovery. Other psychiatric conditions for which *PAXIL* is prescribed can be associated with an increased risk of suicidal behaviour, and these conditions may also be co-morbid with MDD. Additionally, patients with a history of suicidal behaviour or thoughts, young adults, and those patients exhibiting a significant degree of suicidal ideation prior to commencement of treatment, are at a greater risk of suicidal thoughts or suicide attempts. All patients should be monitored for clinical worsening (including development of new symptoms) and suicidality throughout treatment, and especially at the beginning of a course of treatment, or at the time of dose changes, either increases or decreases.

Patients (and caregivers of patients) should be alerted about the need to monitor for any worsening of their condition (including development of new symptoms) and/or the emergence of suicidal ideation/behaviour or thoughts of harming themselves and to seek medical advice immediately if these symptoms present. It should be recognised that the onset of some symptoms, such as agitation, akathisia or mania, could be related either to the underlying disease state or the drug therapy (see Akathisia and Mania and Bipolar Disorder below; Adverse Reactions).

Consideration should be given to changing the therapeutic regimen, including possibly discontinuing the medication, in patients who experience clinical worsening (including development of new symptoms) and/or the emergence of suicidal ideation/behaviour, especially if these symptoms are severe, abrupt in onset, or were not part of the patient's presenting symptoms.

### Akathisia

Rarely, the use of *PAXIL* or other selective serotonin reuptake inhibitors (SSRIs) have been associated with the development of akathisia, which is characterised by an inner sense of restlessness and psychomotor agitation such as an inability to sit or stand still usually associated with subjective distress. This is most likely to occur within the first few weeks of treatment.

# Serotonin Syndrome/Neuroleptic Malignant Syndrome

On rare occasions development of a serotonin syndrome or neuroleptic malignant syndrome-like events may occur in association with PAX/L treatment, particularly when given in combination with other serotonergic and/or neuroleptic drugs. As these syndromes may result in potentially life-threatening conditions, treatment with PAX/L should be discontinued if such events (characterised by clusters of symptoms such as hyperthermia, rigidity, myoclonus, autonomic instability with possible rapid fluctuations of vital signs, mental status changes including confusion, irritability, extreme agitation progressing to delirium and coma) occur and supportive symptomatic treatment should be initiated. PAXIL should not be used in combination with serotonin-precursors (such as L-tryptophan, oxitriptan) due to the risk of serotonergic syndrome (see Contraindications, interactions).

### Mania and Bipolar Disorder

A major depressive episode may be the initial presentation of bipolar disorder. It is generally believed (though not established in controlled trials) that treating such an episode with an antidepressant alone can increase the likelihood of precipitation of a mixed/manic episode in patients at risk for bipolar disorder. Prior to initiating treatment with an antidepressant, patients should be adequately screened to determine if they are at risk for bipolar disorder; and episode screening should include a detailed psychiatric history, including a family history of suicide, bipolar disorder, and depression. It should be noted that paroxetine is not approved for use in treating bipolar depression. As with all antidepressants, paroxetine should be used with caution in patients with a history of mania.

### Tamoxifen

Some studies have shown that the efficacy of tamoxifen, as measured by the risk of breast cancer relapse/mortality, may be reduced when co-prescribed with PAXIL CR as a result of paroxetine's irreversible inhibition of CYP2D6 (see Interactions). This risk may increase with longer duration of co-administration. When tamoxifen is used for the treatment or prevention of breast cancer, prescribers should consider using an alternative antidepressant with little or no CYP2D6 inhibition.

### **Bone Fracture**

Epidemiological studies on bone fracture risk following exposure to some antidepressants, including SSRIs, have reported an association with fractures. The risk occurs during treatment and is greatest in the early stages of therapy. The possibility of fracture should be considered in the care of patients treated with PAX/L CR.

### **Monoamine Oxidase Inhibitors**

Treatment with PAXIL CR should be initiated cautiously at least two weeks after terminating treatment with MAO inhibitors and dosage of PAXIL CR should be increased gradually until optimal response is reached (see Contraindications, Interactions).

### **Renal/Hepatic Impairment**

Caution is recommended in patients with severe renal impairment or in those with hepatic impairment (see Dosage and Administration).

### Epilepsy

As with other antidepressants, PAXIL CR should be used with caution in patients with epilepsy.

### Seizures

Overall the incidence of seizures is less than 0.1% in patients treated with paroxetine. The drug should be discontinued in any patient who develops seizures.

### Electroconvulsive Therapy (ECT)

There is little clinical experience of the concurrent administration of paroxetine with ECT.

### Glaucoma

As with other SSRIs, paroxetine can cause mydriasis and should be used with caution in patients with narrow angle glaucoma.

### Hyponatraemia

Hyponatraemia has been reported rarely, predominantly in the elderly. The hyponatraemia generally reverses on discontinuation of paroxetine.

### Haemorrhage

Skin and mucous membrane bleedings (including gastrointestinal and gynaecological bleeding) have been reported following treatment with paroxetine. Paroxetine should therefore be used with caution in patients concomitantly treated with drugs that give an increased risk for bleeding, and in patients with a known tendency for bleeding or those with predisposing conditions (see Adverse Reactions). SSRIs may increase the risk of postpartum haemorrhage (see Preanancy and Lactation).

### **Cardiac Conditions**

The usual precautions should be observed in patients with cardiac conditions.

### **QT** Prolongation

Cases of QT interval prolongation have been reported, although causality with PAXIL CR has not been established. In a study of healthy subjects, paroxetine administered at repeated daily doses up to 60 mg did not prolong QTc (see Pharmacodynamics).

PAXIL CR should be used with caution in patients with a history of QT interval prolongation, patients taking antiarrhythmic or other medications that may potentially prolong QT interval, or those with relevant pre-existing cardiac disease.

For further information, see Contraindications and Interactions.

### Symptoms Seen on Discontinuation of PAXIL Treatment in Adults:

In clinical trials in adults, adverse events seen on treatment discontinuation occurred in 30% of patients treated with PAXIL compared to 20% of patients treated with placebo. The occurrence of discontinuation symptoms is not the same as the drug being addictive or dependence producing as with a substance of abuse.

Dizziness, sensory disturbances (including paraesthesia, electric shock sensations and tinnitus), sleep disturbances (including intense dreams), agitation or anxiety, nausea, tremor, confusion, sweating, headache, diarrhoea have been reported. Generally, these symptoms are mild to moderate, however, in some patients they may be severe in intensity. They usually occur within the first few days of discontinuing treatment, but there have been very rare reports of such symptoms in patients who have inadvertently missed a dose. Generally, these symptoms are self-limiting and usually resolve within two weeks, though in some individuals they may be prolonged (two to three months or more). It is therefore advised that *PAXLI* should be gradually tapered when discontinuing treatment over a period of several weeks or months, according to the patient's needs (*see "Discontinuation of PAXLI", Dosage and Administration*).

### Sexual Dysfunction

SSRIs may cause symptoms of sexual dysfunction (see Adverse Reactions). There have been reports of long-lasting sexual dysfunction where the symptoms have continued despite discontinuation of SSRIs.

### Symptoms Seen on Discontinuation of PAXIL Treatment in Children and Adolescents:

In clinical trials in children and adolescents, adverse events seen on treatment discontinuation occurred in 32% of patients treated with PAXIL compared to 24% of patients treated with placebo. Events reported upon discontinuation of PAXIL at a frequency of at least 2% of patients and which occurred at a rate at least twice that of placebo were: emotional lability (including suicidal ideation, suicide attempt, mood changes and tearfulness), nervousness, dizziness, nausea and abdominal pain (see Adverse Reactions).

### PAXIL CR 12.5 mg Tablets Only

The paroxetine 12.5 mg controlled release tablet coating (Opadry Yellow: 15B120039) contains the colouring agent Sunset Yellow Lake (FD&C Yellow No. 6 aluminium lake), an azo dye which may cause allergic-type reactions.

### Interactions

# Serotonergic Drugs

As with other SSRIs, co-administration with serotonergic drugs may lead to an incidence of 5-HT associated effects (serotonin syndrome: see Warnings and Precautions). Caution should be advised and a closer clinical monitoring is required when serotonergic drugs (such as L-tryptophan, triptans, tramadol, SSRIs, lithium, fentanyl and St. John's Wort – Hypericum perforatum – preparations) are combined with PAXIL CR.

Concomitant use of PAXIL CR and MAO inhibitors (including linezolid, an antibiotic which is a reversible non-selective MAO inhibitor and methylthioninium chloride (methylene blue)) is contraindicated (see Contraindications).

# Pimozide

Increased pimozide levels have been demonstrated in a study of a single low dose pimozide (2 mg) when co-administered with paroxetine. This is explained by the known CVP2D6 inhibitory properties of paroxetine. Due to the narrow therapeutic index of pimozide and its known ability to prolong QT interval, concomitant use of pimozide and PAXIL CR tablets is contraindicated (see Contraindications).

### Drug metabolising Enzymes

The metabolism and pharmacokinetics of paroxetine may be affected by the induction or inhibition of drug metabolising enzymes.

When paroxetine is to be co-administered with a known drug metabolising enzyme inhibitor, consideration should be given to using doses at the lower end of the range.

No initial dosage adjustment is considered necessary when the drug is to be co-administered with known drug metabolising enzyme inducers (e.g. carbamazepine, rifampicin, phenobarbital, phenytoin). Any subsequent dosage adjustment should be guided by clinical effect (tolerability and efficacy).

### Fosamprenavir/Ritonavir:

Co-administration of fosamprenavir/ritonavir with paroxetine significantly decreased plasma levels of paroxetine. Any dose adjustment should be guided by clinical effect (tolerability and efficacy).

### Procyclidine:

Daily administration of paroxetine increases significantly the plasma levels of procyclidine. If anti-cholinergic effects are seen, the dose of procyclidine should be reduced.

### Anticonvulsants:

Carbamazepine, phenytoin, sodium valproate. Concomitant administration does not seem to show any effect on pharmacokinetic/dynamic profile in epileptic patients.

### **Neuromuscular Blockers**

SSRIs may reduce plasma cholinesterase activity resulting in a prolongation of the neuromuscular blocking action of mivacurium and suxamethonium.

### CYP2D6 Inhibitory Potency of Paroxetine

As with other antidepressants, including other SSRIs, paroxetine inhibits the hepatic cytochrome P450 enzyme CYP2D6. Inhibition of CYP2D6 may lead to increased plasma concentrations of co-administered drugs metabolised by this enzyme. These include certain tricyclic antidepressants (e.g. amitriptyline, nortriptyline, imipramine and desipramine), phenothiazine neuroleptics (e.g. perphenazine and thioridazine, *see Contraindications*), risperidone, atomoxetine, certain Type 1c antiarrhythmics (e.g. propafenone and flecainide) and metoprolol.

Tamoxifen has an important active metabolite, endoxifen, which is produced by CYP2D6 and contributes significantly to the efficacy of tamoxifen. Irreversible inhibition of CYP2D6 by paroxetine leads to reduced plasma concentrations of endoxifen (see Warnings and Precautions).

### CYP3A4

An *in vivo* interaction study involving the co-administration under steady state conditions of paroxetine and terfenadine, a substrate for cytochrome CYP3A4, revealed no effect of paroxetine on terfenadine pharmacokinetics. A similar *in vivo* interaction study revealed no effect of paroxetine on alprazolam pharmacokinetics and vice-versa. Concurrent administration of paroxetine with terfenadine, alprazolam and other drugs that are CYP3A4 substrates would not be expected to cause a hazard.

# **Drugs Affecting Gastric pH**

Clinical studies have shown the absorption and pharmacokinetics of paroxetine to be unaffected or only marginally affected (i.e. at a level which warrants no change in dosing regimen) by:

- food
- antacids
- digoxin
  propranolol
- alcohol: paroxetine does not increase the impairment of mental and motor skills caused by alcohol, however, the concomitant use of PAXIL and alcohol is not advised.

### **Pregnancy and Lactation**

### Fertility

Some clinical studies have shown that SSRIs (including *PAXIL*) may affect sperm quality. This effect appears to be reversible following discontinuation of treatment. Changes in sperm quality may affect fertility in some men.

### Pregnancy

Animal studies have not shown any teratogenic or selective embryotoxic effects.

Epidemiological studies of pregnancy outcomes following maternal exposure to antidepressants in the first trimester have reported an increase in the risk of congenital malformations, particularly cardiovascular (e.g. ventricular and atrial septal defects), associated with the use of paroxetine. The data suggest that the risk of having an infant with a cardiovascular defect following maternal paroxetine exposure is approximately 1/50, compared with an expected rate for such defects of approximately 1/100 infants in the general population.

The prescribing physician will need to weigh the option of alternative treatments in women who are pregnant or are planning to become pregnant, and should only prescribe *PAXIL* CR if the potential benefit outweighs the potential risk. If a decision is taken to discontinue *PAXIL* CR treatment in a pregnant woman, the prescriber should consult *Dosage* 

GSK

and Administration - Discontinuation of PAXIL and Warnings and Precautions – Symptoms seen on discontinuation of PAXIL treatment in adults.

There have been reports of premature birth in pregnant women exposed to paroxetine or others SSRIs, although a causal relationship with drug therapy has not been established.

Observational data have provided evidence of an increased risk (less than two-fold) of postpartum haemorrhage following exposure to SSRIs within one month prior to birth.

Neonates should be observed if maternal use of *PAXIL* continues into the later stages of pregnancy, because there have been reports of complications in neonates exposed to *PAXIL* or other SSRIs late in the third trimester of pregnancy. However, a causal association with drug therapy has not been confirmed. Reported clinical findings have included: respiratory distress, cyanosis, apnoea, seizures, temperature instability, feeding difficulty, vomiting, hypoglycaemia, hypertonia, hypotonia, hyperreflexia, tremor, jitteriness, irritability, lethargy, constant crying and somnolence. In some instances the reported symptoms were described as neonatal withdrawal symptoms. In a majority of instances the complications were reported to have arisen either immediately or soon (<24 hours) after delivery.

Epidemiological studies have shown that the use of SSRIs (including paroxetine) in pregnancy, particularly use in late pregnancy, was associated with an increased risk of persistent pulmonary hypertension of the newborn (PPHN). The increased risk among infants born to women who used SSRIs late in pregnancy was reported to be four to five times higher than observed in the general population (rate of 1 to 2 per 1000 pregnancies).

### Lactation

Small amounts of paroxetine are excreted into breast milk. In published studies, serum concentrations in breast-fed infants were undetectable (<2 nanograms/mL) or very low (<4 nanograms/mL). No signs of drug effects were observed in these infants. Nevertheless, *PAXIL* should not be used during lactation unless the expected benefits to the mother justify the potential risks for the infant.

### Effects on Ability to Drive and Use Machines

Clinical experience has shown that therapy with PAXIL is not associated with impairment of cognitive or psychomotor function. However, as with all psychoactive drugs, patients should be cautioned about their ability to drive a car and operate machinery.

Although paroxetine does not increase the mental and motor skill impairments caused by alcohol, the concomitant use of PAXIL CR and alcohol is not advised.

### **Adverse Reactions**

Some of the adverse experiences listed below may decrease in intensity and frequency with continued treatment and do not generally lead to cessation of therapy.

Adverse drug reactions are listed below by system organ class and frequency. Frequencies are defined as: very common  $(\geq 1/10)$ , common  $(\geq 1/100$ , <1/10), uncommon  $(\geq 1/10, 000, <1/100)$ , very rare (<1/10,000), including isolated reports. The frequencies of common and uncommon events were generally determined from pooled safety data from a clinical trial population of >8000 PAX/L CR treated patients and are quoted as excess incidence over placebo. Rare and very rare events were generally determined from post-marketing data and refer to reporting rate rather than true frequency.

### **Blood and Lymphatic System Disorders**

Uncommon:	abnormal bleeding, predominantly of the skin and mucous membranes.
Very rare:	thrombocytopenia.

### Immune System Disorders

Very rare: severe allergic reactions (including anaphylactoid reactions and angioedema).

### **Endocrine disorders**

Very rare: syndrome of inappropriate anti-diuretic hormone secretion (SIADH).

### **Metabolism and Nutrition Disorders**

Common:	increases in cholesterol levels, decreased appetite.									
Rare:	hyponat	raemia.								

Hyponatraemia has been reported predominantly in elderly patients and is sometimes due to syndrome of inappropriate anti-diuretic hormone secretion (SIADH).

# **Psychiatric Disorders**

Common:	somnolence, insomnia, agitation, abnormal dreams (including nightmares).	
Uncommon:	confusion, hallucinations.	
Rare:	manic reactions.	
These symptoms may be due to the underlying disease.		

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### **Nervous System Disorders**

Common:	dizziness, tremor, headache.
Uncommon:	extrapyramidal disorders.
Rare:	convulsions, akathisia, restless legs syndrome (RLS).
Very rare:	serotonin syndrome (symptoms may include agitation, confusion, diaphoresis, hallucinations, hyperreflexia, myoclonus, shivering tachycardia and tremor).

Reports of extrapyramidal disorders including oro-facial dystonia have been received in patients sometimes with underlying movement disorders or who were using neuroleptic medication.

# **Eye Disorders**

Common:	blurred vision.
Uncommon:	mydriasis (see Warnings and Precautions).
Verv rare:	acute glaucoma.

**Cardiac Disorders** 

Uncommon: sinus tachycardia.

# Vascular Disorders

Uncommon: postural hypotension.

**Respiratory, Thoracic and Mediastinal Disorders** 

Common: yawning.

### **Gastrointestinal Disorders**

Very common: nausea.

Common: constipation, diarrhoea, vomiting, dry mouth.

Very rare: gastrointestinal bleeding.

### **Hepatobiliary Disorders**

Rare: elevation of hepatic enzymes.

Very rare: hepatic events (such as hepatitis, sometimes associated with jaundice and/or liver failure).

Elevation of hepatic enzymes has been reported. Post-marketing reports of hepatic events (such as hepatitis, sometimes associated with jaundice, and/or liver failure) have also been received very rarely. Discontinuation of paroxetine should be considered if there is prolonged elevation of liver function test results.

# Skin and Subcutaneous Tissue Disorders

Common:	sweating.	
Uncommon:	skin rashes.	
Very rare:	severe cutaneous adverse reactions (including erythema multiforme, Stevens-Johnson	
syndrome and toxic epidermal necrolysis), urticaria, photosensitivity reactions.		

## Renal and Urinary Disorders

Rare:

Uncommon: urinary retention, urinary incontinence.

### **Reproductive System and Breast Disorders**

Verv common: sexual dysfunction.

hyperprolactinaemia/galactorrhoea, menstrual disorders (including menorrhagia, metrorrhagia and amenorrhoea).

### **General Disorders and Administration Site Conditions**

Common:	asthenia, body weight gain
Verv rare:	peripheral oedema.

### Symptoms Seen on Discontinuation of Paroxetine Treatment:

Common: dizziness, sensory disturbances, sleep disturbances, anxiety, headache Uncommon: agitation, nausea, tremor, confusion, sweating, diarrhoea.

As with many psychoactive medicines, discontinuation of PAXIL (particularly when abrupt) may lead to symptoms such as diziness, sensory disturbances (including paraesthesia, electric shock sensations and tinnitus), sleep disturbances (including intense dreams), agitation or anxiety, nausea, headache, tremor, confusion, diarrhoea and sweating. In the majority of patients, these events are mild to moderate and are self-limiting. No particular patient group appears to be at higher risk of these symptoms; it is therefore advised that when paroxetine treatment is no longer required, gradual discontinuation by dose tapering be carried out (see Dosage and Administration and Warnings and Precautions).

### **Adverse Events from Paediatric Clinical Trials**

In paediatric clinical trials the following adverse events, were reported at a frequency of at least 2% of patients and occurred at a rate at least twice that of placebo: emotional lability (including self-harm, suicidal thoughts, attempted suicide, crying and mood fluctuations), hostility, decreased appetite, tremor, sweating, hyperkinesia and agitation. Suicidal thoughts and suicide attempts were mainly observed in clinical trials of adolescents with Major Depressive Disorder. Hostility occurred particularly in children with obsessive compulsive disorder, and especially in younger children es than 12 years of age).

In studies that used a tapering regimen (daily dose decreased by 10 mg/day at weekly intervals to a dose of 10 mg/day for one week), symptoms reported during the taper phase or upon discontinuation of *PAXIL* at a frequency of at least 2% of patients and occurred at a rate at least twice that of placebo were: emotional lability, nervousness, dizziness, nausea and abdominal pain (see *Warnings and Precautions*).

# Overdose

## Symptoms and Signs

A wide margin of safety is evident from available overdose information on PAXIL.

Experience of PAXIL in overdose has indicated that, in addition to those symptoms mentioned under Adverse Reactions, fever, blood pressure changes, involuntary muscle contractions, anxiety and tachycardia have been reported.

Patients have generally recovered without serious sequelae even when doses of up to 2000 mg have been taken alone. Events such as coma or ECG changes have occasionally been reported and, very rarely a fatal outcome, but generally when *PAXIL* was taken in conjunction with other psychotropic drugs, with or without alcohol.

### Treatment

No specific antidote is known.

The treatment should consist of those general measures employed in the management of overdose with any antidepressant. Supportive care with frequent monitoring of vital signs and careful observation is indicated. Patient management should be as clinically indicated, or as recommended by the national poisons centre, where available.

# **Pharmacological Properties**

### Pharmacodynamics

### ATC Code

Anatomical Therapeutic Chemical (ATC) code: N06A B05.

Pharmacotherapeutic group: Antidepressants - selective serotonin reuptake inhibitors.

### Mechanism of Action

Paroxetine is a potent and selective inhibitor of 5-hydroxytryptamine (5-HT, serotonin) uptakeand its antidepressant action and effectiveness in the treatment of OCD and Panic disorder is thought to be related to its specific inhibition of 5-HT uptake in brain neurones.

Paroxetine is chemically unrelated to the tricyclic, tetracyclic and other available antidepressants.

Paroxetine has low affinity for muscarinic cholinergic receptors and animal studies have indicated only weak anticholinergic properties.

In accordance with this selective action, *in vitro* studies have indicated that, in contrast to tricyclic antidepressants, paroxetine has little affinity for alpha<sub>2</sub>, alpha<sub>2</sub> and beta-adrenoceptors, dopamine (D2), 5-HT<sub>1</sub> like, 5-HT<sub>2</sub> and histamine (H<sub>2</sub>) receptors. This lack of interaction with post-synaptic receptors *in vitro* is substantiated by *in vivo* studies which demonstrate lack of CNS depressant and hypotensive properties.

### Pharmacodynamic Effects

Paroxetine does not impair psychomotor function and does not potentiate the depressant effects of ethanol.

As with other selective 5-HT uptake inhibitors, paroxetine causes symptoms of excessive 5-HT receptor stimulation when administered to animals previously given monoamine oxidase (MAO) inhibitors or tryptophan.

Behavioural and EEG studies indicate that paroxetine is weakly activating at doses generally above those required to inhibit 5-HT uptake. The activating properties are not "amphetamine-like" in nature.

Animal studies indicate that paroxetine is well tolerated by the cardiovascular system.

Paroxetine produces no clinically significant changes in blood pressure, heart rate and ECG after administration to healthy subjects. A study in 38 healthy subjects found no association between paroxetine plasma concentrations and PR, QRS, or QTc after repeated daily doses of 20 mg, 40 mg, or 60 mg of paroxetine. In this study, paroxetine did not prolong QTc at therapeutic levels (*see Warnings and Precautions*).

Studies indicate that, in contrast to antidepressants which inhibit the uptake of nor-adrenaline, paroxetine has a much reduced propensity to inhibit the antihypertensive effects of guanethidine.

### Pharmacokinetics

### Absorption

Paroxetine is well absorbed after oral dosing and undergoes first-pass metabolism. *PAXIL CR* tablets control the dissolution rate of paroxetine over a period of four to five hours. In addition to controlling the rate of drug release *in vivo*, an enteric coat delays the start of drug release until *PAXIL* CR tablets have left the stomach. Compared to immediate release formulations of paroxetine, controlled release tablets have a reduced absorption rate.

Due to first-pass metabolism, the amount of paroxetine available to the systemic circulation is less than that absorbed from the gastrointestinal tract.

Steady state systemic levels are attained by 7 to 14 days after starting treatment with immediate or controlled release formulations and pharmacokinetics do not appear to change during long-term therapy.

### Distribution

Paroxetine is extensively distributed into tissues and pharmacokinetic calculations indicate that only 1% of the paroxetine in the body resides in the plasma.

Approximately 95% of the paroxetine present in the plasma is protein bound at therapeutic concentrations.

No correlation has been found between paroxetine plasma concentrations and clinical effect (adverse experiences and efficacy).

### Metabolism

The principal metabolites of paroxetine are polar and conjugated products of oxidation and methylation, which are readily cleared. In view of their relative lack of pharmacological activity, it is most unlikely that they contribute to the therapeutic effects of paroxetine.

Metabolism does not compromise paroxetine's selective action on neuronal 5-HT uptake.

### Elimination

Urinary excretion of unchanged paroxetine is generally less than 2% of dose whilst that of metabolites is about 64% of dose. About 36% of the dose is excreted in faeces, probably via the bile, of which unchanged paroxetine represents less than 1% of the dose. Thus, paroxetine is eliminated almost entirely by metabolism.

Metabolite excretion is biphasic, being initially a result of first-pass metabolism and subsequently controlled by systemic elimination of paroxetine.

The elimination half-life is variable but is generally about one day.

# **Special Patient Populations**

### **Elderly and Renal/Hepatic Impairment**

Increased plasma concentrations of paroxetine occur in elderly subjects, in subjects with severe renal and in those with hepatic impairment, but the range of plasma concentrations overlaps that of healthy adult subjects.

# **Non-Clinical Information**

Toxicology studies have been conducted in rhesus monkeys and albino rats; in both, the metabolic pathway is similar to that described for humans. As expected with lipophilic amines, including tricyclic antidepressants, phospholipidosis was detected in rats. Phospholipidosis was not observed in primate studies of up to one year duration at doses that were six times higher than the recommended range of clinical doses.

Carcinogenesis: In two year studies conducted in mice and rats, paroxetine had no tumorigenic effect.

Genotoxicity: Genotoxicity was not observed in a battery of in vitro and in vivo tests.

# **Pharmaceutical Information**

### List of Excipients

Tablet core: Hypromellose; Povidone; Lactose Monohydrate; Magnesium Stearate; Colloidal silicon dioxide; Glyceryl Dibehenate and the following colourants: Yellow Ferric Oxide (12.5 mg tablets) and Red Ferric Oxide (25 mg tablets).

Tablet coating: Methacrylic Acid and Ethyl Acrylate Copolymer Dispersion; Talc; Triethyl citrate, Opadry Yellow, 15B120039 (12.5 mg tablets, includes the colouring agent Sunset Yellow Lake (FD&C Yellow No. 6 aluminium lake)), Opadry Pink, Y-1-1262 (25 mg tablets). For important information about some of these excipients see Warnings & Precautions.

### Shelf-Life

The expiry date is indicated on the packaging.

# Storage

The storage conditions are detailed on the packaging.

# Nature and Contents of Container

Foil blister packs or HDPE bottles with child-resistant closures.

### Incompatibilities

There are no known incompatibilities with PAXIL CR tablets.

# Use and Handling

No special instructions.

Not all presentations are available in every country.

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