ECENTOPAM™

1. **Generic Name**

   Escitalopram

2. **Qualitative and Quantitative Composition**

Escitalopram 5 /10/ 20 mg

3. **Dosage form and strength**

Oral tablets are containing Escitalopram 5/10/20 mg.

4. **Clinical particulars**

4.1 Therapeutic indication

Ecentopam is used in treatment of:

- Major Depression Disorder (MDD)
- Generalised anxiety disorder
- Social anxiety disorder

4.2 Posology and method of administration

Recommended oral dose of Ecentopam is:

- Major depressive episodes

Usual dosage is 10 mg once daily. Depending on individual patient response, the dose may be increased to a maximum of 20 mg daily.

Usually 2-4 weeks are necessary to obtain antidepressant response. After the symptoms resolve, treatment for at least 6 months is required for consolidation of the response.

- Social anxiety disorder

Usual dosage is 10 mg once daily. Usually 2-4 weeks are necessary to obtain symptom relief. The dose may subsequently, depending on individual patient response, be decreased to 5 mg or increased to a maximum of 20 mg daily.

Social anxiety disorder is a disease with a chronic course, and treatment for 12 weeks is recommended to consolidate response. Long-term treatment of responders has been studied for 6 months and can be considered on an individual basis to prevent relapse; treatment benefits should be re-evaluated at regular intervals.

Social anxiety disorder is a well-defined diagnostic terminology of a specific disorder, which should not be confounded with excessive shyness. Pharmacotherapy is only indicated if the disorder interferes significantly with professional and social activities.

- Generalised anxiety disorder

Initial dosage is 10 mg once daily. Depending on the individual patient response, the dose may be increased to a maximum of 20 mg daily.

Long-term treatment of responders has been studied for at least 6 months in patients receiving 20 mg daily. Treatment benefits and dose should be re-evaluated at regular intervals

4.3 Contraindication

- Hypersensitivity to the active substance or to any of the excipients of Ecentopam
- Concomitant treatment with non-selective, irreversible monoamine oxidase inhibitors (MAO- inhibitors) is contraindicated due to the risk of serotonin syndrome with agitation, tremor, hyperthermia etc.
- The combination of escitalopram with reversible MAO-A inhibitors (e.g. moclobemide) or the reversible non-selective MAO-inhibitor linezolid is contraindicated due to the risk of onset of a serotonin syndrome.
- Escitalopram is contraindicated in patients with known QT-interval prolongation or congenital long QT syndrome.
- Escitalopram is contraindicated together with medicinal products that are known to prolong the QT- interval

4.4 Special warnings and precautions for use

- Paradoxical anxiety

Some patients with panic disorder may experience increased anxiety symptoms at the beginning of treatment with antidepressants. This paradoxical reaction usually subsides within two weeks during continued treatment. A low starting dose is advised to reduce the likelihood of an anxiogenic effect.

- Seizures

Escitalopram should be discontinued if a patient develops seizures for the first time, or if there is an increase in seizure frequency (in patients with a previous diagnosis of epilepsy). SSRIs should be avoided in patients with unstable epilepsy and patients with controlled epilepsy should be closely monitored.

- Mania

SSRIs should be used with caution in patients with a history of mania/hypomania. SSRIs should be discontinued in any patient entering a manic phase.

- Diabetes

In patients with diabetes, treatment with an SSRI may alter glycaemic control (hypoglycaemia or hyperglycaemia). Insulin and/or oral hypoglycaemic dosage may need to be adjusted.

- Suicide/suicidal thoughts or clinical worsening

Depression is associated with an increased risk of suicidal thoughts, self-harm and suicide (suicide- related events). This risk persists until significant remission occurs. As improvement may not occur during the first few weeks or more of treatment, patients should be closely monitored until such improvement occurs. It is general clinical experience that the risk of suicide may increase in the early stages of recovery.

Other psychiatric conditions for which escitalopram is prescribed can also be associated with an increased risk of suicide-related events. In addition, these conditions may be co-morbid with major depressive disorder. The same precautions observed when treating patients with

major depressive disorder should therefore be observed when treating patients with other psychiatric disorders.

Patients with a history of suicide-related events, or those exhibiting a significant degree of suicidal ideation prior to commencement of treatment, are known to be at greater risk of suicidal thoughts or suicide attempts, and should receive careful monitoring during treatment. A meta analysis of placebo controlled clinical trials of antidepressant drugs in adult patients with psychiatric disorders showed an increased risk of suicidal behaviour with antidepressants compared to placebo in patients less than 25 years old. Close supervision of patients and in particular those at high risk should accompany drug therapy especially in early treatment and following dose changes.

Patients (and caregivers of patients) should be alerted about the need to monitor for any clinical worsening, suicidal behaviour or thoughts and unusual changes in behaviour and to seek medical advice immediately if these symptoms present.

- Akathisia/psychomotor restlessness

The use of SSRIs/SNRIs has been associated with the development of akathisia, characterised by a subjectively unpleasant or distressing restlessness and need to move often accompanied by an inability to sit or stand still. This is most likely to occur within the first few weeks of treatment. In patients who develop these symptoms, increasing the dose may be detrimental.

- Hyponatraemia

Hyponatraemia, probably due to inappropriate antidiuretic hormone secretion (SIADH), has been reported rarely with the use of SSRIs and generally resolves on discontinuation of therapy. Caution should be exercised in patients at risk, such as the elderly, or patients with cirrhosis, or if used in combination with other medications which may cause hyponatraemia.

- Haemorrhage

There have been reports of cutaneous bleeding abnormalities, such as ecchymoses and purpura, with SSRIs. Caution is advised in patients taking SSRIs, particularly in concomitant use with oral anticoagulants, with medicinal products known to affect platelet function (e.g. atypical antipsychotics and phenothiazines, most tricyclic antidepressants, acetylsalicylic acid

and non-steroidal anti- inflammatory medicinal products (NSAIDs), ticlopidine and dipyridamole) and in patients with known bleeding tendencies.

SSRIs/SNRIs may increase the risk of postpartum haemorrhage.

- ECT (electroconvulsive therapy)

There is limited clinical experience of concurrent administration of SSRIs and ECT, therefore caution is advisable.

- Serotonin syndrome

Caution is advisable if escitalopram is used concomitantly with medicinal products with serotonergic effects such as sumatriptan or other triptans, tramadol, buprenorphine and tryptophan. If concomitant treatment with other serotonergic agents is clinically warranted, careful observation of the patient is advised, particularly during treatment initiation and dose increases.

In rare cases, serotonin syndrome, a potentially life-threatening condition (see section 4.5), has been reported in patients using SSRIs concomitantly with serotonergic medicinal products. A combination of symptoms, such as agitation, tremor, myoclonus and hyperthermia may indicate the development of this condition. If this occurs treatment with the SSRI and the serotonergic medicinal product should be discontinued immediately and symptomatic treatment initiated.

- St. John´s Wort

Concomitant use of SSRIs and herbal remedies containing St. John´s Wort (Hypericum perforatum) may result in an increased incidence of adverse reactions.

- Discontinuation symptoms seen when stopping treatment

Discontinuation symptoms when stopping treatment are common, particularly if discontinuation is abrupt. In clinical trials adverse events seen on treatment discontinuation occurred in approximately 25% of patients treated with escitalopram and 15% of patients taking placebo.

The risk of discontinuation symptoms may be dependent on several factors including the duration and dose of therapy and the rate of dose reduction. Dizziness, sensory disturbances (including paraesthesia and electric shock sensations), sleep disturbances (including insomnia and intense dreams), agitation or anxiety, nausea and/or vomiting, tremor, confusion, sweating, headache, diarrhoea, palpitations, emotional instability, irritability, and visual disturbances are the most commonly reported reactions.

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 2 weeks, though in some individuals they may be prolonged (2-3 months or more). It is therefore advised that escitalopram should be gradually tapered when discontinuing treatment over a period of several weeks or months, according to the patient's needs.

- Sexual dysfunction

Selective serotonin reuptake inhibitors (SSRIs)/serotonin norepinephrine reuptake inhibitors (SNRIs) may cause symptoms of sexual dysfunction. There have been reports of long-lasting sexual dysfunction where the symptoms have continued despite discontinuation of SSRIs/SNRI.

- Coronary heart disease

Due to limited clinical experience, caution is advised in patients with coronary heart disease.

- QT interval prolongation

Escitalopram has been found to cause a dose-dependent prolongation of the QT-interval. Cases of QT interval prolongation and ventricular arrhythmia including torsade de pointes have been reported during the post-marketing period, predominantly in patients of female

gender, in patients with hypokalaemia, or with pre-existing QT interval prolongation or other cardiac diseases.

Caution is advised in patients with significant bradycardia; or in patients with recent acute myocardial infarction or uncompensated heart failure.

Electrolyte disturbances such as hypokalaemia and hypomagnesaemia increase the risk for malignant arrhythmias and should be corrected before treatment with escitalopram is started.

If patients with stable cardiac disease are treated, an ECG review should be considered before treatment is started.

If signs of cardiac arrhythmia occur during treatment with escitalopram, the treatment should be withdrawn and an ECG should be performed.

- Angle-Closure Glaucoma

SSRIs including escitalopram may have an effect on pupil size resulting in mydriasis. This mydriatic effect has the potential to narrow the eye angle resulting in increased intraocular pressure and angle- closure glaucoma, especially in patients pre-disposed. Escitalopram should therefore be used with caution in patients with angle-closure glaucoma or history of glaucoma.

4.5 Drug interactions

<u>Contra-indicated combinations:</u>

- Irreversible non-selective MAOIs

Cases of serious reactions have been reported in patients receiving a SSRI in combination with a non- selective, irreversible monoamine oxidase inhibitor (MAOI), and in patients who have recently discontinued SSRI treatment and have been started on such MAOI treatment. In some cases, the patient developed serotonin syndrome.

Escitalopram is contra-indicated in combination with non-selective, irreversible MAOIs. Escitalopram may be started 14 days after discontinuing treatment with an irreversible MAOI. At least 7 days should elapse after discontinuing escitalopram treatment, before starting a non-selective, irreversible MAOI.

- Reversible, selective MAO-A inhibitor (moclobemide)

Due to the risk of serotonin syndrome, the combination of escitalopram with a MAO-A inhibitor such as moclobemide is contraindicated. If the combination proves necessary, it should be started at the minimum recommended dosage and clinical monitoring should be reinforced.

- Reversible, non-selective MAO-inhibitor (linezolid)

The antibiotic linezolid is a reversible non-selective MAO-inhibitor and should not be given to patients treated with escitalopram. If the combination proves necessary, it should be given with minimum dosages and under close clinical monitoring.

- Irreversible, selective MAO-B inhibitor (selegiline)

In combination with selegiline (irreversible MAO-B inhibitor), caution is required due to the risk of developing serotonin syndrome. Selegiline doses up to 10 mg/day have been safely co-administered with racemic citalopram.

- QT interval prolongation

Pharmacokinetic and pharmacodynamic studies of escitalopram combined with other medicinal products that prolong the QT interval have not been performed. An additive effect of escitalopram and these medicinal products cannot be excluded. Therefore, co-administration of escitalopram with medicinal products that prolong the QT interval, such as Class IA and III antiarrhythmics, antipsychotics (e.g. phenotiazine derivatives, pimozide, haloperidol), tricyclic antidepressants, certain antimicrobial agents (e.g. sparfloxacin, moxifloxacin, erythromycin IV, pentamidine, anti-malarian treatment particularly halofantrine), certain antihistamines (astemizole, mizolastine), is contraindicated.

Combinations requiring precautions for use:

- Serotonergic medicinal products

Co-administration with serotonergic medicinal products (e.g. tramadol, buprenorphine, sumatriptan and other triptans) increases the risk of serotonin syndrome, a potentially life-threatening condition.

- Medicinal products lowering the seizure threshold

SSRIs can lower the seizure threshold. Caution is advised when concomitantly using other medicinal products capable of lowering the seizure threshold (e.g antidepressants (tricyclics, SSRIs), neuroleptics (phenothiazines, thioxanthenes and butyrophenones), mefloquine, bupropion and tramadol).

- Lithium, tryptophan

There have been reports of enhanced effects when SSRIs have been given together with lithium or tryptophan, therefore concomitant use of SSRIs with these medicinal products should be undertaken with caution.

- St. John's wort

Concomitant use of SSRIs and herbal remedies containing St. John´s wort (Hypericum perforatum) may result in an increased incidence of adverse reactions.

- Haemorrhage

Altered anti-coagulant effects may occur when escitalopram is combined with oral anticoagulants. Patients receiving oral anticoagulant therapy should receive careful coagulation monitoring when escitalopram is started or stopped. Concomitant use of non-steroidal anti- inflammatory drugs (NSAIDs) may increase bleeding-tendency.

- Alcohol

No pharmacodynamic or pharmacokinetic interactions are expected between escitalopram and alcohol. However, as with other psychotropic medicinal products, the combination with alcohol is not advisable.

- Medicinal products inducing hypokalaemia/hypomagnesaemia

Caution is warranted for concomitant use of hypokalaemia/hypomagnesaemia inducing medicinal products as these conditions increase the risk of malignant arrhythmias.

Influence of other medicinal products on the pharmacokinetics of escitalopram

- The metabolism of escitalopram is mainly mediated by CYP2C19. CYP3A4 and CYP2D6 may also contribute to the metabolism although to a smaller extent. The metabolism of the major metabolite S- DCT (demethylated escitalopram) seems to be partly catalysed by CYP2D6.
- Co-administration of escitalopram with omeprazole 30 mg once daily (a CYP2C19 inhibitor) resulted in moderate (approximately 50%) increase in the plasma concentrations of escitalopram.
- Co-administration of escitalopram with cimetidine 400 mg twice daily (moderately potent general enzyme-inhibitor) resulted in a moderate (approximately 70%) increase in the plasma concentrations of escitalopram. Caution is advised when administering escitalopram in combination with cimetidine. Dose adjustment may be warranted.
- Thus, caution should be exercised when used concomitantly with CYP2C19 inhibitors (e.g. omeprazole, esomeprazole, fluconazole, fluvoxamine, lansoprazole, ticlopidine) or cimetidine. A reduction in the dose of escitalopram may be necessary based on monitoring of side-effects during concomitant treatment.

Effect of escitalopram on the pharmacokinetics of other medicinal products

- Escitalopram is an inhibitor of the enzyme CYP2D6. Caution is recommended when escitalopram is co-administered with medicinal products that are mainly metabolised by this enzyme, and that have a narrow therapeutic index, e.g. flecainide, propafenone and metoprolol (when used in cardiac failure), or some CNS acting

medicinal products that are mainly metabolised by CYP2D6, e.g. antidepressants such as desipramine, clomipramine and nortriptyline or antipsychotics like risperidone, thioridazine and haloperidol. Dosage adjustment may be warranted.

- Co-administration with desipramine or metoprolol resulted in both cases in a twofold increase in the plasma levels of these two CYP2D6 substrates.
- In vitro studies have demonstrated that escitalopram may also cause weak inhibition of CYP2C19. Caution is recommended with concomitant use of medicinal products that are metabolised by CYP2C19.

4.6 Use in special population

- Pediatric: Ecentopam Tablets should not be used in the treatment of children and adolescents below the age of 18 years. Safety and effectiveness of Ecentopam Tablets has not been established in children and adolescents below the age of 18 years.
- Geriatric: Sedating drugs may cause confusion and over-sedation in the elderly; elderly patients generally should be started on low doses of Ecentopam Tablets and observed closely. The efficacy of escitalopram in social anxiety disorder has not been studied in elderly patients.
- Liver impairment: In patients with severe liver damage (e.g. cirrhosis of the liver), particular caution needs to be taken.
- Renal failure: In patients with severe renal impairment, treatment with Ecentopam Tablets should be done with caution.
- Pregnancy and lactation: Ecentopam Tablets should not be used in pregnancy unless clearly necessary. Caution should be exercised and breastfeeding infants should be observed for adverse reactions when Ecentopam Tablets are administered to a lactating mother.

4.7 Effects on ability to drive and use machine

Although escitalopram has been shown not to affect intellectual function or psychomotor performance, any psychoactive medicinal product may impair judgement or skills. Patients should be cautioned about the potential risk of an influence on their ability to drive a car and operate machinery.

4.8 Undesirable effects

Escitalopram: Thrombocytopenia, Anaemia, Palpitations, Tachycardia, Bradycardia, Cardiac arrest, Cardio-respiratory arrest, Arrhythmia, Tinnitus, Vertigo, Inappropriate antidiuretic hormone secretion, Vision blurred, Visual impairment, Mydriasis, Nausea, Diarrhoea, Vomiting, Dry mouth, Constipation, Abdominal pain, Abdominal pain upper, Abdominal discomfort, Dyspepsia, Abdominal distension, Dysphagia, Hepatic function abnormal, Drug hypersensitivity, Hypersensitivity, Weight increased , Hyponatraemia, Decreased appetite, Increased appetite, Myalgia, Arthralgia, Muscle spasms, Muscle twitching, Pain in extremity, Muscular weakness, Back pain, Rhabdomyolysis, Musculoskeletal stiffness, Dizziness, Headache, Somnolence, Tremor, Seizure , Serotonin syndrome , Paraesthesia, Disturbance in attention, Loss of consciousness, Syncope, Hypoaesthesia , Dyskinesia, Memory impairment, Amnesia, Coma, Sedation, Migraine, Akathisia, Balance disorder, Lethargy, Burning sensation, Depressed level of consciousness, Extrapyramidal disorder, Generalised tonic-clonic seizure, Restless legs syndrome , Speech disorder, Cognitive disorder, Hypersomnia, Dysarthria, Dysgeusia, Psychomotor hyperactivity, Myoclonus, Dystonia, Anxiety, Insomnia, Depression, Completed suicide, Suicidal ideation, Suicide attempt, Confusional state, Agitation, Restlessness, Panic attack, Sleep disorder, Irritability, Aggression, Nervousness, Hallucination, Depressed mood, Libido decreased, Mania, Nightmare, Anger, Abnormal behaviour, Disorientation, Intentional self-injury, Abnormal dreams, Drug abuse, Apathy, Loss of libido, Sopor, Hallucination, visual, Delirium, Bruxism, Mental disorder, Thinking abnormal, Mood swings, Drug dependence, Fear, Anorgasmia, Stress, Emotional disorder, Paranoia, Psychotic disorder, Urinary retention, Dysuria, Erectile dysfunction,Sexual dysfunction, Galactorrhoea, Dyspnoea, Cough, Epistaxis, Yawning, Respiratory arrest, Hyperhidrosis, Rash, Pruritus, Alopecia, Urticaria, Erythema, Night sweats, Rash pruritic, Hypotension, Hypertension, Hot flush, Orthostatic hypotension.

4.9 Overdose

- Toxicity

Clinical data on escitalopram overdose are limited and many cases involve concomitant overdoses of other drugs. In the majority of cases mild or no symptoms have been reported. Fatal cases of escitalopram overdose have rarely been reported with escitalopram alone; the majority of cases have involved overdose with concomitant medications. Doses between 400 and 800mg of escitalopram alone have been taken without any severe symptoms.

- Symptoms

Symptoms seen in reported overdose of escitalopram include symptoms mainly related to the central nervous system (ranging from dizziness, tremor, and agitation to rare cases of serotonin syndrome, convulsion, and coma), the gastrointestinal system (nausea/vomiting), and the cardiovascular system (hypotension, tachycardia, QT interval prolongation, and arrhythmia) and electrolyte/fluid balance conditions (hypokalaemia, hyponatraemia).

- Management

There is no specific antidote. Establish and maintain an airway, ensure adequate oxygenation and respiratory function. Gastric lavage and the use of activated charcoal should be considered. Gastric lavage should be carried out as soon as possible after oral ingestion. Cardiac and vital signs monitoring are recommended along with general symptomatic supportive measures.

ECG monitoring is advised in case of overdose, in patients with congestive heart failure/bradyarrhythmias, in patients using concomitant medications that prolong the QT interval, or in patients with altered metabolism, e.g. liver impairment.

5. Pharmacological properties

5.1 Mechanism of action

The mechanism of the antidepressant action of escitalopram, the S-enantiomer of racemic citalopram, is presumed to be linked to the potentiation of serotonergic activity in the central

nervous system (CNS), resulting from its inhibition of CNS neuronal reuptake of serotonin (5-HT).

5.2 Pharmacodynamic properties

In vitro and in vivo studies suggests that escitalopram is a highly selective serotonin (5-HT) reuptake inhibitor (SSRI) with a high affinity for the primary binding site, and has minimal effects on norepinephrine and dopamine neuronal reuptake. It also binds to an allosteric site on the serotonin transporter, with a 1,000-fold lower affinity. Escitalopram is at least 100-fold more potent than the R-enantiomer with respect to the inhibition of 5-HT reuptake and inhibition of 5-HT neuronal firing rate. Tolerance to a model of antidepressant effect in rats was not induced by long-term (up to 5 weeks) treatment with escitalopram. Escitalopram has no or very low affinity for serotonergic (5-HT1–7)or other receptors including alpha- and beta-adrenergic, dopamine (D1–5), histamine (H1–3), muscarinic (M1–5), benzodiazepine and opiod receptors. Escitalopram also does not bind to or has low affinity for various ion channels, including Sodium (Na+), Potassium (K+), Chloride (Cl–) and Calcium (Ca++) channels. Antagonism of the muscarinic, histaminergic and adrenergic receptors has been hypothesized to be associated with various anticholinergic, sedative and cardiovascular side effects of other psychotropic drugs.

5.3 Pharmacokinetic properties

- Escitalopram

<u>Absorption</u>

The single- and multiple-dose pharmacokinetics of escitalopram are linear and dose-proportional in a dose range of 10 to 30 mg/day.

Absorption is almost complete and independent of food intake (mean time to maximum concentration is 4 hours after multiple dosing). As with racemic citalopram, the absolute bio-availability of escitalopram is expected to be about 80%. Following a single oral dose (20 mg tablet or solution) of escitalopram, peak blood levels occur at about 5 hours.

<u>Distribution</u>

The binding of escitalopram to human plasma proteins is approximately 56%. The apparent volume of distribution (Vd,β/F) after oral administration is about 12–26 L/kg. At the steady state, the extent of accumulation of escitalopram in plasma in young healthy subjects was 2.2–2.5 times the plasma concentrations observed after a single dose.

Metabolism

Biotransformation of escitalopram is mainly hepatic, with a mean terminal half-life of about 27–32 hours. Escitalopram is metabolized to S-demethylcitalopram (S-DCT) and S-didemethylcitalopram (S-DDCT). Both of these are pharmacologically active. Alternatively, the nitrogen may be oxidized to form the N-oxide metabolite. Both parent substance and metabolites are partly excreted as glucuronides. After multiple dosing, the mean concentrations of the demethyl and didemethyl metabolites are usually 28–31% and <5%, respectively, of the escitalopram concentration. In humans, unchanged escitalopram is the predominant compound in plasma. At the steady state, the concentration of the escitalopram metabolite, S-DCT, in plasma is approximately one-third that of escitalopram.

In vitro studies show that escitalopram is at least 7 and 27 times more potent than S-DCT and S-DDCT, respectively, in the inhibition of serotonin reuptake, suggesting that the metabolites of escitalopram do not contribute significantly to the antidepressant actions of escitalopram. S-DCT and S-DDCT also have no or very low affinity for serotonergic (5-HT1–7) or other receptors, including alpha- and beta-adrenergic, dopamine (D1–5), histamine (H1–3), muscarinic (M1–5) and benzodiazepine receptors. S-DCT and S-DDCT also do not bind to various ion channels, including Na+, K+, Cl– and Ca++ channels. In vitro studies using human liver microsomes indicated that cytochrome (CY) P3A4 and CYP2C19 are the primary isozymes involved in the N-demethylation of escitalopram. Some contribution by the enzymes, CYP3A4 and CYP2D6, is also possible.

Elimination

The elimination half-life (t½β) after multiple dosing is about 30 hours and the oral plasma clearance (Cloral) is about 0.6 L/min. Following oral administration of escitalopram, the fraction of drug recovered in the urine as escitalopram and S-DCT is about 8% and 10%, respectively. The major metabolites have a significantly longer half-life. Escitalopram and its

major metabolites are assumed to be eliminated by both the hepatic (metabolic) and the renal routes, with the major part of the dose excreted as metabolites in the urine. The oral clearance of escitalopram is 600 mL/min, with approximately 7% of that due to renal clearance.

With once-daily dosing, steady-state plasma concentrations are achieved within approximately 1 week. Average steady-state concentrations of 50 nmol/L (range: 20 to 125 nmol/L) are achieved at a daily dose of 10 mg.

6. Nonclinical properties

6.1 Animal Toxicology or Pharmacology

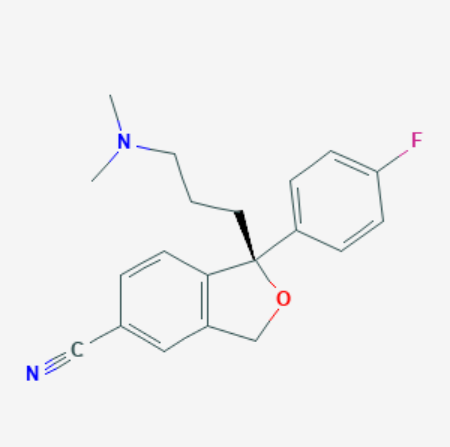
Not required.

7. Description

- **Escitalopram**

Escitalopram is the active S-stereoisomer of the selective serotonin reuptake inhibitor (SSRI) citalopram with antidepressant, anti-obsessive-compulsive and antibulimic properties. Escitalopram inhibits the reuptake of the neurotransmitter serotonin (5-HT) at the serotonin reuptake pump of the neuronal membrane of the presynaptic cell, thereby increasing levels of 5-HT within the synaptic cleft and enhancing the actions of serotonin on 5HT1A autoreceptors. Unlike other SSRIs, escitalopram appears to not only bind to a primary high-affinity site on the serotonin transporter protein but also to a secondary lower-affinity allosteric site that is considered to stabilize and prolong drug binding.

Escitalopram is a 1-[3-(dimethylamino)propyl]-1-(4-fluorophenyl)-1,3-dihydro-2-benzofuran-5-carbonitrile that has S-configuration at the chiral centre. It is the active enantiomer of citalopram. It has a role as an antidepressant and an EC (prolyl oligopeptidase) inhibitor. It is a conjugate base of an escitalopram(1+). It is an enantiomer of a (R)-citalopram.



8. Pharmaceutical particulars

8.1 Incompatibilities

There are no known incompatibilities.

8.2 Shelf-life

24 months.

8.3 Packaging Information

Ecentopam tablets are available in pack of 10 tablets.

8.4 Storage and handling instructions

Keep container tightly closed in a dry and well-ventilated place

9. Patient Counselling Information

9.1 Adverse Reactions

Refer part 4.8

9.2 Drug Interactions

Refer part 4.5

9.3 Dosage

Refer part 4.2

9.4 Storage

Refer part 8.4

9.5 Risk Factors

Refer part 4.4

9.6 Self-monitoring information

NA

9.7 Information on when to contact a health care provider or seek emergency help

Patients are advised to be alert for the emergence or worsening of the adverse reactions and contact the prescribing physician.

9.8 Contraindications

Refer part 4.3

10. Manufactured by THE CENTAUR PHARMACEUTICALS PVT LTD, GOA

11. Details of permission or license number with date

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12. Date of revision: January 2022