Dlexet

(Duloxetine)

COMPOSITION Dlexet 20mg Capsule: Each capsule contains: Duloxetine as HCI (delayed-release pellets)20mg

Dlexet 30mg Capsule: Each capsule contains: Duloxetine as HCI (delayed-release pellets)30mg

DESCRIPTION

Duloxetine is a selective serotonin and norepinephrine reuptake inhibitor (SNRI) for oral administration

(Sirki) to trat administration: MECHANISM OF ACTION Duloxetine is a potent inhibitor of neuronal serotonin and norepinephrine reuptake and a less potent inhibitor of dopamine reuptake. Duloxetine has no significant affinity for dopaminergic, adrenergic, cholinergic, histaminergic, opiod, glutamate, and GABA receptors in vitro. Duloxetine drugs known to affect wrethra lesistance. Although the exact mechanisms of the antidepressant, central pain inhibitory and anxiolytic actions of duloxetline in humans are unknown, these actions are believed to be related to its potentiation of serotonergic and noradrenergic activity in the CNS.

PHARMACOKINETICS

PHARMACOKINETICS Duloxetine is well absorbed from the gastrointestinal tract and peak plasma concentrations occur about 16 hours after an oral dose. Food delays the time to reach peak concentrations to 10 hours. Protein binding is about 96%mainly albumin and alphat acid glycoprotein. Duloxetine is extensively metabolized by cytochrome P450 isoenzymes CYP1A2 and CYP2D6; two major, but inactive metabolite are formed, 4-hytoxy duloxetine glucuronide and 5-hydroxy, 6-methoxy duloxetine sulphate. These and other metabolities are mainly excreted in the urine, about 20% excreted in the facess. Less than 1% of a dose is excreted in the urine as unchanged duloxetine. The elimination half-life of duloxetine is 8 to 17 hours with an average of about 12 hours. Duloxetine is distributed into breast milk.

- Indicated for thous: Deductine is usualduled into breast mile.
 Indicated for the treatment of;
 Major depressive disorder in adults
 Generalized anxiety disorder in adults and pediatric
 patients 7 years of age and older
 Diabetic peripheral neuropathic pain in adults
 Fibromyalgia in adults and pediatric patients 13 years of age and older
 Chronic musculoskeletal pain in adults

DOSAGE AND ADMINISTRATION

- Diagete: peripheria had/bits and petitidine patients is 13 years of age and older Chronic musculoskieletal pain in adults Fibromyalgian had/bits and petitidine patients is 13 years of age and older Chronic musculoskieletal pain in adults **CSAGE AND ADMINISTAT CSASE AND ADMINISTAT CSASE AND ADMINISTAT** (given either once daily or is 30 mg noce daily). For some patients, it may be desirable to start at 30 mg noce daily. For 1 week, to allow patients to adjust to divext (duloxetine) before increasing to 60 mg once daily. While a 120 mg/day does was shown to be effective, there is no evidence that doses greater than 60 mg/day confer any additional benefits. Periodically reasses to determine the need for maintenance treatment and the appropriate dosage for such treatment. The recommended dosage for Generalized Anviely Disorder (GAD) in most adults lies than 65 years of age, is to initiate divext (duloxetine) before increasing to 60 mg once daily. For some patients, it may be desirable to attra 130 mg once daily for 1 week, to allow patients to adjust to diexet (duloxetine) before increasing to 60 mg once daily. For some patients, it may be desirable to 120 mg once daily for 3 week to allow patients. The recommended dosage for such treatment.

CONTRAINDICATIONS Duloxetine is contraindicated in

- The use of MAOIs intended to treat psychiatric disorders with duloxetine or within 5 days of stopping treatment with duloxetine is contraindicated because of an increased risk of serotonin syndrome.
 The use of duloxetine within 14 days of stopping an MAOI intended to treat psychiatric disorders is contraindicated.
 Starting duloxetine in a patient who is being treated with MAOIs such as linezoil or intravenous methylene blue is also contraindicated because of an increased risk of serotonin syndrome.

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suicide attempt, urinary frequency, dysuria, micturition urgency, nocturia, polyuria, urine odor abnormal, pruritus, cold sweat, dermatitis contact, erythema, increased tendency to bruise, night sweats, photosensitivity reaction, ecchymosis, rash, trismus, angioneurotic edema, colitis (microscopic or unspecified), cutaneous vasculitis (sometimes associated with systemic involvement), extrapyramidal disorder, galactorhea, gynecological bleeding, hallucinations, hyperglycemia, hyperprolactima, hypersensitivity, hypertensive crisis, restless legs syndrome, urticaria, and supraventricular arrhythmia,

DRUG INTERACTIONS Drug interaction associated with duloxetine are;

- DRUG INTERACTIONS
 Drug interaction associated with duloxetine are;
 Both CYP1A2 and CYP2D6 are responsible for duloxetine metabolism.
 Coadministration of duloxetine with fluvoxamine is a potent CYP1A2 inhibitor, there is an increase in duloxetine trut12. Cmax, and AUC.
 Concomitant use of duloxetine with paroxetine increased the concentration of duloxetine AUC, and greater degrees of inhibiton are expected with higher doses of paroxetine. Similar effects would be expected with other potent CVP2D6 inhibitors (e.g., fluoxetine, quinidine).
 Concomitant administration of duloxetine with fluvoxamine, a potent CYP1A2 inhibitor, to CVP2D6 poor metabolizer resulted in an increase in duloxetine AUC and Cmax.
 Serotonin release by pletelets plays an important role in hemostasis. Use of psychotropic drugs that interfere with serotonin reuptake and the occurrence of upper gastorintestinal bleeding have also shown that concurrent use of an NSAID or aspirin may potentiate this risk of bleeding. Altered anticoagulant effects, including increased bleeding, have been reported when SSRIs or SNRIs are co-administeration with mutantic and uncertains and uncertain therapy should be carefully monitored when duloxetine is initiated or discontinued.
 Under steady-state conditions for duloxetine and lorazeparn, the pharmacokinetics of duloxetine and relare relares of duloxetine. However, co-administration of duloxetine and lorazeparn, the patranacokinetics of duloxetine and reliar erelare of duloxetine. However, co-administration of duloxetine and learlier relase of duloxetine. However, co-administration of duloxetine and lorazeparn, the patranacokinetisal of H may lead to an earlier relase of duloxetine. However, co-administration of duloxetine with aduminum-and may slow gastric emptying (e.g., some diabetics). Drugs that raise the gastrointestinal of H may lead to an earlier relase of duloxetine. However, co-administration of duloxetine absorption. It is unknown whet

- the CYP1A2, there is an increase in AUC when co-administered with duloxetine. Duloxetine is a moderate inhibitor of CYP2D6. When duloxetine was administered in conjunction with designamine, a CYP2D6 substrate, the AUC of designamine increased. Drugs metabolized by CYP2Q, demonstrate that duloxetine does not inhibit activity. The pharmacokinetics of S-warfarin, a CYP2C9 substrate, were not significantly affected by duloxetine. Drugs metabolized by CYP3A, demonstrate that duloxetine does not inhibit or induce CYP3A, activity. Therefore, an increase or decrease in the metabolism of CYP3A substrates (e.g., oral contraceptives and other steroidal agents) resulting from induction or inhibition is not anticipated.
- In the metabolism of CYF4A substrates (e.g., oral contraceptives and other steroidal agents) resulting from induction or inhibition is not anticipated.
 Drugs metabolized by CYP2C19, demonstrate that duloxetine does not inhibit CYP2C19 activity at therapeutic concentrations.
 Inhibition of the metabolism of CYP2C19 substrates is therefore not anticipated, although clinical studies have not been performed.
 Do not start duloxetine in a patient who requires more urgent treatment of a psychiatric condition, other interventions, including hospitalization, should be considered. In patient who receiving duloxetine there blue. It considered in patient who receiving duloxetine thereins any require urgent treatment with linezolid or intravenous methylene blue treatment are judged to outweigh the risks of serotonin syndrome. In a patient who receiving duloxetine therapy may require urgent treatment with linezolid or intravenous methylene blue treatment are judged to outweigh the risks of serotonin syndrome in a patient who require duloxetine should be stopped promptly, and linezolid or intravenous methylene blue treatment are judged to outweigh the risks of serotonin syndrome in a patient variavenous methylene blue treatment are ubded to noutweigh the risks of serotonin syndrome as patient are ludged to outweigh the risks of serotonin syndrome and the alto does of linezolid or intravenous methylene blue. The rape under a structure and a structure and the structure of the last does of linezolid or intravenous methylene blue. The rape with duloxetine may be resumed 24 hours after the last does of linezolid or intravenous methylene blue. The rape the last does of linezolid or intravenous methylene blue. Sinchever comes first. Therapy with duloxetine may be resumed 24 hours after the last does of linezolid or intravenous methylene blue. Sinchever and serotonergic drugs including other SNRIs, SSRIs, triptans, tricyclic antidepressants, opiols, lithium, buspirone, amphetamines, tryclophan, and St. John's W
- consider discontinuation of duloxetine and/or concomitant serotonergic drugs. When duloxetine and ethanol were administered several hours apart so that peak concentrations of each would coincide, duloxetine did not increase the impairment of mential and motor skills caused by alcohol. Duloxetine should be used with caution when it is taken in combination with or substituted for other centrally acting drugs, including those with a similar mechanism of action. Because duloxetine is highly bound to plasma protein, administration of duloxetine to a patient taking another drug that is highly protein bound may cause increased free concentrations of the other drug, potentially resulting in adverse reactions.

duicxetine to a patient taking another drug that is highly protein bound may cause increased free concentrations of the other drug, potentially resulting in adverse reactions.
 WARNINGS AND PRECAUTION
 Patients with major depressive disorder (MDD), both adult and emergence of suicidal teation and behavior (suicidality) or unusual changes in behavior, whether or not they are taking antidepressant medications, and this risk may persist until significant remission occurs. Suicide is a known risk of depression and certain other psychiatric disorders, and these disorders themselves are the strongest predictors of suicidal. There has been a long-standing concern, however, that antidepressants may have a role in inducing worsening of depression and the emergence of suicidal toring the arity phases of treatment. All patients being treated with antidepressants may have a role in inducing treated with antidepressants. The following symptoms, suicidality, and unusual changes in behavior, especially during the ariti, suggessiveness, impulsivity, akathisia (psychomotor restlessness), hypomania, and masual have been reported in adult and pediatric patients being treated with antidepressants for major denpressive disorder as well as for other indications, bother the mergence of such symptoms and either the waves the mergence of such symptoms and either the waves of depressive disorder as well as for other indications, both psychiatic and nonpsychiatic. Although a cuasal link between the emergence of such symptoms may represent precursors to emerging suicidality.
 Consideration should be given to changing the threagenuit regiment suicidal insuless haves and cargivers of galven to changing the threagenuit regiment suicidality or symptoms that might be precursors to worsening depressive disorder as well as for other indications, both psychiatic and nonpsychiatic symptoms. If the decision has been aregore of patients beling the treagenuit regiments whold be tapere

- normal (ULN) with or without jauncice, reflecting a mixed or hepatoceliular pattern of liver injury. Duloxetine should be discontinued in patients who develop jauncice or other evidence of clinically significant liver dysfunction and should not be resumed unless another cause can be established. Cases of cholestatic jauncice with minimal elevation of transaminase levels have also been reported. Patients with chronic liver disease or cirrhosis elevated transaminases, bilirubin, and alkaline phosphatase have also occurred. It is possible that duloxetine and alcohol may interact to cause liver injury or that duloxetine may aggravate pre-existing liver disease. Duloxetine should not be prescribed to patients with substantial alcohol use or evidence of chronic liver disease. Orthostatic hypotension lend to occur within the first week of therapy but can occur at any time during duloxetine treatment, particularly after dose increases. The risk of falling appears to be related to the degree of orthostatic decrease in load pressure (BP) as well as other factors that may increase the underlying risk of falls, and synchostic hypotension, falls, and syncub consultation (Suthas antiony failer dose increases. The risk of falling appears to be related to the degree of orthostatic decrease in blood pressure (BP) as well as other factors that may increase the underlying risk of falls, and syncup eduring duloxetine therapy. Risk of falling also appeared to be proportional to a patient's underrying duloxetine therapy.
- duloxetine use. Serotonin-norepinephrine reuptake inhibitors (SNRIs), including duloxetine, can precipitate serotonin syndrome, a potentially life-threatening condition. The risk is increased with concomitant use of duloxetine, can precipitate serotonin syndrome, a poteruumy life-threatening condition. The risk is increased with concomitant use of other serotonergic drugs (including triptans, tricyclic antidepressants, fentaryl, lithtum, tramadol, meperidine, methadone, trybophan, buspirone, amphetamines, and SL John's Wort) and with drugs that impair metabolism of serotonin, i.e., MAOIS. Serotonin syndrome can also occur when these drugs are used alone. Serotonin syndrome signs and symptoms may include mental status changes (e.g., agitation, hallucinations, delirium, and coma), autonomic instability (e.g., tachycarda, labib blood pressure, dizziness, diaphoresis, flushing, hyperthermia), neuromuscular symptoms (e.g., tremor, rigidity, myoclous, hyperreflexia, incoordination), seizures, and gastrointestinal symptoms (e.g., nausea, vomiting, diarrhea). The concomitant use of duloxetine with MAOIs is contraindicated. In additon, do not initiate duloxetine in a patient being treated with MAOIs such as linezoid or intravenous methylene blue. If it is necessary to initiate treatment with an MAOI such as linezoid or intravenous methylene blue in a patient, abing duloxetine, discontinue

necessary to initiate treatment with an MAOI such as linezolid or intravenous methylene blue in a patient taking duloxetine, discontinue duloxetine before initiating treatment with the MAOI. Monitor all patients taking duloxetine for the emergence of serotonin syndrome. Discontinue treatment with duloxetine and any concomitant serotonergic agents immediately if the above symptoms occur and initiate supportive symptomatic treatment. If concomitant use of duloxetine with other serotonergic drugs is clinically warranted, inform patients of the increased risk for serotonin syndrome and monitor for symptoms.

- initiale supportive symptomatic treatment. If concomilant use of duloxetine with other serotonergic drugs is clinically warranted, inform patients of the increased risk for serotonin syndrome and monitor for symptoms.
 Drugs that interfere with serotonin reuptake inhibition, including duloxetine, may increase the risk of bleeding events. Bleeding events related to SSRI and SNRI use have ranged from ecchymoses, hematomas, epistaxis, and petechiae to life-threatening hemorrhages. Concomitant use of applicit, increased table, the second the source of the second s

- patient with anatomically narrow angles who see instantial indectomy. Dukoteline has not been systematically evaluated in patients with a sisture disorder and should be prescribed with care in patients with a history of a seizure disorder. Blood pressure should be measured prior to initiating treatment and periodically measured throughout treatment with dukoteline. Both CYP1A2 and CYP2DB are responsible for dukoteline metabolism. Co-administration of dukoteline with potent CYP1A2 and CYP2DB
- Co-administration of duloxetine with potent CYP1A2 and CYP2De inhibitors should be avoided. Use of duloxetine concomitantly with heavy alcohol intake may be associated with severe liver injury. Duloxetine should not be prescribed for patients with substantial alcohol use. Duloxetine should be used with caution when it is taken in combination with or substituted for other centrally acting drugs,
- Duloxetine should be used with caution when it is taken in combination with or substituted for other centrally acting drugs, including those with a similar mechanism of action.
 Hyponatremin may occur as a result of treatment with SSRIs and SNRIs, including duloxetine. Geriatric patients may be at greater risk of developing hyponatremina with SSRIs and SNRIs. Also, patients taking diuretics or who are otherwise volume depleted may be at greater risk. Discontinuation of duloxetine should be considered in patients with symptomatic hyponatremia and appropriate medical intervention should be instituted. Signs and symptoms of hyponatremia include headache, difficulty concentrating, memory impairment, confusion, weakness, and unsteadiness, which may lead to falls. More severe and/or acute cases have been associated with hallucination, syncope, sezure, coma, respiratory arrest, and death.
 Caution is advised in using duloxetine in patients with a recent history of myocardial infarction or unstable coronary arrey disease.
 Avoid use in patients with severe renal impairment, GFR <30 ml/minute. Increased plasma concentration of duloxetine, and especially of its metabolites, occurred in patients with a diabetes.
 Duloxetine treatment worsened glycemic control in some patients with diabetes.

- diabetes. Duloxetine is in a class of drugs known to affect urethral resistance. If symptoms of urinary hesitation develop during treatment with duloxetine, consideration should be given to the possibility that they might be drug related. Use of SNRIs, including duloxetine, may cause symptoms of sexual dysfunction. In male patients, SNRI use may result in ejaculatory delay or failure, decreased libido, and erectile dysfunction. In female patients, SNRI use may result in decreased libido and delayed or absent orgasm.

USE IN SPECIFIC POPULATIONS

Pregnancy There are risks associated with untreated depression and fibromyalgia in pregnancy, and with exposure to SNRIs and SSRIs, including duloxetine, during pregnancy.

Manufactured by HIGHNOON LABORATORIES LTD 17.5 KM, Multan Road, Lahore, Pakistan. www.highnoon-labs.com

Women who discontinue antidepressants during pregnancy are more likely to experience a relapse of major depression than women who continue antidepressants. Consider the risk of untreated depression when discontinuing or changing treatment with antidepressant medication during pregnancy and postpartum. Pregnant women with fibromyalig are at increased risk for adverse maternal and infant outcomes including preterm premature rupture of membranes, preterm birth, small for gestational age, intrauterine growth restriction, placental disruption, and venous thrombosis. It is not known if these adverse maternal and fetal outcomes are a direct result of fibromyalig or other comprisid factors. Neonates exposed to duloxetine and other SNRIs or SSRIs late in the third timester have developed complications requiring prolonged hospitalization, respiratory support, and tube feeding. Such complications can arise immediately upon delivery. Reported clinical findings have included respiratory distress, cyanosis, apnea, seizures, temperature instability, feeding difficulty, vomiting, hypodynemia, hypotonia, hypertonia, hypereflexia, themors, litteriness, iritability, and constant crying. These Infidings are consistent with either a direct toxic effect of the SNRIs or SSRIs, or possibly, a drug discontinuation syndrome. It should be noted that, in some cases, the clinical picture is consistent with serotonin syndrome.

Breast-feeding Risk Summary There are repo

RiskSummary. There are reports of sedation, poor feeding, and poor weight gain in infants exposed to duloxetine through breast milk. The developmental and health benefits of breastleeding should be considered along with the mother's clinical need for duloxetine and any potential adverse effects on the breasted child from duloxetine or from the underlying maternal condition. Infants exposed to duloxetine should be monitored for sedation, poor feeding and poor weight gain.

Pediatric Use The safety and effectiveness of duloxetine have been established for the The safety and effectiveness of duloxetine have been established for the treatment of generalized anxiety disorder (GAD) in patients 7 to 17 years of age and for treatment of juvenile fibromyalgia syndrome in patients 13 to 17 years of age. The safety and effectiveness of duloxetine have not to 17 years of age. The safety and effectiveness of duioxetine have not been established in pediatric patients with major depressive disorder (MDD), diabetic peripheral neuropathic pain, or chronic musculoskeletal pain. The safety and effectiveness of duioxetine for the treatment of GAD in pediatric patients less than 7 years of age have not been established. The safety and effectiveness of duioxetine for the treatment of florent effectiveness of aduloxetine for the treatment of florent effectiveness of aduloxetine for the treatment of florent effectiveness of aduloxetine for the treatment of established

Geriatric Use

Geriatric Use There are no overall differences in safety or effectiveness that were generally observed between geniatric patients and younger adult patients. A higher rate of fall has been reported with duloxeline and the increased risk appears to be proportional to a patient's underlying risk for falls. The underlying risk appears to increase steadily with age. As geriatric patients tend to have a higher prevalence of risk factors for falls such as medications, medical comorbidities and gait disturbances, the impact of increasing age by itself on falls during duloxetine treatment is unclear. Falls with serious consequences including bone fractures and hospitalizations have been reported with duloxetine use. Dosage adjustment based on the age of the adult patient is not necessary.

Hepatic Impairment Patients with clinically evident hepatic impairment have decreased duloxetine metabolism and elimination.

Severe Renal Impairment Limited data are available on the effects of duloxetine in patients with end-stage renal disease (ESRD).

DRUG ABUSE AND DEPENDENCE

Auge Abuse Abuse Duloxetine has not been systematically studied in humans for its potential for abuse, there was no indication of drug-seeking behavior. Physicians should carefully evaluate patients for a history of drug abuse and follow such patients (cosely, observing them for signs of misuse or abuse of duloxetine (e.g., development of tolerance, incrementation of dose, drug-seeking behavior).

Dependence Duloxetine did not demonstrate dependence-producing potential in

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DOSAGE & INSTRUCTIONS

To be sold and used on the prescription of a registered medical practitioner only. Keep out of reach of children. Do not store above 30°C. Keep in a dry place. Protect from Light.

PRESENTATION Diexet 20mg Capsules: Alu. Alu. Blister Pack of 1 x 10's. Alu. Alu. Bilster Pack of 1 x 10 3. Diexet 30mg Capsules: Alu. Alu. Blister Pack of 1 x 10's

> خوراک و بدایات: صرف مستند ڈاکٹر کے نسخہ کے مطابق ہی دوا فروخت اور استعال کی جائے۔ بچوں کی پنینج سے دور رکھیں۔ C°30 سے زیادہ درجہ حرارت پر نہ رکھیں۔

Item Code No. 14003709

خشک جگہ پر رکھیں۔ روشن سے بچائیں۔

120x300mm