

Donex® ODT

Donepezil HCl



Presentation:

Donex® 5: Each orodispersible tablet contains 5mg of Donepezil HCl in packs of 30 tablets.

Donex® 10: Each orodispersible tablet contains 10mg of Donepezil HCl in packs of 30 tablets.

Pharmaceutical form:

Orodispersible Tablets for oral use

Pharmacotherapeutic group:

Drugs for dementia; ATC group: N06DA02

Therapeutic Indications:

Donex® is indicated for the symptomatic treatment of mild to moderately severe Alzheimer's dementia.

Posology and method of administration:

Adults/Elderly: Treatment is initiated at 5mg/ day (once-a-day dosing).

Donex® should be taken orally, in the evening, just prior to retiring.

The 5mg/ day dose should be maintained for at least one month in order to allow the earliest clinical responses to treatment to be assessed & to allow steady-state concentrations of donepezil to be achieved.

Following one-month clinical assessment of treatment at 5mg/ day, the dose of **Donex®** can be increased to 10mg/day (once-a-day dosing). The maximum recommended daily dose is 10mg. Doses greater than 10mg/day have not been studied in clinical trials.

Upon discontinuation of treatment, a gradual abatement of the beneficial effects of **Donex®** is seen. There is no evidence of a rebound effect after abrupt discontinuation of therapy.

Renal & hepatic impairment: Similar dose schedule can be followed for patients with renal or mild to moderate hepatic impairment. As clearance of donepezil is not affected by these conditions.

Children: **Donex®** is not recommended for use in children.

Contra-indications:

Donex® is contraindicated in patients with known hypersensitivity to donepezil, piperidine derivatives.

Warnings & Precautions for use:

Treatment should be initiated & supervised by a physician experienced in the diagnosis & treatment of Alzheimer's dementia. Diagnosis should be made according to accepted guidelines (e.g. DSM IV, ICD 10). Therapy with donepezil should only be started if a caregiver is available who will regularly monitor drug intake for the patient. Maintenance treatment can be continued for as long as a therapeutic benefit for the patient exists. Therefore, the clinical benefit of donepezil should be reassessed on a regular basis. Discontinuation should be considered when evidence of a therapeutic effect is no longer present. Individual response to donepezil cannot be predicted.

The use of **Donex®** in patients with other types of dementia or other types of memory impairment (e.g., age-related cognitive decline), has not been investigated.

Anaesthesia:

Donex®, as a cholinesterase inhibitor, is likely to exaggerate succinylcholine-type muscle relaxation during anaesthesia.

Cardiovascular Conditions:

Because of their pharmacological action, cholinesterase inhibitors may have vagotonic effects on heart rate (e.g., bradycardia). The potential for this action may be particularly important to patients with "sick sinus syndrome" or other supraventricular cardiac conduction conditions, such as sinoatrial or atrioventricular block.

There have been reports of syncope & seizures. In investigating such patients the possibility of heart block or long

sinusal pauses should

be considered.

Gastrointestinal Conditions:

Patients at increased risk for developing ulcers, e.g., those with a history of ulcer disease or those receiving concurrent nonsteroidal anti-inflammatory drugs (NSAIDs), should be monitored for symptoms.

However, **Donex®** showed no increase, in the incidence of either peptic ulcer disease or gastrointestinal bleeding.

Genitourinary: Although not observed in **Donex®**, cholinomimetics may cause bladder outflow obstruction.

Neurological Conditions:

Seizures: Cholinomimetics are believed to have some potential to cause generalised convulsions. However, seizure activity may also be a manifestation of Alzheimer's Disease.

Cholinomimetics may have potential to exacerbate or induce extrapyramidal symptoms.

Pulmonary Conditions: Because of their cholinomimetic actions, cholinesterase inhibitors should be prescribed with care to patients with a history of asthma or obstructive pulmonary disease.

Administration of **Donex®** concomitantly with other inhibitors of acetylcholinesterase, agonists or antagonists of the cholinergic system should be avoided.

Severe Hepatic Impairment: There are no data for patients with severe hepatic impairment.

This medicinal product contains

- **Aspartame:** Aspartame is a source of phenylalanine. It may be harmful if you have phenylketonuria (PKU), a rare genetic disorder in which phenylalanine builds up because the body cannot remove it properly.

- **Lactose:** Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose - galactose malabsorption should not take this medicine

Effects on ability to drive or use machines: Donepezil has minor or moderate influence on the ability to drive & use machines. Dementia may cause

impairment of driving performance or compromise the ability to use machinery. Furthermore, donepezil can induce fatigue, dizziness & muscle cramps, mainly when initiating or increasing the dose. The treating physician should routinely evaluate the ability of patients on donepezil to continue driving or operating complex machines.

Use During Pregnancy & Lactation:

Pregnancy: There are no adequate data from the use of donepezil in pregnant women. Studies in animals have not shown teratogenic effect but have shown peri & post natal toxicity. The potential risk for humans is unknown.

Donex® should not be used during pregnancy unless clearly necessary.

Lactation: Donepezil is excreted in the milk of rats. It is not known whether donepezil is excreted in human breast milk & there are no studies in lactating women. Therefore, women on donepezil should not breast feed.

Drug Interactions:

Donepezil &/ or any of its metabolites do not inhibit the metabolism of theophylline, warfarin, cimetidine or digoxin in humans. The metabolism of donepezil is not affected by concurrent administration of digoxin or cimetidine. In vitro studies have shown that the cytochrome P450 isoenzymes 3A4 & to a minor extent 2D6 are involved in the metabolism of donepezil. Drug interaction studies performed in vitro show that ketoconazole & quinidine, inhibitors of CYP3A4 & 2D6 respectively, inhibit donepezil metabolism. Therefore

these & other CYP3A4 inhibitors, such as itraconazole & erythromycin, & CYP2D6 inhibitors, such as fluoxetine could inhibit the metabolism of donepezil.

Ketoconazole increased mean donepezil concentrations. Enzyme inducers, such as rifampicin, phenytoin, carbamazepine & alcohol may reduce the levels of donepezil. Since the magnitude of an inhibiting or inducing effect is unknown, such drug combinations should be used with care. Donepezil has the potential to interfere with medications having anticholinergic activity. There is also the potential for synergistic activity with concomitant treatment involving medications such as succinylcholine, other neuro-muscular blocking agents or cholinergic agonists or beta blocking agents which have effects on cardiac conduction.

Undesirable effects:

The most common adverse events are diarrhea, muscle cramps, fatigue, nausea, vomiting & insomnia.

The incidence profile for adverse events for severe Alzheimer's disease is similar to that of mild to moderately severe Alzheimer's disease. Adverse reactions reported as more than an isolated case are listed below, by system organ class & by frequency. Frequencies are defined as: very common ($\geq 1/10$) common ($\geq 1/100, < 1/10$), uncommon ($\geq 1/1,000, < 1/100$), rare ($\geq 1/10,000, < 1/1,000$), very rare ($< 1/10,000$) & not known (cannot be estimated from available data).

• Infections & infestations:

Common: Common cold.

• Metabolism & nutrition disorders:

Common: Anorexia.

• Psychiatric disorders:

Common: hallucinations**, agitation**, aggressive behaviour**, abnormal dreams & aightmares**

• Nervous system disorders: Common: Syncope*, dizziness, insomnia. Uncommon: seizure*. Rare: extrapyramidal symptoms.

• Cardiac disorders: Uncommon: Bradycardia. Rare: Sino-atrial block, Atrioventricular block.

• Gastrointestinal disorders: Very Common: Diarrhoea, Nausea. Common: Vomiting, Abdominal disturbance. Uncommon: Gastrointestinal haemorrhage, Gastric & duodenal ulcers.

• Hepato-biliary disorders: Rare: Liver dysfunction including hepatitis***.

• Skin & subcutaneous tissue disorders: Common: Rash, Pruritis.

• Musculoskeletal, connective tissue & bone disorders: Common: Muscle cramps.

• Renal & urinary disorders: Common: Urinary incontinence.

• General disorders & administration site conditions: Very Common: Headache. Common: Fatigue, Pain.

• Investigations: Uncommon: Minor increase in serum concentration of muscle creatine kinase.

• Injury & poisoning: Common: Accident *In investigating patients for syncope or seizure the possibility of heart block or long sinusal pauses should be considered.

**Reports of hallucinations, abnormal dreams, nightmares, agitation & aggressive behaviour have resolved on dose-reduction or discontinuation of treatment.

***In cases of unexplained liver dysfunction, withdrawal of **Donex®** should be considered.

Overdose:

The estimated median lethal dose of donepezil following administration of a single oral dose in mice & rats is 45 & 32mg/kg, respectively, or approximately 225 & 160 times the maximum recommended human dose of 10mg per day. Dose-related signs of cholinergic stimulation were observed in animals & included reduced spontaneous movement, prone position, staggering gait, lacrimation, clonic convulsions,

depressed respiration, salivation, miosis, fasciculation & lower body surface temperature.

Overdose with cholinesterase inhibitors can result in cholinergic crisis characterized by severe nausea, vomiting, salivation, sweating, bradycardia, hypotension, respiratory depression, collapse & convulsions. Increasing muscle weakness is a possibility & may result in death if respiratory muscles are involved.

As in any case of overdose, general supportive measures should be utilised. Tertiary anticholinergics such as atropine may be used as an antidote for **Donex®** overdose. Intravenous atropine sulphate titrated to effect is recommended: an initial dose of 1.0 to 2.0mg IV with subsequent doses based upon clinical response. Atypical responses in blood pressure & heart rate have been reported with other cholinomimetics when co-administered with quaternary anticholinergics such as glycopyrrolate. It is not known whether donepezil &/or its metabolites can be removed by dialysis (hemodialysis, peritoneal dialysis, or hemofiltration).

Pharmacological Properties

Donex® (donepezil) belongs to a group of medicines called anti-dementia drugs "acetylcholinesterase inhibitors". Donepezil increases the levels of a substance (acetylcholine) in the brain involved in memory function by slowing down the breakdown of acetylcholine.

Pharmacokinetic properties

Absorption: Maximum plasma levels are reached approximately 3-4 hours after oral administration. Plasma concentrations & area under the curve rise in proportion to the dose. Terminal disposition half-life is approximately 70 hours, thus, administration of multiple single-daily doses results in gradual approach to steady-state.

Approximate steady-state is achieved within 3 weeks after initiation of therapy.

Once at steady-state, plasma donepezil concentrations & related pharmacodynamic activity show little variability over the course of the day. Food did not affect the absorption of donepezil.

Distribution: Donepezil is approximately 95% bound to human plasma proteins. The distribution of donepezil in various body tissues has not been definitively studied. This suggests that donepezil &/or its metabolites may persist in the body for more than 10 days.

Metabolism/Excretion: Donepezil is both excreted in the urine intact & metabolised by the cytochrome P450 system to multiple metabolites, not all of which have been identified.

Approximately 57% of the total administered radioactivity was recovered from the urine (17% as unchanged donepezil), & 14.5% was recovered from the faeces, suggesting biotransformation & urinary excretion as the primary routes of elimination.

There is no evidence to suggest enterohepatic recirculation of donepezil &/or any of its metabolites.

Plasma donepezil concentrations decline with a half-life of approximately 70 hours.

Special precautions for storage:

Do not store above 30°C.

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This is a medicament

- A medicament is a product which affects your health, and its consumption contrary to instructions is dangerous for you.
- Follow strictly the doctor's prescription, the method of use and the instructions of the pharmacist who sold the medicament.
- The doctor and the pharmacist are experts in medicine, its benefits and risks.
- Do not by yourself interrupt the period of treatment prescribed for you.
- Do not repeat the same prescription without consulting your doctor.
- Keep medicament out of the reach of children.

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