Defstar™

Tablets

Composition:

Each tablet contains

Deflazacort	6mg

Pharmacokinetic properties:

After oral administration in the fasted state, the median Tmax with deflazacort tablets or suspension is about 1 hour. The protein binding of the active metabolite of deflazacort is about 40%. Deflazacort is rapidly converted to the active metabolite 21-desDFZ by esterases after oral administration. 21-desDFZ is further metabolized by CYP3A4 to several other inactive metabolites. Urinary excretion is the predominant route of deflazacort elimination (about 68% of the dose), and the elimination is almost completed by 24 hours post dose. 21-desDFZ accounts for 18% of the eliminated drug in the urine.

Mechanism of Action

Glucocorticoids bind to the cytosolic glucocorticoid receptor (GR). This type of receptor is activated by ligand binding. After a hormone binds to the corresponding receptor, the newly formed receptor-ligand complex translocate itself into the cell nucleus, where it binds to glucocorticoid response elements (GRE) in the promoter region of the target genes resulting in the regulation of gene expression and modification of transcription and, hence, protein synthesis in order to achieve inhibition of leukocyte infiltration at the site of inflammation, interference in the function of mediators of inflammatory response, suppression of humoral immune responses, and reduction in edema or scar tissue. The anti-inflammatory actions of dexamethasone are thought to involve phospholipase A_2 inhibitory proteins, lipocortins, which control the biosynthesis of potent mediators of inflammation such as prostaglandins and leukotrienes.

Indication:

Defstar is indicated in patient with:

- Allergic Rhinitis
- Sudden sensory neural hearing loss
- Acute inflammatory conditions
- Acute exacerbation of chronic bronchitis
- Lower respiratory tract infection
- Arthritis

- Osteoarthritis

Contraindication:

Defstar is contraindicated in patient with:

- Systemic infection unless specific anti-infective therapy is employed.
- Hypersensitivity to deflazacort or any of the ingredients.
- Receiving live virus immunization.

Drug Interaction:

- It is recommended to increase the maintenance dose of deflazacort if drugs which are liver enzyme inducers are co-administered, e.g. rifampicin, rifabutin, carbamazepine, phenobarbitone, phenytoin, primidone and aminoglutethimide.
- For drugs which inhibit liver enzymes, e.g. ketoconazole it may be possible to reduce the maintenance dose of deflazacort. In patients taking estrogens, corticosteroid requirements may be reduced.
- The desired effects of hypoglycaemic agents (including insulin), anti-hypertensives & diuretics are antagonised by corticosteroids & the hypokalaemic effects of acetazolamide, loop diuretics, thiazide diuretics & carbenoxolone are enhanced.
- The efficacy of coumarin anticoagulants may be enhanced by concurrent corticosteroid therapy
- Antacids may reduce bioavailability; leave at least 2 hours between administration of deflazacort and antacids.

Adverse effects:

- GI – dyspepsia & peptic ulcer are the most commonly reported adverse effects
- Others - candidiasis, cataract, drug psychosis, impaired glucose tolerance, growth retardation, hirsutism, hypertension, hypokalaemia, muscle weakness, osteoporosis, pathological fracture, steroid facies, delayed wound healing

Warnings and Precautions:

- Alterations in Endocrine Function:

Hypothalamic-pituitary-adrenal axis suppression, Cushing's syndrome, and hyperglycemia can occur; Monitor patients for these conditions with chronic use of DEFSTAR

- Immunosuppression and Increased Risk of Infection:

Increased risk of new, exacerbation, dissemination, or reactivation of latent infections, which can be severe and at times fatal; Signs and symptoms of infection may be masked

- Alterations in Cardiovascular/Renal Function:

Monitor for elevated blood pressure and sodium, and for decreased potassium levels

- Gastrointestinal Perforation:

Increased risk in patients with certain GI disorders; Signs and symptoms may be masked

- Behavioral and Mood Disturbances:

May include euphoria, insomnia, mood swings, personality changes, severe depression, and psychosis

- Effects on Bones:

Monitor for decreases in bone mineral density with chronic use of DEFSTAR

- Ophthalmic Effects:

May include cataracts, infections, and glaucoma; Monitor intraocular pressure if DEFSTAR is continued for more than 6 weeks

- Vaccination:

Do not administer live or live attenuated vaccines to patients receiving immunosuppressive doses of corticosteroids

- Serious Skin Rashes:

Discontinue at the first sign of rash, unless the rash is clearly not drug related

Use in special population:

1. **Pediatric:** Deflazacort is not approved for use by anyone younger than 5 years old.
2. **Geriatric:** No clinical data is available for elderly patients.
3. **Liver impairment:** No dose adjustment is required in patients with mild or moderate hepatic impairment .There is no clinical experience in patients with severe hepatic impairment, and a dosing recommendation cannot be provided for patients with severe hepatic impairment.
4. **Renal failure:** No dose adjustment is required in patients with mild, moderate or severe renal impairment
5. **Pregnancy and lactation:** Not recommended for use in pregnancy. Deflazacort can pass into breast milk and may cause side effects in the nursing baby.

Dosage:

As directed by physician.

Presentation:

Defstar tablets are available in a strip of 10 tablets.

Storage and handling:

Store in cool and dry place.