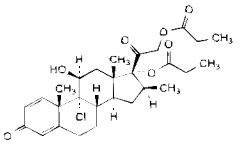
Bekson® HFA
Bekson Forte® HFA

(Beclomethasone dipropionate)
CFC Free Inhalers 50mcg and 250mcg

بیکسن ایچ ایف اے
بیکسن فورٹ ایچ ایف اے

DESCRIPTION
BEKSON HFA and BEKSON FORTE HFA are pressurized metered dose inhalers that deliver 50mcg and 250mcg Beclomethasone dipropionate respectively per actuation into the mouth piece of specially designed actuator. BEKSON HFA (Beclomethasone dipropionate) and BEKSON FORTE HFA (Beclomethasone dipropionate) Inhaler contains HFA 134a as propellant and does not contain any chlorofluorocarbons. The chemical name of Beclomethasone dipropionate is 9-chloro-11ß-hydroxy-16ß-methyl-3, 20-dioxopregna -1, 4-diene-17, 21-diyl dipropionate. Its molecular formula is $C_{28}H_{37}ClO_7$ and the structural formula is:



Beclomethasone dipropionate

QUALITATIVE & QUANTITATIVE COMPOSITION
BEKSON HFA (Beclomethasone dipropionate) and BEKSON FORTE HFA (Beclomethasone dipropionate) Inhaler is available for administration as:

1. BEKSON HFA Inhaler 50mcg
   Each metered dose contains:
   Beclomethasone dipropionate BP…50mcg

2. BEKSON FORTE HFA Inhaler 250mcg
   Each metered dose contains:
   Beclomethasone dipropionate BP…250mcg

CLINICAL PHARMACOLOGY
Mechanism of Action
Beclomethasone dipropionate is a pro-drug with weak glucocorticoid receptor binding affinity. It is extensively hydrolyzed via esterase enzymes to the active metabolite Beclomethasone-17-monopropionate (B-17-MP), which has high topical anti-inflammatory activity.

Pharmacokinetics
Absorption
When administered via inhalation, systemic absorption of unchanged Beclomethasone dipropionate occurs through the lungs with negligible oral absorption of the swallowed dose. There is extensive conversion of Beclomethasone dipropionate to its active metabolite Beclomethasone-17-monopropionate within the lung prior to systemic absorption. The systemic absorption of Beclomethasone-17-monopropionate arises from both lung deposition (36%) and oral absorption of the swallowed dose (26%). The absolute bioavailability following inhalation is approximately 2% and 62% of the nominal dose for unchanged Beclomethasone dipropionate and Beclomethasone-17-monopropionate respectively. Beclomethasone dipropionate is absorbed rapidly with peak plasma concentrations at 0.3 hours. Beclomethasone-17-monopropionate appears more slowly with a t_{max} of 1 hour.

Metabolism
Beclomethasone dipropionate is cleared very rapidly from the systemic circulation by metabolism mediated via esterase enzymes that are found in most tissues. The main product of metabolism is the active metabolite (B-17-MP). Minor inactive metabolites, Beclomethasone-21-monopropionate and Beclomethasone, are also formed but these contribute little to the systemic exposure.

Distribution
The tissue distribution at steady-state for Beclomethasone dipropionate is moderate (20L) but more extensive for Beclomethasone-17-monopropionate (424L). Plasma protein binding is moderately high (87%).

Excretion
The elimination of Beclomethasone dipropionate and Beclomethasone-17-monopropionate are characterised by high plasma clearance (150 and 120L/hour) with corresponding terminal elimination half-lives of 0.5 hours and 2.7 hours. Following oral administration of tritiated Beclomethasone dipropionate, approximately 60% of the dose was excreted in the feces within 96 hours mainly as free and conjugated polar metabolites. Approximately 12% of the dose was excreted as free and conjugated polar metabolites in the urine. The renal clearance of Beclomethasone dipropionate and its metabolites is negligible.

THERAPEUTIC INDICATIONS
BEKSON HFA (Beclomethasone dipropionate) and BEKSON FORTE HFA (Beclomethasone dipropionate) is indicated in the prophylactic management of mild, moderate, or severe asthma in adults or children.

Adults:
Mild Asthma (PEF values greater than 80% predicted at baseline with less than 20% variability): Patients requiring intermittent symptomatic bronchodialator asthma medication on more than occasional basis.

Moderate Asthma (PEF values 60%-80% predicted at baseline with 20%-30% variability): Patients requiring regular asthma medication and patients with unstable or worsening asthma on other prophylactic therapy or bronchodialator alone.

Severe Asthma (PEF values less than 60% predicted at baseline with greater than 30% variability): Patients with severe chronic asthma who are dependent on systemic corticosteroids for adequate control of symptoms.

Children:
Any child who requires prophylactic asthma medication.

DOSAGE AND ADMINISTRATION
BEKSON HFA (Beclomethasone dipropionate) and BEKSON FORTE HFA (Beclomethasone dipropionate) Inhalers are administered by the inhaled route only. The starting dose of beclomethasone dipropionate should be adjusted to the severity of the disease. The dose should be titrated to the lowest dose at which effective control of asthma is maintained.

BEKSON HFA (Beclomethasone dipropionate) Inhaler 50mcg
Adult (Including the elderly): Usual starting dose is 200mcg (4 inhalations) twice daily. In more severe cases a dose of 600-800mcg (12-16 inhalations) daily is recommended. This may then be reduced when the patient's asthma is stabilized. The total daily dosage should be administered as two to four divided doses.

Children: Usual starting dose is 100mcg (2 inhalations) twice daily. Depending upon the severity of asthma, the daily dose may be increased up to 400mcg (8 inhalations) in two to four divided doses.

BEKSON FORTE HFA (Beclomethasone dipropionate) Inhaler 250mcg
Adults (Including the elderly): Usually 1000mcg (4 inhalations) daily, which may be increased up to 2000mcg (8 inhalations) daily. This may then be reduced when patient's asthma has stabilized. The total daily dosage should be administered as two to four divided doses.

Children: Not recommended for use in children.

ADVERSE REACTIONS
- Candidiasis of the throat and mouth may develop in some patients but this can be treated without discontinuation of Beclomethasone therapy.
- Hoarseness or throat irritation may also occur.
- As with other inhaled therapy, paradoxical bronchospasm with wheezing may occur immediately after dosing. Immediate treatment with an inhaled fast-acting bronchodilator is required. Beclomethasone dipropionate should be discontinued immediately and alternative prophylactic therapy introduced.
- Systemic effects of inhaled corticosteroids may occur particularly at high doses prescribed for prolonged periods. These may include adrenal suppression, growth retardation in children and adolescents, decrease in bone mineral density, cataract and glaucoma.
- Hypersensitivity reactions including rashes, urticaria, pruritus and erythema and edema of the eye, face, lips and throat (angioedema) have been reported.
- Psychiatric disorders including psychomotor hyperactivity, sleep disorders, anxiety, depression, aggression and behavioral changes (predominantly in children).

CONTRAINDICATIONS
Beclomethasone dipropionate is contraindicated in:
- Patients with a history of hypersensitivity to the drug or any component of the product.
- Tubercular (active or quiescent) and local viral infections.

PRECAUTIONS
- Patients should be properly instructed on the use of the inhaler and their technique checked. They should also be made aware that Beclomethasone dipropionate inhaler has to be used regularly, even when they are asymptomatic, for optimum benefit.
- Lack of response or severe exacerbations of asthma should be treated by increasing the dose of inhaled Beclomethasone dipropionate and if necessary, by giving a systemic steroid and/or an antibiotic if there is an infection, together with ß-agonist therapy.
- Patients who have received systemic steroids for long periods of time or at high doses, or both, need special care and subsequent management when transferred to Beclomethasone therapy. The patient should be in a reasonably stable state before being given Beclomethasone dipropionate in addition to his usual maintenance dose of systemic steroid. Withdrawal of the systemic steroid should be gradual, starting after about seven days by reducing the daily oral dose by 1 mg prednisolone, or equivalent, at intervals not less than one week.

Adrenocortical function should be monitored regularly.
- Special care is necessary for the first months after the transfer until the hypothalamic-pituitary-adrenal (HPA) system has sufficiently recovered to enable the patient to cope with emergencies such as trauma, surgery or infections.
- In some patients inhaled Beclomethasone dipropionate may cause hoarseness or throat irritation. It may be helpful to rinse the mouth out with water immediately after inhalation. The use of a spacer device may be considered.
- Beclomethasone dipropionate inhaler is not for use in acute attacks but for routine long-term management.
- It is recommended that the height of children receiving prolonged treatment with inhaled corticosteroid should be regularly monitored.
- Patients weaned off oral steroids whose adrenocortical function is impaired should carry a steroid warning card indicating that they may need supplementary systemic steroids during periods of stress.
- Additional systemic corticosteroid cover should be considered during periods of stress or elective surgery.
- Transfer of patients from systemic steroid therapy to inhaled therapy may cause exacerbation or unmask allergic conditions (such as atopic eczema and rhinitis) previously suppressed by systemic steroid therapy. These should be treated as required with antihistamine and topical therapy.
- Treatment with Beclomethasone dipropionate inhaler should not be stopped abruptly.

Pregnancy
There is inadequate evidence of safety of Beclomethasone dipropionate in human pregnancy. Administration of Beclomethasone dipropionate during pregnancy should only be considered if the expected benefit to the mother is greater than any possible risk to the fetus.

Nursing mothers
The use of Beclomethasone dipropionate in mothers breast feeding their babies requires that the therapeutic benefits of the medicine be weighed against the potential hazards to the mother and baby.

Drug Interactions
Beclomethasone dipropionate Inhaler contains small amount of ethanol. There is a theoretical potential for interaction in particular sensitive patients taking disulfiram or metronidazole.

OVERDOSAGE
Acute: Inhalation of doses in excess of those recommended may lead to temporary suppression of adrenal function. This does not require emergency action. In these patients treatment should be continued at a dose sufficient to control asthma; adrenal function recovers in a few days and can be verified by measuring plasma cortisol.

Chronic: Use of inhaled Beclomethasone dipropionate in daily doses in excess of 1,500mcg over prolonged periods may lead to adrenal suppression. Monitoring of adrenal reserve may be indicated. Treatment should be continued at a dose sufficient to control asthma.

STORAGE
Store below 30°C.
Protect from direct sunlight, heat and frost.
Shake well before use.

As with most inhaled medications in aerosol canisters, the therapeutic effect of this medication may decrease when the canister is cold.

The canister should not be broken, punctured or burnt, even when apparently empty.

The expiration date refers to the product correctly stored at the required conditions.

HOW SUPPLIED
BEKSON HFA (Beclomethasone dipropionate) Inhaler 50mcg is available as metered dose inhaler with specially designed actuator. Each canister provides 200 inhalations.
BEKSON FORTE HFA (Beclomethasone dipropionate) Inhaler 250mcg is available as metered dose inhaler with specially designed actuator. Each canister provides 200 inhalations.

Keep out of reach of children.

To be sold on prescription of a registered medical practitioner only.

Please read the contents carefully before use.
This package insert is continually updated from time to time.

Manufactured by:
Jewim Pharmaceutical (Shandong) Co. Ltd.
Taian High-Tech Industrial Development Zone
Shandong, China.

Manufactured for:

Getz pharma (PVT) LIMITED
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