

Bical

Bicalutamide

COMPOSITION

Bical Tablet : Each film coated tablet contains Bicalutamide USP 50 mg.

CLINICAL PHARMACOLOGY

Mechanism of Action

Bicalutamide is a non-steroidal androgen receptor inhibitor. It competitively inhibits the action of androgens by binding to cytosol androgen receptors in the target tissue.

When Bicalutamide is combined with luteinizing hormone releasing hormone (LHRH) analog therapy, the suppression of serum testosterone induced by the LHRH analog is not affected. However, in clinical trials with Bicalutamide as a single agent for prostate cancer, rises in serum testosterone and estradiol have been noted.

In a subset of patients who have been treated with Bicalutamide and an LHRH agonist and who discontinue Bicalutamide therapy due to progressive advanced prostate cancer, a reduction in Prostate Specific Antigen (PSA) and/or clinical improvement (antiandrogen withdrawal phenomenon) may be observed.

Pharmacokinetics

Absorption: Bicalutamide is well-absorbed following oral administration, although the absolute bioavailability is unknown. Coadministration of Bicalutamide with food has no clinically significant effect on rate or extent of absorption.

Distribution: Bicalutamide is highly protein-bound (96%).

Metabolism/Elimination: Bicalutamide undergoes stereospecific metabolism. The S (inactive) isomer is metabolized primarily by glucuronidation. The R (active) isomer also undergoes glucuronidation but is predominantly oxidized to an inactive metabolite followed by glucuronidation. Both the parent and metabolite glucuronides are eliminated in the urine and feces.

INDICATIONS

Bicalutamide 50 mg Tablet is indicated for use in combination therapy with a luteinizing hormone-releasing hormone (LHRH) analog for the treatment of Stage D2 metastatic carcinoma of the prostate.

DOSAGE AND ADMINISTRATION

The recommended dose for Bicalutamide tablets therapy in combination with an LHRH analog is one 50 mg tablet once daily (morning or evening), with or without food. It is recommended that Bicalutamide tablets be taken at the same time each day. Treatment with Bicalutamide tablets should be started at the same time as treatment with an LHRH analog.

Dosage Adjustment in Renal Impairment: No dosage adjustment is necessary for patients with renal impairment.

Dosage Adjustment in Hepatic Impairment: No dosage adjustment is necessary for patients with mild to moderate hepatic impairment. In patients with severe liver impairment, although there was a 76% increase in the half-life (5.9 and 10.4 days for normal and impaired patients, respectively) of the active enantiomer of Bicalutamide no dosage adjustment is necessary.

CONTRAINDICATIONS

Hypersensitivity: Bicalutamide is contraindicated in any patient who has shown a hypersensitivity reaction to the drug or any of the tablet's components. Hypersensitivity reactions including angioneurotic edema and urticaria.

PRECAUTIONS

Hepatitis: Cases of death or hospitalization due to severe liver injury (hepatic failure) have been reported postmarketing in association with the use of Bicalutamide. Hepatotoxicity in these reports generally occurred within the first three to four months of treatment. Hepatitis or marked increases in liver enzymes leading to drug discontinuation occurred in approximately 1% of Bicalutamide patients in controlled clinical trials.

Serum transaminase levels should be measured prior to starting treatment with Bicalutamide, at regular intervals for the first four months of treatment, and periodically thereafter. If clinical symptoms or signs suggestive of liver dysfunction occur (e.g., nausea, vomiting, abdominal pain, fatigue, anorexia, "flu-like" symptoms, dark urine, jaundice or right upper quadrant tenderness), the serum transaminases, in particular the serum ALT should be measured immediately. If at any time a patient has jaundice or their ALT rises above two times the upper limit of normal, Bicalutamide should be immediately discontinued with close follow-up of liver function.

Gynecomastia and Breast Pain: In clinical trials with Bicalutamide 150 mg as a single agent for prostate cancer, gynecomastia and breast pain have been reported in up to 38% and 39% of patients, respectively.

Glucose Tolerance: A reduction in glucose tolerance has been observed in males receiving LHRH agonists. This may manifest as diabetes or loss of glycemic control in those with preexisting diabetes. Consideration should therefore be given to monitoring blood glucose in patients receiving Bicalutamide in combination with LHRH agonists.

Laboratory Tests: Regular assessments of serum Prostate Specific Antigen (PSA) may be helpful in monitoring the patient's response.

If PSA levels rise during Bicalutamide therapy, the patient should be evaluated for clinical progression. For patients who have objective progression of disease together with an elevated PSA, a treatment-free period of antiandrogen, while continuing the LHRH analog, may be considered.

ADVERSE EFFECTS

When Bicalutamide and an LHRH analog are given together, the most common side effect is hot flashes (50% of patients) and facial flushing. Alcohol may worsen this reaction and so it should be cautiously consumed. Other common side effects of the combination are infections, water retention, anemia diarrhea, constipation and overall pain including pain in the back, hips and stomach. LHRH analogs may increase blood glucose and worsen diabetes. Less common side effects are breast enlargement and breast pain, which may be due to the Bicalutamide alone.

DRUG INTERACTIONS

Bicalutamide may interact with warfarin. Therefore, the dose of warfarin may need to be adjusted and the ability of blood to clot should be closely monitored.

Bicalutamide reduces the activity of liver enzymes that breakdown certain drugs, for example, midazolam. Such combinations should be avoided if possible.

PHARMACEUTICAL INFORMATION

Storage Condition

Store in a cool and dry place, away from light. Keep out of the reach of children.

Presentation & Packaging

Bical Tablet : Each commercial box contains 3x10 tablets in Alu-Alu blister pack.

Manufactured By
 **BEACON**
Pharmaceuticals Limited
Mymensingh, Bangladesh