

**Composition:**

FXR 5 Tablet: Each film coated tablet contains Obeticholic Acid INN 5 mg.

FXR 10 Tablet: Each film coated tablet contains Obeticholic Acid INN 10 mg.

Therapeutic Indications:

FXR is indicated for the treatment of primary biliary cholangitis (also known as primary biliary cirrhosis) in combination with Ursodeoxycholic acid (UDCA) in adults with an inadequate response to UDCA or as monotherapy in adults unable to tolerate UDCA.

Dose Regimen and Method of Administration:**Dose Regimen:**

The starting dose is 5 mg once daily.

Based on an assessment of tolerability after 6 months, the dose should be increased to 10 mg once daily to achieve optimal response. No dose adjustment of concomitant UDCA is required in patients receiving obeticholic acid. Management and dose adjustment for severe pruritus: Management strategies include the addition of bile acid binding resins or antihistamines.

Method of Administration:

The tablet should be taken orally with or without food. For patients taking bile acid binding resins, obeticholic acid should be administered at least 4-6 hours before or 4-6 hours after taking a bile acid binding resin, or at an interval as great as possible.

Pharmacological Properties:

Pharmacotherapeutic Group: Bile Acid Preparations.

Mechanism of Action: Obeticholic acid is a selective and potent agonist for the farnesoid X receptor (FXR), a nuclear receptor expressed at high levels in the liver and intestine. FXR is thought to be a key regulator of bile acid, inflammatory, fibrotic, and metabolic pathways. FXR activation decreases the intracellular hepatocyte concentrations of bile acids by suppressing de novo synthesis from cholesterol, as well as, by increasing transport of bile acids out of the hepatocytes. These mechanisms limit the overall size of the circulating bile acid pool while promoting choleresis, thus reducing hepatic exposure to bile acids.

Pharmacokinetic Properties:

Absorption: Obeticholic acid is absorbed with peak plasma concentrations (C_{max}) occurring at a median time (t_{max}) of approximately 2 hours. Co-administration with food does not alter the extent of absorption of obeticholic acid.

Distribution: Human plasma protein binding of obeticholic acid and its conjugates is greater than 99%. The volume of distribution of obeticholic acid is 618 L. The volume of distributions of glyco and tauro-obeticholic acid has not been determined.

Biotransformation: Obeticholic acid is conjugated with glycine or taurine in the liver and secreted into bile. These glycine and taurine conjugates of obeticholic acid are absorbed in the small intestine leading to enterohepatic recirculation. The conjugates can be deconjugated in the ileum and colon by intestinal microbiota, leading to the conversion to obeticholic acid that can be reabsorbed or excreted in faeces, the principal route of elimination.

Elimination: After administration of radiolabeled obeticholic acid, greater than 87% is excreted in faeces. Urinary excretion is less than 3%.

Special warnings and precautions for use: Liver related adverse events: Elevations in alanine amino transferase (ALT) and aspartate aminotransferase (AST) have been observed in patients taking obeticholic acid. Clinical signs and symptoms of

hepatic decompensation have also been observed. These events have occurred as early as within the first month of treatment. Liver-related adverse events have primarily been observed at doses higher than the maximum recommended dose of 10 mg once daily. Signs and symptoms of hepatic decompensation have also been observed. These events have occurred as early as within the first month of treatment. Liver-related adverse events have primarily been observed at doses higher than the maximum recommended dose of 10 mg once daily.

Patients should be monitored during treatment with FXR for elevations in liver biochemical tests and for the development of liver-related adverse events.

Interaction with other medicinal products and other forms of interaction: Medicinal products that are affected by obeticholic acid

Warfarin: International normalized ratio (INR) is decreased following co-administration of warfarin and obeticholic acid. INR should be monitored and the dose of warfarin adjusted, if needed, to maintain the target INR range when co-administering obeticholic acid and warfarin.

Bile acid binding resins: Bile acid binding resins such as cholestyramine, colestipol, or colesevelam adsorb and reduce bile acid absorption and may reduce efficacy of obeticholic acid. When concomitant bile acid binding resins are administered, obeticholic acid should be taken at least 4-6 hours before or 4-6 hours after taking a bile acid binding resin, or at as great an interval as possible.

Fertility, Pregnancy and Lactation:

Pregnancy: There are no data on the use of obeticholic acid in pregnant women. Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity as a precautionary measure, it is preferable to avoid the use of obeticholic acid during pregnancy.

Breast-feeding: It is unknown whether obeticholic acid is excreted in human milk. Based on animal studies and intended pharmacology, obeticholic acid is not expected to interfere with breast-feeding or the growth or development of a breast-fed child. A decision should be made whether to discontinue breast-feeding or to discontinue/abstain from obeticholic acid therapy taking into account the benefit of breast-feeding for the child and the benefit of therapy for the woman.

Undesirable Effects: The most commonly reported adverse reactions were pruritus (63%) and fatigue (22%). The most common adverse reaction leading to discontinuation was pruritus. The majority of pruritus occurred within the first month of treatment and tended to resolve over time with continued dosing.

Pharmaceutical Information:

Storage Conditions: Store in a cool (below 30° C) and dry place, away from light. Keep out of the reach of children.

Packaging:

FXR 5 Tablet: Each commercial box contains 30 tablets in Alu-Alu blister pack.

FXR 10 Tablet: Each commercial box contains 30 tablets in Alu-Alu blister pack.