

**COMPOSITION**

**EmpaMet® XR 5/1000 Tablet:** Each extended release tablet contains Empagliflozin INN 5 mg and Metformin Hydrochloride BP 1000 mg.

**EmpaMet® XR 10/1000 Tablet:** Each extended release tablet contains Empagliflozin INN 10 mg and Metformin Hydrochloride BP 1000 mg.

**EmpaMet® XR 25/1000 Tablet:** Each extended release tablet contains Empagliflozin INN 25 mg and Metformin Hydrochloride BP 1000 mg.

**PHARMACOLOGY**

Empagliflozin is an inhibitor of the SGLT2. It is responsible for the reabsorption of glucose from the glomerular filtrate back into the blood circulation. By inhibiting SGLT2, Empagliflozin reduces renal reabsorption of filtered glucose and lowers the renal threshold for glucose, thereby increases urinary glucose excretion. Empagliflozin also reduces Sodium reabsorption and increases the delivery of Sodium to the distal tubule. This may influence several physiological functions such as lowering both pre- and afterload of the heart and downregulating sympathetic activity.

Metformin Hydrochloride is an antihyperglycemic agent which improves glucose tolerance in patients with type 2 diabetes mellitus, lowering both basal and postprandial plasma glucose. It decreases hepatic glucose production, decreases intestinal absorption of glucose and improves insulin sensitivity by increasing peripheral glucose uptake and utilization. It does not produce hypoglycemia in either patient with type 2 diabetes mellitus or normal subjects (except in special circumstances) and does not cause hyperinsulinemia.

**INDICATION**

EmpaMet XR is indicated as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus.

**Empagliflozin, when used as a component of it, is indicated in adults with type 2 diabetes mellitus to reduce the risk of:**

- Cardiovascular death in adults with established cardiovascular disease.
- Cardiovascular death and hospitalization for heart failure in adults with heart failure.

**Limitations of Use:**

- Not recommended for use in patients with type 1 diabetes mellitus. It may increase the risk of diabetic ketoacidosis in these patients.
- Because of the Metformin Hydrochloride component, it is not recommended for use in patients with heart failure without type 2 diabetes mellitus.

**DOSAGE AND ADMINISTRATION****Testing Prior to Initiation**

- Assess renal function before initiating EmpaMet XR and as clinically indicated.
- Assess volume status in patients with volume depletion and correct this condition before initiating EmpaMet XR.

**Recommended Dosage and Administration of EmpaMet XR in Adults****Switching:**

- Metformin Hydrochloride: Initiate EmpaMet XR at a similar total daily dosage of Metformin Hydrochloride and a total daily Empagliflozin dosage of 10 mg.
- Empagliflozin: Initiate EmpaMet XR at the same total daily dosage of Empagliflozin and a total daily Metformin Hydrochloride dosage of 1000 mg.
- Empagliflozin and Metformin Hydrochloride: Initiate EmpaMet XR at the same total daily dosage of each component.

**Dosage of Empagliflozin and Metformin Hydrochloride:**

- The recommended total daily dosage of Empagliflozin is 10 mg.
- For additional glycemic control, Empagliflozin may be increased to a maximum total daily dosage of 25 mg in patients tolerating 10 mg daily and Metformin Hydrochloride may be increased to a maximum total daily dosage of 2000 mg. Gradual escalation is required to reduce gastrointestinal adverse reactions with Metformin Hydrochloride.

**Take EmpaMet XR orally once daily with a meal in the morning. Swallow each tablet whole. Do not split, crush, dissolve or chew.**

**Dosage Recommendations in Patients with Renal Impairment**

- Initiation of EmpaMet XR is not recommended in patients with an eGFR less than 45 mL/min/1.73 m<sup>2</sup>, due to the Metformin Hydrochloride component.
- EmpaMet XR are contraindicated in patients with an eGFR less than 30 mL/min/1.73 m<sup>2</sup> or in patients on dialysis.

**Discontinuation for Iodinated Contrast Imaging Procedures**

Discontinue EmpaMet XR at the time of or prior to an iodinated contrast imaging procedure in patients with an eGFR less than 60 mL/min/1.73 m<sup>2</sup>; in patients with a history of liver disease, alcoholism or heart failure or in patients who will be administered intra-arterial iodinated contrast.

Re-evaluate eGFR 48 hours after the imaging procedure; restart EmpaMet XR if renal function is stable.

**Recommendations Regarding Missed Dose**

- If a dose is missed, instruct patients to take the dose as soon as possible.
- Do not double up the next dose.

**CONTRAINDICATION**

- Hypersensitivity to Empagliflozin, Metformin Hydrochloride or any of the excipients in it.
- Severe renal impairment (eGFR below 30 mL/min/1.73 m<sup>2</sup>), end stage renal disease or on dialysis.
- Metabolic acidosis including diabetic ketoacidosis.

**WARNING & PRECAUTION**

**Lactic Acidosis:** If Metformin Hydrochloride associated lactic acidosis is suspected, discontinue it and institute general supportive measures in a hospital setting. Prompt hemodialysis is recommended for this case.

**Ketoacidosis:** Before initiating it, consider risk factors for ketoacidosis. If suspected, discontinue it, evaluate and treat promptly.

**Volume Depletion:** Before initiating it, assess volume status and renal function in patients with impaired renal function, elderly patients or patients on loop diuretics. Monitor for signs and symptoms during therapy.

**Urosepsis and Pyelonephritis:** Evaluate patients for signs and symptoms of urinary tract infections and treat promptly, if indicated.

**Hypoglycemia:** Adult patients taking an insulin secretagogue or insulin may have an increased risk of hypoglycemia. Consider lowering the dosage of insulin secretagogue or insulin to reduce the risk of hypoglycemia when initiating EmpaMet XR.

**Necrotizing Fasciitis of the Perineum (Fournier's Gangrene):** Serious life-threatening cases have occurred in both females and males. Assess patients presenting with pain or tenderness, erythema or swelling in the genital or perineal area, along with fever or malaise. If suspected, institute prompt treatment.

**Genital Mycotic Infections:** Monitor and treat as appropriate.

**Hypersensitivity Reactions:** Serious hypersensitivity reactions (e.g.: angioedema) have occurred with Empagliflozin. If hypersensitivity reactions occur, discontinue it, treat promptly and monitor until signs and symptoms resolve.

**Vitamin B<sub>12</sub> Deficiency:** Metformin Hydrochloride may lower vitamin B<sub>12</sub> levels. Measure hematologic parameters annually and vitamin B<sub>12</sub> at 2 to 3 year intervals and manage any abnormalities.

**SIDE EFFECT**

Most common side effects are-

Empagliflozin (>5% or greater incidence): Urinary tract infections and Female genital mycotic infections.

Metformin Hydrochloride (>5%): Diarrhea, nausea/vomiting, flatulence, abdominal discomfort, indigestion, asthenia and headache.

**USE IN PREGNANCY & LACTATION**

**Pregnancy:** Advise females (especially during the second and third trimesters) of the potential risk to a fetus.

**Lactation:** Not recommended when breastfeeding.

**Females and Males of Reproductive Potential:** Advise premenopausal females of the potential for unintended pregnancy.

**USE IN CHILDREN**

Safety and effectiveness of it have not been established in paediatric patients.

**DRUG INTERACTION**

- Carbonic Anhydrase Inhibitors: May increase risk of lactic acidosis. Consider more frequent monitoring.
- Drugs that reduce Metformin Hydrochloride Clearance: May increase the risk of lactic acidosis. Consider the benefits and risks of concomitant use.

**OVERDOSAGE**

Overdose of Metformin Hydrochloride has occurred, including ingestion of amounts greater than 50 grams. Metformin Hydrochloride may be removed by hemodialysis. The removal of Empagliflozin by hemodialysis has not been studied.

**STORAGE**

Store below 30°C temperature in a dry place. Protect from light & moisture. Keep out of the reach of children.

**HOW SUPPLIED**

**EmpaMet® XR 5/1000 Tablet:** Each box contains 16's tablets in Alu-Alu blister pack.

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**EmpaMet® XR 25/1000 Tablet:** Each box contains 16's tablets in Alu-Alu blister pack.