

Empagliflozin INN & Metformin Hydrochloride BP

COMPOSITION

EmpaMet® 5/500 Tablet: Each film coated tablet contains Empagliflozin INN 5 mg and Metformin Hydrochloride BP 500 mg.

EmpaMet[®] 5/850 Tablet: Each film coated tablet contains Empagliflozin INN

5 mg and Metformin Hydrochloride BP 850 mg. EmpaMet[®] 5/1000 Tablet: Each film coated tablet contains Empagliflozin INN 5 mg and Metformin Hydrochloride BP 1000 mg.

EmpaMet® 12.5/500 Tablet: Each film coated tablet contains Empagliflozin EmpaMet® 12.5/850 Tablet: Each film coated tablet contains Empagliflozin

EmpaMet® 12.5/1000 Tablet: Each film coated tablet contains Empagliflozin

INN 12.5 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 is indicated as an adjunct to diet and exercise to improve glycemic control in adults and paediatric patients aged 10 years and older 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 as clinically indicated. · Assess volume status in patients with volume depletion and correct this condition before initiating EmpaMet.

Recommended Dosage and Administration of EmpaMet in Adults Switching:

 Metformin Hydrochloride: Initiate EmpaMet at a similar total daily dosage of Metformin Hydrochloride and a total daily Empagliflozin dosage of 10 mg. • Empagliflozin: Initiate EmpaMet at the same total daily dosage of Empagliflozin and a total daily Metformin Hydrochloride dosage of 1000 mg. • Empagliflozin and Metformin Hydrochloride: Initiate EmpaMet 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 orally twice daily with meals.

Recommended Dosage and Administration of EmpaMet in Paediatric Patients (≥10 Years)

• Individualize the dosage of EmpaMet based on the patient's current regimen. · Monitor effectiveness and tolerability of EmpaMet and adjust dosage as appropriate, not to exceed the maximum total daily dosage of Empagliflozin 25 mg and Metformin Hydrochloride 2000 mg.

Take EmpaMet orally twice daily with meals; with gradual dose escalation to reduce gastrointestinal adverse reactions with Metformin Hydrochloride.

Dosage Recommendations in Patients with Renal Impairment Initiation of EmpaMet is not recommended in patients with an eGFR less than 45 mL/min/1.73 m², due to the Metformin Hydrochloride component. • EmpaMet are contraindicated in patients with an eGFR less than 30 mL/min/1.73 m² or in patients on dialysis.

Discontinuation for Iodinated Contrast Imaging Procedures

Discontinue EmpaMet at the time of or prior to an iodinated contrast imaging procedure in patients with an eGFR less than 60 mL/min/1.73 m²; 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 if enal function 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 m²), 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. 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

Hypoglycemia: Adult patients taking an insulin secretagogue or insulin may have an increased risk of hypoglycemia. In paediatric patients 10 years of age and older, the risk of hypoglycemia was higher regardless of insulin use. Consider lowering the dosage of insulin secretagogue or insulin to reduce the risk of hypoglycemia email. hypoglycemia when initiating EmpaMet. 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.

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

Vitamin B₁₂ Deficiency: Metformin Hydrochloride may lower vitamin B₁₂ levels. Measure hematologic parameters annually and vitamin B₁₂ 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 (<10 years) 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® 5/500 Tablet: Each box contains 30's tablets in Alu-Alu blister pack. EmpaMet® 5/850 Tablet: Each box contains 32's tablets in Alu-Alu blister pack. EmpaMet® 5/1000 Tablet: Each box contains 32's tablets in Alu-Alu blister pack. EmpaMet® 12.5/500 Tablet: Each box contains 30's tablets in Alu-Alu blister pack. EmpaMet® 12.5/850 Tablet: Each box contains 32's tablets in Alu-Alu blister pack. EmpaMet® 12.5/1000 Tablet: Each box contains 32's tablets in Alu-Alu blister pack.

