Glytec Tablets

(Sitagliptin Tablet USP)

گلائی ٹیک گولیاں

(سیٹاگلیپٹن فاسفیٹ)

COMPOSITION: Each film coated tablet contains:
Sitagliptin Phosphate Monohydrate USP eq. to Sitagliptin ... 50mg and 100mg (USP Specs.)

INDICATIONS: For adult patients with type 2 diabetes mellitus, **Glytec** is indicated to improve glycaemic control:
As monotherapy: In patients inadequately controlled by diet and exercise alone and for whom metformin is inappropriate due to contraindications or intolerance.
As dual oral therapy in combination with: Metformin when diet and exercise plus metformin alone do not provide adequate glycaemic control.
A sulphonylurea when diet and exercise plus maximal tolerated dose of a sulphonylurea alone do not provide adequate glycaemic control and when metformin is inappropriate due to contraindications or intolerance.
A peroxisome proliferator-activated receptor gamma (PPARγ) agonist (i.e. a thiazolidinedione) when use of a PPARγ agonist is appropriate and when diet and exercise plus the PPARγ agonist alone do not provide adequate glycaemic control.
As triple oral therapy in combination with: A sulphonylurea and metformin when diet and exercise plus dual therapy with these medicinal products do not provide adequate glycaemic control. A PPARγ agonist and metformin when use of a PPARγ agonist is appropriate and when diet and exercise plus dual therapy with these medicinal products do not provide adequate glycaemic control. **Glytec** is also indicated as add-on to insulin (with or without metformin) when diet and exercise plus stable dose of insulin do not provide adequate glycaemic control.

CONTRA-INDICATIONS: Hypersensitivity to active substance or any of the excipients of the product.

PHARMACOLOGY:
MECHANISM OF ACTION: Sitagliptin inhibits dipeptidyl peptidase-4 (DPP-4), an enzyme responsible for degradation of the incretin hormones glucagon-like peptide-1 (GLP-1) and glucose-dependent insulinotropic polypeptide (GIP). Concentrations of the active intact hormones are increased by Sitagliptin, thereby increasing and prolonging the action of these hormones. Incretin hormones, including glucagon-like peptide-1 (GLP-1) and glucose-dependent insulinotropic polypeptide (GIP), are released by the intestine throughout the day, and levels are increased in response to a meal. These hormones are rapidly inactivated by the enzyme, DPP-4. When blood glucose concentrations are normal or elevated, GLP-1 and GIP increase insulin synthesis and release from pancreatic beta cells by intracellular signaling pathways involving cyclic AMP. GLP-1 also lowers glucagon secretion from pancreatic alpha cells, leading to reduced hepatic glucose production. By increasing and prolonging active incretin levels, Sitagliptin increases insulin release and decreases glucagon levels in the circulation in a glucose-dependent manner.

PHARMACOKINETIC: Sitagliptin is absorbed from the gastrointestinal tract, with a peak plasma concentration occurring about 1 to 4 hours after an oral dose, and a bioavailability of about 87%. Because co-administration of a high-fat meal with Sitagliptin had no effect on the pharmacokinetics, Sitagliptin may be administered with or without food. It undergoes minimal metabolism, mainly by the cytochrome P450 isoenzymes CYP3A4, and to a lesser extent by CYP2C8. About 79% of the dose excreted unchanged in the urine. Renal excretion of Sitagliptin involves active tubular secretions; it is a substrate for organic anion transporter 3 and P-glycoprotein. Its terminal half life is almost 32 hours.

DOSAGE AND ADMINISTRATION: The dose is 100mg sitagliptin once daily. When used in combination with metformin and/or a PPARγ agonist, the dose of metformin and/or PPARγ agonist should be maintained. When **Glytec** is used in combination with a sulphonylurea or with insulin, a lower dose of the sulphonylurea or insulin may be considered to reduce the risk of hypoglycaemia. If a dose of **Glytec** is missed, it should be taken as soon as the patient remembers. A double dose should not be taken on the same day. **Glytec** can be taken with or without food.
Special populations:
Renal impairment: When considering the use of sitagliptin in combination with another anti-diabetic medicinal product, its conditions for use in patients with renal impairment should be checked. For patients with mild renal impairment (glomerular filtration rate [GFR] ≥ 60 to < 90ml/min), no dose adjustment is required. For patients with moderate renal impairment (GFR ≥ 45 to < 60ml/min), no dosage adjustment is required. For patients with moderate renal impairment (GFR ≥ 30 to < 45ml/min), the dose of **Glytec** is 50mg once daily. For patients with severe renal impairment (GFR ≥ 15 to <30ml/min) or with end-stage renal disease (ESRD) (GFR < 15ml/min), including those requiring haemodialysis or peritoneal dialysis, the dose of **Glytec** is 25mg once daily. Treatment may be administered without regard to the timing of dialysis. Because there is a dosage adjustment based upon renal function, assessment of renal function is recommended prior to initiation of **Glytec** and periodically thereafter.
Hepatic impairment: No dose adjustment is necessary for patients with mild to moderate hepatic impairment. Sitagliptin has not been studied in patients with severe hepatic impairment and care should be exercised. However, because sitagliptin is primarily renally eliminated, severe hepatic impairment is not expected to affect the pharmacokinetics of sitagliptin.

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Elderly: No dose adjustment is necessary based on age.
Paediatric population: The safety and efficacy of sitagliptin in children and adolescents under 18 years of age have not yet been established. No data are available.

OVERDOSAGE: In the event of an overdose, it is reasonable to employ the usual supportive measures, e.g., remove unabsorbed material from the gastrointestinal tract, employ clinical monitoring (including obtaining an electrocardiogram), and institute supportive therapy if required. Sitagliptin is modestly dialysable. Prolonged haemodialysis may be considered if clinically appropriate. It is not known if sitagliptin is dialysable by peritoneal dialysis.

WARNINGS & PRECAUTIONS: General: Sitagliptin should not be used in patients with type 1 diabetes or for the treatment of diabetic ketoacidosis.
Acute pancreatitis: Use of DPP-4 inhibitors has been associated with a risk of developing acute pancreatitis. Patients should be informed of the characteristic symptom of acute pancreatitis: persistent, severe abdominal pain. Resolution of pancreatitis has been observed after discontinuation of sitagliptin (with or without supportive treatment), but very rare cases of necrotising or haemorrhagic pancreatitis and/or death have been reported. If pancreatitis is suspected, Sitagliptin and other potentially suspect medicinal products should be discontinued; if acute pancreatitis is confirmed, Sitagliptin should not be restarted. Caution should be exercised in patients with a history of pancreatitis.
Hypoglycaemia when used in combination with other anti-hyperglycaemic medicinal products: In clinical trials of Sitagliptin as monotherapy and as part of combination therapy with medicinal products not known to cause hypoglycaemia (i.e. metformin and/or a PPARr agonist), rates of hypoglycaemia reported with sitagliptin were similar to rates in patients taking placebo. Hypoglycaemia has been observed when sitagliptin was used in combination with insulin or a sulphonylurea. Therefore, to reduce the risk of hypoglycaemia, a lower dose of sulphonylurea or insulin may be considered.
Renal impairment: Sitagliptin is renally excreted. To achieve plasma concentrations of sitagliptin similar to those in patients with normal renal function, lower dosages are recommended in patients with GFR < 45ml/min, as well as in ESRD patients requiring haemodialysis or peritoneal dialysis.
When considering the use of sitagliptin in combination with another anti-diabetic medicinal product, its conditions for use in patients with renal impairment should be checked.
Hypersensitivity reactions: Post-marketing reports of serious hypersensitivity reactions in patients treated with sitagliptin have been reported. These reactions include anaphylaxis, angioedema, and exfoliative skin conditions including Stevens-Johnson syndrome. Onset of these reactions occurred within the first 3 months after initiation of treatment, with some reports occurring after the first dose. If a hypersensitivity reaction is suspected, Sitagliptin should be discontinued. Other potential causes for the event should be assessed, and alternative treatment for diabetes initiated.
Bullous pemphigoid: There have been post-marketing reports of bullous pemphigoid in patients taking DPP-4 inhibitors including sitagliptin. If bullous pemphigoid is suspected, Sitagliptin should be discontinued.

DRUG INTERACTIONS: Digoxin Sitagliptin had a small effect on plasma digoxin concentrations. No dose adjustment of digoxin is recommended. However, patients at risk of digoxin toxicity should be monitored for this when sitagliptin and digoxin are administered concomitantly.

FERTILITY, PREGNANCY AND LACTATION:
Pregnancy:
Pregnancy category B: The safety of sitagliptin in pregnant women is not known. Sitagliptin, like other oral antihyperglyceamic agents, is not recommended for use in pregnancy.
Lactation: It is unknown whether sitagliptin is excreted in human breast milk. Because many drugs are excreted in human milk, sitagliptin should not be used during breast-feeding.
Effects on ability to drive and use machines: Sitagliptin has no or negligible influence on the ability to drive and use machines. However, when driving or using machines, it should be taken into account that dizziness and somnolence have been reported. In addition, patients should be alerted to the risk of hypoglycaemia when sitagliptin is used in combination with a sulphonylurea or with insulin.

ADVERSE REACTIONS: Serious adverse reactions including pancreatitis and hypersensitivity reactions have been reported. Hypoglycaemia has been reported in combination with sulphonylurea and insulin. Upper respiratory tract infections, nasopharyngitis and headache have also been reported.

INSTRUCTIONS: Store below 30°C. Protect from heat, light and moisture. Keep out of the reach of children.

PRESENTATION:
Glytec 50mg and 100mg tablets are available in packs size of 14's.

خوراک: ڈاکٹر کی ہدایت کے مطابق استعمال کریں۔
ہدایات: ۳۰ ڈگری سینٹی گریڈ سے کم درجہ حرارت پر رکھیں۔ گرمی، روشنی اور نمی سے بچائیں۔ بچوں کی پہنچ سے دور رکھیں۔

Manufactured by:
NABIQASIM INDUSTRIES (PVT) LTD.
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