## GLINEXT MR® Tablet

(BP Specification)

# Gliclazide

(BP Specification)

30mg & 60mg Modified Released Tablets

## COMPOSITION

## CLINICAL PARTICULARS

## Therapeutic indications:

Type-2 diabetes in adults when dietary measures, physical exercise and weight loss alone are not sufficient to control blood glucose.

## Posology and method of administration:

(For adult use only) The daily dose may vary from 30 mg to 120 mg taken orally in a single intake at breakfast time. It is recommended that the tablet(s) be swallowed whole. If a dose is forgotten, there must be no increase in the dose taken the next day. As with any hypoglycaemic agent, the dose should be adjusted according to the individual patient's metabolic response (blood glucose, HbA1c) If blood glucose is not adequately controlled, the dose may be increased to 60, 90 or 120 mg daily, in successive steps. The interval between each dose increment should be at least 1 month except in patients whose blood glucose has not reduced after two weeks of treatment. In such cases, the dose may be increased at the end of the second week of treatment. The maximum recommended daily dose is 120 mg. There are no data and clinical studies available in children.

## Contraindications:

- Known hypersensitivity to gliclazide or to any of the excipients, other sulphonylureas, sulphonamides.
- Type 1 diabetes
- · Diabetic pre-coma and coma, diabetic keto-acidosis.
- Severe renal or hepatic insufficiency: in these cases the use of insulin is recommended.
- Treatment with miconazole (see section "Interactions with other medicinal products and other forms of interaction")
- · Lactation (see section "Pregnancy and Lactation")

## Special warnings and precautions for use:

Careful selection of patients, of the dose used, and clear patient directions are necessary to reduce the risk of hypoglycaemic episodes.

## Factors which increase the risk of hypoglycaemia:

- Patient refuses or (particularly in elderly subjects) is unable to cooperate
- Malnutrition, irregular mealtimes, skipping meals, periods of fasting or dietary changes
- Imbalance between physical exercise and carbohydrate intake
- · Renal insufficiency
- · Severe hepatic insufficiency
- Overdose
- Certain endocrine disorders: thyroid disorders, hypopituitarism and adrenal insufficiency.
- Concomitant administration of certain other medicines (see Interactions)

Renal and hepatic insufficiency: the pharmacokinetics and/or

pharmacodynamics of gliclazide may be altered in patients with hepatic insufficiency or severe renal failure. A hypoglycaemic episode occurring in these patients may be prolonged, so appropriate management should be initiated.

Close follow-up and regularly laboratory tests are recommended. **Precautions:** 

- . In the case of surgery, trauma, fever or infection, difficulty in eating
  - In the case of planned pregnancy
- In the case administration of other drugs, in particular an antiinflammatory agent, betablocker, corticoids

## Interaction with other medicinal products and other forms of interaction:

The blood sugar lowering effect of gliclazide may be strengthened and signs of low blood sugar levels may occur when one of the following medicines is taken:

- Other medicines used to treat high blood sugar (oral antidiabetics or insulin)
- Antibiotics (e.g. sulphonamides)
- Medicines to treat high blood pressure or heart failure (beta blockers, ACE-inhibitors such as captopril, orenalapril)
- · Medicines to treat fungal infections (miconazole, fluconazole)
- Medicines to treat ulcers in the stomach or duodenum (H2 receptor antagonists)
- Medicines to treat depression (monoamine oxidase inhibitors)
- Painkiller or antirheumatics (phenylbutazone, ibuprofen)
- Medicines containing alcohol

The blood glucose lowering effect of gliclazide may be weakened and raised blood sugar levels may occur when one of the following medicines is taken:

- Medicines to treat disorders of the central nervous system (chlororomazine)
- Medicines reducing inflammation (corticosteroids)
- Medicines to treat asthma or used during labour (intravenous salbutamol, ritodrine and terbutaline)
- Medicines to treat breast disorders, heavy menstrual bleeding and endometriosis (danazol)

**GLINEXT MR** may increase the effects of medicines which reduce blood clotting (e.g. warfarin)

## Pregnancy and lactation:

<u>Pregnancy</u>: There is no experience with the use of gliclazide during pregnancy in humans, even though there are few data with other sulphonylureas. In animal studies, gliclazide is not teratogenic. Control of diabetes should be obtained before the time of conception to reduce the risk of congenital abnormalities linked to uncontrolled diabetes. Oral hypoglycaemic agents are not suitable; insulin is the drug of first choice for treatment of diabetes during pregnancy. It is recommended that oral hypoglycaemic therapy is changed to insulin before a pregnancy is attempted, or as soon as pregnancy is discovered.

<u>Lactation</u>: It is not known whether gliclazide or its metabolites are excreted in breast milk. Given the risk of neonatal hypoglycaemia, the product is contra-indicated in breast-feeding mothers.

## Effects on ability to drive and use machines:

Patients should be made aware of the symptoms of hypoglycaemia and should be careful if driving or operating machinery, especially at the beginning of treatment.

## Undesirable effects:

Like all medicines GLINEXT MR can cause side effects, although not everybody gets them. The most commonly observed side effect is low blood sugar (hypoglycaemia). If an episode of low blood sugar is severe or prolonged, even if it is temporarily controlled by eating sugar, immediate medical attention is needed.

Liver disorders: There have been reports of abnormal liver function, which

can cause yellow skin and eyes. The symptoms generally disappear if the medicine is stopped.

<u>Skin disorders:</u> Skin reactions such as rash, redness, itching and hives are rarely reported.

<u>Blood disorders</u>: Decrease in the number of cells in the blood (e.g. platelets, red and white blood cells) which may cause paleness, prolonged bleeding, bruising, sore throat and fever have been reported. These symptoms usually vanish when the treatment is discontinued.

<u>Digestive disorders:</u> Abdominal pain, nausea, vomiting, indigestion, diarrhoea, and constipation. These effects are reduced when **GLINEXT MR** is taken with a meal as recommended.

<u>Eye disorders</u>: Vision may be affected for a short time especially at the start of treatment. This effect is due to changes in blood sugar levels.

With sulfonylurea, cases of severe changes in the number of blood cells and allergic inflammation of the wall of blood vessels have been described. Symptoms of liver impairment (e. g. jaundice) have been observed which in most cases disappeared after withdrawal of the sulfonylurea, but may lead to life-threatening liver failure in isolated rases.

#### Overdose:

An overdose of sulphonylureas may cause hypoglycaemia. Moderate symptoms of hypoglycaemia, without any loss of consciousness or neurological signs, must be corrected by carbohydrate intake, dose adjustment and/or change of diet. Strict monitoring should be continued until the doctor is sure that the patient is out of danger. Severe hypoglycaemic reactions, with coma, convulsions or other neurological disorders are possible and must be treated as a medical emergency, requiring immediate hospitalization. If hypoglycaemic coma is diagnosed or suspected, the patient should be given a rapid I.V. injection of 50 m. of concentrated glucose solution (20 to 30 %). This should be followed by continuous infusion of a more dilute glucose solution (10 %) at a rate that will maintain blood glucose levels above 1 g/L. Patients should be monitored closely and, depending on the patient's condition after this time, the doctor will decide if further monitoring is necessary. Dialysis is of no benefit to patients due to the strong binding of gliclazide to proteins.

## PHARMACOLOGICAL PROPERTIES

## Pharmacodynamic properties:

Gliclazide reduces blood glucose levels by stimulating insulin secretion from the  $\beta$ -cells of the islets of Langerhans. Increase in postprandial insulin and C-peptide secretion persists after two years of treatment. In addition to these metabolic properties, gliclazide has haemovascular properties.

<u>Effects on insulin release</u>: In type 2 diabetics, gliclazide restores the first peak of insulin secretion in response to glucose and increases the second phase of insulin secretion. A significant increase in insulin response is seen in response to stimulation induced by a meal or glucose.

Haemovascular properties: Gliciazide decreases microthrombosis by two mechanisms which may be involved in complications of diabetes: A partial inhibition of platelet aggregation and adhesion, with a decrease in the markers of platelet activation (beta thromboglobulin, thromboxane B<sub>2</sub>). An action on the vascular endothelium fibrinolytic activity with an increase in TPA activity.

## Pharmacokinetic properties

Plasma levels increase progressively during the first 6 hours, reaching a

plateau which is maintained from the sixth to the twelfth hour after administration. Intra-individual variability is low. Gliclazide is completely absorbed. Food intake does not affect the rate or degree of absorption. The relationship between the dose administered ranging up to 120 mg and the area under the concentration time curve is linear. Plasma protein binding is approximately 95%. Gliclazide is mainly metabolized in the liver and excreted in the urine: less than 1% of the unchanged form is found in the urine. No active metabolites have been detected in plasma. The elimination half-life of gliclazide varies between 12 and 20 hours. The volume of distribution is around 30 litres. No clinically significant changes in pharmacokinetic parameters have been observed in elderly patients.

#### STORAGE

Store below 30°C. Protect from light and moisture.

#### HOW SUPPLIED

**GLINEXT MR** 30 mg Tablets: Pack of 30 modified released tablets. **GLINEXT MR** 60 mg Tablets: Pack of 30 modified released tablets.

TO BE SOLD ON THE PRESCRIPTION OF A REGISTERED MEDICAL PRACTITIONER ONLY.

KEEP ALL MEDICINES OUT OF THE REACH OF CHILDREN.

**Contains Lactose But Gluten Free** 

گلائی نیکسٹ ایم آرٹیبٹ (گلکلازائیڈ) 30 ملگرام اور 60 ملگرام موڈیفائیڈریلیزڈگولیاں

خوراک و ہدایات ڈاکٹر کی ہدایات کےمطابق استعال کریں۔ صرف متندڈ اکٹر کے نسخہ کےمطابق ہی دوا فروخت کی جائے۔ تمام ادویات بچوں کی بی چے سے دور رکھیں۔ دواکو ° 30سے کم درجہ حرارت پر بنی اور روشنی سے محفوظ رکھیں۔