



Glucotrol
(glipizide)

THERAPEUTIC CLASS

Sulfonylurea (2nd generation)

DEA CLASS

RX

ADULT DOSAGE & INDICATIONS

Type 2 Diabetes Mellitus

Initial: 5mg qd

Titrate: Increase by 2.5-5mg every several days; may divide dose if response to single dose is not satisfactory

Max qd Dose: 15mg

Max Total Daily Dose: 40mg

Doses >15mg/day should be divided

Switching from Insulin:

Daily Insulin Requirement:

≤20 U/day: D/C insulin and begin glipizide at usual dose

>20 U/day: Reduce insulin dose by 50% and begin glipizide at usual dose; subsequent insulin reductions should depend on individual patient response

Switching from Longer Half-Life Sulfonylureas (eg, Chlorpropamide):

Observe patient carefully for 1-2 weeks

DOSING CONSIDERATIONS

Concomitant Medications

Colesevelam: Administer glipizide at least 4 hrs prior to colesevelam

Renal Impairment

Initial/Maint: Dose conservatively

Hepatic Impairment

Initial: 2.5mg qd

Maint: Dose conservatively

Elderly

Initial: 2.5mg qd

Maint: Dose conservatively

Other Important Considerations

Debilited/Malnourished Patients:

Initial/Maint: Dose conservatively

ADMINISTRATION

Oral route

Administer approx 30 min ac.

HOW SUPPLIED

Tab: 5mg*, 10mg* *scored

CONTRAINDICATIONS

Known hypersensitivity to the drug; type 1 diabetes mellitus; diabetic ketoacidosis, w/ or w/o coma.

WARNINGS/PRECAUTIONS

Caution during first 1-2 weeks of therapy if transferring from longer T_{1/2} sulfonylureas (eg, chlorpropamide). Consider hospitalization during the insulin withdrawal period if patient has been receiving >40 U/day of insulin. May be associated with increased risk of cardiovascular mortality. May

produce severe hypoglycemia; increased risk in elderly, debilitated, or malnourished patients; with renal/hepatic impairment, or adrenal/pituitary insufficiency; when caloric intake is deficient; or after severe/prolonged exercise. Loss of glycemic control may occur when exposed to stress (eg, fever, trauma, infection, surgery); may be necessary to d/c therapy and administer insulin. Secondary failure may occur over time. May cause hemolytic anemia; caution with G6PD deficiency and consider a non-sulfonylurea alternative. Caution in elderly.

ADVERSE REACTIONS

Hypoglycemia, GI disturbances, dizziness, drowsiness, headache, porphyria cutanea tarda, photosensitivity reactions, leukopenia, agranulocytosis, thrombocytopenia, hemolytic anemia.

DRUG INTERACTIONS

See Dosage. Hypoglycemic effects may be potentiated by NSAIDs, some azoles, other highly protein-bound drugs, salicylates, sulfonamides, chloramphenicol, probenecid, coumarins, MAOIs, and β -blockers; monitor closely for hypoglycemia during coadministration and for loss of glycemic control when such drugs are withdrawn. Potential interaction leading to severe hypoglycemia reported with oral miconazole. Fluconazole may increase levels. Thiazides and other diuretics, corticosteroids, phenothiazines, thyroid products, estrogens, oral contraceptives, phenytoin, nicotinic acid, sympathomimetics, calcium channel blockers, and isoniazid may produce hyperglycemia and may lead to loss of glycemic control; monitor closely for loss of control during coadministration and for hypoglycemia when such drugs are withdrawn. Increased likelihood of hypoglycemia with alcohol and use of >1 glucose-lowering drug. May be difficult to recognize hypoglycemia with β -blockers. Caution with salicylate or dicumarol. Colesevelam may reduce levels.

PREGNANCY AND LACTATION

Category C, not for use in nursing.

MECHANISM OF ACTION

Sulfonylurea (2nd generation); lowers blood glucose acutely by stimulating insulin release from pancreatic β cells.

PHARMACOKINETICS

Absorption: Rapid and complete. T_{max} =1-3 hrs. **Distribution:** Plasma protein binding (98-99%); (IV) V_d =11L. **Metabolism:** Liver (extensive). **Elimination:** Urine (<10% unchanged); $T_{1/2}$ =2-4 hrs.

ASSESSMENT

Assess for previous hypersensitivity to drug, renal/hepatic impairment, type of DM, diabetic ketoacidosis, risk factors for hypoglycemia, G6PD deficiency, pregnancy/nursing status, and possible drug interactions. Obtain baseline FPG and HbA1c levels.

MONITORING

Monitor for hypoglycemia, loss of glycemic control when exposed to stress, hypersensitivity reactions, secondary failure, hemolytic anemia, and other adverse reactions. Monitor blood/urine glucose and HbA1c levels periodically.

PATIENT COUNSELING

Inform of the risks, benefits, and alternative modes of therapy. Counsel about the importance of adherence to dietary instructions, regular exercise program, and regular testing of urine and/or blood glucose. Inform about the symptoms, treatment, and predisposing conditions of hypoglycemia, as well as primary and secondary failure. During the insulin withdrawal period, instruct to test for sugar and ketone bodies in urine at least tid and to contact physician immediately if these tests are abnormal.

STORAGE

<30°C (86°F).