



GLIMPSE study: exploring the effectiveness of glimepiride and metformin fixed dose combination (FDC) therapy in newly diagnosed type 2 diabetes (T2DM) in India

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- FDC of Glimepiride & metformin promotes beta cell responsiveness, protects them from apoptosis & is highly cost-effective. The study aims to primarily understand the usage pattern of initial combination therapy of metformin and glimepiride in newly diagnosed T2DM patients in India.
- A retrospective, multi-center, cross-sectional study was conducted in 17994, newly diagnosed diabetic patients who received FDC of glimepiride & metformin.
- Glimepiride 2 mg + Metformin 500 mg (30.49%) & Glimepiride 1 mg + Metformin 500 mg (30.15%) were prescribed to younger age group with mean age of 54 years. The mean hemoglobin A1c (HbA1c) level significantly improved to 7.3% from initial 8.3% following treatment for 3 months ($p < 0.001$). Post-treatment fasting blood sugar (FBG) levels decreased from 172.8 mg/dl to 134.2 mg/dl, while postprandial blood glucose (PPBG) levels were reduced from 245.9 mg/dl to 187.8 mg/dl (both $p < 0.001$).
- Most patients demonstrated either excellent or good outcomes based on the clinician's global assessment of treatment effectiveness and safety.

Metformin 500 mg with either 1mg or 2mg of glimepiride is the most frequently prescribed FDC in newly diagnosed T2DM patients as it offers mechanistic complementarity for insulin resistance and β -cell dysfunction, with good safety profile, along with cost effectiveness.

