



## COMPARISON OF SITAGLIPTIN AND GLIMEPIRIDE WITH METFORMIN FOR SAFETY AND ITS EFFICACY IN PATIENTS WITH TYPE 2 DIABETES MELLITUS - A SYSTEMATIC REVIEW

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### Abstract

*Type 2 DM is chronic progressive disease, in a olden days which may seen in elder people and now it becomes more common to everyone because of lifestyle changes, also it may occur of genetic and environmental factors. Type 2 DM occurred by impairment of beta cell function and reduction in insulin sensitivity and secretion. Many of the antihyperglycemic agents like metformin, Sulfonylureas, DPP-4 inhibitor, Thiazolidinedione, SGLT2I which may used to treat Type 2 DM. Metformin is given as first line drug as monotherapy to patients because it does not occur any major side effects and it is very safe to use and control glucose levels. Sitagliptin is a first approved drug in DPP-4 inhibitor it is well tolerated drug and mainly very effective in reduction of HbA1C, FBS and PPBS, this may also given in monotherapy and combination therapy. The glimepiride which is an sulphonyl urea and mainly recommend for combination therapy to metformin which leads to glycemic control immediately. The glimepiride which may given in monotherapy, immediately results in reduction of HbA1c in blood glucose to patients, this also a well-tolerated drug but it may occur weight gain in some condition. According to this physician should be more aware of antihyperglycemic agents which may given to patients in monotherapy, dual therapy or triple therapy and they may consider about patient health, side effects and tolerability also. According to this review it briefly discussed about safety and efficacy of antihyperglycemic agents in monotherapy and combination therapy for patients.*

### Author Keywords

Blood glucose levels, Drug therapy, Effectiveness, Metformin, Sulfonylureas, Type 2 Diabetes Mellitus

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