

Manuscript ID : 00000-91159

Source ID : 00000239

International Journal of Pharmacy and Technology

Volume 13, Issue 1, March 2021, Pages 32324-32342, Page Count - 19



## COMPARING THE EFFICACY AND SAFETY PROFILE OF SITAGLIPTIN VERSUS GLIMEPIRIDE IN PATIENTS OF TYPE 2 DIABETES MELLITUS INADEQUATELY CONTROLLED WITH METFORMIN ALONE

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### Abstract

*Aim and Objectives:* To evaluate the safety and efficacy of sitagliptin versus glimepiride in patients with Type2 DM inadequately controlled with metformin alone. To reduce the incidence of parameters like HbA1C, FPG and PPG levels in Type 2DM by administering sitagliptin, glimepiride in combination with metformin monotherapy.

*Materials and Methods:* A sample size 73 patients were included in the study after obtaining the Ethical approval from the IEC. The patients were divided into two groups receiving Glimepiride with Metformin and Sitagliptin with Metformin combination according to it. The data was collected for a period of 12 weeks. Informed consent and Case performa was given to the patients before collecting the data. Statistical analysis was done by using Microsoft Excel, t test and SPSS Software.

*Results:* Out of 73 patients, 37 patients were received Sitagliptin/Metformin and 36 patients were received Glimepiride/Metformin. Out of 73 patients, a drugs were given for 12 weeks there was a statistically a significant reduction in HbA1C levels in glimepiride group as compared to the sitagliptin group ( $p < 0.05$ ). Also FPG and PPG levels were statistically significant reduction in glimepiride group as compared to the sitagliptin group.

*Conclusion:* It has been found that there is a significant difference between these two combination drugs. Glimepiride is found to be more efficacious drug when compared to Sitagliptin; in case of safety Sitagliptin is found to be safer drug than Glimepiride. Sitagliptin is also a well-tolerated drug.

### Author Keywords

Metformin, Sitagliptin, Glimepiride, Effectiveness, Baseline parameters, Type 2 Diabetes mellitus

### Acknowledgement

The authors are thankful to vels college of pharmacy and its management for providing research facilities and encouragement and to our friends those who helped us to complete this research

ISSN Print:

Source Type: Journals

Publication Language: English

Abbreviated Journal Title: IJPT

Publisher Name: B. Latha Reddy

ISSN Online: 0975-766X

Document Type: Journal Article

DOI: [http://dx.doi.org/10.32318/IJPT/0975-766X/13\(1\)](http://dx.doi.org/10.32318/IJPT/0975-766X/13(1))

Access Type: Open Access

Resource Licence: CC BY-NC

**Scope Database Link:** <https://sdbindex.com/documents/00000239/00000-91159.pdf>  
**Article Link:** <https://www.ijptonline.com/wp-content/uploads/2021/05/32324-32342.pdf>

**Major Subject:** Health Sciences

**Subject area:** Endocrinology, Diabetes and Metabolism

**Subject Area classification:** Medicine

**Source:** SCOPEDATABASE

## Reference