**Proceedings Abstracts**

**Paper Title**:

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**Keywords**: add 3-5 keywords.

**Abstract**:

Introduction:

Methods:

Results:

Discussion:

Conclusion:

**Tables or figures:** (Optional, up to 3)

Example:

**1**

**Paper Title:** Associations between Using Noninsulin Blood Glucose Lowering Drugs and Heart Failure: Observations from a Meta-Analysis.

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**Keywords**: noninsulin therapy, blood glucose lowering, heart failure, meta-analysis

**Introduction**: Type 2 diabetes mellitus (T2DM) is the most common type of diabetes with millions being affected worldwide. Patients with T2DM are at a high risk of developing heart failure. There is a clear lack of clinical information on what the effect of glucose lowering drugs is on heart failure. The objective of the study was to conduct a meta-analysis of observational studies on the relative risk of heart failure when glucose lowering drugs are used in T2DM individuals. **Methods**: Cohort and case-control studies were systemically identified and reviewed with the focus on the use of noninsulin blood glucose-lowering medications in patients with T2DM. Databases such as Medline, Embase, and the Cochrane Library were accessed. Publications that met the eligibility criteria were selected and whittled down. Results were combined using fixed and random-effects models with 3 independent data points were available for a drug-drug comparison. Results: The relative risk of heart failure in individuals on rosiglitazone therapy versus pioglitazone therapy (95% CI) was 1.26 (1.05-1.29). For individuals who had just started therapy (n=5), the relative risk was 1.31 (1.14-1.40). Comparing the relative risk of rosiglitazone usage versus metformin usage was 1.36 (95% CI, 1.17-1.59) (n=3). Comparing the summary relative risk (95% CI) of heart failure in sulfonylureas users versus metformin users showed results as 1.17 (95% CI, 1.06-1.29) and 1.22 (1.02-1.46). **Discussion**: This study suggests that using glitazones and sulfonylureas is associated with an increased risk of heart failure when compared to metformin as the sole agent of treatment. The limitations of this study included scare information about disease

severity and a nonuniform approach to dose and treatment duration reporting. **Conclusion**: Large multi-database studies are required to further evaluate the risk of heart failure in treated

patients with diabetes, including those using newer glycaemic control therapies