

## Adult E-Poster

majority were male patients (63.1%), and more than half (58.8%) had background diabetes mellitus. The incidence of hypoglycemia post-insulin chase was 16.6%. Patients who developed hypoglycemia had a significantly higher median creatinine level (678  $\mu\text{mol/l}$  vs. 349  $\mu\text{mol/l}$ ,  $p = 0.005$ ). Prior use of sulfonylurea was also significantly associated with an increased risk of hypoglycemia (26.3% vs. 8.8%,  $p = 0.031$ ). Factors such as age, gender, race, presence of diabetes mellitus, and prior insulin use were not found to be significantly associated with the development of hypoglycemia. Almost one-quarter of patients (23.5%) did not have BG checked prior, and only 40.6% had BG monitoring planned post-insulin chase.

### CONCLUSION

This audit demonstrated a 16.6% incidence of hypoglycemia post-insulin chase. Renal impairment and prior sulfonylurea use were significant risk factors. There is a need to improve the planning and implementation of pre- and post-treatment glucose monitoring to prevent hypoglycemia.

## EP\_A199

### PRESCRIBING PATTERNS OF SGLT2 INHIBITORS IN TYPE 2 DIABETES MANAGEMENT AT A TERTIARY CARE CENTER IN MALAYSIA

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### INTRODUCTION

Type 2 diabetes (T2D) continues to pose a significant public health challenge in Malaysia, affecting approximately 20% or 4.4 million adults. Among the newer treatment options, sodium-glucose co-transporter-2 inhibitors (SGLT2-i) have gained increasing attention due to their proven glycaemic and cardiorenal benefits. Despite the increasing adoption of SGLT2-i due to established glycaemic and cardiorenal benefits, Malaysia-specific prescribing patterns remain understudied, particularly in tertiary healthcare environments. This study aimed to evaluate the prescribing patterns of SGLT2-i and its relationship with antidiabetic utilization in T2D patients at Hospital Kuala Lumpur.

### METHODOLOGY

This retrospective cohort study used patient data from the Pharmacy Information System (PhIS) and Lab Management System (LMS). Patients aged 18–70 years diagnosed with

T2D and prescribed empagliflozin or dapagliflozin between January - December 2023 were included. Data on demographics, initiation date of SGLT2-i, medication history, and HbA1c levels were extracted. Adherence to prescribing guidelines was assessed by comparing initiation criteria, dosing, and drug combinations against recommendations outlined in the Malaysian Clinical Practice Guidelines (6<sup>th</sup> edition). Medication adherence was measured using the Medication Possession Ratio extracted from PhIS. HbA1c levels before and after SGLT2-i treatment in adherent patients were compared using the Wilcoxon signed-rank test, with a significance level set at 0.05.

### RESULT

Among the 256 patients analyzed, 77.3% of prescriptions adhered to national guidelines, with excellent dose compliance (97.3%). Combination therapy was predominant (98%), with metformin (82%), vildagliptin (54%), and gliclazide (20%) most frequently prescribed concurrently. Additionally, 60.2% received insulin concurrently with SGLT2-i. Notably, adherent patients experienced significant HbA1c reductions from a median baseline of 7.5% to 7.2% post-treatment ( $p = 0.019$ ).

### CONCLUSION

SGLT2-i prescribing practices at HKL closely align with national guidelines, primarily involving combination therapy. The observed significant improvement in glycaemic control among adherent patients underscores the value of SGLT2-i in routine clinical management of T2D. Future research should focus on long-term clinical outcomes and economic implications of widespread SGLT2-i use.

## EP\_A200

### EFFECTS OF SODIUM-GLUCOSE COTRANSPORTER-2 INHIBITORS ON HEMATOCRIT AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS: A TERTIARY CENTER EXPERIENCE

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### INTRODUCTION

Sodium-glucose cotransporter-2 inhibitors (SGLT2i) have become integral to managing Type 2 Diabetes Mellitus (T2DM) due to their cardiorenal benefits. They promote osmotic diuresis, leading to hemoconcentration and increased erythropoiesis, which may theoretically raise