OBJECTIVES: HIPOS-ER is the first national Hypoglycemia study in Portugal collect- ing data directly in the hospitals. Here we describe the average cost of severe hypoglycemic event by anti-hypoglycemic agent (AHA) class.

METHODS: The study was conducted in 7 centers in mainland Portugal for a period of 12 months (Jan13-Jan14). Patient level data and resource utilization were collected through data form used in each ICU. The data base was obtained from official sources (ER, CCM, hospital, and diabetes emergency room) and costs were calculated multiplying resource use by corresponding unit costs. For hospitalization, length of stay was multiplied by daily cost obtained through the data collected in the hospitals. AHA therapy class were to: Group 1 (insulin), Group 2 (secretagogue), Group 3 (oral AHA excluding secretagogue), and Group 4 (at least one insulin and one secretagogue).

RESULTS: 238 patients were enrolled and 105 (44%) were hospitalized. The distribution based on AHA therapy class were: 55% (131) Group 1, 32% (75) Group 2, 7% (16) Group 3 and 7% (16) Group 4. After the event episode, Group 2 patients were more often hospitalized versus Group 1 (71% vs. 29%, p<0.001) and Group 4 (31%, p=0.003). The global cost was 1,495€ (341–26,818€) and hospitalization. The mean cost per day was 2,585€ (3,566€ to 2.278€). Group 2: 3.2% vs. 2.7% for Group 3 ($5,805 (4,539–7,071) in the year before the DKA patients were, respectively 10,442 (8,755–12,129) and 9,720 (8,659–10,782) in additional factors included BMI (OR≈0.04) and glycemia (OR≈0.03), use of 3rd generation SU (OR≈3.46); p<0.003), and chronic renal disease (OR≈5.10; p<0.002), and chronic renal disease (OR≈5.10; p<0.002), and chronic renal disease (OR≈5.10; p<0.002), and chronic renal disease (OR≈5.10; p<0.002). CONCLUSIONS: In conclusion, multiple fac- tors, including efficacy and hypoglycemia, are associated with discontinuation of SU treatment after insulin initiation.

PDB110
IMPACT OF HYPOGLYCEMIA ON DISCONTINUING OR DOWN-TITRATING SULFONYLUREA AMONG TYPE 2 DIABETES PATIENTS WITHOUT INSULIN THERAPY

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OBJECTIVES: Sulfonlureas (SU) may be discontinued or down-titrated due to hypoglycemia, weight gain, or chronic complications. We aimed to describe factors associated with discontinuation of SU therapy (down-titration) among adults receiving SU therapy without insulin. METHODS: Patients with the first SU prescription (Rx) (index date) in 2009-2011, ≥18 years of age on the index date, and with ≥1 year continuous enrollment pre- and post-index were included. Patients were excluded if they received insulin within the 1-year pre- or post-index, had ≥2 SUs on the index date, or had type 1, gestational or secondary diabetes. Therapy changes were determined during the 1-year post-index. Discontinuation occurred when consecutive SU fills were ≥90 days apart. Down-titration occurred when an SU fill had a lower equivalent dose than the index dose. Hypoglycemic events were identified using ICD-9 code between the index date and the therapy change or the end of the 1-year post-index period. Cox regression was used to evaluate associations of SU type and therapy changes. RESULTS: 9,570 patients were included in the study, of which 50,854 (52.1%) experienced therapy changes within 1-year post-index. Patients with hypoglycemic events were more likely to have experienced ≥1 hypoglycemic event (HR=2.97 (1.73, 4.96); p<0.01) or have ≥2 hypoglycemic events (HR=1.90 (1.16, 2.98); 0.003). They were 197% more likely to down-titrate (HR=1.97 (0.1, 1.97), 0.92) or down-titrate (HR=1.97 (1.34, 2.96); p<0.01) in the follow-up period. CONCLUSIONS: Post-index hypoglycemic events are significantly associ- ated with therapy changes among patients receiving SU without insulin, especially down-titration.

PDB112
GUIDELINE ADHERENCE AND CONTROL OF DIABETES MELLITUS WITH CO-MORBIDITIES IN A TERTIARY-CARE HOSPITAL IN MALAYSIA

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OBJECTIVES: To evaluate doctors’ adherence to Malaysian Clinical Practice Guideline (CFG) 2009 in the management of diabetes mellitus with co-morbidities in Malaysia. METHODS: Cross-sectional study was done at a tertiary-care hospital in Malaysia. Total 51 physicians and 1020 patients’ prescriptions were written by physicians (20 prescriptions per physician) were analyzed. All patients had diabetes mellitus with co-morbidities. Depending on the recommendations of CFG 2009, the prescriptions were clustered as adherent and non-adherent prescriptions. All variables were analyzed using descriptive and inferential statistics. RESULTS: A statistically significant negative association (p<0.004, p-value=0.003) was observed between diabetes mellitus control and co-morbidities. CFG adherent had statistically significant better glycemic control (p<0.001) with patients having co-morbidities (41.6%). No statistically significant association was observed between CFG adherence and any other co-morbidity. Majority of the patients received guidelines-compliant pharmacotherapy. The overall good level of physician adherence with CFG was observed and was associated with glycemic control. CONCLUSIONS: The study explored several features of prescription pattern of the physicians involved in the management of diabetes mellitus with co-morbidities and recommended for improvement in their prescription pat- tern for treating the diabetes mellitus.