OBJECTIVES: HIPOS-ER is the first national Hypoglycemia study in Portugal collecting prospective data directly in the hospitals. The aim here was to estimate 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. The data source was the patients’ hospital emergency room (ER) attendance, 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 registry in the hospitals. AHA therapy class was 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: Group 3 (55%) (113 Group 3, 32% (75) Group 2, 10% (16) Group 3 and 7% (10) Group 1. After 1 year, Group 2 patients were more often hospitalized versus Group 1 (71% vs. 29%, p<0.001) and Group 3 (21%, p=0.03). The global cost was 1.495 (341-26,818) and hospitalization rate per year of event (10,906 vs. 8,755) was lower for HYPO patients than for DKA patients: the difference in mortality rates between groups disappeared once the hospitalization rate was adjusted. The overall mortality rate in the observational period was 66.9 (1.3-96.7) and 39.4 (1.0-95.7) years, respectively. The overall mortality rate in the year of index event was 42.6 (8.4-90.7), and in the year before, 22.3 (7.6-41.2) years. The overall hospitalization rate in the year of event was 70.7% and in the year before the event year, 10,296 (8,446-12,145) and 5,805 (4,539-7,071) in the year before the event year. RESULTS: Hospitalizations represented the driver of total costs: in the year of event and in the year before the event year, 10,442 (8,755-12,129) and 9,720 (8,659-10,782) in HYPO patients, respectively. CONCLUSIONS: AHA classes may differ significantly in cost and mortality. Insulin based therapy had the greatest overall cost followed closely by secretagogue type drugs, which were associated with more hospitalizations.

DIABETES/ENDOCRINE DISORDERS – Patient-Reported Outcomes & Patient Preference Studies

PDB120 FACTORS ASSOCIATED WITH DISCONTINUATION OF SULFONYLUREA THERAPY IN TYPE 2 DIABETES PATIENTS WHO INITIATE INSULIN

Laires P., Fu A.Z., Llombart-Bosch A., Qiu Y., Cortesi P.A., Cortesi P.A., Cortesi P.A., Cortesi P.A. 1

1University of Naples, Naples, Italy

OBJECTIVES: Sulfonylureas (SU) represent a common treatment for type 2 diabetes (T2DM), but they are associated with hypoglycemia, weight gain, and possibly cardiovascular events. The purpose of this study is to evaluate factors associated with SU discontinuation after insulin initiation. METHODS: Patients ≥21 years old with a T2DM diagnosis between 2005 and 2012 were identified using the GE electronic medical records database. Index date was defined as the first insulin prescription (Rx) between 2006 and 2011. Patients were required to be on SU at the index date. Patients were excluded if they did not have medical records available ≥12 months before and ≥3 months after the index date. Patients with SU discontinuation ≥90 days apart. Multivariable logistic regression was performed to identify factors associated with SU discontinuation. RESULTS: A total of 8,185 patients were selected, with mean age 64 years and 49% were male. 60.4% discontinued SU within 1 year. Group 3, 7% (p=0.38) had a longer SU discontinuation interval from insulin initiation to SU discontinuation of 88 days. In the logistic regression, baseline diagnosed hypoglycemia (OR=2.29 [95% CI 1.03 - 5.10], p=0.04) and baseline HbA1c (OR=1.04 [1.01 - 1.06]) were identified as factors associated with SU discontinuation. Additional factors included BMI (<25 kg/m² vs. ≥30 kg/m², OR=1.23 [1.03 - 1.46], p=0.03), use of 3rd generation SU (OR=0.86 [0.78 - 0.95], p=0.002), and chronic renal disease (HR=1.41 [1.07 - 1.84], p=0.01). CONCLUSIONS: In conclusion, multiple factors, including efficacy and hypoglycemia, are associated with discontinuation of SU treatment after insulin initiation.

PDB121 IMPACT OF HYPOGLYCEMIA ON DISCONTINUING OR DOWN-TITRATING SULFONYLUREA AMONG TYPE 2 DIABETES PATIENTS WITHOUT INSULIN THERAPY

McKerrow Sharp & Dohme, Oeiras, Portugal, 1Merck Sharp & Dohme Corp., Whitehouse Station, NJ, USA

OBJECTIVES: Sulfonylureas (SU) may be discontinued or down-titrated due to hypoglycemia. SU discontinuation ≥90 days apart may be more concerning for patients not receiving aggressive efficacy-driven treatment such as the dual-therapy of SU and insulin. A retrospective cohort study using the MarketScan database was conducted to assess the impact of hypoglycemia on SU discontinuation (≥90 days apart) or therapy changes (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 period. 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 the association between hypoglycemic events and therapy changes. RESULTS: 97,570 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 experience therapy changes (HR=2.97 [1.53, 3.46]; p<0.01) and 80% more likely to down-titrate (HR=1.80 [1.69, 1.92]; p<0.01). CONCLUSIONS: Post-index hypoglycemic events are significantly associated with therapy changes among patients receiving SU without insulin, especially down-titration.

PDB122 GUIDELINE ADHERENCE AND CONTROL OF DIABETES MELLITUS WITH CO-MORBIDITIES IN A TERTIARY-CARE HOSPITAL IN MALAYSIA

Sheah M.Z.1, Iqbal M.S.1, Iqbal M.S.1, Khan A.H.2, Sulaiman S.A.2, Iqbal M.S.1

1Department of Clinical Pharmacy, Faculty of Pharmacy, AIMST University, Kedah, Malaysia; 2Department of Clinical Pharmacy, School of Pharmaceutical Sciences, Universiti Sains Malaysia, Pulau Pinang, Malaysia

OBJECTIVES: To evaluate adherence to the Malaysian 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 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 obtained data were analyzed using descriptive and inferential statistics. RESULTS: A statistically significant negative association (Φ=-0.094, p-value<0.003) was observed between diabetes mellitus control and co-morbidities. CFG adherent had statistically significant (Φ=0.018, p-value<0.010) higher adherence to the guidelines than patients with self-co-morbidities (41.6%). No statistically significant association was observed between CFG adherence and any other co-morbidity. Majority of the patients received guideline-compliant pharmacist therapy. The overall good level of physician adherence with Co-Morbidity associations was observed. CONCLUSIONS: The findings of the study explored several features of prescription pattern of the physicians involved in the management of diabetes mellitus with co-morbidities and may be considered for improvement in their prescription pattern for treating the diabetes mellitus.

PDB123 THE RELATIONSHIP BETWEEN MACULAR EDEMA AND HEALTH OUTCOMES AMONG PATIENTS WITH DIABETES IN WESTERN EUROPE

Poynter M. 1, Dibonaventura M. 1

1Kantar Health, München, Germany, 2Kantar Health, New York, NY, USA

OBJECTIVES: Diabetes is associated with a number of microvascular and macrovascular complications. Diabetic macular edema (DME) is one of these complications and is among the leading causes of vision impairment. However, little data exists as to the patient-related burden of DME in Europe and the aim of the current study was to address this gap. METHODS: Data from the 2013 SEU (France, Germany, Italy, Spain, and UK) National Health and Wellness Survey (NHWS) were used (N=62,000). The NHWS is a patient-reported survey administered to a demographically representative sample of adults (with respect to age, sex, and region). Patients who reported experiencing DME were compared with a propensity-scored matched control group. RESULTS: Patients with DME reported significantly worse physical health (PHC - 41.1 vs. 43.2), greater overall work impairment (36.2% vs. 25.64%), and...