for a better control of diabetes. **CONCLUSIONS:** The responses of patients with both types of diabetes clearly show the need for new management approaches to alleviate the burden associated with the disease addressing the specific unmet needs of diabetic patients.

PDB93

EVALUATING DIABETES PATIENTS' PREFERENCES FOR PROFILES OF GLP-1 TREATMENTS IN THE UNITED KINGDOM: A DISCRETE CHOICE EXPERIMENT

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OBJECTIVES: To use a discrete choice experiment (DCE) to evaluate preferences for the actual treatment features and overall profiles of two injectable glucagon-like peptide-1 (GLP-1) receptor agonists (dulaglutide and liraglutide) among patients with type 2 diabetes (T2DM) in the United Kingdom (UK). **METHODS:** In-person interviews were conducted in the UK to administer a DCE to patients with self-reported T2DM, naïve to treatment with injectable medications. The DCE examined 6 attributes of T2DM treatment each described by 2 levels: 'dosing frequency,' 'HbA1c change,' 'weight change,' 'type of delivery system,' 'frequency of nausea,' and 'frequency of hypoglycemia.' Part-worth utilities were estimated using random effects logit models and used to calculate relative importance values for each attribute. A Chi-square test was used to determine differences in preferences for dulaglutide vs. liraglutide profiles. **RESULTS:** A total of 243 participants [mean age: 60.5 (SD 10.9) years; 76.1% male; mean BMI: 29.8 (SD 5.4) kg/m2] completed the study. Relative importance values for the attributes in rank order were: 'dosing frequency' (41.6%), 'type of delivery system' (35.5%), 'frequency of nausea' (10.4%), 'weight change' (5.9%), 'HbA1c change' (3.6%), and 'frequency of hypoglycemia' (3.0%). Significantly more participants preferred the dulaglutide profile (83.1%) compared to the liraglutide profile (16.9%; p<0.0001). **CONCLUSIONS:** This study elicited patients' preferences for attributes and levels representing the actual characteristics of two specific GLP-1 medications. In this context, dosing frequency and type of delivery system were most important, accounting for over 75% of the relative importance. While previous studies have identified efficacy as highly important in T2DM medication decisions, this study suggests that when differences in efficacy between medications are small, other treatment features (e.g., dosing frequency and delivery system) are of much greater importance to patients.

PDB94

PATIENT PREFERENCES FOR ATTRIBUTES OF TYPE 2 DIABETES MELLITUS (T2DM) TREATMENTS IN SPAIN

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OBJECTIVES: Understanding the preferences for attributes of T2DM treatments among patients in Spain. **METHODS:** Patients in Spain (self-reported physician diagnosis of T2DM, taking a prescription T2DM medication for > 2 years) completed an online discrete-choice experiment (DCE) survey (funded by GSK) to elicit preferences for T2DM treatment attributes. Respondents chose between pairs of hypothetical T2DM treatments defined by seven attributes: chance of reaching target HbA1c, reduction in risk of serious heart attack or stroke, frequency of hypoglycemia, risk of gastrointestinal (GI) problems, weight change, mode of administration, and dosing frequency. Random-parameters logit (RPL) was used to analyze the data. Minimum acceptable benefit (MAB) was calculated with RPL coefficients and measures the percentage point (pp) increase in the probability of reaching target HbA1c that respondents require in order to accept worse levels of other attributes. **RESULTS:** 401 patients responded (mean age 51, 77% male, 33% diagnosed more than 7 years ago). The DCE respondents preferred pills to injections and once-weekly dosing over other schedules. The highest MAB levels were: moving from pill to injection (MAB=59pp), moving from once-weekly dosing frequency to more than twice a day (MAB=40pp), moving from no risk of GI problems to 30% risk of GI problems (MAB=37pp), moving from no hypos to more than 2 hypos per month (MAB=37pp), and moving from a 2-kg weight loss to a 2-kg weight gain (MAB=35pp). Respondents using injectables were indifferent between pills and injections, while respondents not using injectables had a strong preference for pills over injections (P = 0.00). **CONCLUSIONS:** Respondents were willing to trade-off efficacy for an improvement in mode of administration (from injection to pills) and improved side effects . Given the variety of T2DM medications available, the results suggest that careful discussion about patient preferences could help improve patient satisfaction with T2DM drugs.

PDB95

IDEGLIRA IMPROVES HEALTH UTILITY COMPARED WITH INSULIN GLARGINE IN PATIENTS WITH TYPE 2 DIABETES

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OBJECTIVES: This analysis of data from the DUAL V clinical trial compared health utility scores of IDegLira, a fixed-ratio combination of insulin degludec and liraglutide, with insulin glargine (IGlar) in patients with type 2 diabetes (T2D). **METHODS:** Health status data were collected using the Short-Form 36 v2 (SF-36) questionnaire during a 26-week, multinational, multi-centre, open-label, parallel, randomised, treat-to-target trial comparing IDegLira (n=278) with IGlar (n=279) (either treatment given once daily in addition to metformin) in patients with T2D, inadequately controlled on IGlar (20–50 units daily) and metformin (Buse et al. Diabetes 2015; 64 (Suppl. 1):A43–A44; abstract 166-OR). In this post hoc analysis, SF-36 scores were mapped to the EuroQol-5D (EQ-5D) health utility scale using a validated algorithm (Model 3; Rowen et al. Health Qual Life Outcomes 2009;7:27). EQ-5D scores at end of trial (EOT) were analysed using an ANCOVA model with treatment and region

as fixed effects and baseline value as covariate. The model was chosen in accordance with the pre-specified model for the clinical trial. **RESULTS:** SF-36 estimated treatment differences (ETD; IDegLira–IGlar), at EOT were 1.9 points [95% CI: 0.8; 3.1] (p<0.001) and –0.1 points [95% CI: –1.5; 1.3] (NS) for physical and mental component summary scores, respectively. Mean EQ-5D score ± SD at baseline was 0.901 ± 0.083. At EOT mean EQ-5D score ± SD was 0.915 ± 0.070 and 0.903 ± 0.084 for IDegLira and IGlar, respectively; ETD 0.017 points [95% CI: 0.007; 0.026] (p=0.001). **CONCLUSIONS:** This analysis suggests that IDegLira provides a statistically significant improvement in health utility compared with IGlar, in patients with T2D inadequately controlled on IGlar and metformin. The health utility improvement was generally driven by improvement in physical health, while mental health remained stable.

PDB96

CROSS-SECTIONAL SURVEY STUDY TO UNDERSTAND BEHAVIOURS, THOUGHTS AND PERCEPTIONS OF MEALTIME INSULIN USAGE IN PATIENTS WITH TYPE 1 AND TYPE 2 DIABETES

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OBJECTIVES: Data on wastage behaviours of patients with diabetes taking mealtime insulin (MTI) with a prefilled disposable pen or reusable pen with disposable cartridge are lacking. A patient survey was undertaken to estimate the average number of MTI units discarded per pen/cartridge by patients with diabetes taking >20 units/day, based on injection habits when insufficient insulin remains in a pen/cartridge to administer a full dose in a single injection. **METHODS:** Cross-sectional, online, self-reported survey of MTI usage and wastage behaviours in adults with type 1 or 2 diabetes [T1D, T2D] using >20 units/day of MTI administered via 100 units/mL pen/cartridge for ≥1 month, conducted between February and March 2015 in four EU countries [France, Germany, Italy, United Kingdom]. **RESULTS:** 400 patients with diabetes [120 T1D; 280 T2D] completed the survey. Mean age (SD) was 54.5 (12.2) years [T1D: 50.3 (13.0); T2D: 56.3 (11.4)]. Average BMI was 29.9 (7.2) kg/m2 [T1D: 26.9 (4.9); T2D: 31.3 (7.7)]. Average time since diabetes diagnosis was 16.1 (11.7) years [T1D: 23.4 (14.2); T2D: 13.0 (8.8)]. Total average MTI units taken per day (self-reported number of units taken at breakfast, lunch and dinner combined) was 54.8 (34.1) units [T1D: 41.1 (21.9); T2D: 60.6 (36.7)]. 255 patients [63.8%] reported wasting no insulin, whereas 145 patients [36.3%] reported wasting some insulin. Overall, patients reported discarding 2.0 [95% CI 1.4–2.5] pens/cartridges per month on average that still had insulin remaining. Patients who reported wasting some insulin discarded on average 8.6 [95% CI 7.2–10.0] units of MTI per pen/cartridge. **CONCLUSIONS:** One third of patients taking >20 units/day MTI reported discarding at least one 100 units/mL pen/cartridge with insulin remaining. These results suggest there may be an opportunity to reduce insulin wastage with new higher strength MTI formulations that provide more total units per pen and fewer pen/cartridge transitions.

PDB97

PATIENT-REPORTED FREQUENCY AND BURDEN OF HYPOGLYCAEMIA FOR INSULIN-TREATED DIABETES PATIENTS IN 5 CITIES OF CHINA: A CROSS-SECTION STUDY

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OBJECTIVES: To investigate the frequency of hypoglycaemic episodes and its effect on diabetes management, healthcare resource use, economic burden and time loss (including time loss from work and daily life) for insulin-treated diabetes patients in urban China. **METHODS:** A questionnaire was used to collect data from 7 third-grade class-A hospitals in Beijing, Nanjing, Chengdu, Kunming and Ha'erbin in China from July to September of 2012. Type 1 and type 2 diabetes patients treated with insulin were included. Hypoglycaemia episodes were categorized as mild (symptoms could be self-disappeared), moderate (symptoms could not be self-disappeared), severe (coma hardly, usually require medical assistance) and nocturnal (occur during sleep, including mild, moderate and severe) hypoglycaemia. Descriptive Statistic analysis was applied to the data. **RESULTS:** More than half (56.7%) of 602 enrolled patients reported experiencing hypoglycaemia. 34.7%, 3.3% and 3.5% patients reported mild, moderate and nocturnal hypoglycaemia during the preceding month, with a total of 593, 84.5 and 45.5 episodes, respectively. 9 patients reported 12 severe hypoglycaemia episodes during the preceding year. Among patients experiencing hypoglycaemia, 15.5% reported anxiety of anti-diabetes drugs, 16.1% reported treatment regimens modification by themselves and 12.6% by their doctors, 19.9% reported extra self-monitoring of blood glucose of 3.14 times/week, 11.7% reported time loss by an average of 2 days/event, and 9.4% reported time loss for family members by an average of 1.89 days/event. Of the patients experiencing severe hypoglycaemia, 28.6% required emergency visit and 14.3% required hospitalization. Of patients experiencing nocturnal hypoglycaemia, 5.3% required hospitalization. Patients experiencing hypoglycaemia reported an average of hypoglycaemia-related cost of 44.06CNY/month. Nevertheless, for those who required medical assistance, the medical cost was 1216.53 CNY/event. **CONCLUSIONS:** Hypoglycaemia was common in diabetes patients treated with insulin. Hypoglycaemia had negative impact on diabetes management and was associated with increasing healthcare utilization, economic burden and time loss for patients and family.

PDB98

A PILOT STUDY MEASURING KNOWLEDGE AND ATTITUDES TOWARDS DIABETES MELLITUS IN KEDAH, MALAYSIA

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OBJECTIVES: An adequate disease-related knowledge is important in treatment and management of ailments. Within this context, patients are needed to have