

**PDB80**  
**A CONTROLLED, PROSPECTIVE LONGITUDINAL, INTERVENTIONAL, NATURALISTIC STUDY TO EVALUATE THE UNIQUE HEALTH CARE PROGRAM "CONVERSATION MAP®" FOR TURKISH PATIENTS WITH TYPE-2 DIABETES IN ONE GERMAN MAJOR CITY**

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**OBJECTIVES:** Considering a cultural and epidemiological disparity between Turkish and German type-2 diabetes patients in Germany, resulting in a health care gap, a customised diabetes program for Turkish migrants is required. The objective was to evaluate "Conversation Map®", a unique health care education program for Turkish migrants with type-2 diabetes in Germany. **METHODS:** Ninety-two Turkish patients with poor German language skills were divided into interventional (IV, n = 44) and control (C, n = 48) groups, 42 German (G) patients served as additional control group. The IV group attended a structured once weekly, 2 hr "Conversation Map®" training over 4 weeks in Turkish language. The two control groups had no intervention. Sociodemographic data were recorded at baseline, and standardized questionnaires assessing treatment, diabetes-knowledge (0–6; 6 = everything right), and therapy adherence ("Essential Training Content (ETC)" 0–10; 10 = best) were applied at baseline and after 4 weeks after training in the IV group. Baseline differences between the groups and changes of data after 4 weeks compared to baseline were tested (paired *t*-test,  $\alpha = 0.05$ , two-sided). **RESULTS:** Ethnic groups were comparable on demographic data, whereas Turkish patients had lower education level ( $P < 0.001$ ). 55% of all Turkish patients (IV and C) were insulin-dependent and 63% were previously not attending any diabetes-training. Baseline diabetes knowledge of Turkish patients was significantly lower than in the German control group (IV 2.38, T 2.77, G: 4.10,  $P < 0.001$ ), as well as the ETC score (IV 6.37, C 5.92, G 7.98,  $P < 0.001$ ). After "Conversation Map®" training the Turkish group achieved significantly higher mean knowledge- and ETC-score values compared to baseline (difference +70%, ETC: +25%,  $P < 0.001$ ) and were comparable to the German group. **CONCLUSIONS:** The study demonstrated that the cultural sensitive training "Conversation Map®", led to a significant increase of disease-knowledge and therapy adherence, helping to improve the health care situation of Turkish patients, with cost savings potential in the long term.

**PDB81**  
**TIME TO ADD-ON MEDICATION USE FOR PATIENTS WITH TYPE 2 DIABETES MELLITUS (T2DM) WHO FAILED METFORMIN MONOTHERAPY**

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**OBJECTIVES:** Add-on medications are recommended if target glycemic goals for patients with T2DM are not achieved or sustained after initial metformin monotherapy. This study examined the time to add-on medication use after metformin monotherapy failure in clinical practice. **METHODS:** Selected from a large US EMR database between January 1, 1997 and December 31, 2008, included patients had to be aged  $\geq 18$  years with a diagnosis of T2DM who had HbA1c  $\geq 7.0\%$  or  $\geq 2$  fasting blood glucose levels of 126 mg/dL or greater. Treatment failure was defined as HbA1c  $\geq 7\%$  (index date) after metformin monotherapy for at least 6 months. Baseline data were extracted during 1 year prior to the index date. Time to add-on medication use was time between index date to the first add-on medication use during follow-up and was evaluated for the overall cohort and for three index HbA1c subgroups:  $<8\%$ , 8–9%, and  $>9\%$ . A Cox proportional hazard model was employed to determine baseline clinical and demographic characteristics associated with shorter time to add-on medication use. **RESULTS:** There were 12,566 patients meeting the inclusion criteria; 8656, 2175 and 1735 had index HbA1c  $<8\%$ , 8–9% and  $>9\%$ , respectively. The overall mean (SD) age was 63 (12) years and 51% were female. The median time to add-on medication use was 15.7 months overall and 17.0, 13.9 and 11.3 months for patients with index HbA1c  $<8\%$ , 8–9% and  $>9\%$ , respectively. Higher index A1c, greater body mass index, higher Charlson comorbidity index, younger age, males, lower LDL were significantly associated with shorter time to add-on medication use (all  $P < 0.05$ ). **CONCLUSIONS:** This indicates, in US clinical practice, it takes over a year for a diabetic patient who has suboptimal glycemic level after initial metformin monotherapy to receive add-on medications. There is room through disease management so that patients who have failed metformin monotherapy, if eligible and appropriate, receive add on therapy sooner rather than later.

**PDB82**  
**PRESCRIBED DAILY DOSES OF ONCE-DAILY LIRAGLUTIDE IN THE GERMAN STATUTORY HEALTH INSURANCE (SHI)**

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**OBJECTIVES:** To evaluate the prescribed daily dose of liraglutide for patients in German statutory health insurances. The novel once-daily incretin analogue, liraglutide, mimics the effect of endogenous glucagon-like peptide 1 (GLP-1). Liraglutide was launched in Germany in July 2009 in a device allowing 3 different dosages (0.6 mg for initial titration; and the two maintenance doses 1.2 and 1.8 mg). The defined daily dose (DDD) was set by WHO at 1.2 mg. The prescribed daily dose (PDD) has not been evaluated so far. **METHODS:** Sampled data from German statutory health insurances (SHI) was provided by Insight Health (patient tracking data) for the period from July 2009 to March 2010 (9 months) covering about 11% of all patients in

German SHI. All patients with prescriptions of liraglutide were identified (n = 4,284). Patients with only one prescription and less than 4 weeks between first and last date of prescription were excluded to avoid overrepresented influence of low dosed therapy starters (remaining patients: n = 2,118). Total number of prescribed pens was determined from first to second last prescription and total consumption in mg was calculated. Number of days between first and last prescription was determined and mean average consumption in mg per day was calculated. **RESULTS:** The mean PDD of liraglutide in 2118 patients was 1.28 mg. Sensitivity analyses including only patients with longer periods of use showed decreasing average consumption; patients with at least 10 weeks duration of treatment showed a mean daily dose of 1.25 mg. Stocking effects (prescription before package is empty) could have driven the increase in average use in the starting period and at the end of the calendar year. **CONCLUSIONS:** The longer patients use liraglutide the lower the observed PDDs. The DDD of 1.2 mg is a valid estimate for real life usage of liraglutide.

**PDB83**  
**TIME TO TREATMENT MODIFICATION AMONG PATIENTS WITH TYPE 2 DIABETES WHO INITIATED EXENATIDE OR INSULIN GLARGINE**

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**OBJECTIVES:** To examine time to treatment modification for patients with type 2 diabetes (T2D) initiating treatment with exenatide BID or insulin glargine. **METHODS:** A retrospective analysis was conducted using the Thomson Reuters Research Databases. Adult patients with T2D who initiated exenatide (N = 9197) or glargine (N = 4499) between October 1, 2006 and September 30, 2007 with 12 months pre- and 18 months post-index continuous enrollment were included. Treatment modification was defined as the first event of change in the treatment and was classified further into three types: intensification, switching or discontinuation of the index medication. The 2 cohorts were 1:1 propensity score matched on baseline demographics, clinical characteristics, and prior health care utilization. Survival analysis was used to examine time to treatment modification. **RESULTS:** Propensity score matching resulted in inclusion of 3774 exenatide and 3774 glargine patients with a mean age of 57 years, mean Deyo Charlson Comorbidity Index score of 1.6, and with proportionately more males (54%) than females. All of the patients concomitantly used a non-index antidiabetic medication in post-index period. The 18-month discontinuation rates were 38.3% and 40.0% ( $P = 0.14$ ) and the treatment intensification rates were 15.9% and 26% ( $P < 0.0001$ ) for exenatide and glargine, respectively. Alternatively, 14.9% of exenatide-treated patients switched therapies, compared to 10.0% of glargine-treated patients ( $P < 0.0001$ ). Glargine-treated patients were 33% more likely to modify treatment than exenatide-treated patients (Hazard Ratio (HR): 1.33,  $P < 0.0001$ ). Glargine-treated patients were 72% more likely to intensify their treatment (HR = 1.72,  $P < 0.0001$ ), 25% more likely to discontinue (HR = 1.25,  $P < 0.0001$ ), and 29% less likely to switch to new therapy (HR = 0.71,  $P < 0.0001$ ) compared to exenatide. **CONCLUSIONS:** This analysis showed that exenatide-treated patients were less likely to modify their treatment suggesting potential longer durability with exenatide therapy. Furthermore, exenatide-treated patients were less likely to discontinue or intensify but more likely to switch their treatment than glargine-treated patients.

**PDB84**  
**MANAGEMENT OF ACROMEGALY IN CLINICAL PRACTICE ROSETINS IN SPAIN**

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**OBJECTIVES:** The goal of treating acromegaly is directed at removing the tumor, preventing tumor re-growth and reducing long-term morbidity and mortality. For this purpose, different health resources are necessary. This study evaluates the disease resources and costs in Spain. **METHODS:** An epidemiological, prospective, naturalistic, multicentric study (30 endocrinologists) involving acromegalic patients with micro ( $\leq 10$  mm) or macro ( $>10$  mm) adenomas was performed. Patients were categorized as Surgical Group (SG) (surgery in the 6 months before inclusion or during follow-up period) and somatostatin analogue (SA) treatment for  $<6$  months during the pre-surgery period) and Medical Treatment Group (MTG) (patients receiving SA treatment for  $\geq 6$  months, with/without surgery following SA treatment). Resource data were collected from standard visits during a 2-years period. **RESULTS:** The study included 74 patients (56 SG and 18 MTG). Most patients were women (62%). The mean (SD) age was 49 (14) years. The annual direct acromegaly cost per patient is €9668 (€9223 SG vs. €11,054 MTG). The cost of illness was higher in patients with macroadenoma than in microadenoma (€11,053 vs. €5809), and it is increased in young patients ( $<40$  years). Surgical procedures in acromegaly (involving hospitalization and complementary tests) constitute the 22% and 8% of the illness cost in SG