follow-up in subsequent years following a cardiovascular event. First-year costs of the cardiovascular events considered were myocardial infarction (US$5,026), angina (US$244), and congestive heart failure (US$395). First-year costs of treating cardiovascular events were stroke (US$282), congestive heart failure (US$2,244), and angina (US$395). The cost of an amputation procedure was US$244, as add-on to metformin. Patients initiating exenatide versus liraglutide for the management of T2D had savings in mean total pharmacy costs ($2,925 vs. $3,272, P < 0.001) and mean inpatient ($1,222 vs. $1,025) costs. Among patients who initiated liraglutide, those on 1.8 mg daily, or sitagliptin 100 mg daily, each used as add-on therapy to metformin. These findings of cost-effectiveness analyses (CEA) were performed to test robustness of the base case scenario. RESULTS: For liraglutide 1.8 mg versus sitagliptin, the ICER was $37,234 per QALY gained, while for liraglutide 1.2 mg versus sitagliptin, the ICER was $25,742 per QALY gained. In all sensitivity analyses including setting the HbA1c reduction to its 95% lower limit, the ICERs remained below US$50,000/QALY, a commonly accepted threshold in the United States, except for the shortest time horizon of 10 years. CONCLUSIONS: The availability of liraglutide 1.2 mg and 1.8 mg with improved efficacy profiles over sitagliptin could improve patient care, while being cost-effective treatment options to be considered.

PDB51

MEDICATION ADHERENCE AND MEDICAL COSTS ASSOCIATED WITH EXENATIDE BID VERSUS LIRAGLUTIDE: A RETROSPECTIVE DATABASE ANALYSIS

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OBJECTIVES: Although, safety and efficacy of exenatide (exenatide) and liraglutide for treating type 2 diabetes (T2D) has been demonstrated in trials, their comparative economic benefits are unknown. This study examined cost-offsets and medication adherence with use of exenatide versus liraglutide in managed care population. METHODS: A retrospective cohort analysis was conducted using the LinkLife database, containing adult patients with T2D who initiated exenatide (n = 2,383) or liraglutide (n = 1,535) between January 1, 2010 and June 30, 2010 and with 6 months pre- and post-index continuous eligibility. Patients were propensity score matched to control for on baseline differences. Medication adherence was measured using the proportion of days covered (PDC). The paired t-test and McNemar’s test were used to compare outcomes. RESULTS: Matched exenatide and liraglutide cohorts (n = 1,347 pairs) had comparable age (54 vs. 53 years), gender (55% vs. 57% female), and comorbidities (86% vs. 86%). In the 6-month follow-up, exenatide and liraglutide patients had similar 6-month total costs ($6,737 vs. $7,063, P = 0.313) and similar cost savings were observed in mean total pharmacy costs ($2,925 vs. $2,372, P < 0.001). There were no significant differences in mean total outpatient ($2,541 vs. $3,050) or inpatient ($1,222 vs. $1,025) costs. Among patients who initiated liraglutide, those on 1.8 mg bid had significantly higher mean total costs than those on 1.2 mg doses (n = 438) ($8,046 vs. $7,637, P = 0.043) due to higher mean total pharmacy costs in the 1.8 mg cohort ($4,017 vs. $3,926, P < 0.001); 35% higher mean drug cost for liraglutide claims in the 1.8 mg cohort largely accounted for this difference ($1,876 vs. $1,390, P < 0.001). There was no significant difference in medication adherence between groups (mean FDC: exenatide 56% vs. liraglutide 57%). CONCLUSIONS: Patients initiating exenatide versus liraglutide for the management of T2D had