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Real-World Comparison of Adherence to and Persistence with Dulaglutide and Liraglutide in UAE e-Claims Database

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Abstract : Objectives— The study aims to compare real-world adherence to and persistence with dulaglutide and liraglutide in patients with type 2 diabetes (T2D) initiating treatment in UAE. Methods— This was a retrospective, non-interventional study (observation period: 01 March 2017–31 August 2019) using the UAE Dubai e-Claims database. Included: adult patients initiating dulaglutide/liraglutide 01 September 2017–31 August 2018 (index period) with: ≥1 claim for T2D in the 6 months before index date (ID); ≥1 claim for dulaglutide/liraglutide during index period; and continuous medical enrolment for ≥6 months before and ≥12 months after ID. Key endpoints, assessed 3/6/12 months after ID: adherence to treatment (proportion of days covered [PDC; PDC ≥80% considered 'adherent'], per-group mean±standard deviation [SD] PDC); and persistence (number of continuous therapy days from ID until discontinuation [i.e., >45 days gap] or end of observation period). Patients initiating dulaglutide/liraglutide were propensity score matched (1:1) based on baseline characteristics. Between-group comparison of adherence was analysed using the McNemar test ($\alpha=0.025$). Persistence was analysed using Kaplan–Meier estimates with log-rank tests ($\alpha=0.025$) for between-group comparisons. This study presents 12-month outcomes. Results— Following propensity score matching, 263 patients were included in each group. Mean±SD PDC for all patients at 12 months was significantly higher in the dulaglutide versus the liraglutide group (dulaglutide=0.48±0.30, liraglutide=0.39±0.28, p=0.0002). The proportion of adherent patients favored dulaglutide (dulaglutide=20.2%, liraglutide=12.9%, p=0.0302), as did the probability of being adherent to treatment (odds ratio [97.5% CI]: 1.70 [0.99, 2.91]; p=0.03). Proportion of persistent patients also favoured dulaglutide (dulaglutide=15.2%, liraglutide=9.1%, p=0.0528), as did the probability of discontinuing treatment 12 months after ID (p=0.027). Conclusions— Based on the UAE Dubai e-Claims database data, dulaglutide initiators exhibited significantly greater adherence in terms of mean PDC versus liraglutide initiators. The proportion of adherent patients and the probability of being adherent favored the dulaglutide group, as did treatment persistence.

Keywords : adherence, dulaglutide, effectiveness, liraglutide, persistence

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