

TREATMENT PERSISTENCE IN PATIENTS WITH TYPE 2 DIABETES TREATED WITH GLP-1 RECEPTOR AGONISTS IN CLINICAL PRACTICE IN SWEDEN: NATIONWIDE RETROSPECTIVE COHORT STUDY

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OBJECTIVES: The aim of this study is to compare the treatment persistence of patients initiated on dulaglutide or liraglutide in clinical practice.

METHODS: In this retrospective study, data from adult patients with T2DM initiating any GLP-1 RA from 23May2015 up-to 15Oct2017 were collected from Swedish health registries. Patients were excluded if they had <75 days of follow-up, initiated a GLP-1 RA before index treatment, or initiated liraglutide treatment for obesity. Baseline characteristics were collected from an up-to-10-years long pre-index period. Treatment persistence (time from treatment initiation to treatment switch or discontinuation) was described using Kaplan-Meier method and calculated as median time-to-end-of persistence and proportion still on treatment after 1 year. Persistence was compared between groups using an inverse treatment probability weighted (using 49 baseline characteristics) Cox regression.

RESULTS: Of 17,384 patients, including 3,390 initiating dulaglutide and 12,461 liraglutide, 39.8% and 42.0% were female, mean age at baseline was 61.2 and 60.6 years, mean diabetes duration was 10.3 and 10.7 years, mean HbA1c was 70.2 and 71.0 mmol/mol, and mean BMI was 33.4 and 34.4, respectively. The most common glucose-lowering medications at baseline were metformin, (dulaglutide: 77.6%; liraglutide: 78.0%), basal insulin (dulaglutide: 31.7%; liraglutide: 44.0%), and DPP-4 inhibitors (dulaglutide: 30.0%; liraglutide: 24.8%). The median time-to-end-of persistence (95%CI) was 947 days (927-not calculable) for liraglutide but not calculable for dulaglutide as the proportion of patients still on treatment was above 50% at the end of observation. The proportion (95%CI) of patients still on treatment after 1 year was 85.0% (83.6-86.4) for dulaglutide and 75.5% (74.6-76.4) for liraglutide. The hazard ratio (95%CI) for treatment discontinuation was 0.61 (0.56-0.68) for dulaglutide compared with liraglutide.

CONCLUSIONS: This retrospective study of nationwide data from Swedish health registries suggests that in clinical practice, more patients starting dulaglutide remained on treatment after 1 year than patients starting liraglutide.