

Higher Rates of Persistence and Adherence in Patients with Type 2 Diabetes Initiating Once-weekly Versus Daily Injectable Glucagon-like Peptide-1 Receptor Agonists in US Clinical Practice (STAY Study)

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Background



Several injectable GLP-1 RAs are available for the treatment of T2D. These are either long-acting, with **once-weekly** administration, or short-acting, requiring **daily** injections.

The **STAY study** assessed persistence with and adherence to injectable GLP-1 RAs in US clinical practice.

The study population was patients (≥ 18 years) with T2D from the IBM MarketScan Explorers Claims-EMR Data Set (1 July 2012–31 January 2019).



Methods

4311 patients with ≥ 1 claim for **once-weekly** GLP-1 RAs



5639 patients with ≥ 1 claim for **daily** GLP-1 RAs



1:1 propensity score matching

Balanced cohorts with **784 patients** in each group

Persistence

Significantly higher persistence with **once-weekly** than **daily** GLP-1 RAs

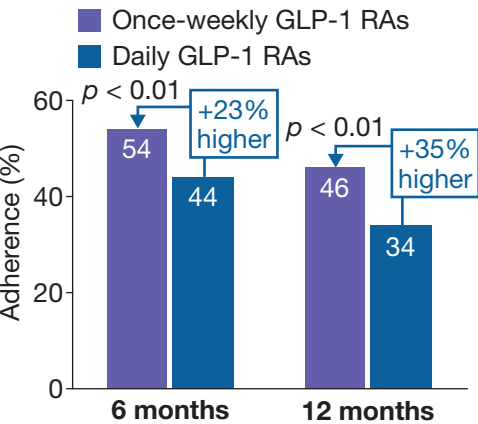
Median stay time

Once-weekly: 333 days
Daily: 269 days

HR: 0.80
(95% CI: 0.71–0.90);
 $p < 0.01$

Adherence

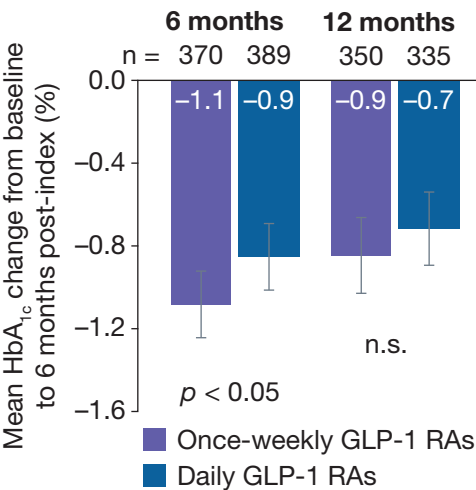
Significantly greater adherence with **once-weekly** than **daily** GLP-1 RAs



Adherence was defined as proportion of days covered ≥ 0.8 .

Blood glucose levels

Greater reductions in HbA_{1c} with **once-weekly** compared with **daily** GLP-1 RAs



Conclusions

- In our study, once-weekly injectable GLP-1 RAs were associated with significantly higher persistence and adherence than daily regimens over 1 year.
- Our study provides evidence that persistence and adherence, which are typically considered to be linked to patient convenience, also have **clear clinical benefits**.

CI confidence interval, GLP-1 RA glucagon-like peptide-1 receptor agonist, HbA_{1c} glycated haemoglobin, HR hazard ratio, $n.s.$ not significant, T2D type 2 diabetes.

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