Initiation of iGlarLixi vs Basal–Bolus Insulin in Adults With Type 2 Diabetes Advancing From Basal Insulin Therapy: The SoliComplex Real-World Study

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BACKGROUND

When type 2 diabetes is suboptimally controlled with basal insulin, multiple daily injections of prandial insulin are commonly added (basal–bolus regimen); this can increase treatment burden and risk of hypoglycemia, both of which are of concern to older adults

Older patients are a heterogenous population; for some, stringent glycemic control may not be a top priority, but rather safety and simplicity should take precedence

Once-daily iGlarLixi is an alternative to basal–bolus insulin

OBJECTIVE

Compare treatment persistence, treatment adherence, hypoglycemia rates, A1C change from baseline, HRU, and costs in adults with type 2 diabetes who previously received basal insulin and newly initiated iGlarLixi or basal–bolus insulin

METHODS

Retrospective, Real-World Observational Study

Study Population

Data from the US Optum Clinformatics claims database

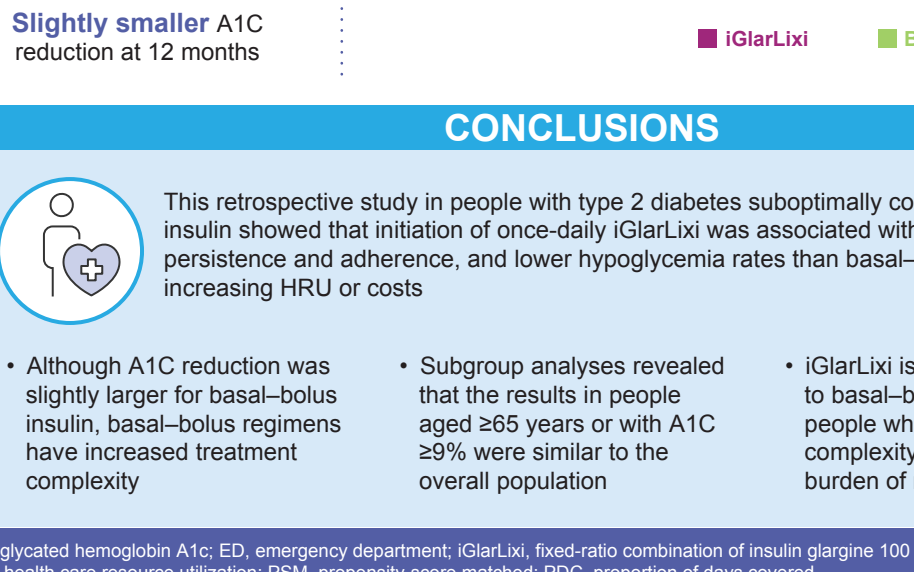
Adults with type 2 diabetes aged ≥18 years at index date who received ≥1 fill of basal insulin

Continuous medical and prescription drug coverage for the 6 months prior to index date

During the 6-month baseline period

- No prior iGlarLixi or bolus insulin fills
- ≥1 valid A1C value (between 5 and 15%)

Study Design



Outcomes at 12 months:
- Persistence (primary)
- Adherence
- Hypoglycemia
- HRU
- Costs
- A1C change

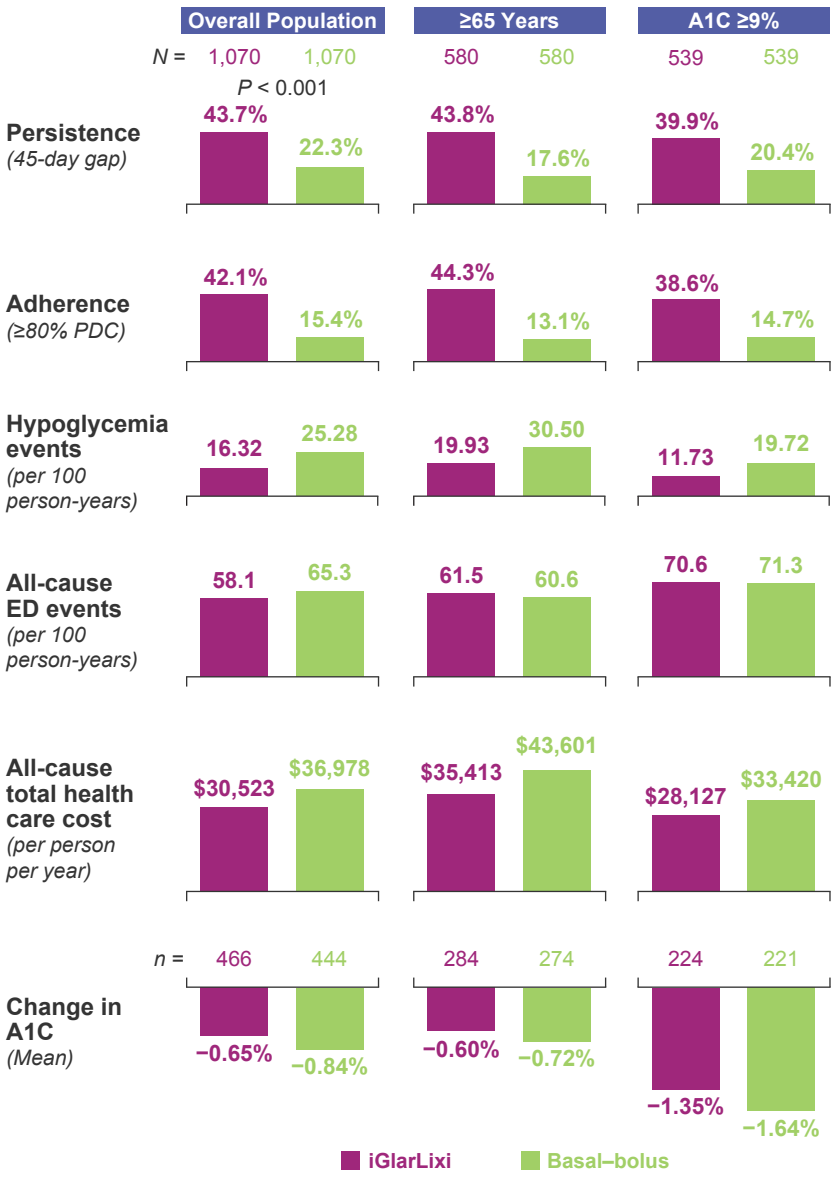
Assessed to:
- Overall population (primary)
- Subgroup aged ≥65 years
- Subgroup with baseline A1C ≥9%

KEY RESULTS

Initiation of iGlarLixi versus basal–bolus insulin was associated with:

- Significanty **higher** treatment persistence
- **Lower** hypoglycemia events
- **Similar** ED visits
- **Lower** all-cause total health care costs
- **Slightly smaller** A1C reduction at 12 months

Outcomes at 12 Months in PSM Cohorts



CONCLUSIONS

This retrospective study in people with type 2 diabetes suboptimally controlled on basal insulin showed that initiation of once-daily iGlarLixi was associated with higher treatment persistence and adherence, and lower hypoglycemia rates than basal–bolus insulin without increasing HRU or costs

- Although A1C reduction was slightly larger for basal–bolus insulin, basal–bolus regimens have increased treatment complexity
- Subgroup analyses revealed that the results in people aged ≥65 years or with A1C ≥9% were similar to the overall population
- iGlarLixi is a suitable alternative to basal–bolus insulin for older people who may require reduced complexity of treatment and burden of management

A1C, glycated hemoglobin A1c; ED, emergency department; iGlarLixi, fixed-ratio combination of insulin glargine 100 U/mL + lixisenatide; HRU, health care resource utilization; PSM, propensity-score matched; PDC, proportion of days covered.