Patients reaching treatment targets with once-weekly semaglutide in real-world practice: pooled analysis of four SURE studies

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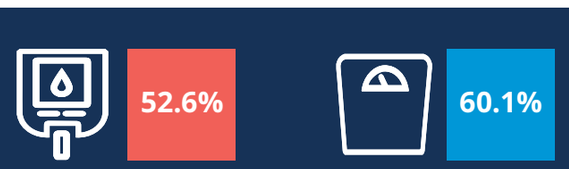
Patients with type 2 diabetes initiating once-weekly subcutaneous semaglutide achieved HbA$_{1c}$ and weight-loss targets in a pooled analysis of four observational studies



Proportion of patients who achieved HbA$_{1c}$ and weight-loss targets in the overall population

Background

- Once weekly (OW) subcutaneous (s.c.) semaglutide is a glucagon-like peptide-1 receptor agonist (GLP-1RA) approved for type 2 diabetes (T2D) treatment.
- Real-world evidence studies are important to understand the use of a drug in routine clinical practice and in diverse patient populations.[1]
- The SURE observational studies to date (Canada, Denmark/Sweden, Switzerland, UK) reported significant HbA$_{1c}$ and body weight reductions with OW semaglutide.[2–5]
- This pooled *post hoc* analysis of four SURE studies (N=1,212) evaluated patients achieving HbA$_{1c}$ and weight-loss targets.

Methods

- Patients (age ≥18 years) with T2D with ≥1 documented HbA$_{1c}$ value ≤12 weeks before semaglutide initiation were enrolled, and the patient populations were pooled for this analysis.
- Semaglutide and other anti-hyperglycaemic drugs were prescribed at the physician's discretion.
- The proportions of patients achieving HbA$_{1c}$ <7%, weight loss from baseline ≥3%, ≥5% and ≥10%, and a composite endpoint of HbA$_{1c}$ reduction ≥1% and weight loss ≥3% at end of study (EOS; ~30 weeks) are reported in the overall pooled population and in the subgroup of patients with a baseline HbA$_{1c}$ level ≥7%.
- The proportion of patients achieving treatment targets was evaluated using summary statistics.

Results

- Overall, 1,212 patients were included in the pooled analysis and there were 981 patients with baseline HbA$_{1c}$ ≥7%, with baseline characteristics reflective of real-world practice (**Table 1**).
- The proportions of patients achieving treatment targets were similar in the overall population and in patients with baseline HbA$_{1c}$ ≥7% (**Figure 1**).

Conclusion

- In a pooled analysis of real-world data from SURE Canada, Denmark/Sweden, Switzerland and the UK:
  - In patients with T2D initiating OW semaglutide, 52.6% achieved HbA$_{1c}$ <7% by EOS (~30 weeks), 60.1% achieved weight loss ≥3%, and 29.4% achieved the composite endpoint of HbA$_{1c}$ reduction ≥1%-point and weight loss ≥3%.
  - In the subset of patients with baseline HbA$_{1c}$ ≥7%, a similar proportion achieved the same targets: 44.5% attained HbA$_{1c}$ <7%, 59.8% a weight loss ≥3%, and 34.6% the composite endpoint by EOS.
  - The discontinuation rate in the overall population was 9.5%, and no new safety signals were identified with OW semaglutide.
  - These results from a real-world setting in five countries support the use of OW semaglutide in routine clinical practice in a broad range of adults with T2D.

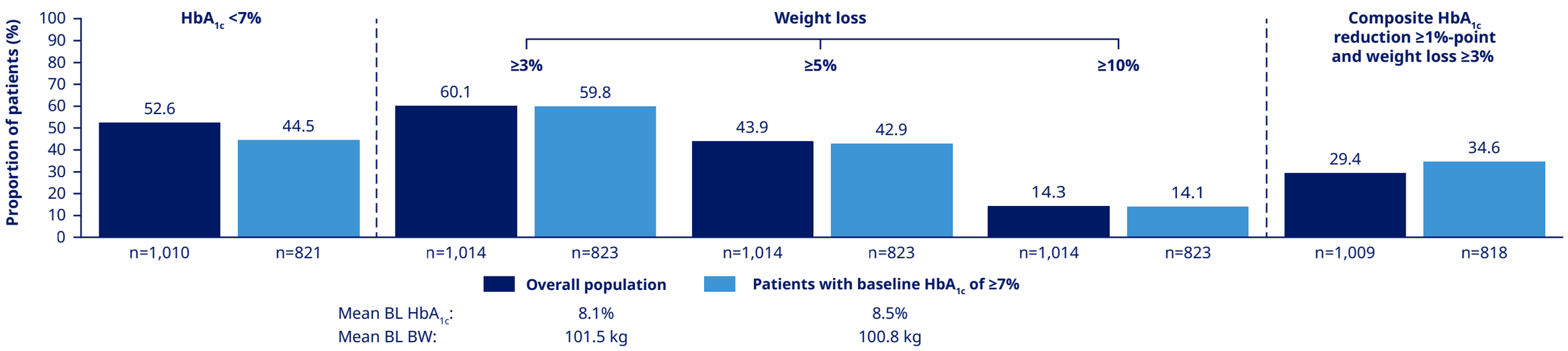
Table 1: Baseline characteristics (overall pooled population and patients with baseline HbA$_{1c}$ ≥7%)

	Overall pooled population N=1,212	Patients with baseline HbA$_{1c}$ ≥7% N=981
Age, years	60.1 (10.9)	59.9 (10.9)
Female, n (%)	473 (39.0)	378 (38.5)
Diabetes duration, years*	12.2 (7.8)	12.5 (7.6)
HbA$_{1c}$, %	8.1 (1.5)	8.5 (1.3)
Body weight, kg†	101.5 (21.0)	100.8 (20.7)
Body mass index, kg/m^2‡	34.9 (6.6)	34.6 (6.5)
Switch from another GLP-1RA, n (%)	252 (20.8)	193 (19.7)

Data shown are the full analysis set for the overall pooled population, N=1,212 unless otherwise stated, and the patients with baseline HbA$_{1c}$ ≥7%, N=981 unless otherwise stated. *N=1,210 and N=979, respectively. †N=1,201 and N=973, respectively. ‡N=1,195 and N=969, respectively. Data are mean (SD) unless otherwise indicated. GLP-1RA, glucagon-like peptide-1 receptor agonist; N, total number of subjects; n, number of subjects; SD, standard deviation.

Key result

Figure 1: Proportions of patients achieving treatment targets



Mean semaglutide dose at EOS in the overall population: 0.8 mg. Data are from the full analysis set, regardless of semaglutide treatment status.
n indicates the number of patients included in analysis with available data. BL, baseline; BW, body weight; EOS, end of study.

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References:
(**1**) Blonde L et al. *Adv Ther* 2018;35:1763–74; (**2**) Yale JF et al. *Diabetes Obes Metab* 2021;23:2269–78; (**3**) Ekberg NR et al. *Prim Care Diabetes* 2021;15:871–8; (**4**) Rudofsky G et al. *Diabetes Res Clin Pract* 2021;178:108931; (**5**) Holmes P et al. *Diabetes Ther* 2021;12:2891–905.

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