Real-world use of once-weekly semaglutide in patients with type 2 diabetes: results from SURE Switzerland

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Background/Introduction:
Non-interventional studies reflect real-world patient outcomes and therapy used in routine clinical practice. Once-weekly (OW) subcutaneous semaglutide is a glucagon-like peptide-1 receptor agonist (GLP-1RA) approved for the treatment of type 2 diabetes (T2D). SURE Switzerland is a multicentre, prospective, non-interventional study investigating the real-world effectiveness of OW semaglutide in adults with T2D. This study aims to complement findings from the SUSTAIN clinical trial programme, in which OW semaglutide demonstrated clinically relevant and superior glycaemic control and body weight (BW) reductions vs placebo and comparators.

Methods:
Patients (age ≥18 years) with T2D who had ≥1 documented HbA1c value ≤12 weeks before semaglutide initiation were enrolled. Semaglutide and other antihyperglycaemic drugs were prescribed at the physician’s discretion. Primary endpoint was change in HbA1c from baseline (BL) to end of study (EOS; ~30 weeks), analysed as a BL-adjusted change using ANCOVA with change from BL in HbA1c as the dependent variable. Secondary endpoints included change from BL to EOS in BW, waist circumference (WC) and patient-reported outcomes (PROs), and patients (%) achieving HbA1c <8.0, 7.5 and 7.0% at EOS. Semaglutide dose at EOS was a prespecified exploratory endpoint. BL characteristics were assessed among patients who initiated semaglutide; endpoints were analysed for patients attending the EOS visit and still receiving semaglutide.

Results:
Of 214 patients initiating semaglutide (mean age 60.2 years, duration of diabetes 11.0 years), 48 (22.4%) had switched from another GLP-1RA. Mean BL HbA1c was 7.8%, BW 99.9 kg and BMI 34.6 kg/m2, and 123 (57.5%), 89 (41.6%) and 59 (27.6%) patients had, respectively, HbA1c <8.0%, <7.5% and <7.0%. Of 187 patients attending the EOS visit, 175 (93.6%) were still receiving semaglutide: 15 (8.6%) at 0.25 mg, 51 (29.1%) at 0.5 mg, 105 (60.0%) at 1.0 mg and 4 (2.3%) at other doses. Mean (SD) dose of semaglutide at EOS was 0.77 (0.29) mg. Significant reductions in HbA1c (−0.8%), BW (−5.0 kg) and WC (−4.8 cm) were observed from BL to EOS (all p<0.0001). At EOS, 146 (85.9%), 130 (76.5%) and 95 (55.9%) patients achieved, respectively, HbA1c <8.0%, <7.5% and <7.0%; 108 (63.9%) and 72 (42.6%) patients achieved BW losses of ≥3% and ≥5%. Significant improvements from BL to EOS (p<0.05) were observed for the 36-Item Short Form Health Survey (physical component +1.4 [95% CI 0.37;2.36]; mental component +1.3 [0.11;2.54]), and the Diabetes Treatment Satisfaction Questionnaire (DTSQ status version +2.0; estimated mean 12.1 for the DTSQ change version at EOS). Mean adherence score at EOS was 7.4 out of 8 on the Morisky Medication Adherence Scale. No new safety concerns with semaglutide were reported.

Conclusion:
Patients with T2D in Switzerland who initiated OW semaglutide and were then followed as part of the SURE study experienced clinically significant improvements from BL to EOS in HbA1c, BW and other patient-related outcomes.