More patients achieved composite reductions of ≥1% HbA1c, ≥5% body weight and ≥5 mmHg systolic blood pressure with semaglutide versus comparators (SUSTAIN 1–5, 7)

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Semaglutide is a new GLP-1 analogue for the once-weekly treatment of type 2 diabetes (T2D). Across the SUSTAIN clinical trial programme, patients with T2D achieved greater reductions in three cardiovascular (CV) risk factors with semaglutide versus placebo or comparators (dulaglutide, exenatide once-weekly, insulin glargine, or sitagliptin): HbA1c, body weight (BW) and systolic blood pressure (SBP). Six SUSTAIN trials (SUSTAIN 1–5 and 7) were assessed post hoc to determine to what extent patients achieved clinically meaningful reductions in all of these risk factors (composite endpoint: ≥1% decrease in HbA1c, ≥5% BW loss, and ≥5 mmHg SBP reduction). Across trials, mean baseline HbA1c, body weight and SBP ranges were 8.1–8.4%, 89.5–95.8 kg and 128.8–134.8 mmHg, respectively. Significantly more patients achieved the composite endpoint with semaglutide (0.5 mg: 14–20%; 1.0 mg: 15–37%) versus comparators (1–12%; $p<0.001$ for all comparisons). Evaluation of the two trials versus glucagon-like peptide-1 receptor agonists showed that the composite endpoint was achieved by a significantly greater proportion of patients treated with semaglutide (0.5 mg: 19%; 1.0 mg: 22–33%) versus exenatide once-weekly 2.0 mg (6%; SUSTAIN 3) or dulaglutide (0.75 mg: 7%; 1.5 mg: 12%; SUSTAIN 7) ($p<0.001$ for all comparisons). With semaglutide, significantly more patients achieved clinically meaningful improvements in the composite of HbA1c, BW and SBP reductions versus comparators, which may promote a better overall CV risk profile with semaglutide compared with comparators.