

STUDY DESIGNS

SUSTAIN 1: Monotherapy vs placebo^{1,18}

A 30-week, randomised, double-blind, placebo-controlled, parallel-group, multicentre trial to evaluate the efficacy and safety of Ozempic® vs placebo. A total of 388 patients with type 2 diabetes inadequately controlled with diet and exercise were randomised to receive once-weekly Ozempic® 0.5 mg (n=128), Ozempic® 1 mg (n=130) or placebo (n=129). The primary endpoint was change in HbA_{1c} at Week 30, and the secondary endpoint was change in mean body weight at Week 30.

SUSTAIN 2: Head-to-head vs Januvia® (sitagliptin)^{1,19}

A 56-week, randomised, double-blind, double-dummy, active-controlled, parallel-group, multicentre trial to compare the efficacy and safety of Ozempic® vs Januvia®. A total of 1231 patients with type 2 diabetes inadequately controlled on metformin and/or thiazolidinediones were randomised to receive once-weekly Ozempic® 0.5 mg (n=409), once-weekly Ozempic® 1 mg (n=409) or once-daily Januvia® 100 mg (n=407). The primary endpoint was change in HbA_{1c} at Week 56, and the secondary endpoint was change in mean body weight at Week 56.

SUSTAIN 3: Head-to-head vs Bydureon® (exenatide ER)^{1,17}

A 56-week, randomised, open-label, active-controlled, parallel-group, multicentre trial to compare the efficacy and safety of Ozempic® vs Bydureon®. A total of 813 patients with type 2 diabetes inadequately controlled on metformin, metformin and sulphonylurea or thiazolidinediones were randomised to receive once-weekly Ozempic® 1 mg (n=404) or Bydureon® 2 mg (n=405). The primary endpoint was change in HbA_{1c} at Week 56, and the secondary endpoint was change in mean body weight at Week 56.

SUSTAIN 4: Head-to-head vs Lantus® (insulin glargine)^{1,10}

A 30-week, randomised, open-label, active-controlled, parallel-group, multicentre trial to compare the efficacy and safety of Ozempic® vs Lantus®. A total of 1089 insulin-naïve patients with type 2 diabetes inadequately controlled on metformin alone or in combination with a sulphonylurea were randomised to receive once-weekly Ozempic® 0.5 mg (n=362), once-weekly Ozempic® 1 mg (n=360) or once-daily Lantus® with a starting dose of 10 IU (n=360). The primary endpoint was change in HbA_{1c} at Week 30, and the secondary endpoint was change in mean body weight at Week 30.

SUSTAIN 5: As add-on to basal insulin vs placebo^{1,13}

A 30-week, randomised, double-blind, placebo-controlled, parallel-group, multicentre trial to demonstrate the superiority of Ozempic® in combination with basal insulin vs placebo. A total of 397 patients inadequately controlled on basal insulin with or without metformin were randomised to once-weekly Ozempic® 0.5 mg (n=132), Ozempic® 1 mg (n=131) or placebo (n=133). Randomisation was stratified according to HbA_{1c} at screening. Patients with HbA_{1c} ≤8% at screening reduced the insulin dose by 20% at start of trial to reduce the risk of hypoglycaemia. The primary endpoint was change in HbA_{1c} at Week 30, and the secondary endpoint was change in mean body weight at Week 30.

SUSTAIN 6: CV outcomes^{1,5,8}

A 2-year, randomised, double-blind, placebo-controlled, parallel-group trial to evaluate CV and other long-term outcomes of Ozempic®. A total of 3297 patients with type 2 diabetes and high risk of CV events were randomised based on evidence of CV disease, insulin treatment and renal impairment to once-weekly Ozempic® 0.5 mg (n=826), Ozempic® 1 mg (n=822) or placebo (n=1649) in addition to standard of care treatments such as oral antidiabetic treatments, insulin, antihypertensives, diuretics and lipid-lowering therapies at investigator discretion. The primary endpoint was time from randomisation to first occurrence of a major adverse CV event (MACE) defined as CV death, nonfatal myocardial infarction or nonfatal stroke. Secondary endpoints included first occurrence from baseline to Week 104 of the individual components of the composite outcomes; nephropathy and diabetic retinopathy complications; change from baseline to Week 104 in body weight and HbA_{1c}.

Inclusion criteria were HbA_{1c} ≥7%; previously on 0-2 oral antidiabetic drugs (OADs), basal or pre-mix insulin ± 0-2 OADs; ≥50 years with established CV disease (≥1 coexisting condition); ≥60 years with at least 1 CV risk factor as determined by the investigator. Exclusion criteria were treatment with a dipeptidyl peptidase-4 inhibitor within 30 days before screening or with a GLP-1 receptor agonist or insulin other than basal or pre-mixed within 90 days before screening; a history of an acute coronary or cerebrovascular event within 90 days before randomisation; planned revascularisation of a coronary, carotid or peripheral artery; or long-term dialysis.

SUSTAIN 7: Head-to-head vs Trulicity® (dulaglutide)^{1,2}

A 40-week, randomised, open-label, active-controlled, parallel-group, multicentre, multinational, four-armed trial to compare the efficacy and safety of Ozempic® vs Trulicity®. A total of 1199 patients with type 2 diabetes inadequately controlled on metformin were randomised to receive Ozempic® 0.5 mg (n=301), Ozempic® 1 mg (n=300), Trulicity® 0.75 mg (n=299) or Trulicity® 1.5 mg (n=299) once weekly. The primary endpoint was change in HbA_{1c} at Week 40, and the secondary endpoint was change in mean body weight at Week 40.

SUSTAIN 8: Head-to-head vs Invokana® (canagliflozin)²⁸

A 52-week, confirmatory, randomised (1:1), double-blind, double-dummy, active-controlled, parallel-group trial to compare (pairwise) the efficacy and safety of once-weekly Ozempic® 1.0 mg vs once-daily oral Invokana® 300 mg, both in combination with metformin. 784 adults with type 2 diabetes inadequately controlled with metformin were randomised. The primary endpoint was change in HbA_{1c} at Week 52, and the key secondary endpoint was change in body weight at Week 52.

SUSTAIN 9: As add-on to SGLT-2i vs placebo²⁹

A randomised, double-blind, parallel-group trial to compare the efficacy and safety of Ozempic® as add-on to SGLT-2i monotherapy or in combination with either metformin or sulphonylurea vs placebo. 302 patients with type 2 diabetes and inadequate glycaemic control, despite ≥90 days treatment with an SGLT-2i, were randomly assigned (1:1) to receive Ozempic® 1.0 mg or volume-matched placebo once weekly for 30 weeks. Existing antidiabetic medications, including SGLT-2i treatment, were continued during the trial. The primary outcome was change in HbA_{1c} from baseline at Week 30, with confirmatory secondary outcome of change in body weight.

SUSTAIN 10: Head-to-head vs Victoza® (liraglutide)³⁰

An open-label, parallel-group, multicentre trial conducted in 11 European countries to compare the efficacy and safety of Ozempic® vs Victoza® in 577 adults with type 2 diabetes, on 1 to 3 oral antidiabetic drugs. Patients were randomised 1:1 to Ozempic® 1.0 mg once weekly or Victoza® 1.2 mg once daily. Randomisation was stratified by background medication of sulphonylureas ± metformin, SGLT-2i ± metformin, SU and SGLT-2i ± metformin or metformin monotherapy. Primary and secondary endpoints were change from baseline to Week 30 in HbA_{1c} and body weight.