## **PubMed search:**

("Diabetes Mellitus, Type 2"[Mesh] OR "diabetes mellitus type 2"[tiab] OR "type 2 diabetes mellitus"[tiab] OR "T2DM"[tiab]) AND (Sodium-Glucose Transporter 2 Inhibitors[MH] OR "Sodium glucose co-transporter 2 inhibitor\*"[TIAB] OR SGLT2 inhibitor\*[TIAB] OR "Empagliflozin"[tiab] OR "Dapagliflozin"[tiab] OR "Canagliflozin"[tiab] OR "ertugliflozin"[tiab] OR "glucagon-like peptide 1 receptor agonists"[TIAB] OR lixisenatide[TIAB] OR liraglutide[TIAB] OR semaglutide[TIAB] OR exenatide[TIAB] OR albiglutide[TIAB] OR dulaglutide[TIAB] OR "cardiovascular death" [tiab] OR "myocardial infarction"[TIAB] OR stroke[tiab] OR "Cardiovascular Events"[TIAB] OR "cardiac Events"[TIAB] OR "MACE"[tiab] OR "major adverse cardiovascular event\*"[tiab] OR "major adverse cardiac event\*"[tiab] OR "heart failure hospitalization"[tiab] OR "All-cause death"[tiab] OR "All-cause mortality"[tiab]) AND ((randomized controlled trial [pt] OR controlled clinical trial [pt] OR randomized [tiab] OR placebo [tiab] OR drug therapy [sh] OR randomly [tiab] OR trial [tiab] OR groups [tiab]) NOT (animals [mh] NOT humans [mh]))

## **Embase search:**

('non insulin dependent diabetes mellitus'/exp OR 'diabetes mellitus type 2':ab,ti OR 'type 2 diabetes mellitus':ab,ti OR T2DM:ab,ti) AND ('sodium glucose cotransporter 2 inhibitors'/exp OR 'Sodium glucose co-transporter 2 inhibitors'/exp OR 'SGLT2 inhibitors'/exp OR empagliflozin:ab,ti OR canagliflozin:ab,ti OR dapagliflozin:ab,ti OR etugliflozin:ab,ti OR 'glucagon-like peptide 1 receptor agonists'/exp,ti OR lixisenatide:ab,ti OR lixisenatide:ab,ti OR semaglutide:ab,ti OR semaglutide:ab,ti OR albiglutide:ab,ti OR dulaglutide:ab,ti OR 'major adverse cardiovascular death'/exp, OR 'myocardial infarction'/exp,ti OR 'stroke:ab,ti OR 'Cardiovascular Events'/exp,ti OR 'cardiac Events'/exp,ti OR 'major adverse cardiovascular events'/exp, OR 'heart failure hospitalization'/exp,ti OR 'All-cause death'/exp,ti OR 'drug therapy'/exp, OR ((double OR single OR doubly OR singly) AND (blind OR blinded OR blindly)/exp, OR 'double blind procedure'/exp) OR trial:ab,ti OR groups:ab,ti) NOT ('animal experiment'/exp, NOT 'human experiment'/exp))

Figure S1 PRISMA flow diagram of study selection

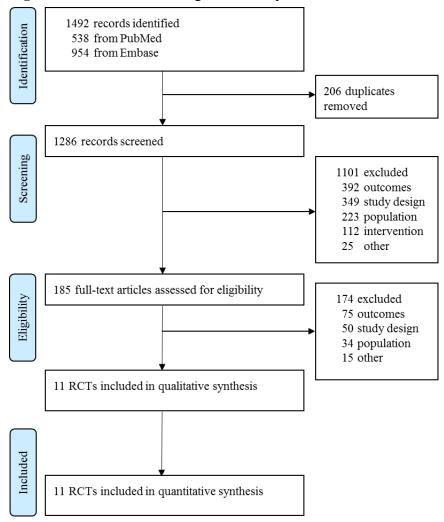


Figure S2 Risk of bias summary

8USTAIN-6	REWIND	PIONEER 6	LEADER	Harmony Outcomes	EXSCEL	EMPA-REG OUTCOME	ELIXA	DECLARE-TIMI 58	CREDENCE	CANVAS Program	
•	•	•	•	•	•	•	•	•	•	•	Random sequence generation (selection bias)
•	•	•	•	•	•	•	•	•	•	•	Allocation concealment (selection bias)
•	•	•	•	•	•	•	•	•	•	•	Blinding of participants and personnel (performance bias)
•	•	•	•	•	•	•	•	•	•	•	Blinding of outcome assessment (detection bias)
•	•	•	•	•	•	•	•	•	•	•	Incomplete outcome data (attrition bias)
•	•	•	•	•	•	•	•	•	•	•	Selective reporting (reporting bias)
•	•	•	•	•	•	•	•	•	•	•	Other bias

Figure S3 Effect of systolic blood pressure reduction on HR of GLP-1RAs vs. placebo as for reducing MACE ( $\beta = -0.015$ , P = 0.683)

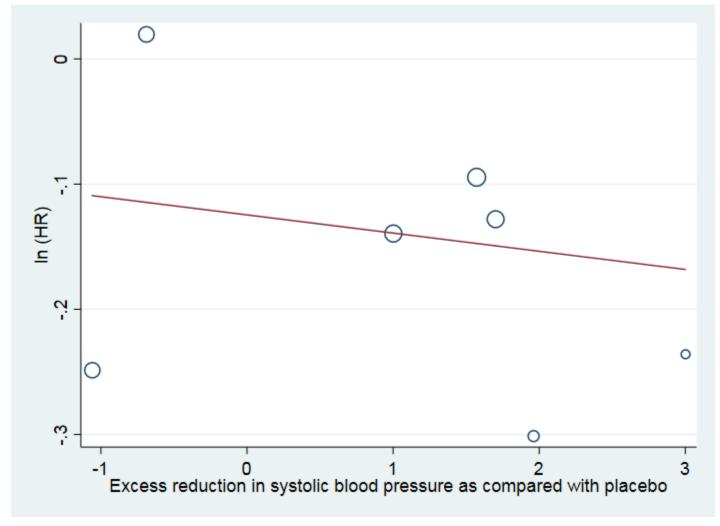


Figure S4 Effect of systolic blood pressure reduction on HR of GLP-1RAs vs. placebo as for reducing HHF ( $\beta = 0.048$ , P = 0.318)

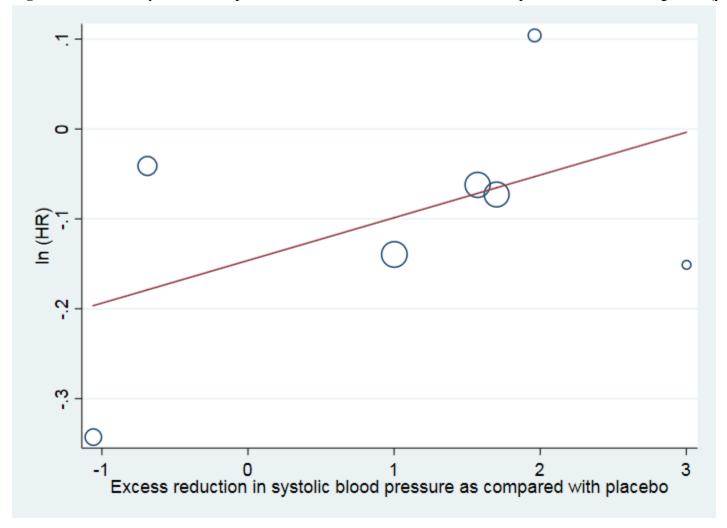


Figure S5 Effect of systolic blood pressure reduction on HR of GLP-1RAs vs. placebo as for reducing CVD ( $\beta$  = -0.039, P = 0.385)

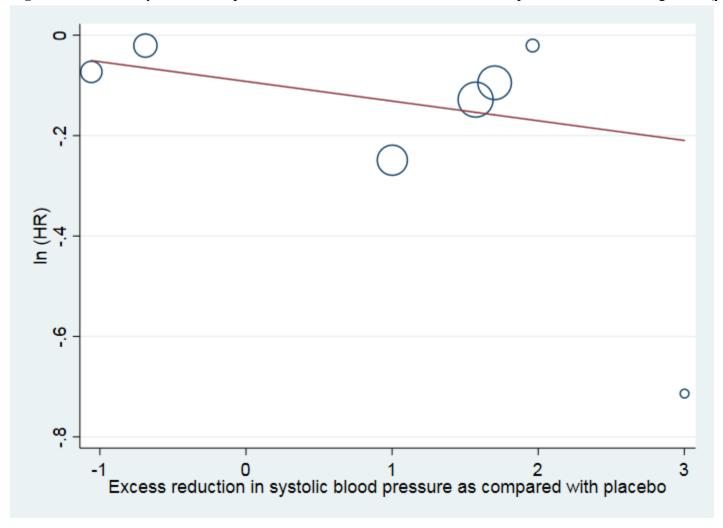


Figure S6 Effect of systolic blood pressure reduction on HR of GLP-1RAs vs. placebo as for reducing MI ( $\beta = 0.035$ , P = 0.429)

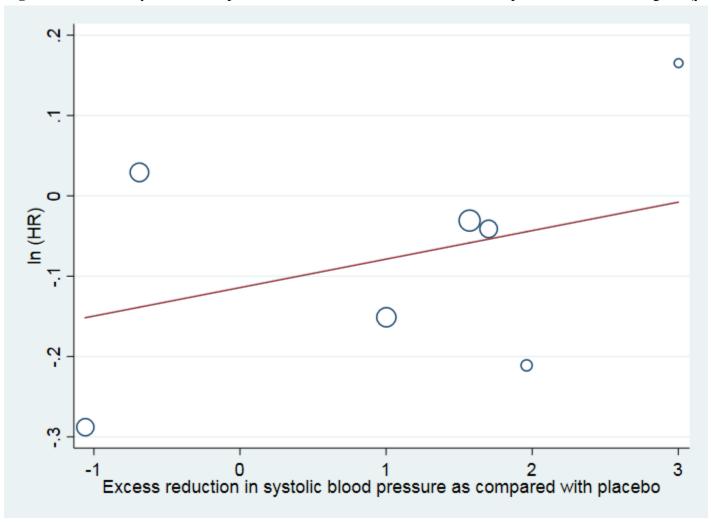


Figure S7 Effect of systolic blood pressure reduction on HR of GLP-1RAs vs. placebo as for reducing stroke ( $\beta = -0.069$ , P = 0.211)

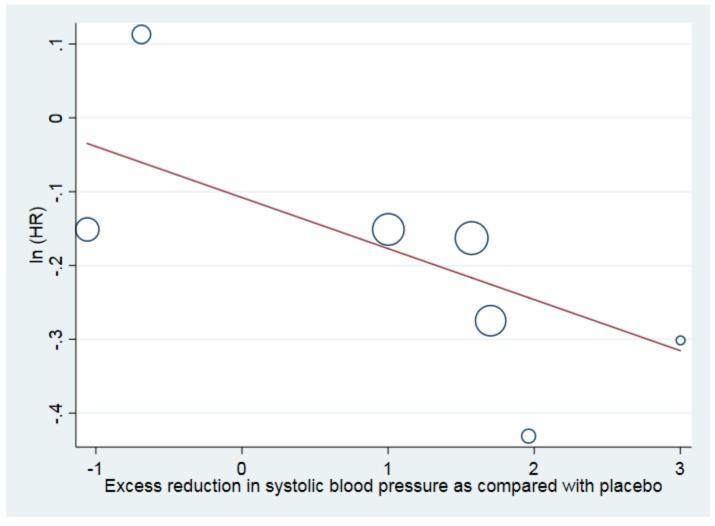


Figure S8 Effect of systolic blood pressure reduction on HR of GLP-1RAs vs. placebo as for reducing ACD ( $\beta = -0.037$ , P = 0.308)

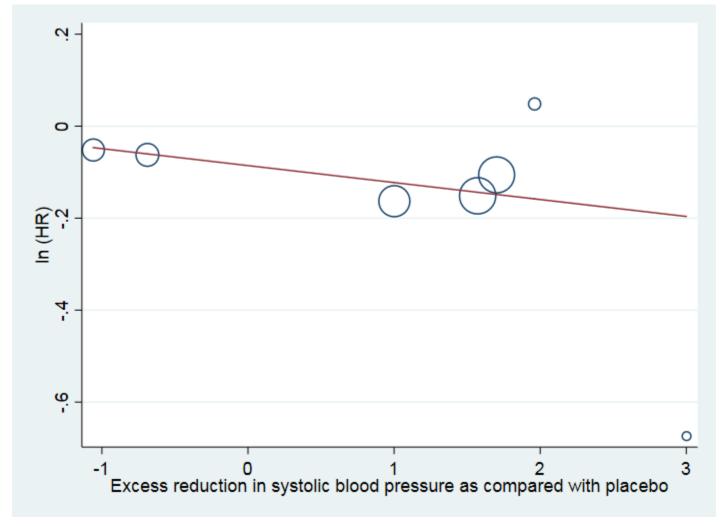


Figure S9 Effect of body weight reduction on HR of GLP-1RAs vs. placebo as for reducing MACE ( $\beta = -0.007$ , P = 0.846)

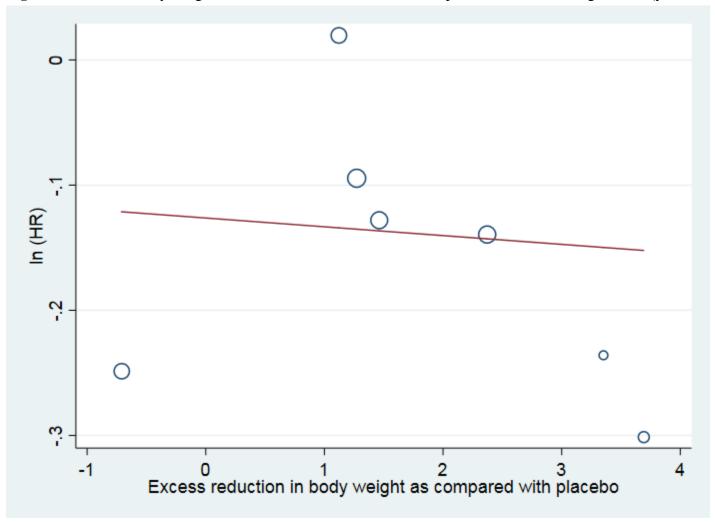


Figure S10 Effect of body weight reduction on HR of GLP-1RAs vs. placebo as for reducing HHF ( $\beta = 0.059$ , P = 0.241)

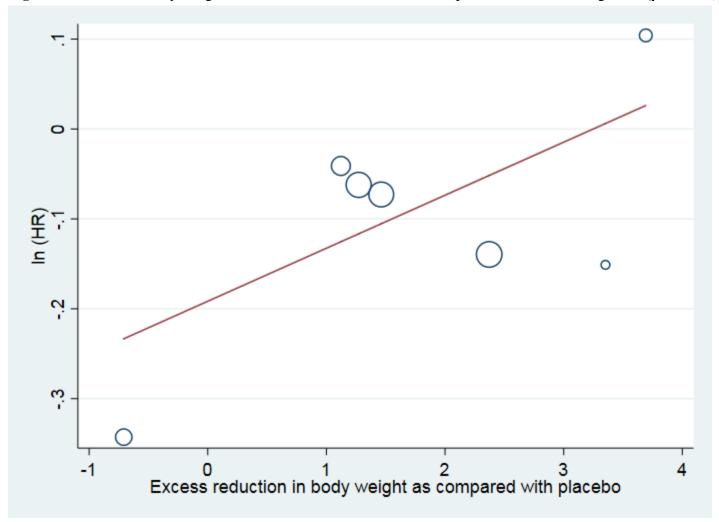


Figure S11 Effect of body weight reduction on HR of GLP-1RAs vs. placebo as for reducing CVD ( $\beta = -0.053$ , P = 0.268)

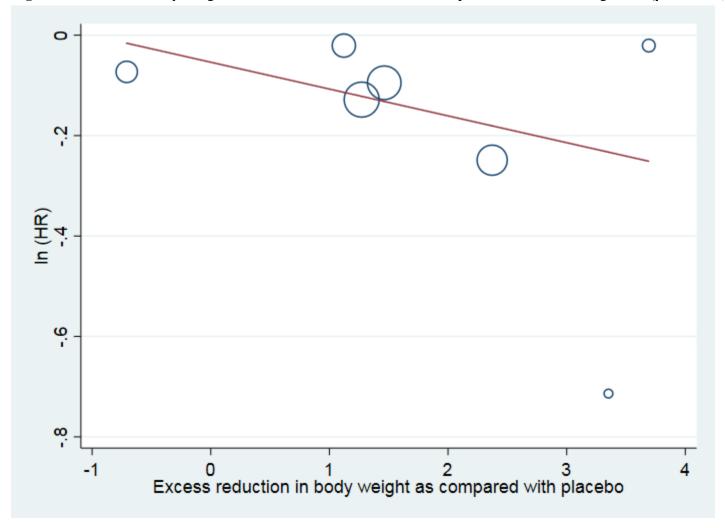


Figure S12 Effect of body weight reduction on HR of GLP-1RAs vs. placebo as for reducing MI ( $\beta = 0.034$ , P = 0.460)

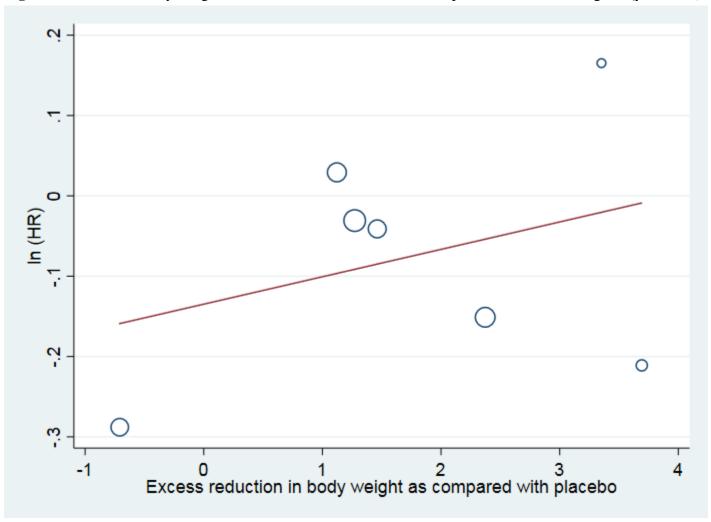


Figure S13 Effect of body weight reduction on HR of GLP-1RAs vs. placebo as for reducing stroke ( $\beta = -0.036$ , P = 0.483)

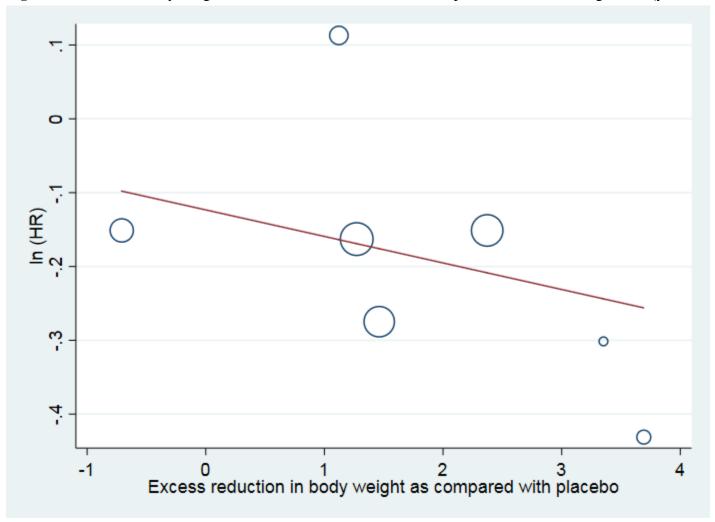


Figure S14 Effect of body weight reduction on HR of GLP-1RAs vs. placebo as for reducing ACD ( $\beta = -0.032$ , P = 0.428)

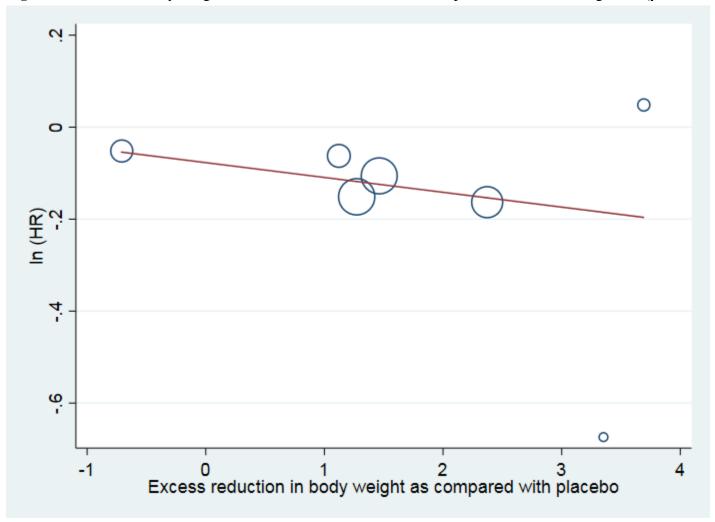


Figure S15 Effect of systolic blood pressure reduction on HR of SGLT-2 is vs. placebo as for reducing MACE ( $\beta = -0.026$ , P = 0.817)

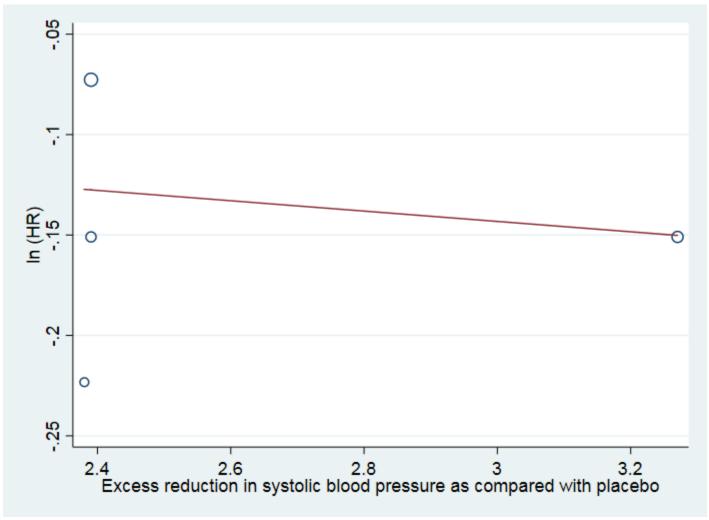


Figure S16 Effect of systolic blood pressure reduction on HR of SGLT-2 is vs. placebo as for reducing HHF ( $\beta$  = -0.014, P = 0.941)

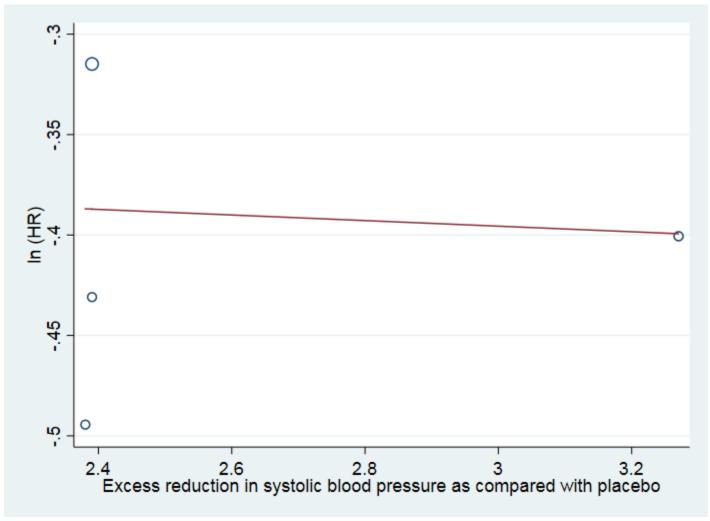


Figure S17 Effect of systolic blood pressure reduction on HR of SGLT-2 is vs. placebo as for reducing CVD ( $\beta = 0.116$ , P = 0.739)

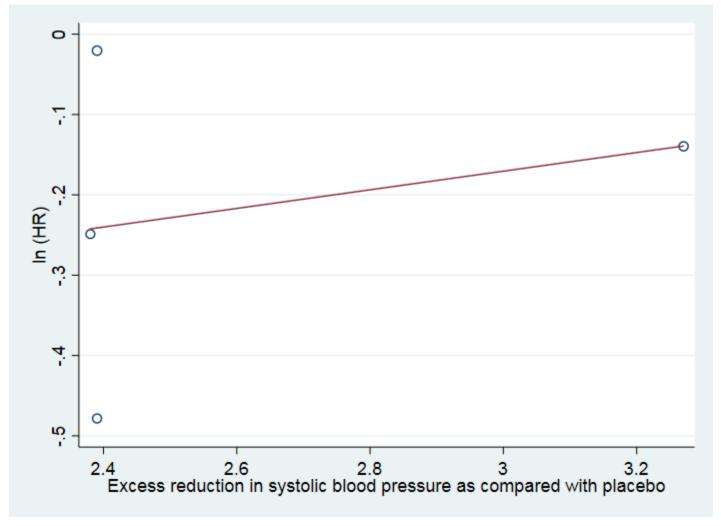


Figure S18 Effect of systolic blood pressure reduction on HR of SGLT-2 is vs. placebo as for reducing MI ( $\beta = 0.011$ , P = 0.939)

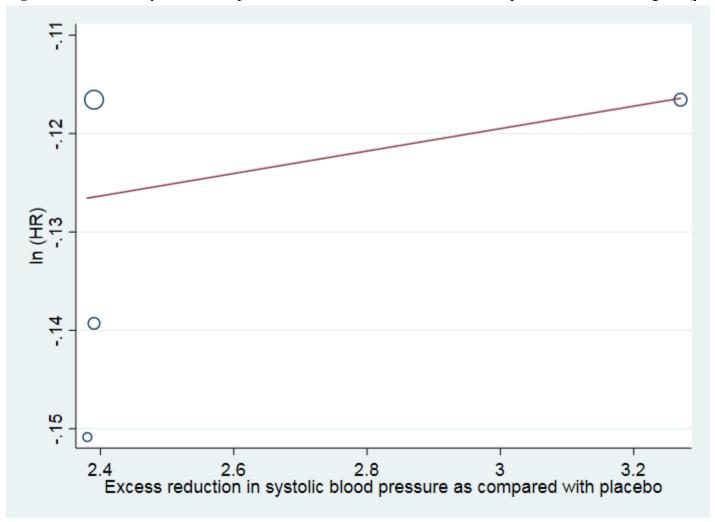


Figure S19 Effect of systolic blood pressure reduction on HR of SGLT-2 is vs. placebo as for reducing stroke ( $\beta = -0.145$ , P = 0.609)

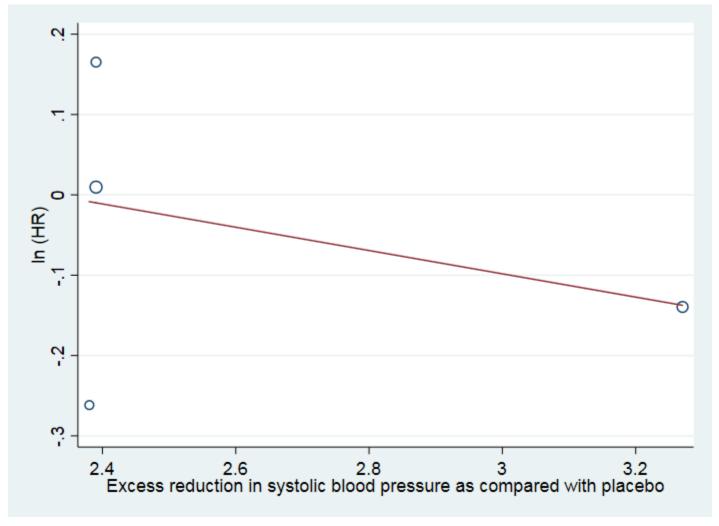


Figure S20 Effect of systolic blood pressure reduction on HR of SGLT-2 is vs. placebo as for reducing ACD ( $\beta = 0.075$ , P = 0.756)

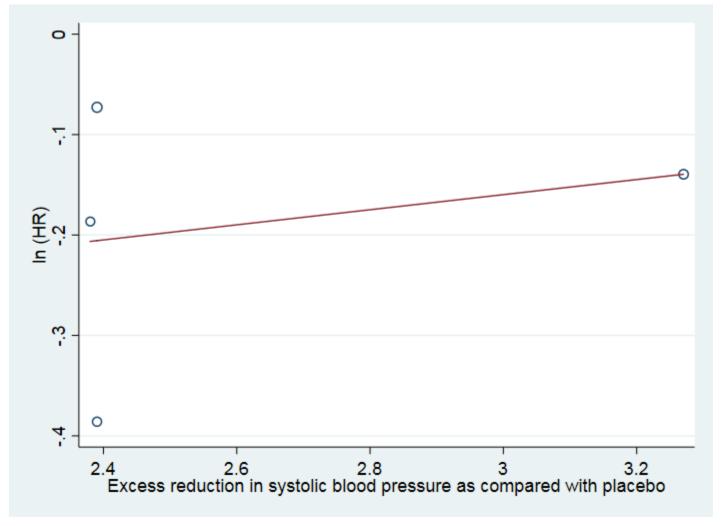


Figure S21 Effect of body weight reduction on HR of SGLT-2 is vs. placebo as for reducing MACE ( $\beta = 0.097$ , P = 0.346)

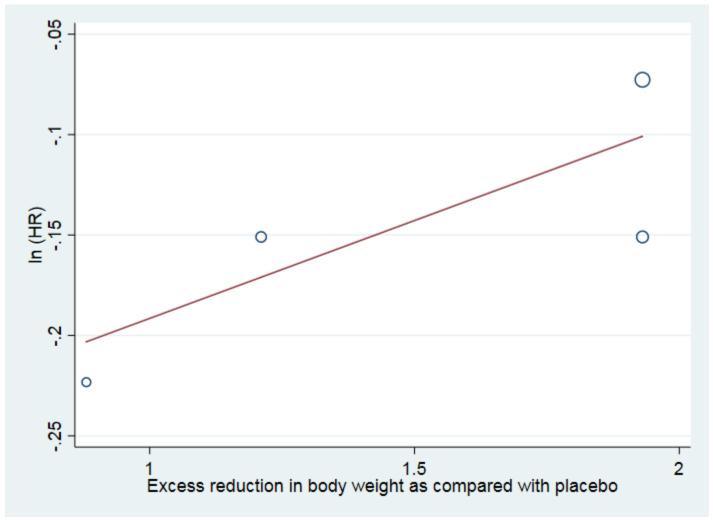


Figure S22 Effect of body weight reduction on HR of SGLT-2 is vs. placebo as for reducing HHF ( $\beta$  = 0.138, P = 0.414)

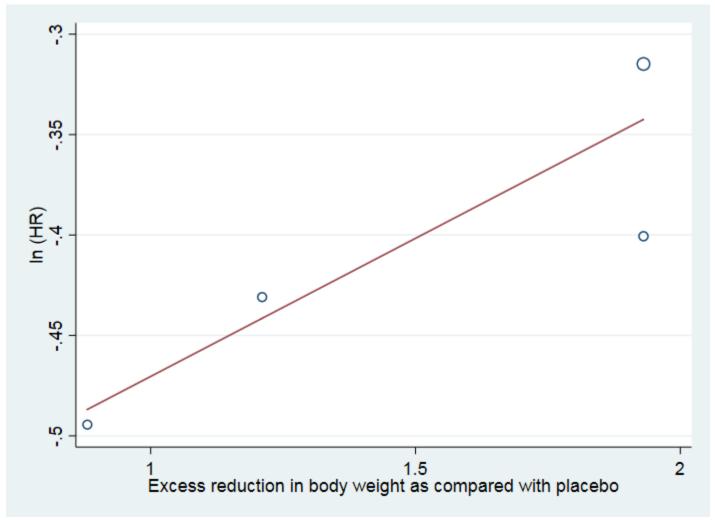


Figure S23 Effect of body weight reduction on HR of SGLT-2 is vs. placebo as for reducing CVD ( $\beta = 0.269$ , P = 0.284)

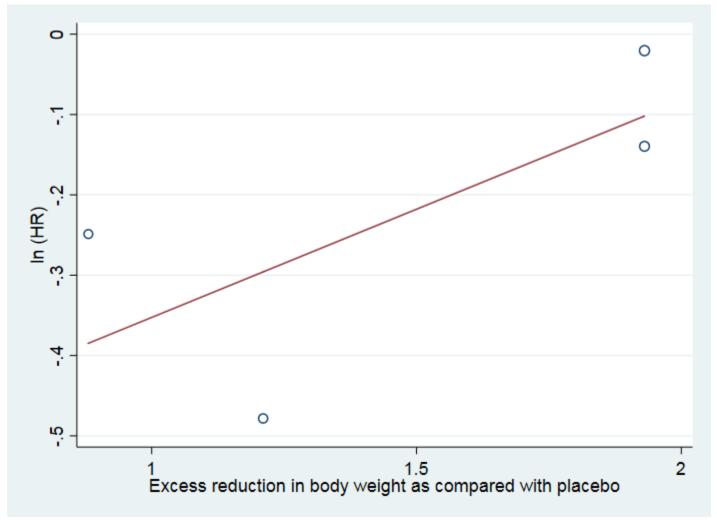


Figure S24 Effect of body weight reduction on HR of SGLT-2 is vs. placebo as for reducing MI ( $\beta = 0.032$ , P = 0.821)

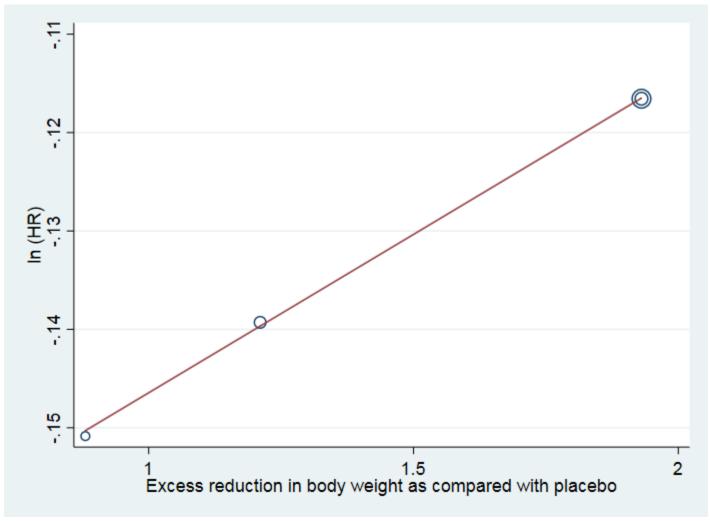


Figure S25 Effect of body weight reduction on HR of SGLT-2 is vs. placebo as for reducing stroke ( $\beta = 0.042$ , P = 0.876)

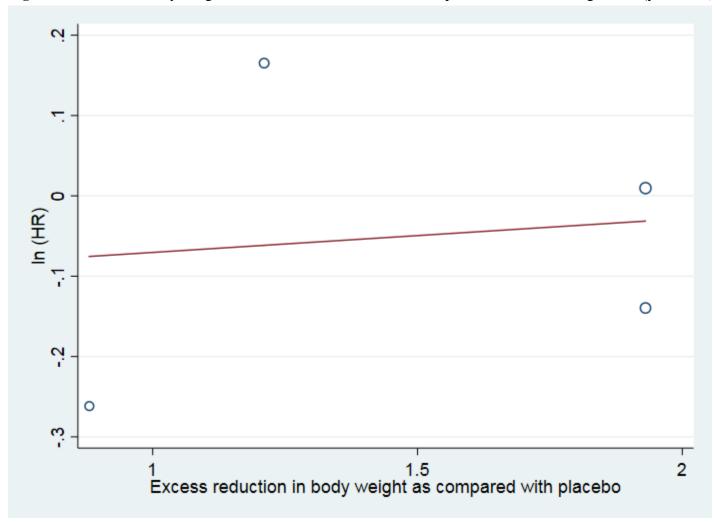


Figure S26 Effect of body weight reduction on HR of SGLT-2 is vs. placebo as for reducing ACD ( $\beta = 0.170$ , P = 0.351)

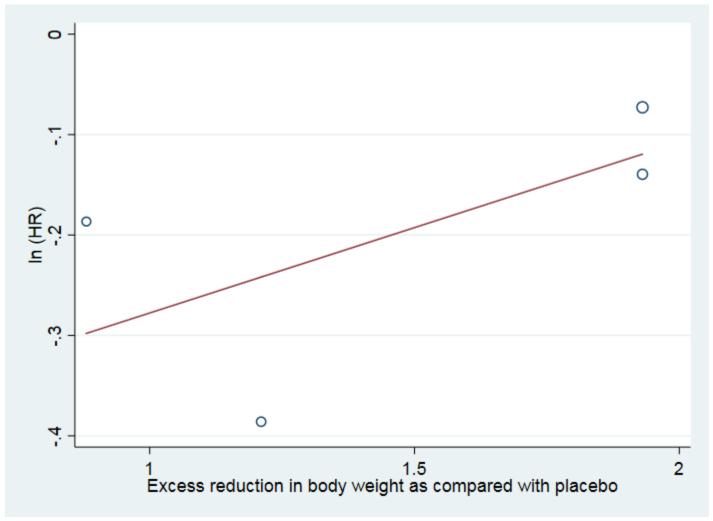


Figure S27 Funnel plot and Egger test for the outcome of MACE

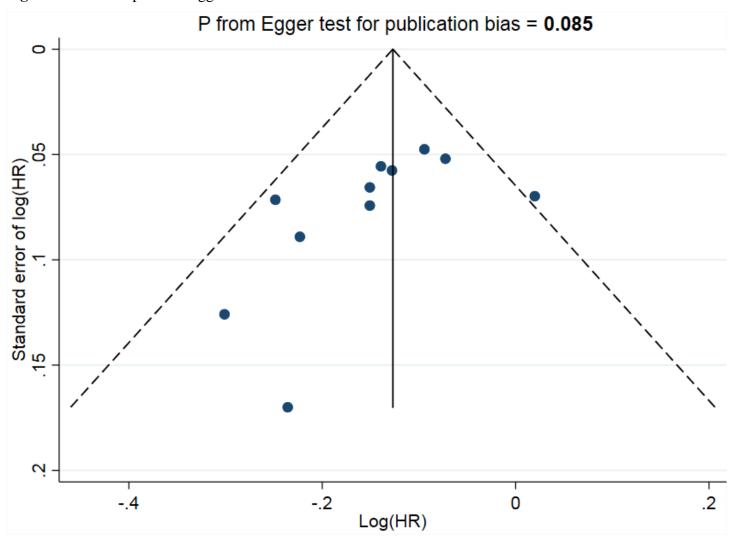


Figure S28 Funnel plot and Egger test for the outcome of HHF

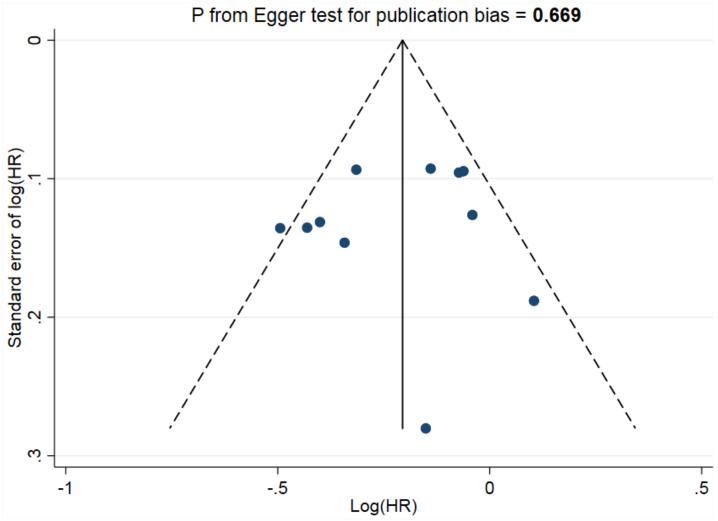


Figure S29 Funnel plot and Egger test for the outcome of CVD

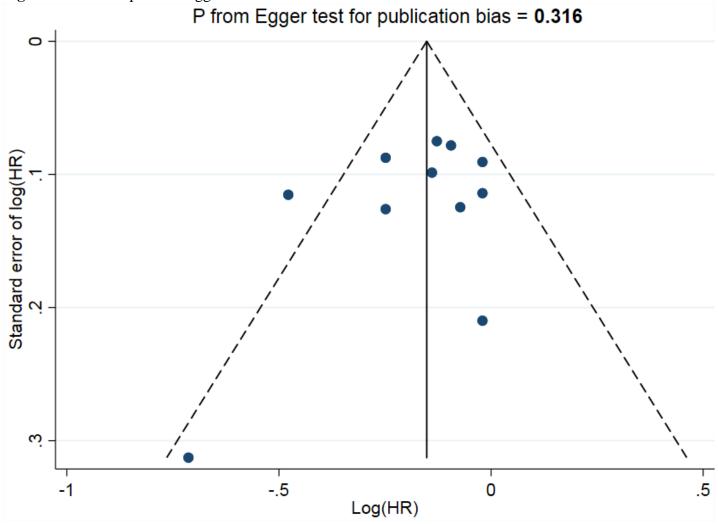


Figure S30 Funnel plot and Egger test for the outcome of MI

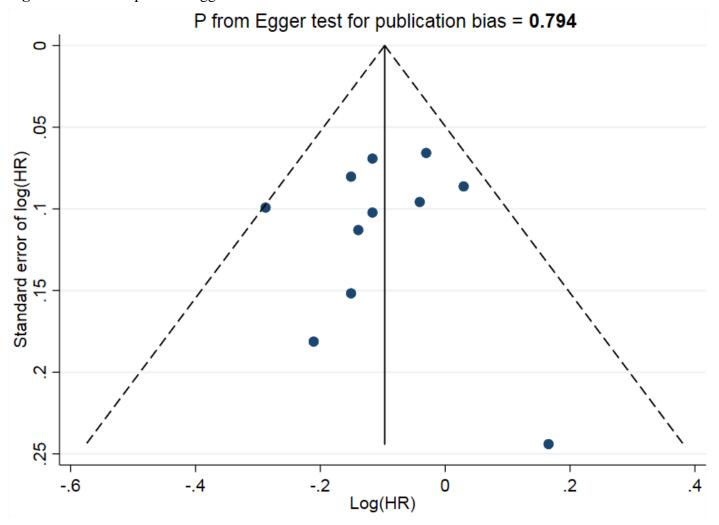


Figure S31 Funnel plot and Egger test for the outcome of Stroke

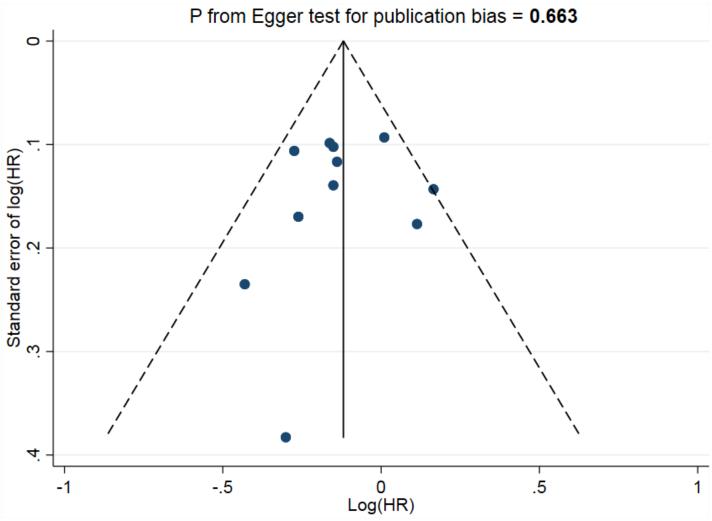


Figure S32 Funnel plot and Egger test for the outcome of ACD

