

PubMed search:

("Diabetes Mellitus, Type 2"[Mesh] OR "diabetes mellitus type 2"[tiab] OR "type 2 diabetes mellitus"[tiab] OR "T2D*"[tiab]) AND ("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]) AND ("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 events"[tiab] OR "major adverse cardiac events"[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 T2D*:ab,ti) AND ('glucagon-like peptide 1 receptor agonists':ab,ti OR lixisenatide:ab,ti OR liraglutide:ab,ti OR semaglutide:ab,ti OR exenatide:ab,ti OR albiglutide:ab,ti OR dulaglutide:ab,ti) AND ('cardiovascular death':ab,ti OR 'myocardial infarction':ab,ti OR stroke:ab,ti OR 'Cardiovascular Events':ab,ti OR 'cardiac Events':ab,ti OR 'major adverse cardiac event'/exp OR 'MACE':ab,ti OR 'major adverse cardiovascular event*':ab,ti) AND (('randomized controlled trial'/exp OR 'controlled clinical study'/exp OR random\$:ab,ti OR placebo:ab,ti OR 'drug therapy':lnk OR ((double OR single OR doubly OR singly) AND (blind OR blinded OR blindly):ti,ab OR 'double blind procedure'/exp) OR trial:ab,ti OR groups:ab,ti) NOT ('animal experiment'/exp NOT 'human experiment'/exp))

Supplementary methods:

The endpoint of major adverse cardiovascular events (MACE) in this study was defined as a composite of cardiovascular death, nonfatal myocardial infarction, or nonfatal stroke.

Seven factors of interest by which participants were divided into groups were sex, duration of diabetes, history of heart failure, prior myocardial infarction or stroke, antihyperglycemic oral agent therapy, insulin therapy, and DPP-4 inhibitor therapy; and subgroups defined by these seven factors were pre-specified in the study protocol.

Fig. S1 Flow graph of study selection

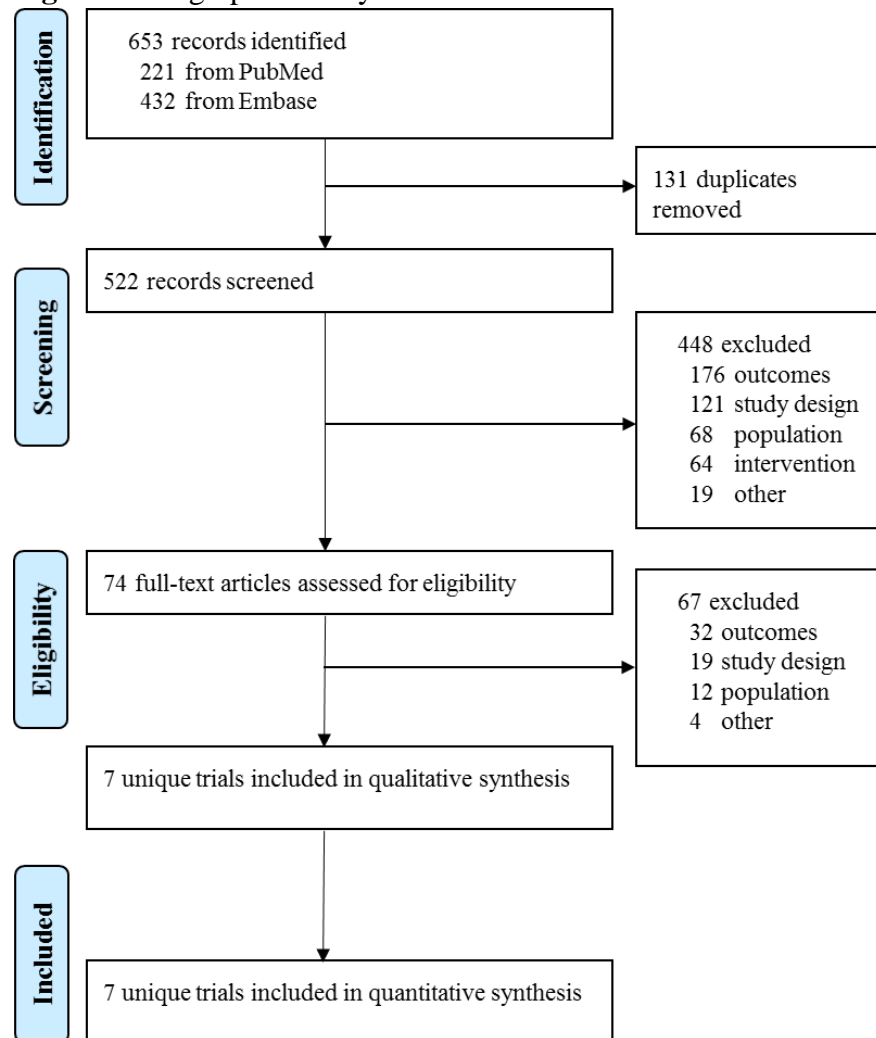


Fig. S2 Risk of bias summary

	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
ELIXA	+	+	+	+	+	+	+
EXSCEL	+	+	+	+	+	+	+
Harmony Outcomes	+	+	+	+	+	+	+
LEADER	+	+	+	+	+	+	+
PIONEER 6	+	+	+	+	+	+	+
REWIND	+	+	+	+	+	+	+
SUSTAIN-6	+	+	+	+	+	+	+

Fig. S3 Risk of bias graph

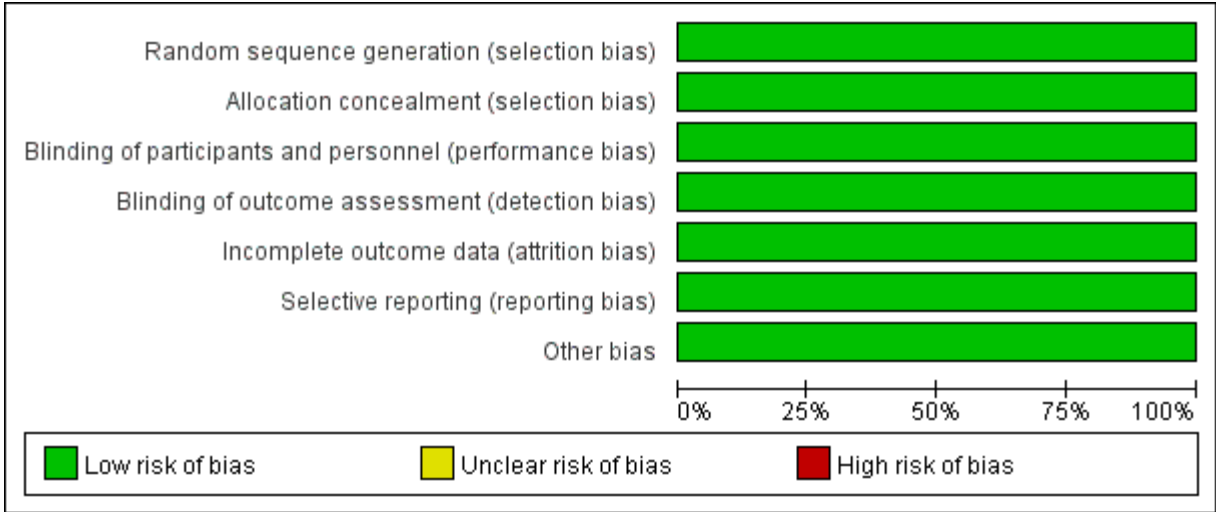


Fig. S4 Funnel plot and Egger test for the female diabetic subgroup

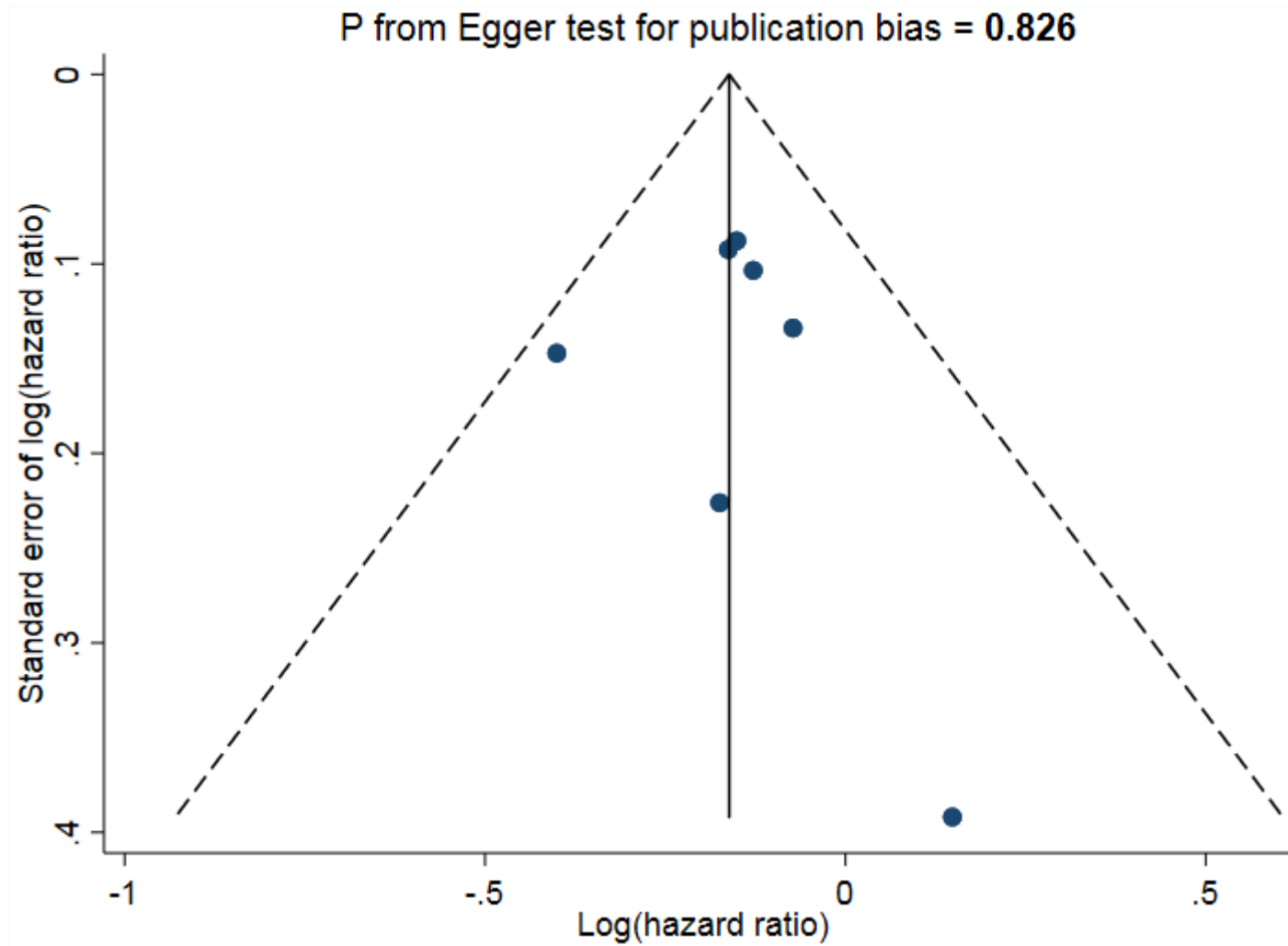


Fig. S5 Funnel plot and Egger test for the male diabetic subgroup

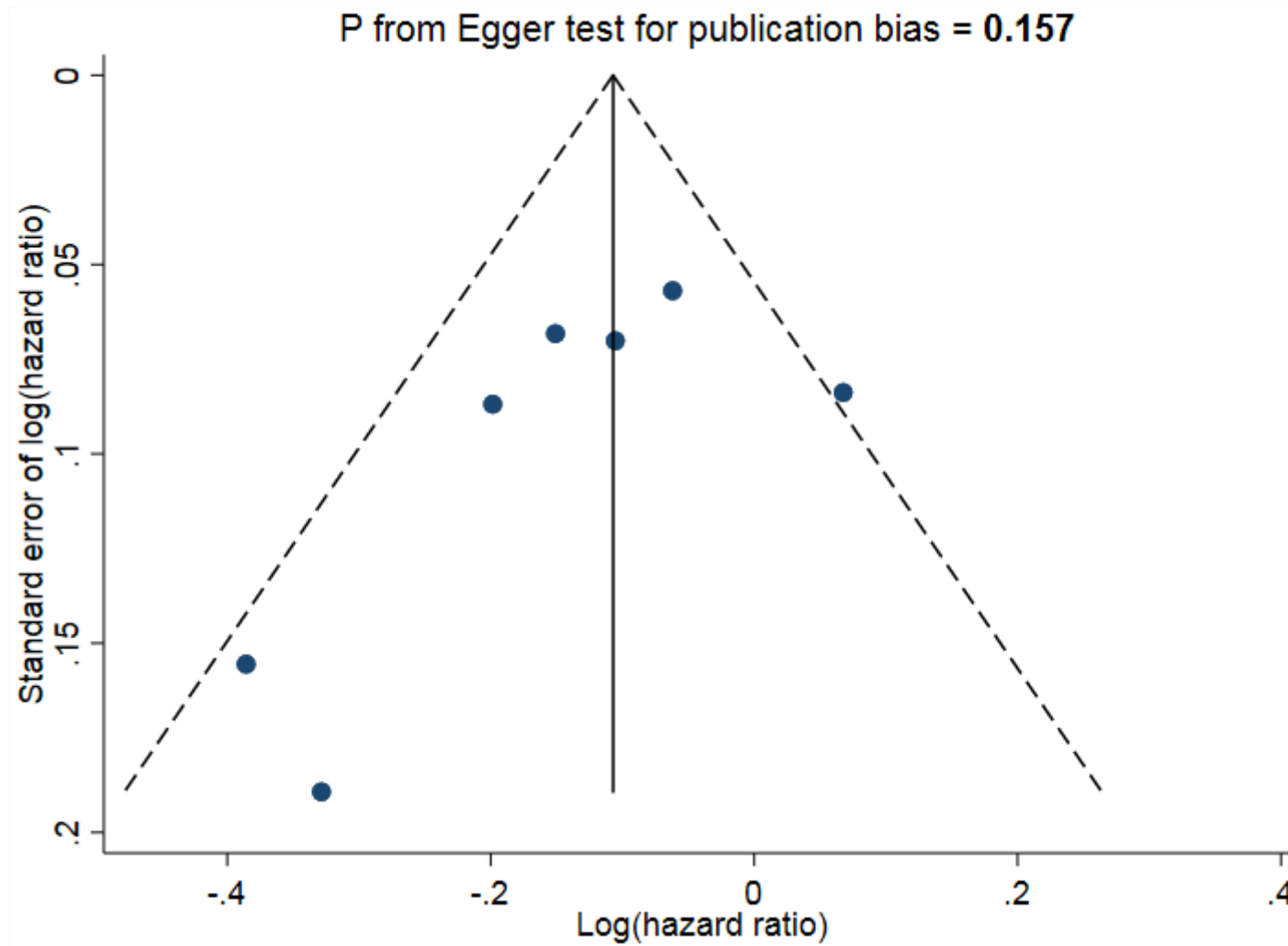


Fig. S6 Funnel plot and Egger test for the subgroup with duration of diabetes ≥ 10 yr

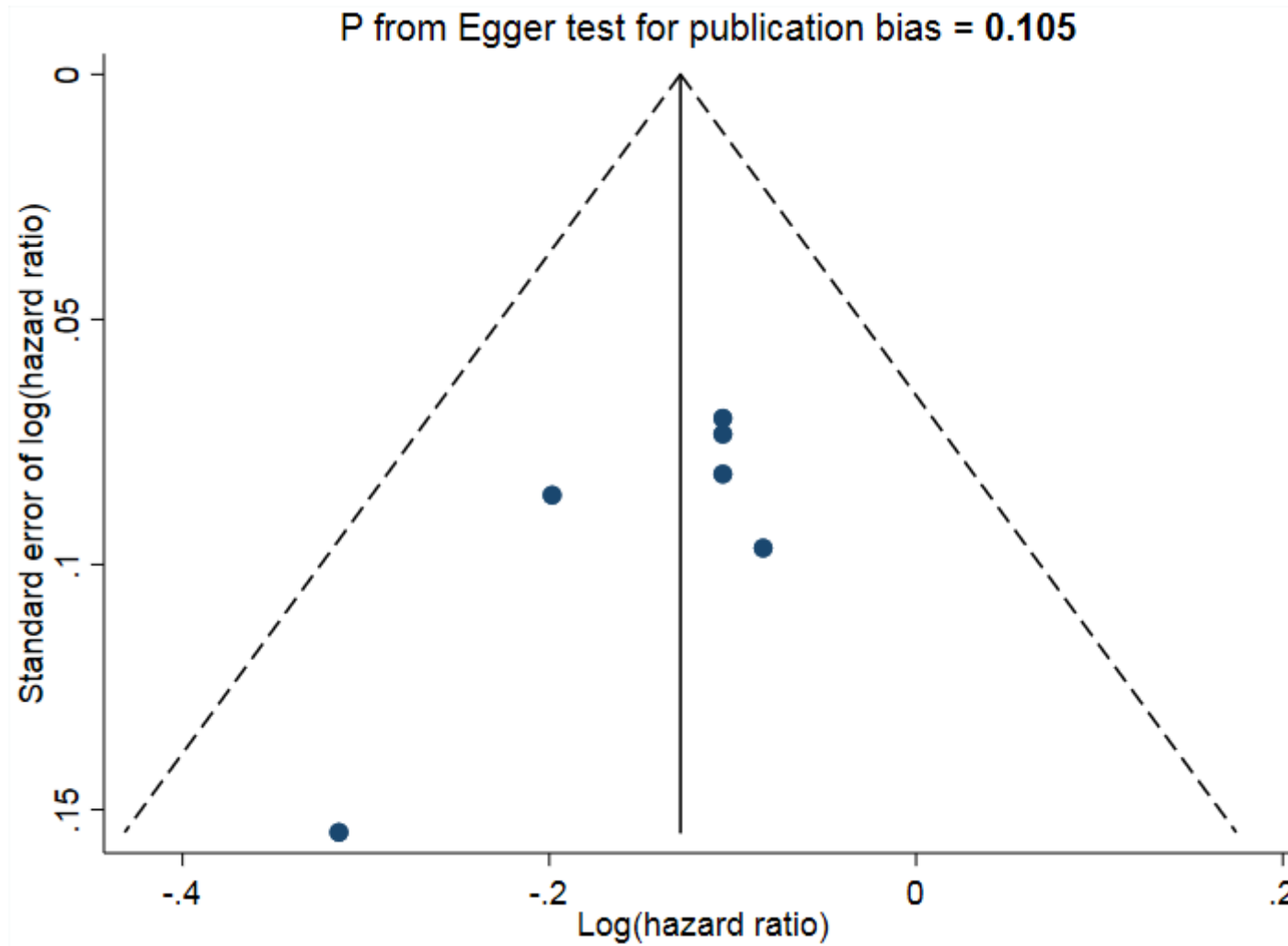


Fig. S7 Funnel plot and Egger test for the subgroup with duration of diabetes <10 yr

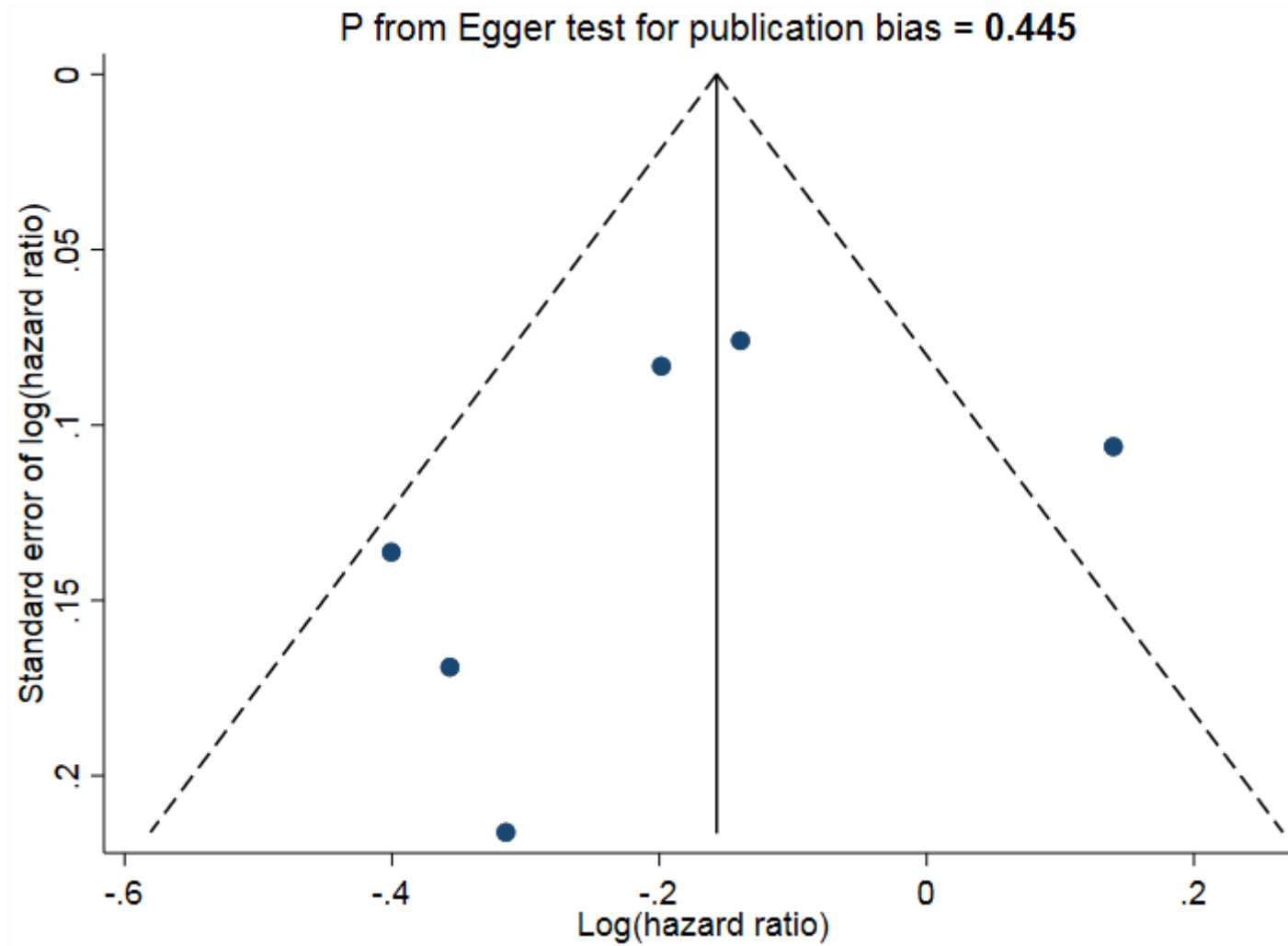


Fig. S8 Funnel plot and Egger test for the diabetic subgroup with history of heart failure

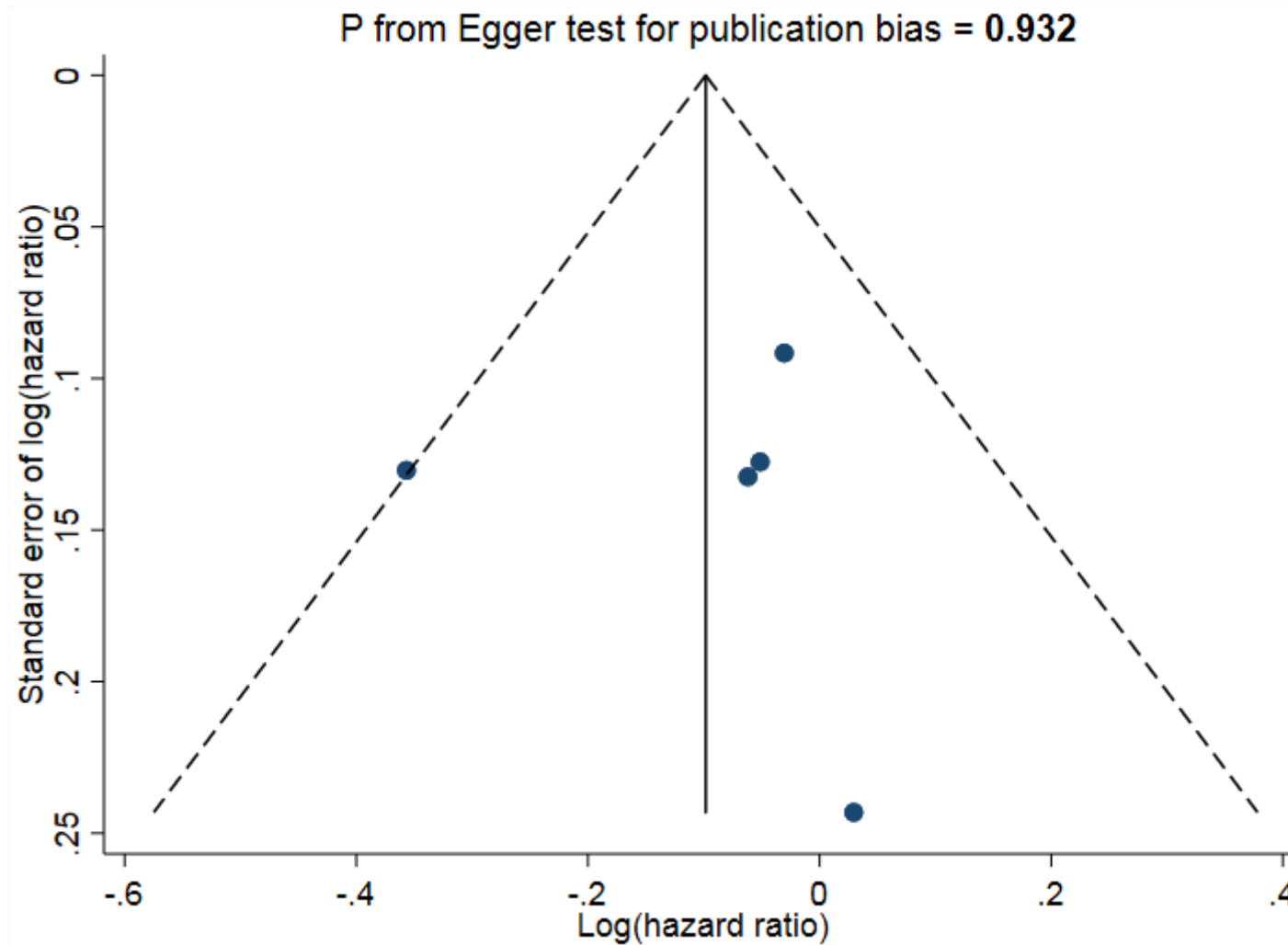


Fig. S9 Funnel plot and Egger test for the diabetic subgroup without history of heart failure

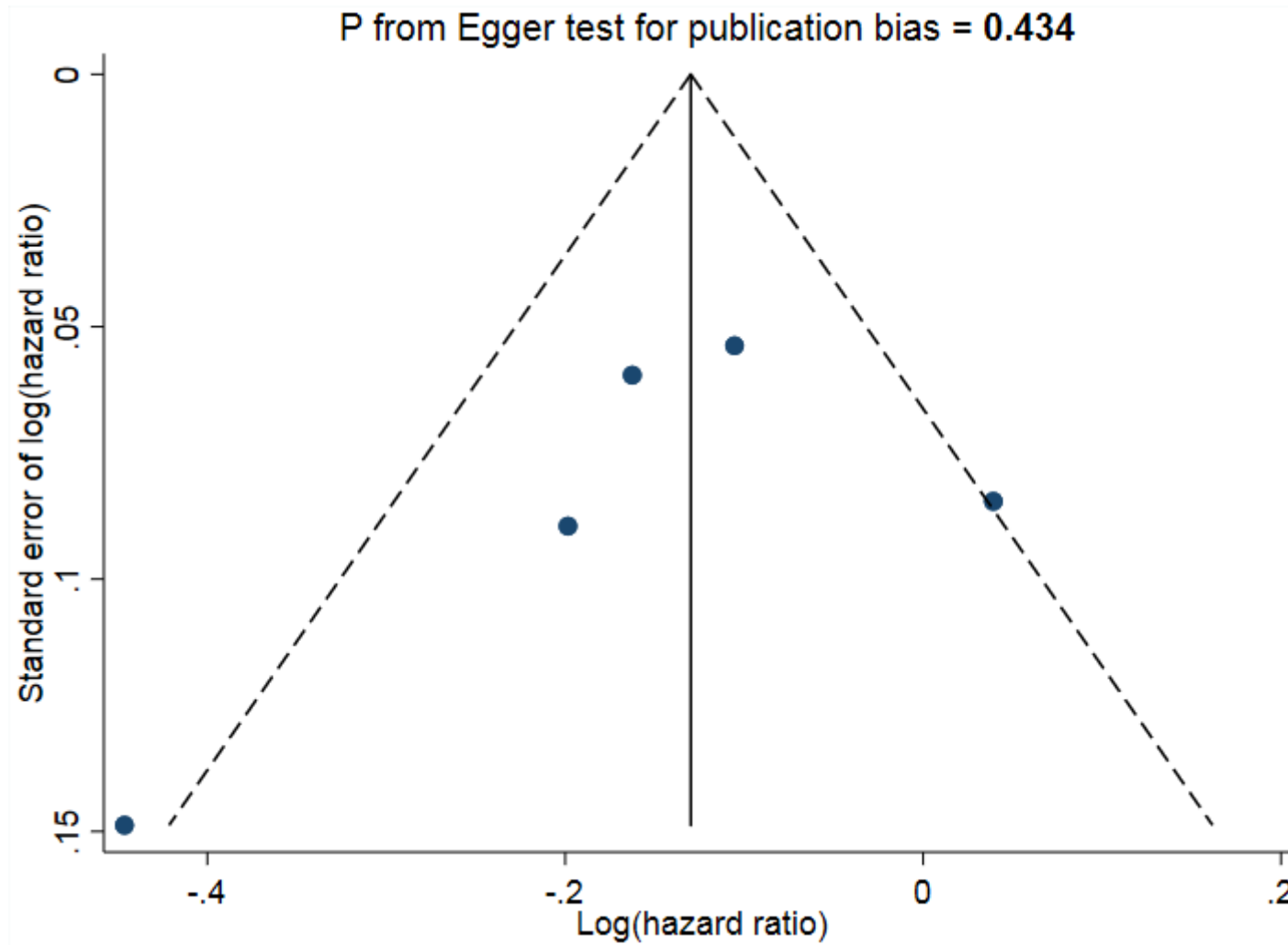


Fig. S10 Funnel plot and Egger test for the diabetic subgroup with prior myocardial infarction or stroke

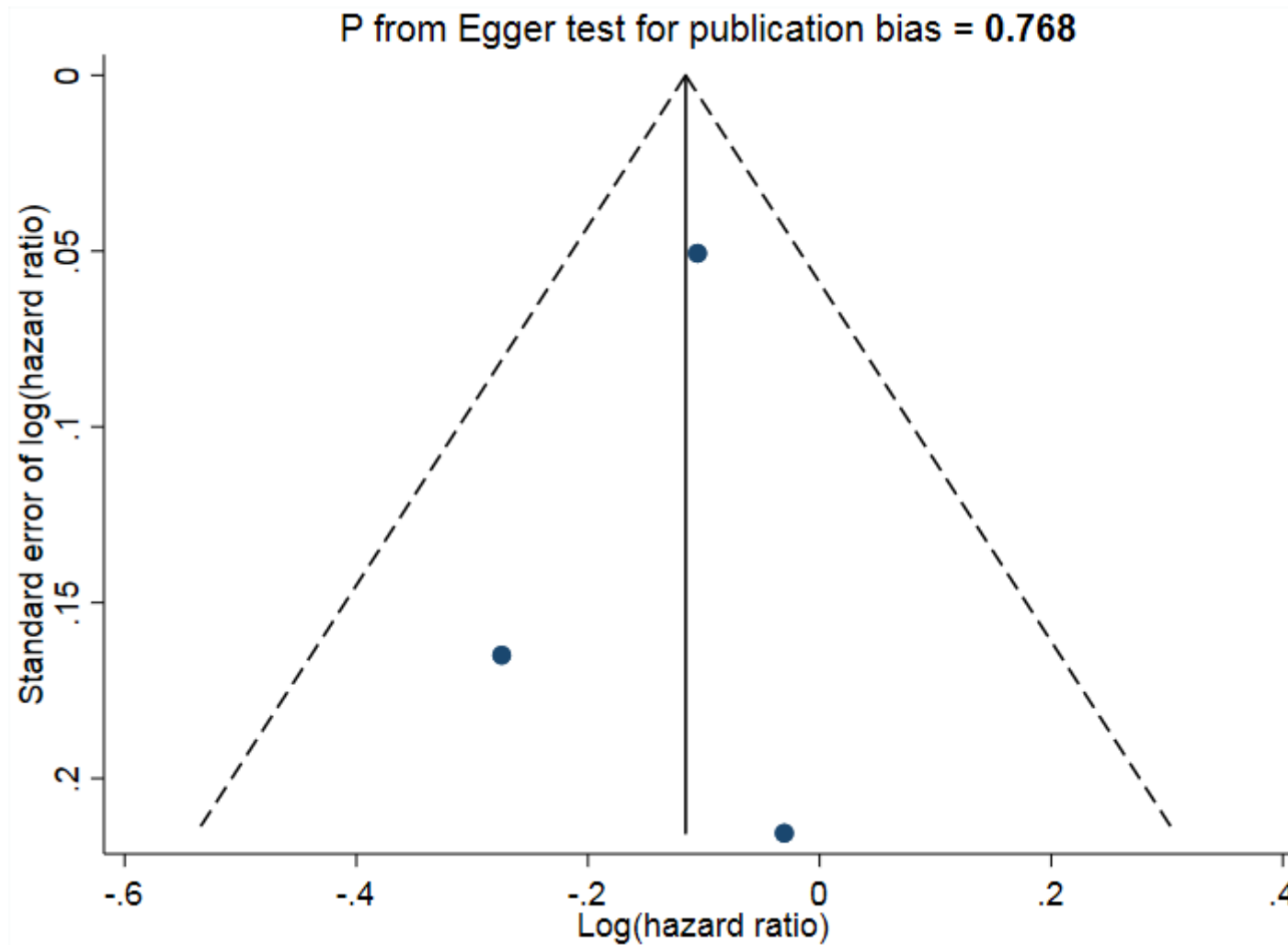


Fig. S11 Funnel plot and Egger test for the diabetic subgroup without prior myocardial infarction or stroke

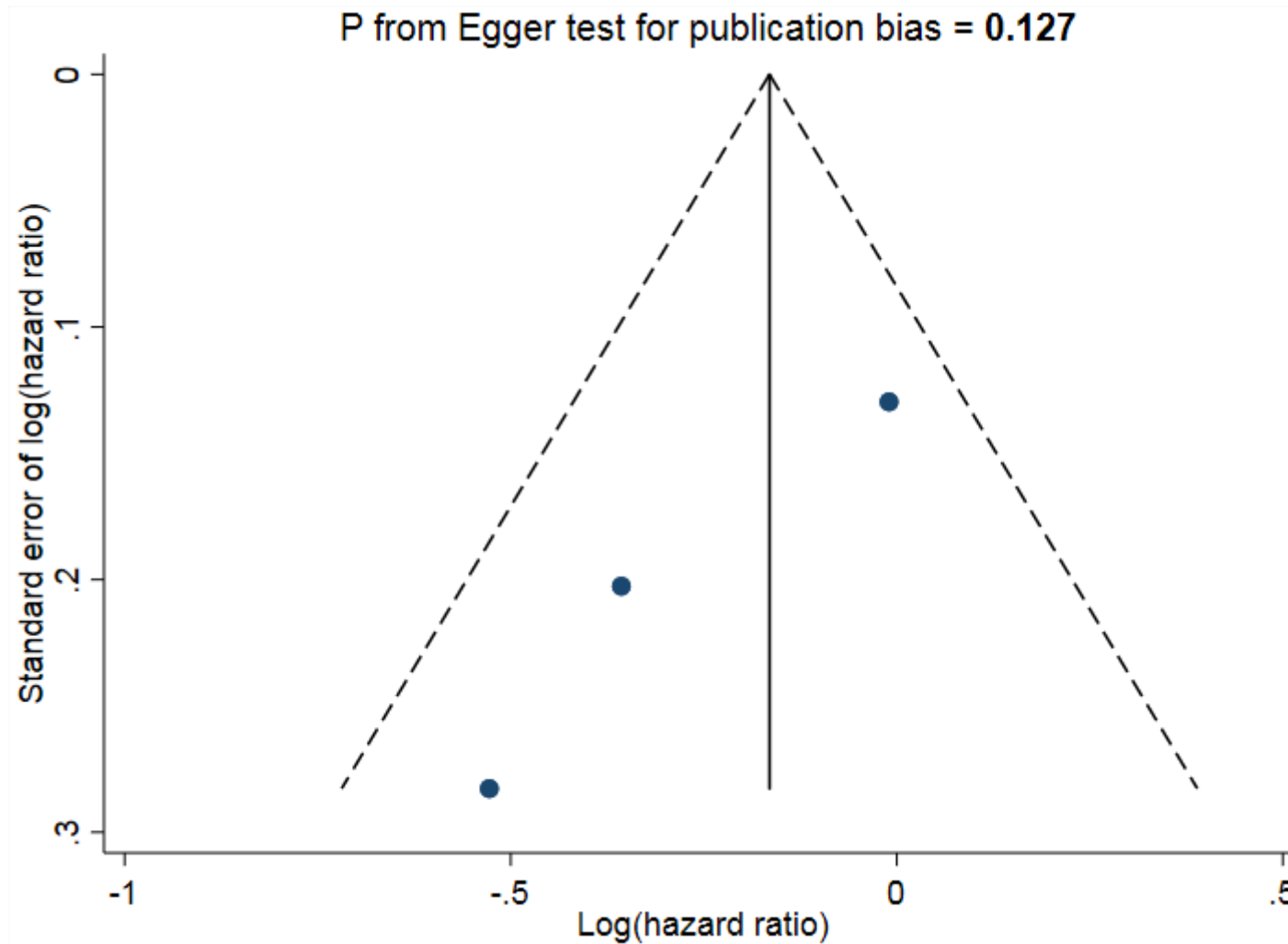


Fig. S12 Funnel plot and Egger test for the diabetic subgroup with antihyperglycemic oral agent therapy

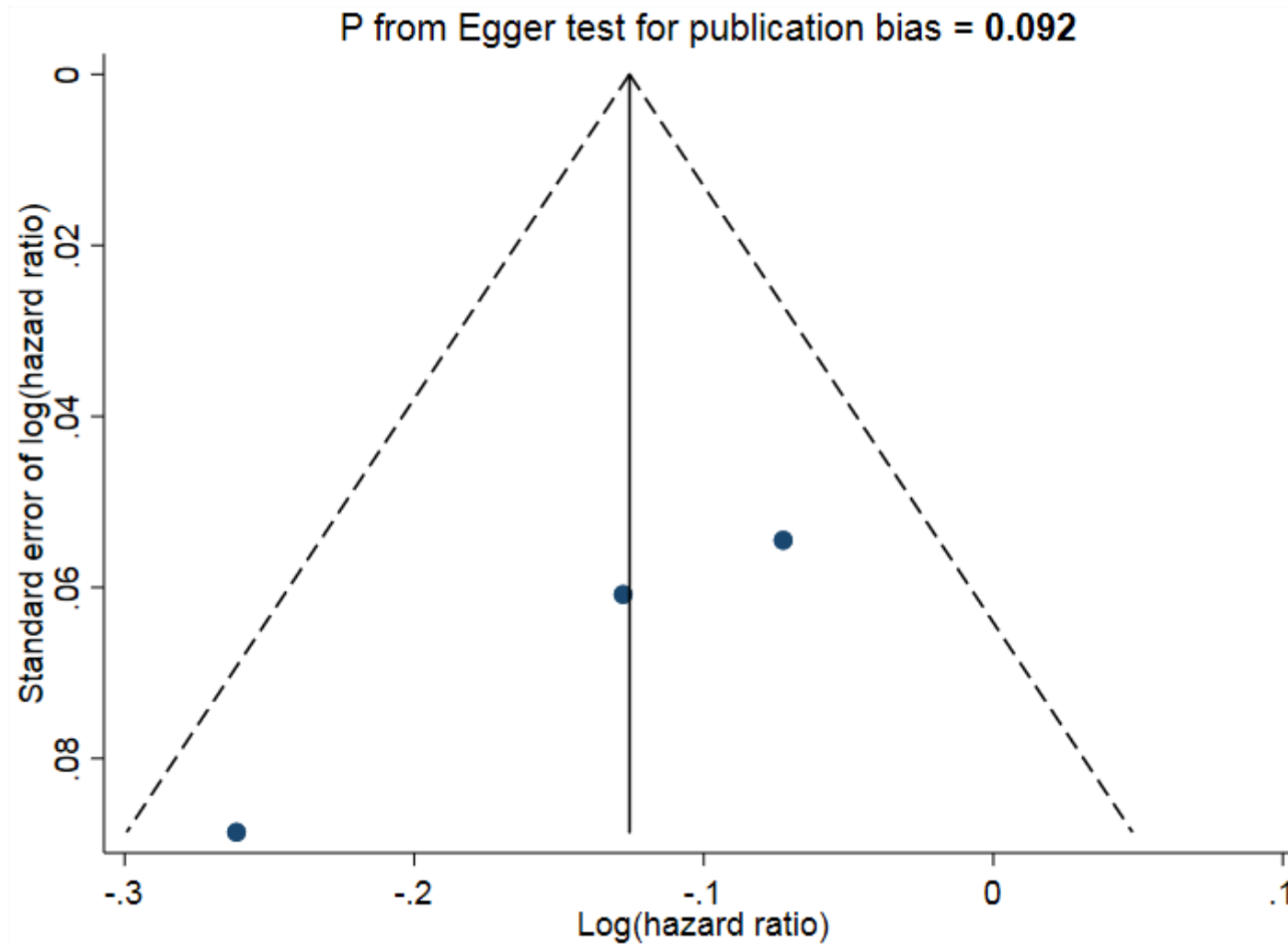


Fig. S13 Funnel plot and Egger test for the diabetic subgroup without antihyperglycemic oral agent therapy

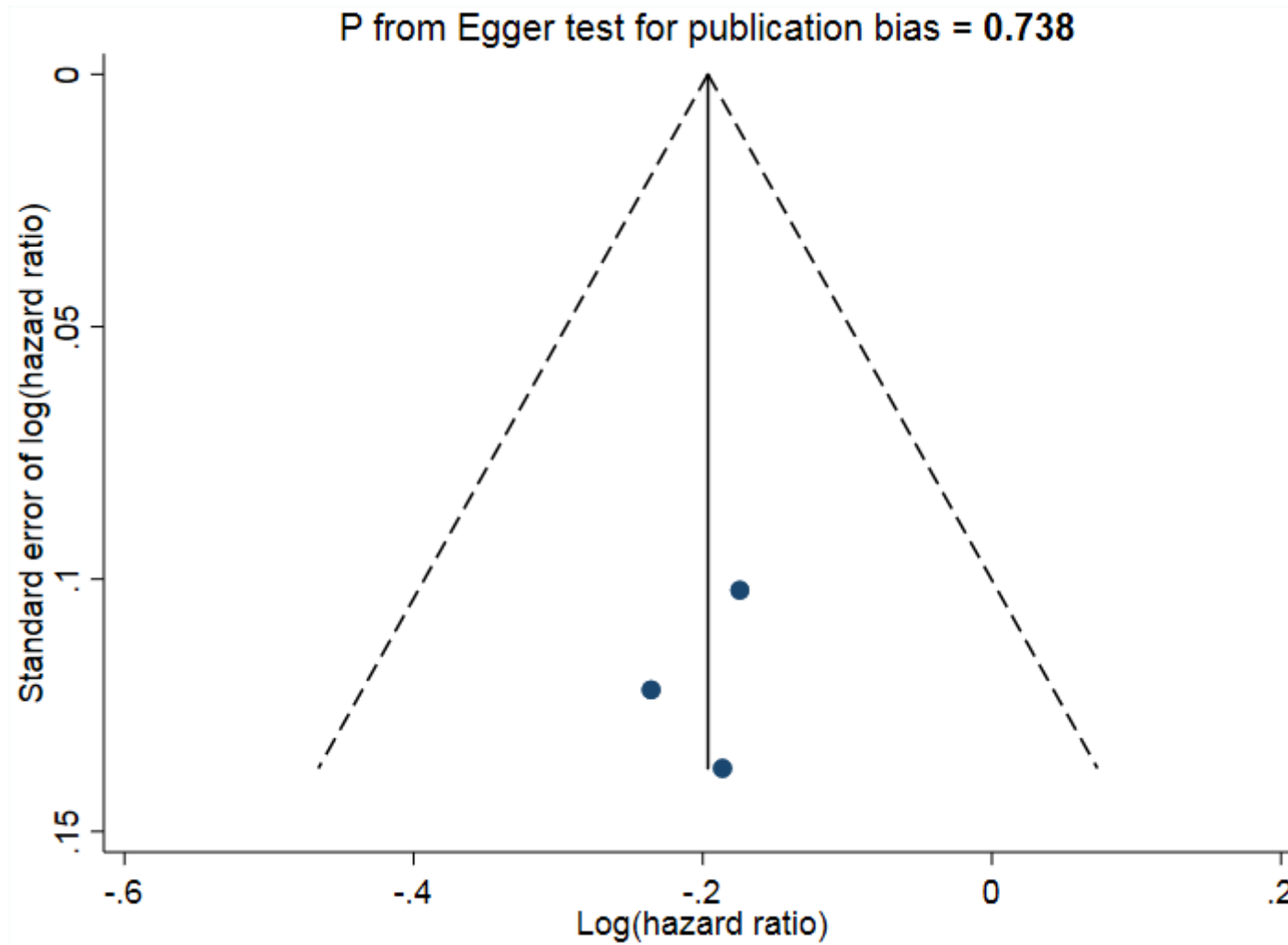


Fig. S14 Funnel plot and Egger test for the diabetic subgroup with insulin therapy

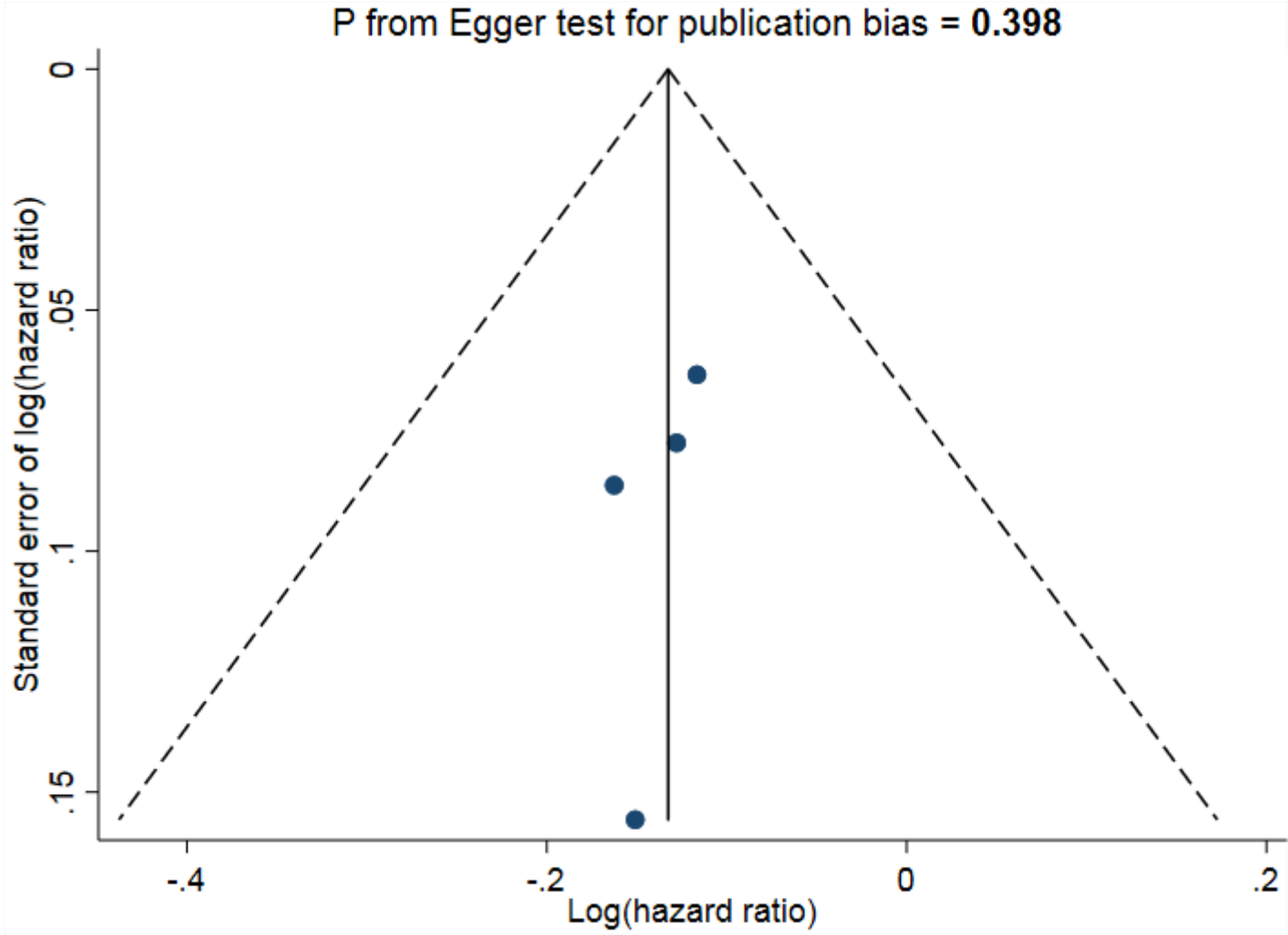


Fig. S15 Funnel plot and Egger test for the diabetic subgroup without insulin therapy

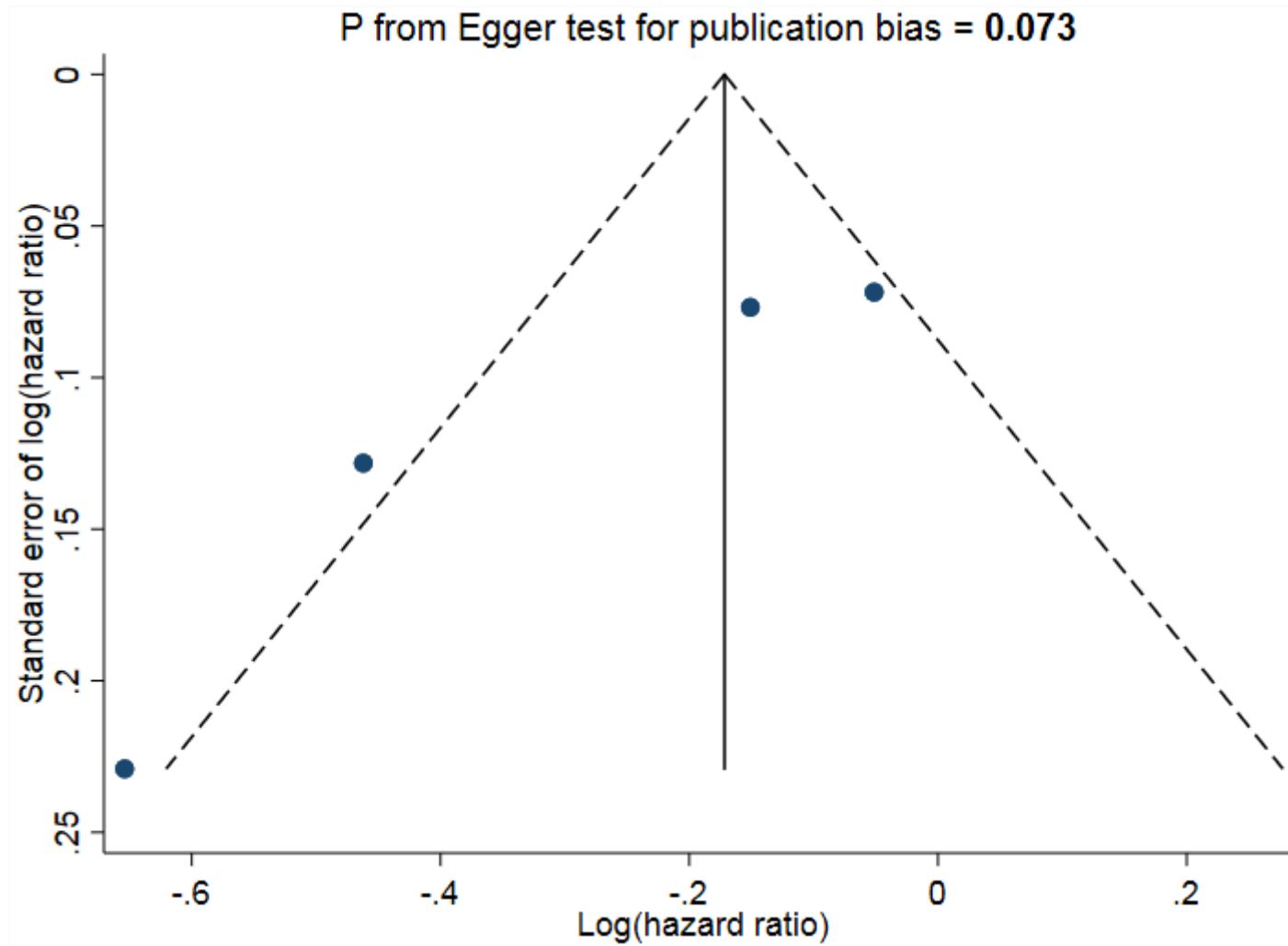


Fig. S16 Funnel plot and Egger test for the diabetic subgroup with DPP-4 inhibitor therapy

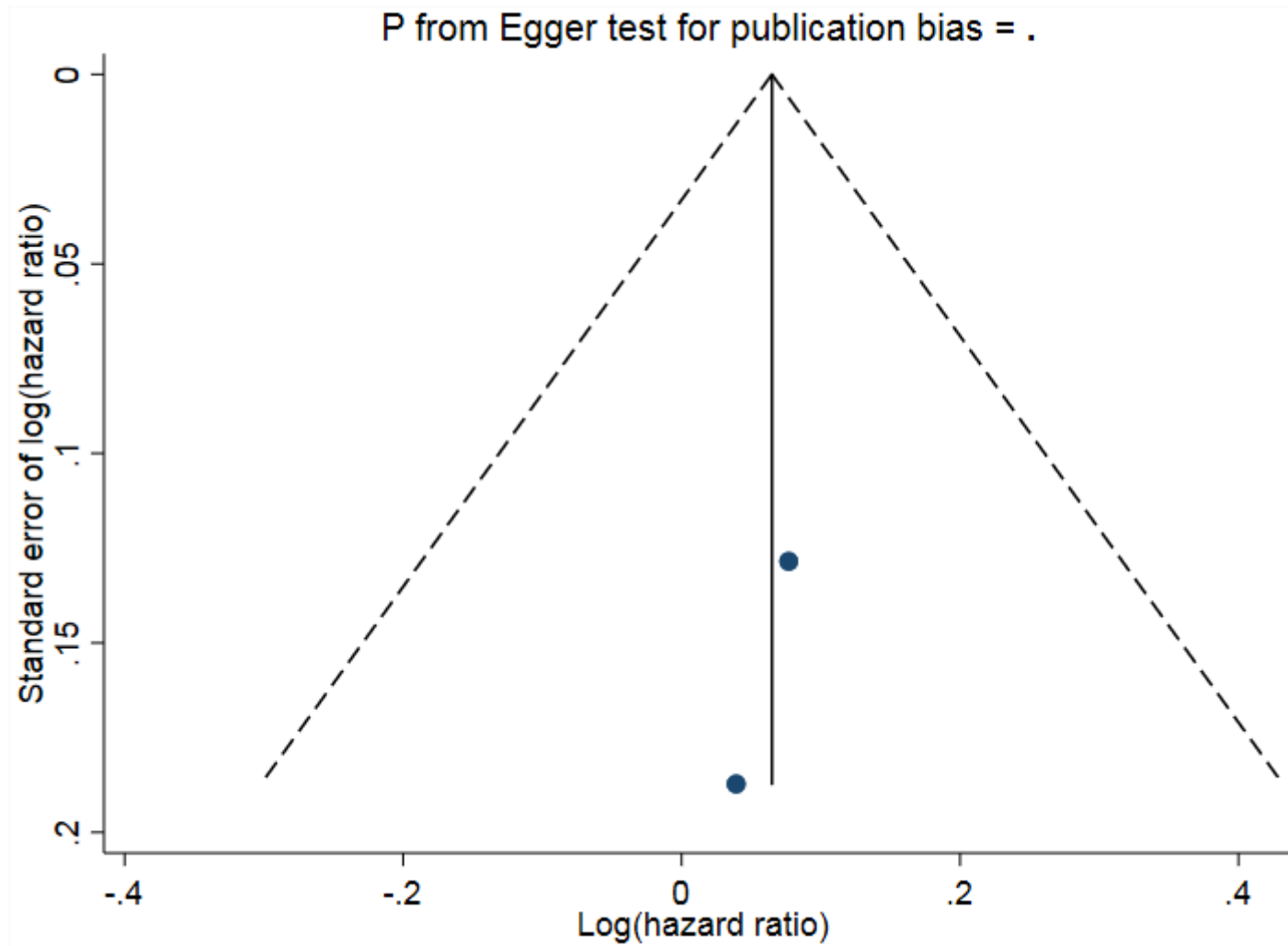


Fig. S17 Funnel plot and Egger test for the diabetic subgroup without DPP-4 inhibitor therapy

