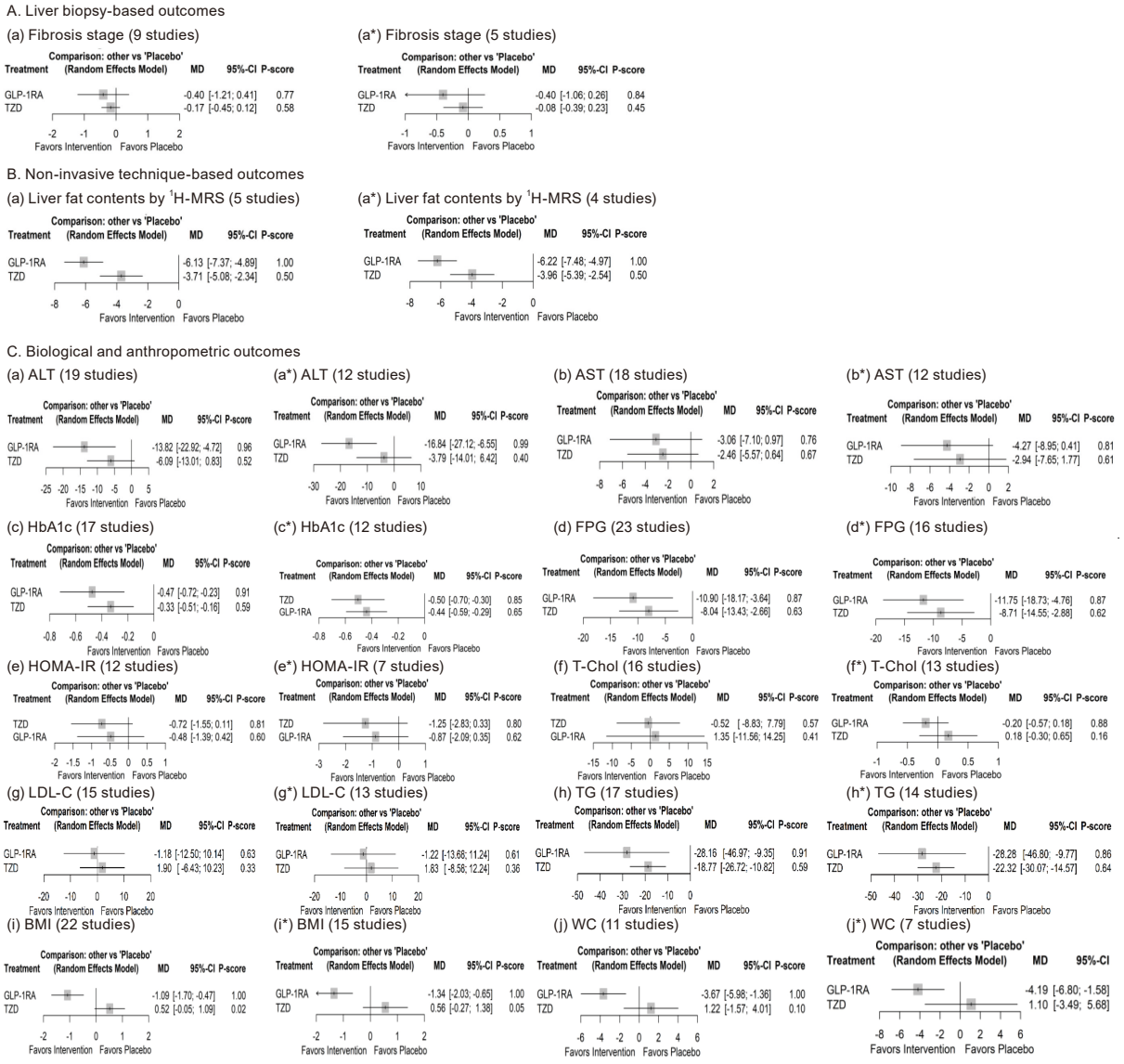

Supplementary Material 8. Sensitivity analysis. Sensitivity analysis was conducted after excluding six articles with a high risk for bias. (A) Forest plots of the original and sensitivity analyses (*). ALT, alanine aminotransferase; AST, aspartate aminotransferase; BMI, body mass index; FPG, fasting plasma glucose; GLP-1RA, glucagon-like peptide-1 receptor agonist; ^{1}H-MRS, proton magnetic resonance spectroscopy; HOMA-IR, homeostasis model assessment of insulin resistance; LDL-C, low-density lipoprotein-cholesterol; MD, mean difference; T-Chol, total cholesterol; TG, triglyceride; TZD, thiazolidinedione; WC, waist circumference. Sensitivity analysis was not performed in some outcomes because of the small number of studies remaining (NAS), and there were no studies with a high risk of bias (NASH resolution, liver fat contents by CAP). All sensitivity analysis results showed a low possibility of heterogeneity, inconsistency, and publication bias.

Supplementary Material 8. Continued

Network meta estimates	Original	Sensitivity
Fibrosis stage	9 studies	5 studies
GLP-1RA vs. placebo	-0.40 (-1.21; 0.41)	-0.40 (-1.06; 0.26)
TZDs vs. placebo	-0.17 (-0.45; 0.12)	-0.08 (-0.39; 0.23)
GLP-1RA vs. TZDs	-0.23 (-1.09; 0.62)	-0.32 (-1.05; 0.41)
Liver fat contents by ^{1}H-MRS	5 studies	4 studies
GLP-1RA vs. placebo	-6.13 (-7.37; -4.89)*	-6.22 (-7.48; -4.97)*
TZDs vs. placebo	-3.71 (-5.08; -2.34)*	-3.96 (-5.39; -2.54)*
GLP-1RA vs. TZDs	-2.42 (-3.84; -1.00)*	-2.26 (-3.70; -0.82)*
ALT	19 studies	12 studies
GLP-1RA vs. placebo	-13.82 (-22.92; -4.72)*	-16.84 (-27.12; -6.55)*
TZDs vs. placebo	-6.09 (-13.01; 0.83)	-3.79 (-14.01; 6.42)
GLP-1RA vs. TZDs	-7.73 (-18.61; 3.14)	-13.04 (-26.46; 0.37)
AST	18 studies	12 studies
GLP-1RA vs. placebo	-3.06 (-7.10; 0.97)	-4.27 (-8.95; 0.41)
TZDs vs. placebo	-2.46 (-5.57; 0.64)	-2.94 (-7.65; 1.77)
GLP-1RA vs. TZDs	-0.6 (-5.55; 4.35)	-1.33 (-7.67; 5.01)
HbA1c	17 studies	12 studies
GLP-1RA vs. placebo	-0.47 (-0.72; -0.23)*	-0.44 (-0.59; -0.29)*
TZDs vs. placebo	-0.33 (-0.51; -0.16)*	-0.50 (-0.70; -0.30)*
GLP-1RA vs. TZDs	-0.14 (-0.44; 0.15)	0.06 (-0.18; 0.31)
FPG	23 studies	16 studies
GLP-1RA vs. placebo	-10.9 (-18.17; -3.64)*	-11.75 (-18.73; -4.76)*
TZDs vs. placebo	-8.04 (-13.43; -2.66)*	-8.71 (-14.55; -2.88)*
GLP-1RA vs. TZDs	-2.86 (-11.72; 6.00)	-3.04 (-11.92; 5.85)
HOMA-IR	12 studies	7 studies
GLP-1RA vs. placebo	-0.48 (-1.39; 0.42)	-0.87 (-2.09; 0.35)
TZDs vs. placebo	-0.72 (-1.55; 0.11)	-1.25 (-2.83; 0.33)
GLP-1RA vs. TZDs	0.24 (-0.89; 1.37)	0.38 (-1.34; 2.11)
T-Chol	16 studies	13 studies
GLP-1RA vs. placebo	1.35 (-11.56; 14.25)	-0.20 (-0.57; 0.18)
TZDs vs. placebo	-0.52 (-8.83; 7.79)	0.18 (-0.30; 0.65)
GLP-1RA vs. TZDs	1.87 (-12.90; 16.64)	-0.37 (-0.92; 0.18)
LDL-C	15 studies	13 studies
GLP-1RA vs. placebo	-1.18 (-12.50; 10.14)	-1.22 (-13.68; 11.24)
TZDs vs. placebo	1.90 (-6.43; 10.23)	1.83 (-8.58; 12.24)
GLP-1RA vs. TZDs	-3.08 (-16.57; 10.41)	-3.05 (-18.47; 12.36)
TG	17 studies	14 studies
GLP-1RA vs. placebo	-28.16 (-46.97; -9.35)*	-28.28 (-46.80; -9.77)*

 https://doi.org/10.3350/cmh.2022.0330

Supplementary Material 8. Continued

Network meta estimates	Original	Sensitivity
TZDs vs. placebo	-18.77 (-26.72; -10.82)*	-22.32 (-30.07; -14.57)*
GLP-1RA vs. TZDs	-9.39 (-29.72; 10.94)	-5.96 (-25.96; 14.03)
BMI	22 studies	15 studies
GLP-1RA vs. placebo	-1.09 (-1.70; -0.47)*	-1.34 (-2.03; -0.65)*
TZDs vs. placebo	0.52 (-0.05; 1.09)	0.56 (-0.27; 1.38)
GLP-1RA vs. TZDs	-1.6 (-2.41; -0.80)*	-1.90 (-2.92; -0.88)*
WC	11 studies	7 studies
GLP-1RA vs. placebo	-3.67 (-5.98; -1.36)*	-4.19 (-6.80; -1.58)*
TZDs vs. placebo	1.22 (-1.57; 4.01)	1.10 (-3.49; 5.68)
GLP-1RA vs. TZDs	-4.89 (-8.17; -1.61)*	-5.28 (-9.77; -0.80)*

(B) A comparison table of original and sensitivity analyses. ALT, alanine aminotransferase; AST, aspartate aminotransferase; BMI, body mass index; FPG, fasting plasma glucose; GLP-1RA, glucagon-like peptide-1 receptor agonist; ^{1}H-MRS, proton magnetic resonance spectroscopy; HOMA-IR, homeostasis model assessment of insulin resistance; LDL-C, low-density lipoprotein-cholesterol; T-Chol, total cholesterol; TG, triglyceride; TZD, thiazolidinedione; WC, waist circumference. *Asterisk indicates statistically significant data.