

*Supplementary materials*

# Correlation between *PPARG* Pro12Ala polymorphism and therapeutic responses to thiazolidinediones in patients with type 2 diabetes: a meta-analysis

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**Table S1.** Search strategy.

No	Search term	Pubmed	Web of Science	Embase
#1	thiazolidinedion* OR (thiazolidine dion*) OR TZD OR glitazon* OR pioglitazone* OR rosiglitazone* OR troglitazone* OR lobeglitazone*	18,638	23,748	48,392
#2	polymorph* OR variant* OR mutation* OR genotyp* OR haplotyp* OR allele* OR SNP* OR pharmacogen* OR Pro12Ala OR rs1801282	1,799,285	1,847,836	2,359,231
#3	(peroxisome proliferator activated receptor gamma) OR (peroxisome proliferator activated receptor $\gamma$ ) OR (PPAR gamma) OR (PPARgamma) OR (PPAR $\gamma$ ) OR (PPAR $\gamma$ ) OR PPARG	32,887	39,501	55,511
#4	#1 and #2	3,513	4,159	7,221
#5	glycemic OR glycaemic OR glucos*	726,068	612,884	1,082,599
#6	lipid* OR cholesterol* OR lipoprotein*	953,031	782,880	1,268,672
#7	(glycated hemoglobin) OR (glycated haemoglobin) OR (glycosylated hemoglobin) OR (glycosylated haemoglobin) OR (hemoglobin A1c) OR (haemoglobin A1c) OR HbA1c OR A1c OR glycohemoglobin OR glycohaemoglobin	77,204	56,209	161,732
#8	(fasting plasma glucos*) OR FPG OR (fasting blood glucos*) OR FBG OR (fasting blood sugar)	75,291	63,067	110,732
#9	(low density lipoprotein cholesterol*) OR (LDL cholesterol*) OR (LDL C) OR (low density lipoprotein*) OR LDL OR (beta lipoprotein cholesterol*)	143,810	129,409	263,387
#10	(high density lipoprotein cholesterol*) OR (HDL cholesterol*) OR (HDL C) OR (high density lipoprotein*) OR HDL OR (alpha lipoprotein cholesterol*)	121,431	110,124	233,036
#11	triglycerid* OR triacylglycerol* OR TG	210,829	294,575	369,807
#12	(total cholesterol*) OR TC	189,366	298,500	283,351
#13	#5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12	1,734,675	1,723,340	2,401,785
#14	#1 AND #4 AND #13	201	293	509

**Table S2.** Begg's test and Egger's test.

<b>Outcomes</b>	<b>P-values of Begg's test</b>	<b>P-values of Egger's test</b>
HbA <sub>1C</sub>	0.85	0.71
FPG	0.57	0.74
TG	0.62	0.90
HDL	1	0.96
LDL	0.62	0.51
TC	0.62	0.19

HbA<sub>1C</sub>: hemoglobin A<sub>1C</sub>, FPG: fasting plasma glucose, TG: triglycerides, LDL: low-density lipoprotein cholesterol, HDL: high-density lipoprotein cholesterol, TC: total cholesterol.

**Table S3.** Sensitivity analysis on the FPG outcome.

<b>Excluded study</b>	<b>Heterogeneity I<sup>2</sup> (%)</b>	<b>Statistical model</b>	<b>Mean difference [95% CI]</b>
None	59	Random	-10.91 [-19.82, -2.01]
Bluher et al. 2003	8	Fixed	-14.37 [-20.67, -8.07]
Hsieh et al. 2010	67	Random	-11.79 [-22.49, -1.10]
Kang et al. 2005	42	Fixed	-7.07 [-12.63, -1.52]
Namvaran et al. 2011	67	Random	-11.17 [-20.70, -1.65]
Pei et al. 2013	59	Random	-9.20 [-19.32, 0.92]
Priya et al. 2016	67	Random	-11.40 [-23.33, 0.53]

CI: confidence interval; FPG: fasting plasma glucose.

**Table S4.** Sensitivity analysis on the TC outcome.

<b>Excluded study</b>	<b>Heterogeneity I<sup>2</sup> (%)</b>	<b>Statistical model</b>	<b>Mean difference [95% CI]</b>
None	0	Fixed	6.40 [-0.05, 12.84]
Bluher et al. 2003	0	Fixed	5.48 [-1.51, 12.47]
Hsieh et al. 2010	0	Fixed	4.91 [-2.04, 11.86]
Kang et al. 2005	0	Fixed	12.43 [1.97, 22.88]
Namvaran et al. 2011	0	Fixed	6.31 [-0.29, 12.91]
Pei et al. 2013	0	Fixed	6.24 [-0.35, 12.82]

CI: confidence interval; TC: total cholesterol.

**Table S5.** Sensitivity analysis on the HbA<sub>1C</sub> outcome.

<b>Excluded study</b>	<b>Heterogeneity I<sup>2</sup> (%)</b>	<b>Statistical model</b>	<b>Mean difference [95% CI]</b>
None	7	Fixed	-0.30 [-0.55, -0.05]
Bluher et al. 2003	0	Fixed	-0.39 [-0.66, -0.11]
Hsieh et al. 2010	23	Fixed	-0.34 [-0.65, -0.03]
Kang et al. 2005	0	Fixed	-0.23 [-0.50, 0.03]
Namvaran et al. 2011	19	Fixed	-0.31 [-0.57, -0.06]
Pei et al. 2013	11	Fixed	-0.26 [-0.52, 0.01]
Priya et al. 2016	23	Fixed	-0.40 [-0.92, 0.12]

CI: confidence interval; HbA<sub>1C</sub>: hemoglobin A<sub>1C</sub>.

**Table S6.** Sensitivity analysis on the TG outcome.

<b>Excluded study</b>	<b>Heterogeneity I<sup>2</sup> (%)</b>	<b>Statistical model</b>	<b>Mean difference [95% CI]</b>
None	6	Fixed	-26.88 [-41.30, -12.46]
Bluher et al. 2003	27	Fixed	-30.08 [-51.44, -8.73]
Hsieh et al. 2010	0	Fixed	-30.28 [-45.44, -15.12]
Kang et al. 2005	29	Fixed	-27.30 [-42.18, -12.43]
Namvaran et al. 2011	29	Fixed	-26.25 [-41.82, -10.67]
Pei et al. 2013	0	Fixed	-21.69 [-37.39, -5.99]

CI: confidence interval; TG: triglyceride.

**Table S7.** Sensitivity analysis on the HDL outcome.

Excluded study	Heterogeneity $I^2$ (%)	Statistical model	Mean difference [95% CI]
None	0	Fixed	0.31 [-1.62, 2.23]
Bluher et al. 2003	0	Fixed	0.94 [-1.84, 3.73]
Hsieh et al. 2010	0	Fixed	-0.14 [-2.37, 2.09]
Kang et al. 2005	0	Fixed	0.18 [-1.88, 2.24]
Namvaran et al. 2011	0	Fixed	0.46 [-1.55, 2.46]
Pei et al. 2013	0	Fixed	0.31 [-1.62, 2.25]

CI: confidence interval; HDL: high-density lipoprotein cholesterol.

**Table S8.** Sensitivity analysis on the LDL outcome.

Excluded study	Heterogeneity $I^2$ (%)	Statistical model	Mean difference [95% CI]
None	0	Fixed	6.69 [-0.90, 14.29]
Bluher et al. 2003	0	Fixed	6.60 [-1.82, 15.04]
Hsieh et al. 2010	0	Fixed	6.48 [-2.05, 15.02]
Kang et al. 2005	0	Fixed	6.94 [-2.34, 16.22]
Namvaran et al. 2011	0	Fixed	6.82 [-1.69, 15.32]
Pei et al. 2013	0	Fixed	6.68 [-1.18, 14.54]

CI: confidence interval; LDL: low-density lipoprotein cholesterol.