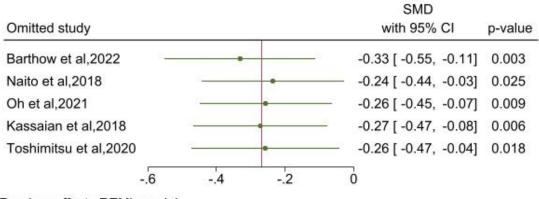
## **Supplementary Figures**



Random-effects REML model

Figure S1 Sensitivity analysis for HOMA-IR

Omitted study	SMD with 95% Cl p-value
Barthow et al,2022	-0.49 [ -0.96, -0.01] 0.047
Naito et al,2018	-0.25 [ -0.45, -0.05] 0.016
Oh et al,2021	-0.45 [ -0.92, 0.02] 0.061
Tay et al,2020	-0.52 [ -0.94, -0.10] 0.016
Kassaian et al,2018	-0.43 [ -0.91, 0.05] 0.078
Toshimitsu et al,2020	-0.51 [ -0.97, -0.04] 0.032
-15	Ó

Random-effects REML model

Figure S2 Sensitivity analysis for HbA1c

	SMD	
Omitted study	with 95% CI p	-value
Barthow et al,2022	-0.15 [ -0.39, 0.09]	0.225
Naito et al,2018	-0.05 [ -0.25, 0.15]	0.626
Oh et al,2021	-0.07 [ -0.26, 0.11]	0.445
Tay et al,2020	-0.13 [ -0.32, 0.06]	0.178
Kassaian et al,2018	-0.07 [ -0.26, 0.12] (	0.476
Toshimitsu et al,2020	-0.16 [ -0.37, 0.05]	0.135
-4 -2	0 2	
	0 .2	

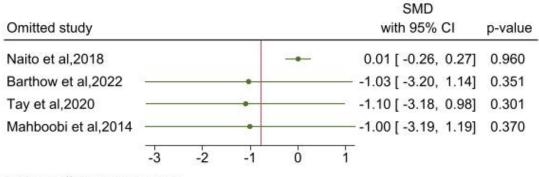
Random-effects REML model

## Figure S3 Sensitivity analysis for FBG

Omitted study	SMD with 95% CI	p-value
Barthow et al. 2022	-0.09 [ -0.35, 0.18]	0.531
Naito et al. 2018	-0.18 [ -0.37, 0.02]	0.083
Oh et al. 2021	-0.06 [ -0.28, 0.15]	0.562
Toshimitsu et al. 2020	-0.03 [ -0.24, 0.18]	0.793
Tay et al. 2020	-0.12 [ -0.32, 0.08]	0.236
Kassaian.et al.2018	-0.07 [ -0.30, 0.16]	0.528
42	0.2	

Random-effects REML model

Figure S4 Sensitivity analysis for insulin



Random-effects REML model

Figure S5 Sensitivity analysis for TC

Omitted study				SMD with 95% Cl	p-value	
Christine, 2022	N <u>.</u>	•		0.70 [ -2.23, 0.83]	0.371	
Audrey Tay, 2020	<u>8</u>		6	-0.57 [ -2.16, 1.02]	0.483	
Sepideh Mahboobi, 2014	-	•		-0.75 [ -2.20, 0.70]	0.312	
Eiichiro NAITO, 2018				0.15 [ -0.11, 0.42]	0.250	
	-2	-1	ó	1		

Random-effects REML model

Figure S6 Sensitivity analysis for TG

				SMD			
Omitted study				with 95%	CI	p-value	
Barthow et al,2022		•	<u>2</u>	1.03 [ 0.45,	1.61]	0.000	
Naito et al,2018 —	•	<u>a y</u>		0.59 [ 0.09,	1.09]	0.021	
Tay et al,2020		•	<u></u> 2	0.94 [ 0.27,	1.61]	0.006	
Mahboobi et al,2014	•		<u></u> 53	0.73 [ -0.01,	1.47]	0.052	
0	.5	1	1.5				

Random-effects REML model

Figure S7 Sensitivity analysis for HDL

Omitted study						SMD with 95% CI	p-value
Barthow et al,2022	8		•			-1.28 [ -3.34, 0.79]	0.226
Naito et al,2018						-0.17 [ -0.64, 0.29]	0.464
Tay et al,2020			•	L.		-1.31 [ -3.30, 0.67]	0.195
Mahboobi et al,2014			•	1		-1.05 [ -3.28, 1.17]	0.355
	-3	-2	-1	ó	1		

Random-effects REML model

Figure S8 Sensitivity analysis for LDL

SMD with 95% CI		ly	Omitted study
0.15 [ -0.32, 0.63]		1. 2022	Barthow et al. 2022
0.03 [ -0.21, 0.27]		018	Naito et al. 2018
0.24 [ -0.20, 0.68]		t al. 2020	Toshimitsu et al. 202
0.16 [ -0.26, 0.59]		20	Tay et al. 2020
0.28 [ -0.08, 0.64]	S <u>.</u>	al.2018	Kassaian.et al.2018
0.28 [ -0.08,	ó	al.2018 5	Kassaian.et al.2018
0.63] 0.27] 0.68] 0.59]	with 95% 0.15 [ -0.32, 0.03 [ -0.21, 0.24 [ -0.20, 0.16 [ -0.26,	with 95% 0.15 [ -0.32, 0.03 [ -0.21, 0.24 [ -0.20, 0.16 [ -0.26, 0.28 [ -0.08,	with 95% 0.15 [ -0.32, 0.03 [ -0.21, 0.24 [ -0.20, 0.16 [ -0.26, 0.28 [ -0.08,

Random-effects REML model

Figure S9 Sensitivity analysis for BMI