

**Supplementary Table 1.** Changes in FPG, lipid profiles, body weight, and blood pressure after 12 weeks of treatment with sodium-glucose cotransporter-2 inhibitors as add-on therapy

Variable	Baseline	Week 12	LS mean change from baseline (95% CI)	Difference in LS mean change (95% CI) <sup>a</sup>
FPG, mg/dL				
Add-on ( <i>n</i> =207)	$164.8 \pm 2.9$	$128.5 \pm 2.2$	$-30.3 (-34.6 \text{ to } -26.1)^{\text{b}}$	-
MET ( <i>n</i> =58)	$159.2 \pm 4.0$	$132.3 \pm 2.5$	$-31.1 (-39.0 \text{ to } -23.2)^{\text{b}}$	-
MET+SU ( <i>n</i> =19)	$161.5 \pm 6.8$	$133.1 \pm 4.9$	$-30.9 (-44.7 \text{ to } -17.1)^{\text{b}}$	-0.2 (-21.7 to 21.3)
MET+SU+DPP4i ( $n=52$ )	$172.0 \pm 4.9$	$131.8 \pm 4.3$	$-34.7 (-43.1 \text{ to } -26.4)^{\text{b}}$	3.6 (-12.0 to 19.3)
Insulin $(n=78)$	$164.9 \pm 6.2$	$122.5 \pm 4.7$	$-42.3 (-49.1 \text{ to } -35.5)^{\text{b}}$	11.2 (-3.0 to 25.3)
TG, mg/dL				
Add-on ( <i>n</i> =207)	$160.8 \pm 8.1$	$141.0 \pm 5.3$	$-17.8 (-25.6 \text{ to } -9.9)^{\text{b}}$	
MET ( <i>n</i> =58)	$177.4 \pm 19.7$	$140.8 \pm 11.4$	$-26.8 (-42.0 \text{ to } -11.7)^{\text{b}}$	-
MET+SU ( $n=19$ )	$139.5 \pm 11.4$	$151.3 \pm 18.6$	-0.7 (-28.8 to 27.4)	-26.1 (-69.3 to 17.1)
MET+SU+DPP4i ( $n=52$ )	$148.0 \pm 14.8$	$132.8 \pm 8.6$	-22.7 (-39.3 to -6.2)	-4.1 (-34.5 to 26.3)
Insulin $(n=78)$	$160.9 \pm 12.2$	$143.9 \pm 8.4$	$-16.9 (-29.9 \text{ to } -3.8)^{\text{b}}$	-10.0 (-37.0 to 17.1)
HDL-C, mg/dL				
Add-on $(n=207)$	$45.7 \pm 0.8$	$46.4 \pm 0.7$	0.8 (-0.2 to 1.7)	
MET ( <i>n</i> =58)	$46.2 \pm 1.5$	$48.5 \pm 1.1$	2.5 (0.7 to 4.3) <sup>b</sup>	-
MET+SU ( <i>n</i> = 19)	$48.9 \pm 2.4$	$49.0 \pm 2.2$	1.3 (-2.0 to 4.7)	1.2 (-4.0 to 6.3)
MET+SU+DPP4i ( $n=52$ )	$43.2 \pm 1.9$	$43.4 \pm 1.4$	-0.8 (-2.8 to 1.2)	3.3 (-0.3 to 6.9)
Insulin $(n=78)$	$46.2 \pm 1.2$	$46.1 \pm 1.2$	0.0 (-1.5 to 1.5)	2.5 (-0.8 to 5.7)
LDL-C, mg/dL				
Add-on ( <i>n</i> =207)	$81.6 \pm 1.6$	$81.0 \pm 1.7$	0.9 (-3.7 to 1.9)	
MET ( <i>n</i> =58)	$84.2 \pm 3.4$	$87.0 \pm 3.4$	3.9 (-1.4 to 9.2)	-
MET+SU ( <i>n</i> = 19)	$76.3 \pm 4.4$	$72.8 \pm 3.0$	-5.9 (-15.6 to 3.9)	9.7 (-5.2 to 24.7)
MET+SU+DPP4i ( $n=52$ )	$82.3 \pm 2.7$	$79.0 \pm 3.0$	-3.0 (-8.7 to 2.7)	6.9 (-3.6 to 17.4)
Insulin $(n=78)$	$80.4 \pm 2.7$	$79.7 \pm 3.0$	-1.3 (-5.8 to 3.2)	5.2 (-4.2 to 14.6)
Body weight, kg				
Add-on $(n=207)$	$74.1 \pm 1.5$	$72.3 \pm 1.5$	$-1.9 (-2.4 \text{ to } -1.5)^{\text{b}}$	
MET(n=58)	$79.2 \pm 3.0$	$77.2 \pm 2.9$	$-1.8 (-2.6 \text{ to } -1.0)^{\text{b}}$	-
MET+SU ( $n=19$ )	69.6±5.5	$68.0 \pm 5.2$	$-1.7 (-3.4 \text{ to } -0.1)^{\text{b}}$	-0.1 (-2.5 to 2.4)
MET+SU+DPP4i ( $n=52$ )	$73.2 \pm 2.8$	$71.5 \pm 2.5$	$-2.1 (-2.9 \text{ to } -1.3)^{\text{b}}$	0.3 (-1.3 to 1.9)
Insulin $(n=78)$	71.2±2.3	$69.5 \pm 2.3$	−1.9 (−2.7 to −1.1) <sup>b</sup>	0.1 (-1.4 to 1.6)
SBP, mm Hg				
Add-on $(n=207)$	$131.3 \pm 1.0$	$126.5 \pm 1.0$	$-4.2 (-5.9 \text{ to } -2.6)^{\text{b}}$	
MET ( <i>n</i> =58)	$133.5 \pm 1.9$	$129.7 \pm 1.9$	-2.7 (-5.7 to 0.3)	-
MET+SU ( $n=19$ )	$127.4 \pm 2.7$	$122.1 \pm 2.7$	-7.3 (-12.4 to -2.1)	4.6 (-3.6 to 12.7)
MET+SU+DPP4i ( $n=52$ )	$127.2 \pm 2.0$	$124.5 \pm 1.9$	-4.7 (-8.1 to -1.3)	2.0 (-4.2 to 8.2)
Insulin $(n=78)$	$133.3 \pm 1.7$	$126.3 \pm 1.6$	$-6.0 (-8.7 \text{ to } -3.3)^{\text{b}}$	3.3 (-2.1 to 8.8)
DBP, mm Hg				
Add-on ( <i>n</i> =207)	$78.4 \pm 0.7$	$77.1 \pm 1.0$	-1.0 (-2.5 to 0.4)	
MET ( <i>n</i> =58)	$83.0 \pm 1.2$	$83.4 \pm 2.5$	1.9 (-1.3 to 5.2)	-
MET+SU (n=19)	$77.8 \pm 2.5$	$76.8 \pm 2.8$	-1.3 (-6.6 to 4.1)	3.2 (-5.2 to 11.7)
MET+SU+DPP4i ( $n=52$ )	$78.1 \pm 1.3$	$76.7 \pm 1.4$	-1.6 (-5.1 to 2.0)	3.5 (-3.0 to 10.0)
Insulin $(n=78)$	$75.7 \pm 1.2$	$72.7 \pm 1.2$	$-4.1 (-6.9 \text{ to } -1.2)^{\text{b}}$	6.0 (0.0 to 12.0)

Values are presented as mean ± standard error.

FPG, fasting plasma glucose; LS, least square; CI, confidence interval; MET, metformin; SU, sulfonylurea; DPP4i, dipeptidyl peptidase 4 inhibitor; TG, triglyceride; HDL-C, high density lipoprotein cholesterol; LDL-C, low density lipoprotein cholesterol; SBP, systolic blood pressure; DBP, diastolic blood pressure.

<sup>&</sup>lt;sup>a</sup>Difference in the LS mean change, which was calculated as compared to adding MET in add-on group and switching from DPP4i in switch group, <sup>b</sup>P<0.05 from baseline in overall patients and each treatment subgroup.