

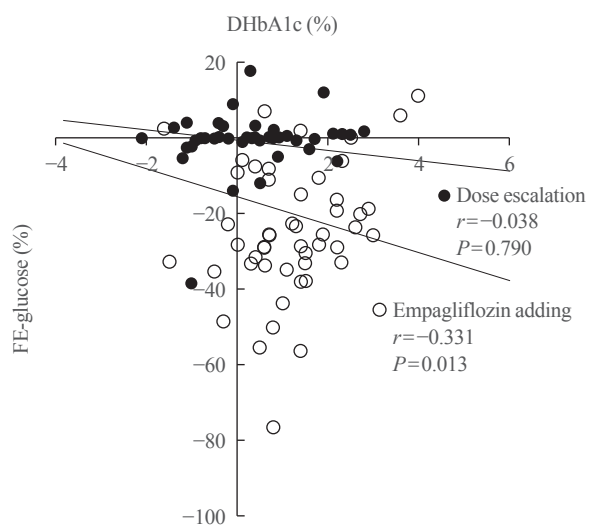
Supplemental Table S1. Changes in Anthropometric and Biochemical Parameters after 6 Months of Treatment with SU Only Dose-Increasing or Empagliflozin Add-on

Variable	SU only dose- increasing (n=20)			Empagliflozin add-on (n=60)			P value ^a
	Baseline	6 months	P value	Baseline	6 months	P value	
SBP, mm Hg	139.4±1,739	134.9±16.7	0.299	133.6±12.5	128.1±13.3	0.005	0.727
DBP, mm Hg	84.6±14.9	76.4±11.4	0.030	78.7±9.8	74.8±11.0	0.009	0.214
FPG, mg/dL	216.3±42.9	174.2±39.8	0.002	174.0±46.7	132.9±31.3	<0.001	0.986
PP2, mg/dL	269.7±81.4	265.8±77.4	0.358	282.9±92.6	222.7±88.5	<0.001	0.175
HbA1c, %	9.1±1.2	8.5±1.4	0.037	8.6±1.6	7.6±1.5	<0.001	0.057
Insulin, μ U/mL	10.4±4.9	10.4±4.7	0.965	12.1±8.2	10.0±7.0	0.016	0.308
C-peptide, ng/mL	3.2±1.6	3.0±1.3	0.611	3.3±1.6	2.7±1.5	0.001	0.192
Glucagon, pg/mL	221.5±184.4	215.1±192.7	0.932	167.9±89.8	258.0±154.3	<0.001	0.051
Total cholesterol, mg/dL	158.6±35.6	152.8±27.2	0.459	167.6±41.6	157.0±36.5	0.030	0.441
Triglycerides, mg/dL	192.9±76.7	166.8±82.6	0.115	169.5±114.9	129.0±59.5	0.001	0.493
HDL-C, mg/dL	43.4±10.5	44.5±9.2	0.394	49.6±26.2	48.6±12.4	0.757	0.702
LDL-C, mg/dL	91.7±22.4	91.3±20.9	0.932	95.9±31.3	92.3±26.5	0.303	0.417
AST, IU/L	33.4±32.8	32.3±16.9	0.843	34.4±17.3	28.8±10.9	0.002	0.291
ALT, IU/L	31.9±29.9	29.8±16.6	0.614	40.7±29.9	33.7±22.1	0.015	0.321
eGFR, mL/min/1.73 m ²	99.2±20.4	97.6±15.9	0.519	100.3±18.4	100.9±21.0	0.703	0.347
Creatinine, mg/dL	0.76±0.19	0.76±0.17	0.902	0.76±0.17	0.76±0.19	0.623	0.884
Sodium, mmol/L	139.4±2.6	140.0±2.2	0.222	139.7±2.5	140.5±1.9	0.003	0.581
Potassium, mmol/L	4.3±0.4	4.3±0.3	0.865	4.5±0.4	4.5±0.4	0.766	0.664
Chlorine, mmol/L	102.2±2.2	102.7±2.4	0.497	102.6±2.5	105.2±12.0	0.109	0.494
FFA, μ mol/L	640.2±136.2	611.2±288.2	0.646	659.4±233.0	695.6±261.5	0.278	0.573
Total ketone, μ mol/L	126.0±45.9	125.4±71.7	0.982	143.0±118.0	294.8±296.4	<0.001	0.039
β -Hydroxybutyrate, μ mol/L	79.5±32.7	83.0±52.2	0.863	98.2±84.6	207.9±228.3	<0.001	0.052
Acetoacetate, μ mol/L	51.1±19.9	42.4±21.8	0.295	44.8±34.7	84.9±71.8	<0.001	0.008
PCr, mg/mmol	227.2±294.7	310.4±478.7	0.175	165.5±163.8	144.4±133.1	0.114	0.008
MCr, mg/mmol	99.7±221.7	161.8±369.3	0.132	73.8±138.7	50.8±112.7	0.039	0.004
FE-glucose, %	4.56±5.81	2.56±4.21	0.172	5.13±9.87	30.47±14.95	<0.001	<0.001
FE-Na, %	0.49±0.34	0.33±0.17	0.054	0.46±0.28	0.55±0.30	0.065	0.038
FE-K, %	9.10±4.33	8.10±2.81	0.271	9.47±4.98	9.91±3.66	0.569	0.476
FE-Cl, %	0.76±0.45	0.61±0.31	0.183	0.73±0.41	0.85±0.48	0.085	0.185
Body composition							
Body weight, kg	74.9±15.5	74.1±14.6	0.286	75.5±19.0	73.0±18.0	<0.001	0.137
BMI, kg/m ²	26.7±4.1	26.3±4.0	0.414	27.3±5.2	26.3±4.9	<0.001	0.078
Waist circumference, cm	92.5±10.6	92.1±8.8	0.646	92.6±13.8	90.8±12.5	0.053	0.584
Total body water, L	38.3±7.0	38.1±6.6	0.514	37.5±8.2	37.1±8.1	0.515	0.819
Lean body mass, kg	49.2±9.0	48.9±8.6	0.509	47.5±11.5	47.6±10.4	0.434	0.851
Whole body fat mass, kg	22.8±7.8	22.3±7.8	0.207	24.7±10.9	22.3±9.8	<0.001	0.051
Whole body fat percent, %	29.9±6.2	29.6±6.3	0.400	31.8±7.9	29.8±7.3	<0.001	0.070
Abdominal VFA, cm ²	105.2±39.3	103.9±40.0	0.618	115.8±52.9	104.3±48.8	<0.001	0.028

Values are expressed as mean±standard deviation.

SU, sulfonylurea; SBP, systolic blood pressure; DBP, diastolic blood pressure; FPG, fasting plasma glucose; PP2, 2-hour postprandial glucose; HbA1c, glycated hemoglobin; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; AST, aspartate aminotransferase; ALT, alanine aminotransferase; eGFR, estimated glomerular filtration rate; FFA, free fatty acid; PCr, protein/creatinine ratio; MCr, microalbumin/creatinine ratio; FE, fractional excretion; VFA, visceral fat area.

^aP for comparison of changes between two groups.



Supplemental Fig. 1. Correlation between the changes in glycosylated hemoglobin concentration (DHbA1c) and fractional excretion of glucose (FE-glucose) at 6 months in each group.