

Supplementary Table 4. Clinical characteristics according to the use of RAS blockade in Korean COVID-19 patients with diabetes based on the NHID-COVID database from the National Health Insurance Service of Korea

Characteristic	No RAS blockade user (n=492)	RAS blockade user (n=212)	P value
Age group, yr			0.006
<40	14 (2.8)	2 (0.9)	
40 to <50	48 (9.8)	7 (3.3)	
50 to <60	134 (27.2)	46 (21.7)	
60 to <70	155 (31.5)	75 (35.4)	
70 to <80	91 (18.5)	55 (25.9)	
≥80	50 (10.2)	27 (12.7)	
Male sex	200 (40.7)	84 (39.6)	0.864
Height, cm	161.0±8.9	159.1±8.4	0.007
Weight, kg	62.7±11.8	66.3±10.7	<0.001
BMI, kg/m ²	24.1±3.3	26.1±3.3	<0.001
Waist circumference, cm	82.3±9.2	86.7±8.2	<0.001
SBP, mm Hg	122.7±14.8	132.8±15.2	<0.001
DBP, mm Hg	74.9±9.9	79.4±9.8	<0.001
Fasting glucose, mg/dL	116.9±49.5	124.1±36.8	0.035
Total cholesterol, mg/dL	192.3±41.0	182.5±40.0	0.003
Smoking	48 (9.8)	11 (5.2)	0.037
Drinking	41 (8.3)	16 (7.5)	0.633
Regular exercise	125 (25.4)	48 (22.6)	0.493
Hypertension	176 (35.8)	212 (100.0)	<0.001
Dyslipidemia	427 (86.8)	204 (96.2)	<0.001
Cardiovascular disease	353 (71.7)	161 (75.9)	0.290
Cerebrovascular disease	58 (11.8)	21 (9.9)	0.551
Chronic kidney disease	9 (1.8)	7 (3.3)	0.354
Asthma	123 (25.0)	65 (30.7)	0.143
COPD	28 (5.7)	16 (7.5)	0.445
Cancer	12 (2.4)	5 (2.4)	1.000
Medication			
Metformin	113 (23.0)	109 (51.4)	<0.001
Sulfonylurea	42 (8.5)	44 (20.8)	<0.001
Meglitinide	0	0	NA
TZD	13 (2.6)	8 (3.8)	0.570
DPP-4i	90 (18.3)	85 (40.1)	<0.001
SGLT2i	10 (2.0)	6 (2.8)	0.707
AGI	0	2 (0.9)	0.166
Insulin	0	0	NA
RAS blockade	0	212 (100.0)	<0.001
ACEi	0	10 (4.7)	<0.001
ARB	0	202 (95.3)	<0.001
Beta blocker	25 (5.1)	29 (13.7)	<0.001
Diuretics	17 (3.5)	59 (27.8)	<0.001
CCB	48 (9.8)	100 (47.2)	<0.001
Statin	121 (24.6)	137 (64.6)	<0.001
Fibrate	7 (1.4)	8 (3.8)	0.090

Values are presented as number (%) or mean ± standard deviation.

RAS, renin-angiotensin system; COVID-19, coronavirus disease 2019; NHID, National Health Information Database; BMI, body mass index; SBP, systolic blood pressure; DBP, diastolic blood pressure; COPD, chronic obstructive pulmonary disease; NA, not applicable; TZD, thiazolidinedione; DPP-4i, dipeptidyl peptidase-4 inhibitor; SGLT2i, sodium glucose cotransporter 2 inhibitor; AGI, alpha glucosidase inhibitor; ACEi, angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; CCB, calcium-channel blocker.