

Supplementary Table 5. Clinical characteristics according to whether DPP-4i and RAS blockade were used in Korean COVID-19 patients with diabetes based on the data from the National Health Insurance Review and Assessment Service of Korea

Characteristic	No RAS blockade, no DPP-4i user (n=372)	RAS blockade only user (n=197)	DPP-4i only user (n=133)	Both DPP-4i and RAS blockade user (n=130)	P value
Age, yr	59.01 ± 17.96	64.73 ± 13.96	61.38 ± 12.20	65.03 ± 12.07	<0.0001
<40	57 (15.32)	8 (4.06)	3 (2.26)	1 (0.77)	<0.0001
40 to <50	51 (13.71)	23 (11.68)	15 (11.28)	14 (10.77)	
50 to <60	74 (19.89)	40 (20.30)	34 (25.56)	27 (20.77)	
60 to <70	73 (19.62)	52 (26.40)	49 (36.84)	41 (31.54)	
70 to <80	71 (19.09)	41 (20.81)	21 (15.79)	34 (26.15)	
≥80	46 (12.37)	33 (16.75)	11 (8.27)	13 (10.00)	
Male sex	187 (50.27)	109 (55.33)	73 (54.89)	76 (58.46)	0.3596
Hypertension	175 (47.04)	196 (99.49)	67 (50.38)	130 (100.00)	<0.0001
Dyslipidemia	303 (81.45)	180 (91.37)	124 (93.23)	123 (94.62)	<0.0001
Cardiovascular disease	94 (25.27)	65 (32.99)	31 (23.31)	37 (28.46)	0.1611
Cerebrovascular disease	44 (11.83)	20 (10.15)	18 (13.53)	23 (17.69)	0.2183
Chronic kidney disease	44 (11.83)	60 (30.46)	24 (18.05)	34 (26.15)	<0.0001
Asthma	112 (30.11)	54 (27.41)	39 (29.32)	34 (26.15)	0.8118
COPD	39 (10.48)	12 (6.09)	8 (6.02)	13 (10.00)	0.1966
Cancer	91 (24.46)	45 (22.84)	27 (20.30)	21 (16.15)	0.2420
Medication					
Metformin	46 (12.37)	40 (20.30)	96 (72.18)	87 (66.92)	<0.0001
Sulfonylurea	16 (4.30)	14 (7.11)	47 (35.34)	52 (40.77)	<0.0001
Meglitinide	2 (0.54)	3 (1.52)	2 (1.50)	0	0.3462
TZD	4 (1.08)	4 (2.03)	13 (9.77)	20 (15.38)	<0.0001
DPP-4i	0	0	133 (100.00)	130 (100.00)	<0.0001
SGLT2i	8 (2.15)	10 (5.08)	1 (0.75)	0	0.0100
AGI	4 (1.08)	2 (1.02)	0	1 (0.77)	0.6934
Insulin	0	1 (0.51)	1 (0.75)	0	0.3550
RAS blockade	0	197 (100.00)	0	130 (100.00)	<0.0001
ACEi	0	18 (9.14)	0	6 (4.62)	<0.0001
ARB	0	182 (92.39)	0	124 (95.38)	<0.0001
Beta blocker	41 (11.02)	51 (25.89)	21 (15.79)	25 (19.23)	<0.0001
Diuretics	19 (5.11)	46 (23.35)	13 (9.77)	33 (25.38)	<0.0001
CCB	60 (16.13)	111 (56.35)	23 (17.29)	65 (50.00)	<0.0001
Statin	99 (26.61)	108 (54.82)	75 (56.39)	84 (64.62)	<0.0001
Fibrate	6 (1.61)	9 (4.57)	10 (7.52)	7 (5.38)	0.0118

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

DPP-4i, dipeptidyl peptidase-4 inhibitor; RAS, renin-angiotensin system; COVID-19, coronavirus disease 2019; COPD, chronic obstructive pulmonary disease; TZD, thiazolidinedione; SGLT2i, sodium glucose cotransporter 2 inhibitor; AGI, alpha glucosidase inhibitor; ACEi, angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; CCB, calcium-channel blocker.