

**Table S2. Logistic regression analysis for risk of hospital-admitted ischemic stroke associated with GLP-1RAs use, days of supplies of GLP-1RAs, demographics, comorbidities, and concomitant medications among T2D patients**

Variable	Ischemic stroke		Crude		Adjusted*	
	No	Yes	OR (95% CI)	P-value	OR (95% CI)	P-value
	n (%)	n (%)				
<b>GLP-1RAs non-users</b>	6,467 (49.92)	67 (59.29)	1 (Reference)		1 (Reference)	
<b>GLP-1RAs users</b>	6,488 (50.08)	46 (40.71)	0.68 (0.47, 1.00)	0.0486	0.69 (0.47, 1.00)	0.0523
1-59 days	1,599 (12.34)	18 (15.93)	1.09 (0.64, 1.83)	0.7558	1.04 (0.61, 1.76)	0.8937
0-153 days	1,614 (12.46)	14 (12.39)	0.84 (0.47, 1.49)	0.5473	0.88 (0.49, 1.57)	0.6533
154-251 days	1,574 (12.15)	9 (7.96)	0.55 (0.27, 1.11)	0.0951	0.57 (0.28, 1.15)	0.1180
> 251 days	1,701 (13.13)	5 (4.42)	0.28 (0.11, 0.71)	0.0067	0.28 (0.11, 0.70)	0.0063
<b>Sex</b>						
Female	6,830 (52.72)	53 (46.90)	1 (Reference)		1 (Reference)	
Male	6,125 (47.28)	60 (53.10)	1.26 (0.87, 1.83)	0.2184	1.36 (0.93, 1.99)	0.1148
<b>Age (year)</b>						
20-29	678 (5.23)	12 (10.61)	1 (Reference)		1 (Reference)	
30-39	2,376 (18.34)		3.14 (0.40, 24.30)	0.2741	2.67 (0.34, 20.82)	0.3487
40-49	3,600 (27.79)	22 (19.47)	4.14 (0.56, 30.72)	0.1649	3.26 (0.43, 24.51)	0.2504
50-59	3,732 (28.81)	40 (35.40)	7.26 (1.00, 52.83)	0.0503	5.21 (0.70, 38.61)	0.1064
60 +	2,569 (19.83)	39 (34.51)	10.28 (1.41, 74.88)	0.0214	6.05 (0.81, 45.23)	0.0796
<b>Comorbidities</b>						
Hypertension						

No	4,309 (33.26)	11 (9.73)	1 (Reference)		1 (Reference)	
Yes	8,646 (66.74)	102 (90.27)	4.62 (2.48, 8.62)	< 0.0001	3.66 (1.74, 7.71)	0.0006
Dyslipidemia						
No	1,766 (13.63)	17 (15.04)	1 (Reference)		1 (Reference)	
Yes	11,189 (86.37)	96 (84.96)	0.89 (0.53, 1.50)	0.6633	0.83 (0.47, 1.48)	0.5255
Smoking						
No	12,383 (95.58)	109 (96.46)	1 (Reference)		1 (Reference)	
Yes	572 (4.42)	4 (3.54)	0.79 (0.29, 2.16)	0.6527	0.79 (0.28, 2.18)	0.6439
Obesity						
No	10,299 (79.50)	91 (80.53)	1 (Reference)		1 (Reference)	
Yes	2,656 (20.50)	22 (19.47)	0.94 (0.59, 1.50)	0.7866	1.22 (0.75, 1.98)	0.4232
Chronic kidney disease						
No	12,141 (93.72)	101 (89.38)	1 (Reference)		1 (Reference)	
Yes	814 (6.28)	12 (10.62)	1.77 (0.97, 3.24)	0.0627	1.07 (0.57, 2.00)	0.8279
Antihyperglycemic medication						
Metformin						
No	34 (0.26)	0 (0.00)	1 (Reference)		1 (Reference)	
Yes	12,921 (99.74)	113 (100.00)	NA	NA	NA	NA
Sulfonylureas						
No	751 (5.80)	4 (3.54)	1 (Reference)		1 (Reference)	
Yes	12,204 (94.20)	109 (96.46)	1.68 (0.62, 4.56)	0.3112	1.11 (0.39, 3.16)	0.8479
DPP-4 i						

No	1,558 (12.03)	20 (17.70)	1 (Reference)		1 (Reference)	
Yes	11,397 (87.97)	93 (82.30)	0.64 (0.39, 1.03)	0.0677	0.57 (0.34, 0.95)	0.0293
<b>Thiazolidinediones</b>						
No	4,835 (37.32)	35 (30.97)	1 (Reference)		1 (Reference)	
Yes	8,120 (62.68)	78 (69.03)	1.33 (0.89, 1.98)	0.1662	1.12 (0.74, 1.70)	0.5987
<b>SGLT-2i</b>						
No	7,807 (60.26)	93 (82.30)	1 (Reference)		1 (Reference)	
Yes	5,148 (39.74)	20 (17.70)	0.33 (0.20, 0.53)	< 0.0001	0.36 (0.22, 0.58)	< 0.0001
<b>Insulins</b>						
No	2,876 (22.20)	7 (6.19)	1 (Reference)		1 (Reference)	
Yes	10,079 (77.80)	106 (93.81)	4.32 (2.01, 9.29)	0.0002	4.00 (1.84, 8.70)	0.0005
<b>Statins</b>						
No	2,983 (23.03)	27 (23.89)	1 (Reference)		1 (Reference)	
Yes	9,972 (76.97)	86 (76.11)	0.95 (0.62, 1.47)	0.8273	0.84 (0.52, 1.37)	0.4802
<b>Antihypertensive agents</b>						
No	2,514 (19.41)	8 (7.08)	1 (Reference)		1 (Reference)	
Yes	10,441 (80.59)	105 (92.92)	3.16 (1.54, 6.49)	0.0017	1.03 (0.44, 2.43)	0.9477
<b>Anticoagulants</b>						
No	12,853 (99.21)	113 (100.00)	1 (Reference)		1 (Reference)	
Yes	102 (0.79)		1.13 (0.16, 8.13)	0.9070	0.73 (0.10, 5.34)	0.7583
<b>Antiplatelets</b>						
No	11,040 (85.22)	86 (76.11)	1 (Reference)		1 (Reference)	
Yes	1,915 (14.78)	27 (23.89)	1.81 (1.17, 2.80)	0.0075	1.18 (0.75, 1.86)	0.4657

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\*: Multivariable logistic regression analysis including variables of GLP-1RAs, sex, age, each of comorbidities, and each of concomitant medications listed above.

Abbreviation: CI, Confidence Interval; DDP-4i, Dipeptidyl Peptidase 4 inhibitors; GLP-1RAs, Glucagon Like Peptide-1 Receptor Agonists; OR, Odds Ratio; SGLT2i, Sodium-GLucose coTransporter 2 inhibitor; T2DM, Type 2 Diabetes Mellitus.