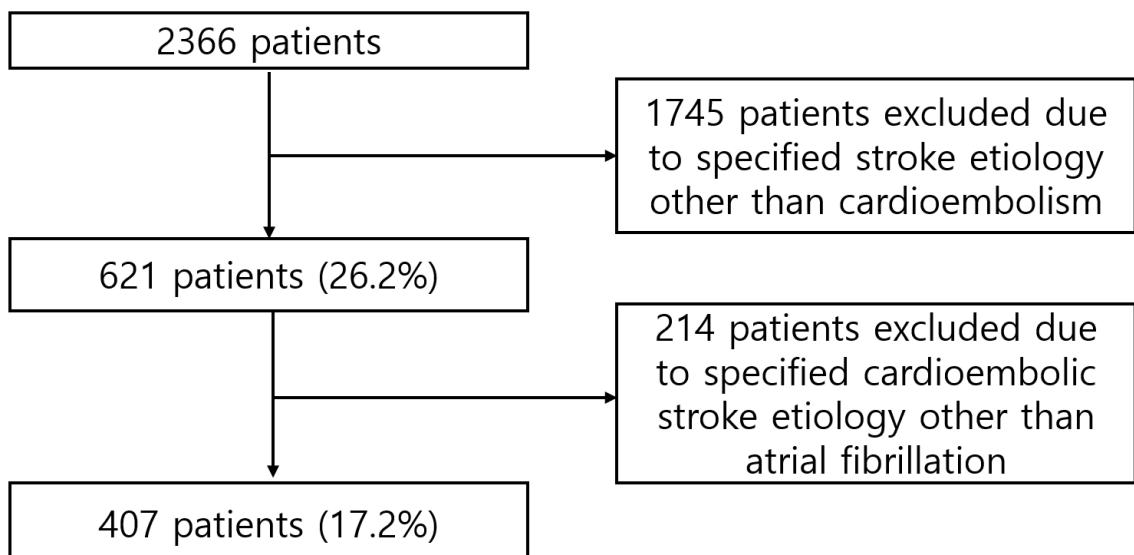


Supplementary Figure1. Flowchart of patient inclusion and exclusion in the study.



Supplementary Table 1. Characteristics of the patients with cardioembolic stroke and atrial fibrillation with right vertebral artery hypoplasia and others.

	Total (n = 407)	Right VAH (n = 99)	Others (n = 308)	P-value
Age (years)	73.3±10.5	71.8±10.7	73.8±10.4	0.109
Female sex	196 (48.2)	38 (38.4)	158 (51.3)	0.025
Hypertension	279 (68.6)	69 (69.7)	210 (68.2)	0.778
Diabetes mellitus	113 (27.8)	23 (23.2)	90 (29.2)	0.247
Hyperlipidemia	129 (31.7)	36 (36.4)	93 (30.2)	0.251
Ischemic heart disease	80 (19.7)	20 (20.2)	60 (19.5)	0.875
History of stroke	107 (26.3)	26 (26.3)	81 (26.3)	0.994
Current smoker	110 (27.0)	29 (29.3)	81 (26.3)	0.560
Initial NIHSS	6.0 (2.0-13.0)	6.0 (2.0-14.0)	6.0 (2.0-13.0)	0.642
Lesion location				
Anterior circulation	293 (72.0)	70 (70.7)	223 (72.4)	0.895
Posterior circulation	92 (22.6)	24 (24.2)	68 (22.1)	0.810
Both	22 (5.4)	5 (5.1)	17 (5.5)	0.858
BAO	15 (3.7)	4 (4.0)	11 (3.6)	0.829
3 months mRS	2.0 (0.3-4.0)	2.0 (0.0-4.0)	2.0 (0.0-4.0)	0.824
3 months mRS 0–2	234 (57.5)	59 (59.6)	175 (56.8)	0.627
3 months mRS 0–3	281 (69.0)	68 (68.7)	213 (69.2)	0.930

Results presented as number and percent (% column), mean ± SD (standard deviation), or median (25th – 75th percentile), VAH: vertebral artery hypoplasia, NIHSS : National Institute of Health Stroke Scale, BAO: basilar artery occlusion, mRS : modified Rankin Scale grades.

Supplementary table 2. Characteristics of patients with atrial fibrillation related cardioembolic stroke with independent walk (mRS 0–3) vs dependent walk (mRS 4–6).

	3 months mRS 0–3 (n = 281)	3 months mRS 4–6 (n=126)	P-value
Age (years)	71.3 ± 10.0	77.7 ± 10.3	<0.001
Female sex	123 (43.8)	73 (57.9)	0.008
Hypertension	181 (64.4)	98 (77.8)	0.007
Diabetes mellitus	68 (24.2)	45 (35.7)	0.016
Hyperlipidemia	97 (34.5)	32 (25.4)	0.067
Ischemic heart disease	58 (20.6)	22 (17.5)	0.455
History of stroke	63 (22.4)	44 (34.9)	0.008
Current smoker	86 (30.6)	24 (19.0)	0.015
Initial NIHSS	4.0 (1.0-8.0)	13.0 (7.0-18.0)	<0.001
VAH			
Right	68 (24.2)	31 (24.6)	0.930
Left	25 (8.9)	20 (15.9)	0.038
No VAH	188 (66.9)	75 (59.5)	0.150
Lesion location			
Anterior circulation	197 (70.1)	96 (76.2)	0.233
Posterior circulation	69 (24.6)	23 (18.3)	0.183
Both	15 (5.3)	7 (5.6)	0.929
BAO	6 (2.1)	9 (7.1)	0.013

Results presented as number and percent (% column), mean ± SD (standard deviation), or median (25th – 75th percentile), VAH: vertebral artery hypoplasia, NIHSS : National Institute of Health Stroke Scale, BAO: basilar artery occlusion, mRS : modified Rankin Scale grades.