Supplementary Table 2

Exploratory pairwise comparisons of admission NIHSS

Two-sided permutation-based Mann-Whitney U tests used 200,000 resamples with Holm adjustment within each domain and fixed random seeds. The original numerical results are retained. Rank-biserial correlations are descriptive effect estimates; bootstrap confidence intervals are omitted because sparse groups can produce unstable or degenerate intervals. Pairwise findings do not supersede the multiplicity-adjusted omnibus tests in Table 3. All comparisons are secondary and hypothesis-generating. Etiologic labels denote operational record-based groups and do not establish individual vascular mechanisms.

Lesion side

Comparison	n1	n2	U	Permutation p	Holm adjusted p	Rank biserial
Right vs Left	34	29	416.5	0.28908	0.28908	-0.155
Right vs Bilateral	34	6	34.0	0.00699	0.02097	-0.667
Left vs Bilateral	29	6	36.0	0.02221	0.04442	-0.586

Rostrocaudal segment

Comparison	n1	n2	U	Permutation p	Holm adjusted p	Rank biserial
Upper pons vs Middle pons	9	51	235.0	0.91334	1.00000	0.024
Upper pons vs Lower pons	9	9	37.5	0.80765	1.00000	-0.074
Middle pons vs Lower pons	51	9	206.0	0.63628	1.00000	-0.102

Recorded morphology/topography

Comparison	n1	n2	U	Permutation p	Holm adjusted p	Rank biserial
Anteromedial vs Lateral	44	11	167.0	0.11380	1.00000	-0.310
Anteromedial vs Bilateral	44	6	49.5	0.01112	0.16680	-0.625
Anteromedial vs Unilateral multiple	44	4	124.0	0.20473	1.00000	0.409
Anteromedial vs Anterolateral	44	2	37.0	0.75942	1.00000	-0.159
Anteromedial vs Tegmental	44	2	20.0	0.22609	1.00000	-0.545
Lateral vs Bilateral	11	6	13.5	0.05187	0.67437	-0.591
Lateral vs Unilateral multiple	11	4	39.0	0.02198	0.30769	0.773
Lateral vs Anterolateral	11	2	12.5	0.87179	1.00000	0.136
Lateral vs Tegmental	11	2	6.5	0.53846	1.00000	-0.409
Bilateral vs Unilateral multiple	6	4	21.0	0.06667	0.80000	0.750
Bilateral vs Anterolateral	6	2	10.0	0.28571	1.00000	0.667
Bilateral vs Tegmental	6	2	10.0	0.28571	1.00000	0.667
Unilateral multiple vs Anterolateral	4	2	2.0	0.53333	1.00000	-0.500
Unilateral multiple vs Tegmental	4	2	0.0	0.13333	1.00000	-1.000
Anterolateral vs Tegmental	2	2	1.0	0.66667	1.00000	-0.500

Etiologic classification

Comparison	n1	n2	U	Permutation p	Holm adjusted p	Rank biserial
Operational small-vessel/lacunar vs Cryptogenic stroke	36	13	234.0	1.00000	1.00000	0.000
Operational small-vessel/lacunar vs Other determined etiology	36	7	116.0	0.75341	1.00000	-0.079
Operational small-vessel/lacunar vs Cardioembolic stroke	36	7	111.5	0.64616	1.00000	-0.115
Operational small-vessel/lacunar vs Large-artery atherosclerosis	36	6	42.0	0.01503	0.13527	-0.611
Cryptogenic stroke vs Other determined etiology	13	7	44.5	0.96447	1.00000	-0.022
Cryptogenic stroke vs Cardioembolic stroke	13	7	39.5	0.64990	1.00000	-0.132
Cryptogenic stroke vs Large-artery atherosclerosis	13	6	11.5	0.01349	0.13490	-0.705
Other determined etiology vs Cardioembolic stroke	7	7	24.5	1.00000	1.00000	0.000
Other determined etiology vs Large-artery atherosclerosis	7	6	7.0	0.04545	0.36364	-0.667
Cardioembolic stroke vs Large-artery atherosclerosis	7	6	9.5	0.10956	0.76690	-0.548

NIHSS, National Institutes of Health Stroke Scale. n1 and n2 denote the first and second group sizes; U refers to the first group. Positive rank-biserial values indicate higher NIHSS ranks in the first group; negative values indicate higher ranks in the second. Operational small-vessel/lacunar denotes the group defined in Section 2.5.