

Real-World Comparative Outcomes of Dual vs. Single Antiplatelet Therapy in Acute Ischemic Stroke: A Retrospective Cohort Analysis

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Prior Presentation: This work has not been previously published or presented. However, portions of this study have been accepted for poster presentation at the American Heart Association International Stroke Conference (ISC 2026), New Orleans, Louisiana, USA, February 4–6, 2026.

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Supplementary Material

Table S1. Association between SAPT agents vs DAPT and clinical outcomes

Outcome	Unadjusted HR (95% CI)	<i>p</i> value	Adjusted HR (95% CI)	<i>p</i> value
Aspirin vs DAPT				
Hemorrhagic transformation	1.56 (0.99–2.46)	0.0537	1.02 (0.62–1.65)	0.9461
Stroke recurrence	0.71 (0.44–1.16)	0.1698	0.71 (0.43–1.19)	0.1983
Composite endpoint*	0.91 (0.65–1.28)	0.5868	0.82 (0.57–1.18)	0.2877
All-cause mortality	1.02 (0.65–1.58)	0.9440	0.90 (0.56–1.45)	0.6634
Clopidogrel vs DAPT				
Hemorrhagic transformation	1.10 (0.44–2.78)	0.8348	0.38 (0.13–1.10)	0.0736
Stroke recurrence	0.78 (0.31–1.94)	0.5918	0.73 (0.25–1.68)	0.5127
Composite endpoint*	1.65 (1.00–2.71)	0.0499	1.16 (0.69–1.96)	0.5808
All-cause mortality	2.17 (1.19–3.94)	0.0114	1.41 (0.73–2.70)	0.3065

Reference group: DAPT. Values are hazard ratios (HR) with 95% confidence intervals from Cox proportional hazards models (unadjusted and adjusted).

*Composite endpoint includes stroke recurrence, hemorrhagic transformation, or all-cause mortality.

Abbreviations: DAPT: dual antiplatelet therapy; SAPT: single antiplatelet therapy.

Table 2S. Subgroup analysis of dual versus single antiplatelet therapy for the risk of hemorrhagic transformation

	Within-level effect (No) HR (95% CI); p value	Within-level effect (Yes) HR (95% CI); p value	P value (interaction)
First-ever stroke	1.11 (0.49–2.53); p=0.8077	1.11 (0.64–1.91); p=0.7186	0.9973
Stroke severity (High vs Low NIHSS)	1.07 (0.64–1.78); p=0.8057	0.82 (0.31–2.17); p=0.6850	0.6331
Diabetes mellitus	1.01 (0.41–2.52); p=0.9812	1.14 (0.67–1.96); p=0.6301	0.8213
Atrial fibrillation	1.12 (0.67–1.87); p=0.6620	1.04 (0.34–3.17); p=0.9433	0.9059
Impaired consciousness	0.94 (0.53–1.66); p=0.8272	1.51 (0.68–3.34); p=0.3101	0.3381
Brain edema	0.78 (0.43–1.41); p=0.4088	1.76 (0.88–3.51); p=0.1120	0.0775
ICU admission	0.69 (0.31–1.52); p=0.3565	1.37 (0.79–2.39); p=0.2621	0.1568
tPA	1.03 (0.61–1.74); p=0.9192	1.43 (0.54–3.78); p=0.4756	0.5635
Mechanical thrombectomy	0.87 (0.52–1.46); p=0.5932	2.64 (0.99–7.05); p=0.0527	0.0518

Adjusted hazard ratios (HRs) and 95% confidence intervals (CIs) for DAPT vs SAPT, stratified by key clinical subgroups.

Table 3S. Subgroup analysis of dual versus single antiplatelet therapy for the risk of stroke recurrence

	Within-level effect (No) HR (95% CI); p value	Within-level effect (Yes) HR (95% CI); p value	P value (interaction)
First-ever stroke	2.15 (1.04–4.42); p=0.0387	1.00 (0.52–1.91); p=0.9904	0.1171
Stroke severity (High vs Low NIHSS)	1.38 (0.78–2.44); p=0.2665	1.57 (0.67–3.66); p=0.2989	0.8053
Diabetes mellitus	1.32 (0.54–3.19); p=0.5394	1.49 (0.85–2.61); p=0.1633	—
Atrial fibrillation	1.34 (0.82–2.20); p=0.2387	2.76 (0.59–12.84); p=0.1955	0.3826
Impaired consciousness	1.58 (0.92–2.74); p=0.1001	1.06 (0.41–2.75); p=0.9113	0.4671
Brain edema	1.29 (0.77–2.15); p=0.3337	2.42 (0.78–7.52); p=0.1261	0.3168
ICU admission	1.61 (0.83–3.12); p=0.1584	1.28 (0.65–2.50); p=0.4769	0.6253
tPA	1.34 (0.80–2.25); p=0.2617	1.97 (0.66–5.92); p=0.2275	—
Mechanical thrombectomy	1.39 (0.85–2.30); p=0.1926	1.88 (0.44–8.07); p=0.3951	0.7040

Adjusted hazard ratios (HRs) and 95% confidence intervals (CIs) for DAPT vs SAPT, stratified by key clinical subgroups.

Table 4S. Subgroup analysis of dual versus single antiplatelet therapy for the risk of composite endpoint (stroke recurrence, hemorrhagic transformation, or all-cause mortality)

	Within-level effect (No) HR (95% CI); p value	Within-level effect (Yes) HR (95% CI); p value	P value (interaction)
First-ever stroke	1.21 (0.77–1.90); p=0.4176	1.03 (0.66–1.63); p=0.8819	0.6343
Stroke severity (High vs Low NIHSS)	1.00 (0.69–1.44); p=0.9836	1.57 (0.79–3.11); p=0.1972	0.2499
Diabetes mellitus	1.24 (0.66–2.34); p=0.5076	1.08 (0.74–1.57); p=0.6864	—
Atrial fibrillation	1.07 (0.76–1.52); p=0.6940	1.44 (0.61–3.41); p=0.4040	0.5307
Impaired consciousness	1.22 (0.81–1.84); p=0.3322	0.96 (0.57–1.62); p=0.8739	0.4649
Brain edema	1.02 (0.71–1.47); p=0.9119	1.51 (0.78–2.93); p=0.2226	0.3068
ICU admission	1.12 (0.68–1.85); p=0.6606	1.12 (0.74–1.70); p=0.6026	0.9962
tPA	1.05 (0.74–1.49); p=0.7845	1.60 (0.71–3.63); p=0.2594	—
Mechanical thrombectomy	1.08 (0.77–1.52); p=0.6593	1.52 (0.56–4.11); p=0.4123	0.5269

Adjusted hazard ratios (HRs) and 95% confidence intervals (CIs) for DAPT vs SAPT, stratified by key clinical subgroups.

Table 5S. Subgroup analysis of dual versus single antiplatelet therapy for the risk of all-cause mortality

	Within-level effect (No) HR (95% CI); p value	Within-level effect (Yes) HR (95% CI); p value	P value (interaction)
First-ever stroke	0.96 (0.54–1.69); p=0.8757	1.03 (0.57–1.84); p=0.9250	0.8576
Stroke severity (High vs Low NIHSS)	0.87 (0.56–1.37); p=0.5619	1.85 (0.60–5.66); p=0.2811	0.2220
Diabetes mellitus	1.04 (0.46–2.35); p=0.9173	0.97 (0.60–1.57); p=0.9107	—
Atrial fibrillation	0.93 (0.59–1.46); p=0.7433	1.36 (0.50–3.67); p=0.5495	0.4954
Impaired consciousness	1.05 (0.59–1.87); p=0.8577	0.93 (0.52–1.66); p=0.8027	0.7572
Brain edema	0.95 (0.58–1.56); p=0.8470	1.08 (0.52–2.26); p=0.8349	0.7772
ICU admission	0.75 (0.33–1.71); p=0.5009	1.08 (0.67–1.74); p=0.7461	0.4548
tPA	0.98 (0.63–1.53); p=0.9391	1.05 (0.33–3.36); p=0.9398	—
Mechanical thrombectomy	0.98 (0.63–1.52); p=0.9217	1.09 (0.31–3.85); p=0.8907	0.8722

Adjusted hazard ratios (HRs) and 95% confidence intervals (CIs) for DAPT vs SAPT, stratified by key clinical subgroups.