

Supplementary Table S1. Association between baseline clinical data, laboratory parameters and short term outcomes in cases (alcohol group) and controls.

| | Good outcome | Unchanged state | Poor outcome | p |
|---|---------------------|---------------------|-------------------|--|
| Number of patients, n (%) | 114 | 105 | 21 | |
| Male, n (%) | 97 (85) | 90 (86) | 17 (80) | 0.855 |
| Age (years), median (IQR) | 58 (51-67) | 63 (56-70) | 64 (60-70) | 0.010 |
| Etanol level (%), median (IQR) | 1.57 (0.59-2.28) | 0.59 (0.29-0.83) | 0.60 (0.10-1.51) | 0.016 |
| Acute alcohol consumption, n (%) | 49 (43) | 8 (8) | 3(14) | <0.001 |
| Affected brain area, n (%) | | | | |
| VBI | 31 (27) | 29 (28) | 4 (19) | |
| Dominant MCA area | 30 (26) | 21 (20) | 6 (29) | 0.723 |
| Non-dominant MCA area | 53 (47) | 55 (52) | 11 (52) | |
| Cerebrovascular risk factors, n (%) | | | | |
| Hypertension | 73 (64) | 87 (83) | 19 (90) | 0.001 |
| Diabetes mellitus | 16 (14) | 25 (24) | 6 (29) | 0.106 |
| Hyperlipidemia | 55 (48) | 42 (40) | 7 (33) | 0.294 |
| Atrial fibrillation | 16 (14) | 8 (8) | 3 (14) | 0.300 |
| Previous stroke | 14 (12) | 12 (11) | 5 (24) | 0.292 |
| Previous myocardial infarction | 8 (7) | 14 (13) | 3 (14) | 0.259 |
| Previous peripheral artery disease | 3 (2.6) | 2 (2) | 0 (0) | 0.702 |
| Current smoker | 63 (55) | 46 (44) | 11 (52) | 0.232 |
| BMI, median (IQR) | 26.8 (23.8-30.9) | 28.1 (23.4-30.8) | 28.7 (23.2-33.3) | 0.365 |
| Admission antiplatelet therapy, n (%) | 21 (18) | 30 (29) | 7 (33) | 0.127 |
| Admission anticoagulant drug, n (%) | 6 (5) | 3 (3) | 3 (14) | 0.089 |
| Admission antidiabetic therapy, n (%) | 11 (10) | 17 (16) | 7 (33) | 0.014 |
| Admission lipid lowering therapy, n (%) | 14 (12) | 15 (14) | 7 (33) | 0.044 |
| Admission NIHSS, median (IQR) | 9 (6-13) | 6 (5-11) | 10 (7-13) | <0.001 0.005[#] 0.022[#] |
| OTN, min, median (IQR) | 135 (108-175) | 140 (112-182) | 138 (101-183) | 0.234 |
| DTN min, median (IQR) | 43 (32-57) | 42 (31-56) | 42 (36-56) | 0.798 |
| Rt-PA dose, mg, median (IQR) | 71.0 (60.0-86.0) | 72.0 (60.0-82.5) | 77.0 (55.0-82.0) | 0.790 |
| Laboratory parameters, median (IQR) | | | | |
| Serum sodium (mmol/L) | 139.0 (137.0-142.0) | 139.0 (137.5-141.0) | 139 (137.0-142.0) | 0.956 |
| Serum glucose (mmol/L) | 6.0 (5.3-7.1) | 6.3 (5.5-7.8) | 6.5 (5.6-8.6) | 0.079 |
| Creatinine (μmol/L) | 73.0 (65.8-90.0) | 73.0 (63.3-88.8) | 79 (64.0-103.0) | 0.467 |
| HsCRP (mg/L) | 2.48 (1.18-4.93) | 2.53 (1.31-5.10) | 4.0 (1.84-15.7) | 0.049 |
| AST (U/L) | 22.0 (17.0-30.0) | 19.0 (15.0-23.0) | 19.0 (15.0-24.0) | 0.004 0.004[#] |
| ALT (U/L) | 20.0 (14.0-34.3) | 18.0 (13.0-24.0) | 18.0 (11.5-24.3) | 0.200 |
| GGT (U/L) | 50.0 (28.5-92.3) | 31.0 (20.8-51.5) | 37.0 (22.5-51.0) | 0.003 0.003[#] |

| | | | | |
|--|---------------------|---------------------|---------------------|--|
| WBC (G/L) | 8.0 (6.7-9.5) | 8.3 (6.4-10.6) | 8.6 (6.9-10.6) | 0.378 |
| MCV (fL) | 90.9 (89.9-94.3) | 89.1 (86.4-92.5) | 89.3 (85.3-92.8) | 0.362 |
| Platelet count (G/L) | 230.0 (184.0-253.0) | 215.0 (183.0-262.0) | 216.0 (198.5-262.5) | 0.934 |
| APTT | 28.4±3.0 | 28.5±3.4 | 27.5±3.1 | 0.467 |
| INR | 0.96 (0.93-1.01) | 0.97 (0.94-1.02) | 0.96 (0.92-0.99) | 0.370 |
| Stroke etiology (TOAST), n (%) | | | | |
| Large artery atherosclerosis | 36 (33) | 29 (29) | 13 (65) | |
| Cardioembolic | 23 (21) | 17 (17) | 3 (15) | 0.052 |
| Small-vessel occlusion | 24 (21) | 30 (30) | 3 (15) | |
| Other/undetermined | 28 (25) | 24 (24) | 1 (5) | |
| Admission BP systolic (mmHg), mean±SD | 160.6±26.2 | 172.1±26.0 | 182.8±25.0 | <0.001 0.004 [‡] 0.001 ⁺ |
| Admission BP diastolis (mmHg), mean±SD | 91.0±16.3 | 95.9±15.7 | 101.4±19.0 | 0.011 0.024 [‡] |
| Imaging data, median (IQR) | | | | |
| ASPECTS on admission | 10 (9-10) | 10 (9-10) | 10 (8-10) | 0.67 |
| ASPECTS at 24 h | 8 (6-10) | 8 (7-10) | 7 (5-9) | 0.503 |
| Alcohol consumption habits, n (%) | | | | |
| Non-, mild drinker | 46 (41) | 63 (60) | 15 (71) | 0.003 |
| Moderate, heavy drinker | 67(59) | 42 (40) | 6 (29) | |

Abbreviations: IQR, interquartile range; VBI, vertebrobasilar insufficiency; MCA, middle cerebral artery; BMI, body mass index; NIHSS, National Institutes of Health Stroke Scale; OTN, onset-to-needle time; DTN, door-to-needle time; rt-PA, recombinant tissue plasminogen activator; hsCRP, high-sensitive C-reactive protein; AST, aspartate aminotransferase; ALT, alanine aminotransferase; GGT, gamma-glutamyl transferase; WBC, white blood cell count; MCV, mean cellular volume; APTT, activated partial thromboplastin time; INR, international normalized ratio; TOAST, Trial of ORG 10172 in Acute Stroke Treatment; BP, blood pressure; ASPECTS, The Alberta Stroke Program early CT score.

^{*}good outcome versus unchanged state (ANOVA, Bonferroni post-hoc-test or Kruskal-Wallis, Dunn's post-hoc-test).

[#]unchanged state versus poor outcome (Kruskal-Wallis, Dunn's post-hoc-test).

[†]good outcome versus poor outcome (ANOVA, Bonferroni post-hoc-test).

Supplementary Table S2. Association between baseline clinical data, laboratory parameters and long term outcomes in cases (alcohol group) and controls.

| | mRS 0-2 | mRS 3-6 | p |
|---|---------------------|---------------------|------------------|
| Number of patients, n (%) | 168 | 72 | |
| Male, n (%) | 148 (88) | 56 (77) | 0.040 |
| Age (years), median (IQR) | 60 (52-69) | 63 (59-69) | 0.005 |
| Etanol level (%), median (IQR) | 1.53 (0.52-2.19) | 0.74 (0.48-1.55) | 0.201 |
| Acute alcohol consumption, n (%) | 52 (31) | 6 (8) | 0.001 |
| Affected brain area, n (%) | | | |
| VBI | 53 (32) | 11 (15) | |
| Dominant MCA area | 33 (20) | 24 (33) | 0.011 |
| Non-dominant MCA area | 83 (48) | 37 (52) | |
| Cerebrovascular risk factors, n (%) | | | |
| Hypertension | 114 (68) | 63 (88) | 0.002 |
| Diabetes mellitus | 26 (15) | 21 (29) | 0.014 |
| Hyperlipidemia | 74 (44) | 30 (42) | 0.733 |
| Atrial fibrillation | 20 (12) | 7 (10) | 0.609 |
| Previous stroke | 20 (12) | 11 (15) | 0.475 |
| Previous myocardial infarction | 15 (9) | 10 (14) | 0.153 |
| Previous peripheral artery disease | 3 (1.8) | 2 (2.8) | 0.638 |
| Current smoker | 87 (52) | 33 (46) | 0.398 |
| BMI, median (IQR) | 27.1 (23.8-30.9) | 28.4 (23.6-31.5) | 0.410 |
| Admission antiplatelet therapy, n (%) | 36 (21) | 22 (31) | 0.130 |
| Admission anticoagulant drug, n (%) | 7 (4) | 5 (7) | 0.354 |
| Admission antidiabetic therapy, n (%) | 20 (12) | 13 (18) | 0.131 |
| Admission lipid lowering therapy, n (%) | 23 (14) | 13 (18) | 0.386 |
| Admission NIHSS, median (IQR) | 6.0 (5.0-10.0) | 11.0 (8.0-14.0) | <0.001 |
| OTN, min, median (IQR) | 137 (109-180) | 137 (107-181) | 0.722 |
| DTN min, median (IQR) | 42 (31-58) | 44 (36-56) | 0.258 |
| Rt-PA dose, mg, median (IQR) | 70.5 (60.0-85.3) | 74.0 (60.0-81.5) | 0.805 |
| Laboratory parameters, median (IQR) | | | |
| Serum sodium (mmol/L) | 139.0 (137.0-142.0) | 139.0 (137.0-142.0) | 0.313 |
| Serum glucose (mmol/L) | 6.0 (5.4-7.1) | 6.5 (5.6-8.9) | 0.003 |
| Creatinine (μ mol/L) | 73.0 (65.0-89.8) | 73.0 (62.8-92.5) | 0.968 |
| HsCRP (mg/L) | 2.4 (1.2-4.2) | 3.4 (1.6-10.6) | 0.003 |
| AST (U/L) | 21.0 (16.0-27.0) | 20.0 (15.0-24.0) | 0.149 |
| ALT (U/L) | 19.0 (14.0-28.8) | 18.0 (14.0-25.0) | 0.139 |
| GGT (U/L) | 38.0 (35.0-73.0) | 38.0 (24.3-64.8) | 0.879 |
| WBC (G/L) | 8.0 (6.4-9.7) | 8.8 (7.1-10.9) | 0.008 |
| MCV (fL) | 89.8 (85.9-93.3) | 89.3 (86.9-92.8) | 0.958 |
| Platelet count (G/L) | 224.0 (184.0-252.0) | 219.5 (182.5-264.3) | 0.970 |
| APTT | 28.4±3.2 | 28.3±3.3 | 0.856 |
| INR | 0.96 (0.93-1.01) | 0.97 (0.93-1.02) | 0.387 |
| Stroke etiology (TOAST), n (%) | | | |
| Large artery atherosclerosis | 44 (2) | 34 (48) | |
| Cardioembolic | 31 (20) | 12 (17) | 0.015 |
| Small-vessel occlusion | 44 (27) | 13 (19) | |
| Other/undetermined | 42 (26) | 11 (16) | |
| Admission BP systolic (mmHg), mean±SD | 163.0±25.6 | 177.0±27.7 | 0.0002 |

| | | | |
|---|-----------|-----------|-------|
| Admission BP diastolic (mmHg), mean±SD | 92.6±15.5 | 96.3±18.2 | 0.115 |
| <hr/> | | | |
| Imaging data, median (IQR) | | | |
| ASPECTS on admission | 10 (9-10) | 10 (9-10) | 0.743 |
| ASPECTS at 24 hours | 8 (6-10) | 8 (6-10) | 0.909 |
| <hr/> | | | |
| Alcohol consumption habits, n (%) | | | |
| Non-, mild drinker | 85 (51) | 39 (54) | 0.612 |
| Moderate, heavy drinker | 83 (49) | 33 (46) | |

Abbreviations: mRS, modified Rankin Scale; IQR, interquartile range; VBI, vertebrobasilar insufficiency; MCA, middle cerebral artery; BMI, body mass index; NIHSS, National Institutes of Health Stroke Scale; mRS: modified Rankin Scale; ONT, onset to needle time; DTN, door-to-needle time; rt-PA, recombinant tissue plasminogen activator; hsCRP, high-sensitive C-reactive protein; AST, aspartate aminotransferase; ALT, alanine aminotransferase; GGT, gamma-glutamyl transferase; WBC, white blood cell count; MCV, mean cellular volume; APTT, activated partial thromboplastin time; INR, international normalized ratio; TOAST, Trial of ORG 10172 in Acute Stroke Treatment; BP, blood pressure; SD, standard deviation; ASPECTS, The Alberta Stroke Program early CT score.