### Supplementary Table 4. Univariable regression analysis

| Variable                                | Occurrence of hemorrhagic transformation | Volume of hemorrhagic transformation |
|-----------------------------------------|-----------------------------------------|-------------------------------------|
|                                         | OR (95% CI)                              | P                                   | β (SE)                              | P                                   |
| **Medical history**                     |                                         |                                     |                                     |                                     |
| Age (yr)                                | 1.01 (0.97–1.05)                        | 0.523                               | 0.05 (0.17)                         | 0.755                               |
| Male sex                                | 2.17 (0.73–6.77)                        | 0.171                               | –0.48 (4.92)                        | 0.923                               |
| Hypertension                            | 1.00 (0.29–3.41)                        | >0.999                              | 7.31 (5.42)                         | 0.183                               |
| Diabetes mellitus                       | 2.44 (0.84–7.45)                        | 0.108                               | 11.57 (4.55)                        | 0.014                               |
| Dyslipidemia                            | 0.62 (0.20–1.88)                        | 0.399                               | –6.43 (4.96)                        | 0.200                               |
| Old stroke                              | 0.82 (0.23–2.86)                        | 0.752                               | 5.48 (5.60)                         | 0.332                               |
| Ischemic heart disease                  | 2.27 (0.53–11.79)                       | 0.283                               | 6.39 (6.43)                         | 0.325                               |
| Peripheral artery occlusive disease     | 0.64 (0.08–4.18)                        | 0.641                               | 7.30 (8.30)                         | 0.383                               |
| Current smoker                          | 1.53 (0.42–5.89)                        | 0.516                               | –6.26 (5.75)                        | 0.281                               |
| Atrial fibrillation                     | 1.00 (0.35–2.88)                        | >0.999                              | 2.37 (4.77)                         | 0.622                               |
| Prior antithrombotics use               | 2.40 (0.83–7.24)                        | 0.111                               | 4.41 (4.74)                         | 0.357                               |
| Initial SBP (mm Hg)                     | 1.01 (0.99–1.03)                        | 0.187                               | 0.10 (0.08)                         | 0.246                               |
| **Laboratory findings**                 |                                         |                                     |                                     |                                     |
| Platelet counts (×10^9/L)               | 1.00 (0.99–1.00)                        | 0.773                               | –0.02 (0.03)                        | 0.630                               |
| PT, INR                                 | 3.14 (0.93–13.042)                      | 0.307                               | 3.55 (1.73)                         | 0.044                               |
| aPTT (sec)                              | 1.06 (0.94–1.22)                        | 0.333                               | –0.13 (0.54)                        | 0.814                               |
| Serum glucose (mmol/L)                  | 1.40 (1.09–1.94)                        | 0.023                               | 0.96 (0.61)                         | 0.118                               |
| eGFR (mL/min/1.73 m²)                   | 0.98 (0.95–1.01)                        | 0.236                               | –0.16 (0.12)                        | 0.189                               |
| **Stroke characteristics**              |                                         |                                     |                                     |                                     |
| Initial NIHSS                           | 1.00 (0.93–1.08)                        | 0.953                               | 0.69 (0.34)                         | 0.044                               |
| ASPECTS                                 | 0.73 (0.51–1.01)                        | 0.070                               | –5.02 (1.16)                        | <0.001                              |
| ASPECTS ≥6                              | 0.64 (0.08–4.18)                        | 0.641                               |                                     |                                     |
| Collateral scores                       | 0.22 (0.07–0.58)                        | 0.004                               | –7.13 (3.74)                        | 0.062                               |
| Collateral score ≥2                     | 0.22 (0.07–0.65)                        | 0.009                               |                                     |                                     |
| TOAST CE (vs. non–CE)                   | 2.08 (0.72–6.22)                        | 0.181                               | 6.93 (4.70)                         | 0.147                               |
| IV–tPA                                  | 1.35 (0.46–4.02)                        | 0.585                               | –6.78 (4.79)                        | 0.163                               |
| IA–tirofiban                            | 1.00 (0.21–4.68)                        | >0.999                              | –0.65 (6.81)                        | 0.924                               |
| No. of stent retriever passes           | 0.86 (0.49–1.48)                        | 0.588                               | –0.82 (2.43)                        | 0.737                               |
| Onset to puncture (min)                 | 1.00 (1.00–1.00)                        | 0.546                               | 0.00 (0.00)                         | 0.623                               |
| TICI grade 3                            | 0.74 (0.25–2.17)                        | 0.585                               | 2.10 (4.87)                         | 0.669                               |
| **Imaging characteristics**             |                                         |                                     |                                     |                                     |
| Closing to DECT (min)                   | 1.01 (0.96–1.06)                        | 0.699                               | 0.24 (0.22)                         | 0.283                               |
| Closing to MRI (hr)                     | 0.97 (0.91–1.02)                        | 0.287                               | –0.16 (0.21)                        | 0.461                               |
| Maximum iodine concentration            | 6.21 (2.28–16.92)                       | < 0.001                             | 6.45 (2.07)                         | 0.003                               |
| Volume of iodine extravasation          | 1.09 (1.00–1.18)                        | 0.050                               | 0.48 (0.04)                         | <0.001                              |

Among the clinical variables, the serum glucose level at admission and collateral scores were associated with the occurrence of hemorrhagic transformation (HT) in univariable logistic regression analyses. The maximum iodine concentration was associated with HT occurrence, whereas the volume of iodine extravasation was not. In the univariable linear regression analyses, HT volume was associated with diabetes, prothrombin time, NIHSS score, ASPECTS score, maximum iodine concentration, and volume of iodine extravasation.

OR, odds ratio; CI, confidence interval; SE, standard error; SBP, systolic blood pressure; PT, prothrombin time; INR, international normalized ratio; aPTT, activated partial thromboplastin time; eGFR, estimated glomerular filtration rate; NIHSS, National Institutes of Health Stroke Scale; ASPECTS, Alberta Stroke Program Early CT Score; TOAST, Trial of ORG 10172 in acute stroke treatment; CE, cardioembolism; IV, intravenous; tPA, tissue plasminogen activator; IA, intra-arterial; TICI, thrombolysis in cerebral infarction; DECT, dual-energy computed tomography; MRI, magnetic resonance imaging.