**Supplementary Table 1. Main characteristics of studies included in the meta-analysis.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study** | **Year** | **Region** | **Study type** | **Lesion site** | **First-line EVT** | **Tirofiban administration strategy** | **Assigned dose subgroup** | **Sample size** | **Mean patient age** | **Male%** | **NIHSS onset** | **Time from onset to groin puncture** | **Time from onset to recanalization** | **% of patients with IV thrombolysis** |
| Anterior | Posterior | Tirofiban | Control | Tirofiban | Control | Tirofiban | Control | Tirofiban | Control | Tirofiban | Control | Tirofiban | Control | Tirofiban | Control |
| Sun C | 2019 | China | cohort | 146  | 49  | MT | 0.25-0.5mg IA loading dose, undisclosed maintenance dose  | NA(Not Addressed) | 71  | 124  | 66.2  | 66.3  | 71.80% | 69.40% | 14 (9–20) | 15.5 (11–20) | 340 (215–505) (min)  | 301 (218–433) (min) | 440 (290–602) (min) | 375 (305–540) (min) | 33.80% | 44.40% |
| Yi HJ | 2019 | Korea | cohort | 303 | 24 | MT | 0.25-1mg IA loading dose, 0.05ug/kg/min maintenance dose | low dose maintenance | 47  | 280  | 73.4  | 69.1  | 59.60% | 56.10% | 10.5 (1-18) | 9.6 (1-18) | NA | NA | NA | NA | 46.80% | 39.60% |
| Zhang Y | 2019 | China | RCT | 67  | 53  | MT | 0.2 ug/kg/min \*15min loading dose, 0.1ug/kg/min maintenance | low dose maintenance | 60  | 60  | 56.4  | 56.4  | 70.00% | 70.00% | 14.3±6.4 | 14.3±6.4 | 4.6±3.1(h) | 4.6±3.1(h) | NA | NA | 28.33% | 28.33% |
| Zhang S | 2019 | China | cohort | 632  | 0  | MT | 0.25-1mg IA single dose | single dose | 154  | 478  | 64.3  | 64.6  | 59.70% | 57.70% | 15 (12.0–20.0) | 17 (13.0–21.0) | NA | NA | 397 (299–499)(min)  | 381 (307–470) (min)  | 29.22% | 32.64% |
| Quan T | 2019 | China | case-control | 0  | 159  | MT/ Aspiration |  0.25-0.5 mg IA loading dose，0.2–0.25 mg/h ivp maintenance | low dose maintenance | 85  | 74  | NA　 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 　NA | 　NA |
| Pan X | 2019 | China | cohort | 75  | 36  | MT | 0.15μg/kg/min maintenance | high dose maintenance | 82  | 129  | 69.5  | 74.0  | 63.40% | 61.20% | 15.0 (10.0-19.0) | 14.0 (10.5-20.0) | NA | NA | NA | NA | 34.15%\* | 72.87% |
| Lou Y | 2019 | China | cohort | 91  | 8  | MT | 50ug/min (50 ug/mL), total amount of 50 ug/kg, pre-EVT single dose | single dose | 56  | 43  | 64.0  | 68.0  | 64.30% | 55.80% | 16.41±6.22 | 15.72±5.28 | NA | NA | NA | NA | 　NA | NA　 |
| Gruber P | 2019 | Switzerland | cohort | 32  | 0  | Stenting | 10ug/kg IA loading dose，0.15ug/kg/min ivp maintenance | high dose maintenance | 18  | 14  | 66.0  | 68.0  | 72.00% | 71.00% | 14 (9–19) | 18 (8–20) | 237 (187–285) (min)  | 243 (187–295) (min)  | NA | NA | 　NA | NA　 |
| Yu T | 2018 | China | cohort | 47  | 7  | MT | <0.5mg IA single dose  | single dose | 26  | 28  | 70.3  | 67.8  | 46.20% | 53.60% | 13.42±4.28 | 12.57±4.95 | 202.31±100.96 (min)  | 199.00±90.68(min)  | 300.77±100.12 (min)  | 304.39±99.48 (min)  | 30.77% | 28.57% |
| Wu YF | 2018 | China | cohort | 176  | 48  | MT | strategized single IA dose: 3ug/kg, 6.7ug/kg, 10ug/kg | single dose | 94  | 124  | 70.0  | 71.5  | 38.30% | 45.20% | 18 (12-22) | 18 (13-23) | 314 (240-360)(min)  | 295 (220-360)(min)  | NA　 | 　NA | 15.96%\* | 30.08% |
| Zhao WB | 2017 | China | cohort | 118  | 62  | MT | 0.25-0.5mg IA loading dose， 0.2-0.25mg/h ivp maintenance | low dose maintenance | 90  | 90  | 61.8  | 60.8  | 77.00% | 67.00% | 21 (14–32) | 19 (15–26) | 314 (235–379) (min)  | 300 (236–375) (min)  | 388 (321–421) (min)  | 372 (311–436)(min)  | 24.44% | 22.22% |
| Lee JL | 2017 | Germany | case-control | 195  | 0  | Stenting | 1.25mg IV loading dose，0.1ug/kg/min ivp maintenance | low dose maintenance | 60  | 135  | 71.0  | 76.0  | 63.33% | 40.74% | 11 (6–16) | 15 (11–18) \* | 175 (139–238) (min)  | 183 (143–294)(min)  | 263 (217–332) (min)  | 263 (217–332) (min)  | 80.00% | 85.93% |
| Kellert L | 2013 | Germany | cohort | 128  | 34  | MT | NA | NA | 50  | 112  | 64.5  | 67.3  | NA | 　NA | 18 (13, 35) | 19 (16, 23) | 140 (93, 270)(min)  | 150 (93, 280)(min)  | 254 (157, 353) (min)  | 239 (164, 386)(min)  | 　NA | NA |

\* *p*<0.01. NA- Not Addressed. EVT- Endovascular therapy. MT- Mechanical Thrombectomy. IA- Intra-artery. IV- Intra-venous. Ivp- Intravenous pump.