**TABLE S9.** Subgroup analysis of myocardial infarct size based on gender distribution, ischemia duration, reperfusion duration, dosage, route, treatment time, and experiment type.

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| --- | --- | --- | --- | --- | --- |
| **Criteria for grouping** | **Subgroup** | **n** | **Mean difference (MD)** | **Heterogeneity** | **Overall effect test** |
| Gender distribution | Male | 12 | -12.42 [-15.67, -9.17] | Tau2 = 30.76; Chi2 = 1570.48, df = 11 (P<0.001); I2 = 99% | Z = 7.49 (P < 0.001) |
| Male and Female | 2 | -11.67 [-16.22, -7.11] | Tau2 = 0.00; Chi2 = 0.12, df = 1 (P = 0.73); I2 = 0% | Z = 5.02 (P < 0.001) |
| Ischemia duration | Time < 40min | 11 | -11.27 [-15.39, -7.16] | Tau2 = 45.29; Chi2 =1465.74, df = 10 (P < 0.001); I2 = 99% | Z = 5.37 (P < 0.001) |
| 40min ≤ Time ≤ 90min | 3 | -16.41 [-24.75, -8.08] | Tau2 = 50.02; Chi2 = 32.19, df = 2 (P < 0.001); I2 = 94% | Z = 3.86 (P = 0.0001) |
| Reperfusion duration | 30min ≤ Time < 120min | 3 | -10.21 [-16.28, -4.14] | Tau2 = 27.03; Chi2 = 230.24, df = 2 (P < 0.001); I2 = 99% | Z = 3.30 (P = 0.0010) |
| 120min ≤ Time < 180min | 7 | -14.14[-20.08, -8.20] | Tau2 = 58.31; Chi2 = 131.65, df = 6 (P < 0.001); I2 = 95% | Z = 4.67 (P < 0.001)  |
| 180min ≤ Time ≤ 480min | 4 | -11.15 [-17.62, -4.67] | Tau2 = 43.22; Chi2 = 508.82, df = 3 (P < 0.001); I2 = 99%  | Z = 3.37 (P = 0.0007) |
| Dosage | 3mg·kg-1·d-1 ≤ Dosage < 10mg·kg-1·d-1 | 3 | -15.35 [-15.82, -14.89] | Tau2 = 0.00; Chi2 = 1.14, df = 2 (P = 0.56); I2 = 0% | Z = 64.79 (P <0.001) |
| 10mg·kg-1·d-1 ≤ Dosage < 20mg·kg-1·d-1 | 5 | -6.70[-10.97, -2.43] | Tau2 = 20.44; Chi2 = 121.33, df = 4 (P < 0.001); I2 = 97% | Z = 3.07 (P = 0.002) |
| 20mg·kg-1·d-1 ≤ Dosage < 540mg·kg-1·d-1 | 4 | -14.36 [-19.90, -8.81] | Tau2 = 28.37; Chi2 = 522.36, df = 3 (P < 0.001); I2 = 99% | Z = 5.08 (P < 0.001) |
| 10μmol·L-1≤Dosage≤50μmol·L-1 | 2 | -17.20 [-37.27, 2.87] | Tau2 = 203.17; Chi2 = 32.03, df = 1 (P < 0.001); I2 = 97% | Z = 1.68 (P = 0.09) |
| Route | i.v | 4 | -13.67 [-17.99, -9.35] | Tau2 = 19.01; Chi2 =243.30, df = 3 (P < 0.001); I2 = 99% | Z = 6.20 (P < 0.001) |
| i.g | 7 | -10.30 [-19.46, -1.15] | Tau2 = 147.68; Chi2 =1176.56, df = 6 (P < 0.001); I2 = 99% | Z = 2.21 (P = 0.03) |
| i.p  | 1 | -12.09 [-12.51, -11.67] | Not applicable | Z = 56.58 (P < 0.001) |
| ecp | 2 | -17.20 [-37.27, 2.87] | Tau2 = 203.17; Chi2 = 32.03, df = 1 (P < 0.001); I2 = 97% | Z = 1.68 (P = 0.09) |
| Treatment time | Prior to ischemia | 4 | -11.36 [-19.61, -3.10] | Tau2 = 68.17; Chi2 = 601.66, df = 3 (P < 0.001); I2 = 100% | Z =2.70 (P = 0.007) |
| Prior to reperfusion | 5 | -8.91 [-17.44, -0.38] | Tau2 = 90.12; Chi2= 667.15, df = 4 (P < 0.001); I2 = 99% | Z = 2.05 (P = 0.04) |
| After reperfusion | 2 | -12.09 [-12.51, -11.67] | Tau2 = 0.00; Chi2= 0.01, df = 1 (P = 0.92); I2 = 0% | Z = 56.79 (P < 0.001) |
| During ischemia | 2 | -15.90 [-17.01, -14.78] | Tau2 = 0.00; Chi2= 0.04, df = 1 (P = 0.84); I2 =0% | Z = 27.95 (P < 0.001) |
| Prior to ischemia and prior to reperfusion | 1 | -27.48 [-32.82, -22.14] | Not applicable | Z = 10.08 (P < 0.001) |
| Experiment type | In vivo | 12 | -11.63 [-14.88, -8.38] | Tau2 = 30.20; Chi2 = 1537.77, df = 11 (P < 0.001); I2 = 99% | Z = 7.02 (P < 0.001) |
| Ex vivo | 2 | -17.20 [-37.27, 2.87] | Tau2 = 203.17; Chi2 = 32.03, df = 1 (P < 0.001); I2 = 97% | Z = 1.68 (P = 0.09) |
| Rat species | SD | 7 | -12.53[-17.02, -8.05] | Tau2 = 34.55; Chi2 = 1386.55, df = 6 (P < 0.001); I2 = 100% | Z = 5.48 (P < 0.001) |
| Wistar | 7 | -11.31 [-15.21, -7.40] | Tau2 = 23.92; Chi2 = 141.55, df = 6 (P < 0.001); I2 = 96% | Z = 5.68 (P < 0.001) |