Table 9. Characteristics and quality assessment of randomized controlled trials with selective inclusion/exclusion criteria in patients with ST-segment elevation myocardial infarction

| Study, Year | Trial Characteristics | Population, Interventions and Followup\* | Outcomes of Interest (Timing) | Quality Assessment / Comments |
| --- | --- | --- | --- | --- |
| Wita, 2009 | **Publication type:**  Full text  **Geographical location:**  Poland  **Funding:**  NR  **Number of centers:**  1  **Randomization:**  Randomized on a 1:1 basis  **Outcome assessment:** Quantitative analysis of all images by 1 investigator blinded to the type of procedure, using a quantitative analysis tool  **Number of participants enrolled:**  42 | **Inclusion criteria:**  Age > 18 y, chest pain > 20 min in conjunction with persistent ST-segment elevation in the precordial leads, LAD closure (TIMI-0), restored blood flow after PCI (TIMI-3) within 12 h from MI onset  **Exclusion criteria:** Cardiogenic shock, history of previous MI, hypertrophic cardiomyopathy, significant valvular disease, lack of IRA identification, residual stenosis after PCI > 50%, electrical instability, ICD or pacemaker , or females of child bearing potential  **Intervention:**  Catheter aspiration using Diver CE flowed by stenting  **Comparator:**  Stenting  **Duration of followup (d):**  30  **Followup:**  100% | **Intermediate:**  MBG 2-3 (post-procedure); EF (7 d, 30 d)  **Final:**  NR  **Safety:**  Procedure time | 1. Were the groups similar at baseline in terms of baseline characteristics and prognostic factors? Yes 2. Were outcomes assessed using a valid methodology and criteria? Yes 3. Were outcome assessors blind to exposure/intervention status? Yes 4. Were incomplete outcome data adequately addressed? Yes 5. Was the differential loss to followup between the compared groups low (< 10%)? Yes 6. Was the overall loss to followup low (< 30%)? Yes 7. Conflict of interest reported and insignificant? No 8. Were the methods used for randomization adequate? Can’t tell   Overall quality rating: Good |
| Ozaki, 2006 | **Publication type:**  Full text  **Geographical location:**  Japan  **Funding:**  NR  **Number of centers:**  1  **Randomization:**  Randomized using envelope method  **Outcome assessment:**  3 or more cardiologists evaluated the success or failure of acute stage coronary angiography, a data processing super computer was used for analysis of SPECT data  **Number of participants enrolled:**  77 | **Inclusion criteria:**  Chest pain≥ 30 min, ST-segment elevation≥ 1 mm on 2 or more contiguous ECG leads, plasma creatinine level ≥ 2 times higher than normal value, abnormalities in the left ventricular wall motion on ECHO, ≤ 6 h of symptom onset  **Exclusion criteria:**  Fibrinolytic treatment with tissue plasminogen activator or urokinase before admission, cardiogenic shock, contraindication to aspirin or ticlopidine, coronary no-reflow/slow flow and chronic stage restenosis  **Intervention A:**  Stent insertion after catheter aspiration using Rescue system or Thrombuster system  **Intervention B:**  Stent insertion after distal balloon embolic protection using PercuSurge GuardWire catheter  **Comparator:**  Direct stent  **Duration of followup (d):**  180  **Followup:**  80% in Rescue/Thrombuster group, 83.3% in the PercuSurge GuardWire group, 71.43% in the direct stenting group | **Intermediate:**  EF (180 d)  **Final:**  NR  **Safety:**  NR | 1. Were the groups similar at baseline in terms of baseline characteristics and prognostic factors? Yes 2. Were outcomes assessed using a valid methodology and criteria? Yes 3. Were outcome assessors blind to exposure/intervention status? No 4. Were incomplete outcome data adequately addressed? Yes 5. Was the differential loss to followup between the compared groups low (< 10%)? No 6. Was the overall loss to followup low (< 30%)? No 7. Conflict of interest reported and insignificant? No 8. Were the methods used for randomization adequate? Yes   Overall quality rating: Fair |

\*Duration of followup is reported as the original study’s longest reported followup and followup is reported for the study’s pre-specified primary outcome

Abbreviations: d=days; ECG=electrocardiogram; ECHO=echocardiogram; EF=ejection fraction; h=hours; ICD=implantable cardioverter-defibrillator; IRA=infarct related artery; LAD=left anterior descending artery; MBG=myocardial blush grade; MI=myocardial infarction; min=minutes; mm=millimeters; NR=not reported; PCI=percutaneous coronary intervention; SPECT=single-photon emission computerized tomography; TIMI=thrombolysis in myocardial infarction; y=years