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