

MULTISTARS AMI trial #ESCCongress

Multivessel immediate versus staged revascularisation in STEMI


Conclusion

 Immediate multivessel percutaneous coronary intervention (PCI) is non-inferior to staged multivessel PCI for reducing death and ischaemic events in patients with ST-segment elevation myocardial infarction (STEMI) and multivessel coronary artery disease.

Impact on clinical practice

 Immediate PCI of non-culprit lesions is as effective and safe as a staged procedure. The results were generally consistent across prespecified key subgroups, particularly among women and men, young and older patients, and patients with or without diabetes.

Study objectives

 The MULTISTARS AMI trial investigated whether immediate complete revascularisation at the time of primary PCI was non-inferior to staged (within 19 to 45 days) multivessel PCI among haemodynamically stable patients with STEMI and multivessel coronary artery disease.

Study population

Patients with acute STEMI (presenting within 24 hours of symptom onset) and multivessel coronary artery disease (defined as ≥ 1 coronary lesion with $\geq 70\%$ diameter stenosis on coronary angiography based on visual estimation in a non-culprit coronary artery of ≥ 2.25 mm and ≤ 5.75 mm in diameter), who were haemodynamically stable after successful primary PCI of the infarct-related coronary artery.

Where?



Europe



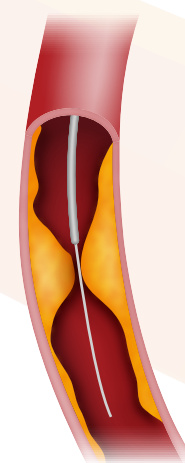
37 sites

Who and what?

840 patients



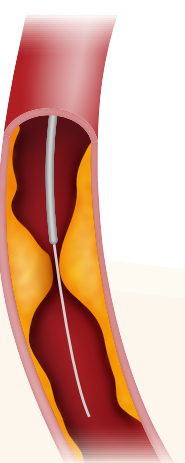
randomised
1:1



immediate PCI of
non-culprit lesions



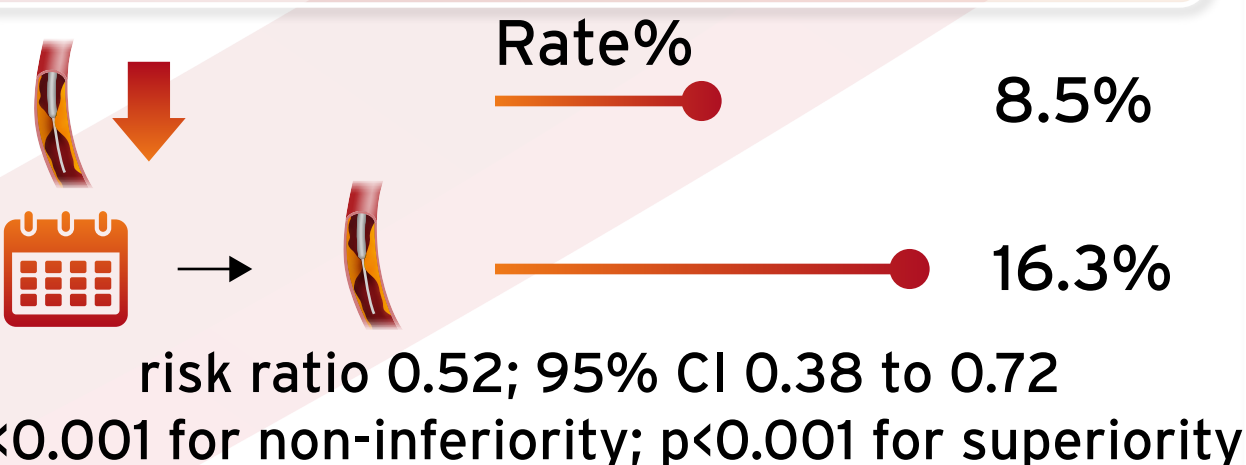
19-45
days



staged PCI of
non-culprit lesions

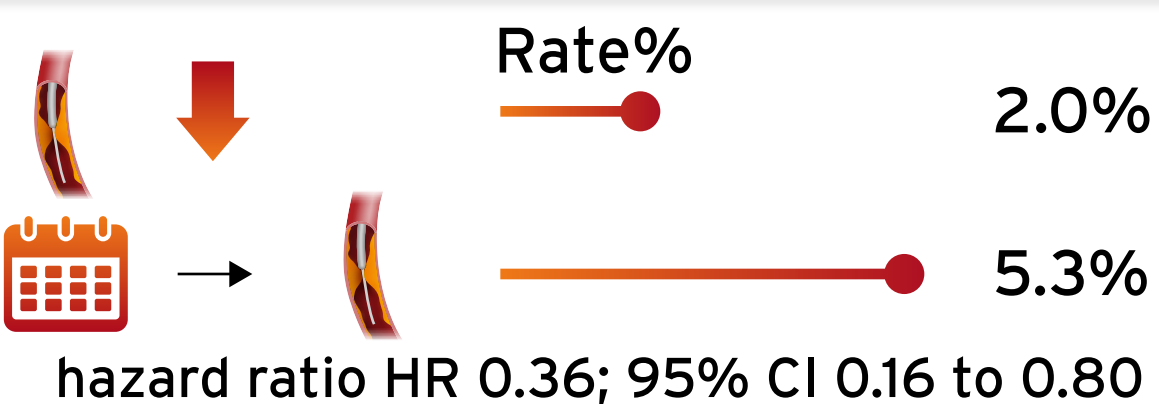
Primary endpoint

Composite of all-cause death, non-fatal myocardial infarction, stroke, unplanned ischaemia-driven revascularisation, or hospitalisation for heart failure within 1 year after randomisation.



Secondary endpoints

non-fatal myocardial infarction



unplanned ischaemia-driven revascularisation

