One Year Mortality in STEMI Patients Randomized to Primary PCI or a Pharmaco-invasive Strategy. The Stream 1 Year Follow-up

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In the STREAM trial 1892 STEMI patients presenting within 3 hours after onset of symptoms and unable to undergo primary PCI within 1 hour were randomized to a pharmaco-invasive (PI) strategy or standard primary PCI according to local practice. The PI approach consisted of bolus tenecteplase (TNK), clopidogrel and enoxaparin with dose adjustments in the elderly. The primary combined endpoint of death, shock, congestive heart failure and reinfarction at 30 days was nominally lower in PI patients (12.4% vs 14.3%, p=0.21). The incidence of congestive heart failure (6.1% vs 7.6%, p=0.18) and shock (4.4% vs 5.9%, p=0.13) were also lower and more aborted infarction (11.1% vs 6.9%, p<0.01) were observed in PI patients, suggesting more salvage of ischemic myocardium due to earlier reperfusion (the median times between symptom onset and bolus tenecteplase or start of PCI procedure were 100 and 178 min, respectively; p<0.001). PI patients were also more likely to undergo CABG than patients allocated to primary PCI (4.7% vs 2.1%, p=0.002) potentially due to avoidance of urgent PCI in about one third of PI patients, whereas because of successful reperfusion, coronary angiography could be performed non-urgently in the remainder. As prespecified by protocol, one year mortality data were acquired in all patients surviving the first 30 days. The last patient was randomized on July 26, 2012; the database was locked on September 30, 2013 and survival plus rehospitalization data are available on 1877 patients (< 0.8% lost to follow-up).

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