# #7508
# Catheterization laboratory or cardiology intensive care unit : destination of ST-elevation myocardial infarction

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**Background and objective:** The European Society of Cardiology recommends primary percutaneous intervention (pPCI) for ST-elevation myocardial infarction (STEMI) <2h when the delay between the first medical contact (FMC) and the balloon inflation is expected to be <90 min with a target of 60 min. The choice to send MICU towards a cardiology intensive care unit (CICU) or a catheterization laboratory (cath-lab) depends on the medical assessment, the regulator doctor and the decision of the cardiologist. Aim : Knowing the distribution of patients, management delays and mortality.

**Methods:** Data derived from a prospective register including STEMI having primary percutaneous coronary intervention (PCI), managed by 6 medical care intensive units (MCIU), from 2003 to 2014. Variables collected : chest pain onset schedule, emergency call schedule, first medical contact schedule, destination to CICU or cath-lab and mortality.

**Results:** *1066 STEMI* were included: 88.7% (n=946) in cath-lab and 11.3% (n=120) in CICU. Chest pain – emergency call delay influences the patient's destination 55 minutes (min) [20 ; 144] for cath-lab versus 90 min [25 ; 332] for CICU (p<0,05). MICU – hospital door delay is faster for the cath-lab group : 50 min [43 ; 60] versus 55 min [47 ; 67] (p<0,05). Mortality is 3 times higher for the CICU group  : 5.9% versus 1,9%(p<0,05).

**Discussion**: Chest pain – emergency call delay influences the patient's destination to cath-lab. The recommendations are not applied to some patients CICU group because they have delay compatible with cath-lab admission. Mortality is more important for CICU's patients. An epidemiological description of these patients would optimize medical care.

| | Cath-lab | CICU | p | |
|---|---|---|---|---|
| N | 946 (88,7%) | 120 (11,3%) | | |
| Median age [Q1;Q3] | 59 [50;69] | 63 [51;75] | 0,2948 | Khi2 |
| Median delay pain to call 15/112 | 55 [20;144] | 90 [25;332] | 0,0092 | |
| Median Delay call 15 to MCIU first contact | 19 [13;29] | 20 [15;31] | 0,2160 | Wilcoxon |
| Median delay MCIU first contact to hospital arrival | 50 [43;60] | 55 [47;67] | 0,0016 | |
| Mortality | 1,9% | 5,9% | 0,0101 | Khi2 |

**Variables collected**