

**Comparison with a prospective registry of management delay for patients presenting an early 2 hours ST segment elevation myocardial infarction (STEMI) in city or suburb. Should you avoid the suburbs?**



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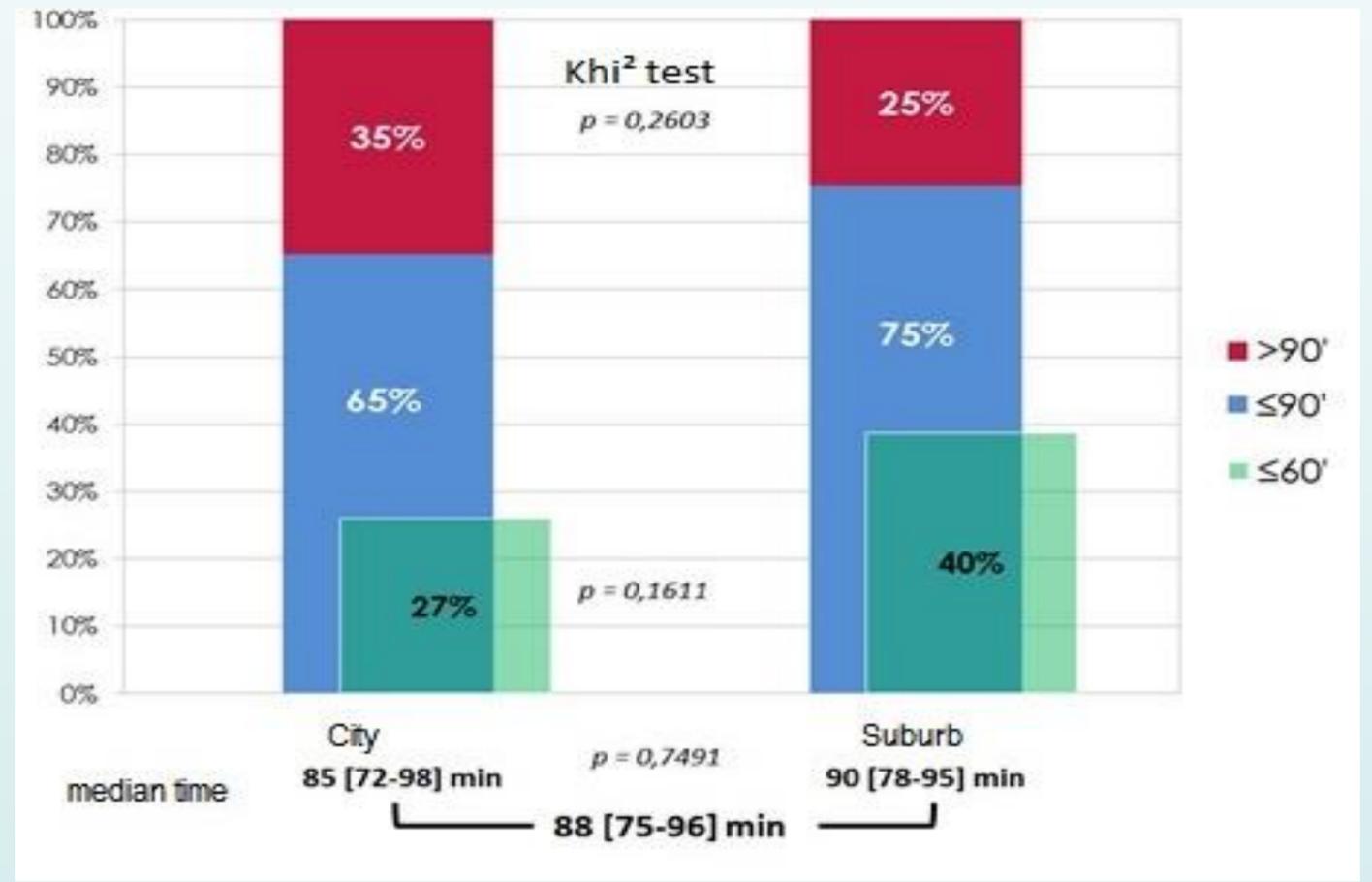
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**Introduction :** The European Society of Cardiology recommends primary percutaneous intervention (pPCI) for early presenters (<2 h) of ST-elevation myocardial infarction (STEMI) when the delay between the first medical contact (FMC) and the balloon inflation is expected to be <90 min with a target of 60 min. Our outcome was to compare the management delay for uncomplicated STEMI “early presenters”, by a mobile intensive care unit (MICU) in a city (C) or in a suburb (S) according to the recommendations.

**Materials and methods :** Data came from a prospective registry that includes all STEMI collected by one out-of-hospital emergency care services (6 MICU) in the greater Paris area. Early presenters (<2 h) of an uncomplicated STEMI with a reperfusion strategy were studied according to the place of management: city or suburb (C or S). The Khi2 test was used for testing the trends (statistical significance p< 0.05).

**Results :** Between 2012 and 2014, 289 early presenting STEMIs, uncomplicated and primary cared by MCIUs were included. Four (2,7%) had benefited from an out-of-hospital fibrinolysis, the other ones benefited from pPCI. The distribution of patients according to the ESC objectives is reported in the chart : 45% (n=130) in the city and 55% (n=155) in suburb, no significant difference was found between the two groups. Patients treated by primary pPCI out of delay represented more than one third (35%).

**Conclusion :** There is not any significant difference in FMC-pPCI times between subgroups. Even if MICU in suburb tends to be faster than in city, we cannot show a lack of chance for the city patients. For the third of patients, fibrinolytic therapy remains a choice that should be considered.



**Figure 1 :Distribution of patients according to the objectives of the European Society of Cardiology and the median time to support the city and suburbs of STEMI**