

ATPCI: Mission Impossible

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We read with great interest the results of ATPCI, a randomized, double-blind placebo-controlled clinical trial about the efficacy and safety of trimetazidine after coronary intervention. [1]

The trial published by Ferrari *et al.* indicated that trimetazidine had a neutral effect compared to placebo. This result is somewhat contradictory to what was observed in a prior study of Xu *et al.*. The latter was a prospective study with two years of follow up, which found that trimetazidine significantly reduces recurring angina after DES implantation in elderly diabetic patients. [2]

The differing characteristics of the patient populations enrolled in the two studies may explain this apparent contradiction. ATPCI was a study of young patients with good left ventricular function who were on optimal medical therapy and in whom successful revascularization was achieved. Of note, more than half of the patients enrolled in this study had single vessel disease and the enrolment criteria did not include diabetes.

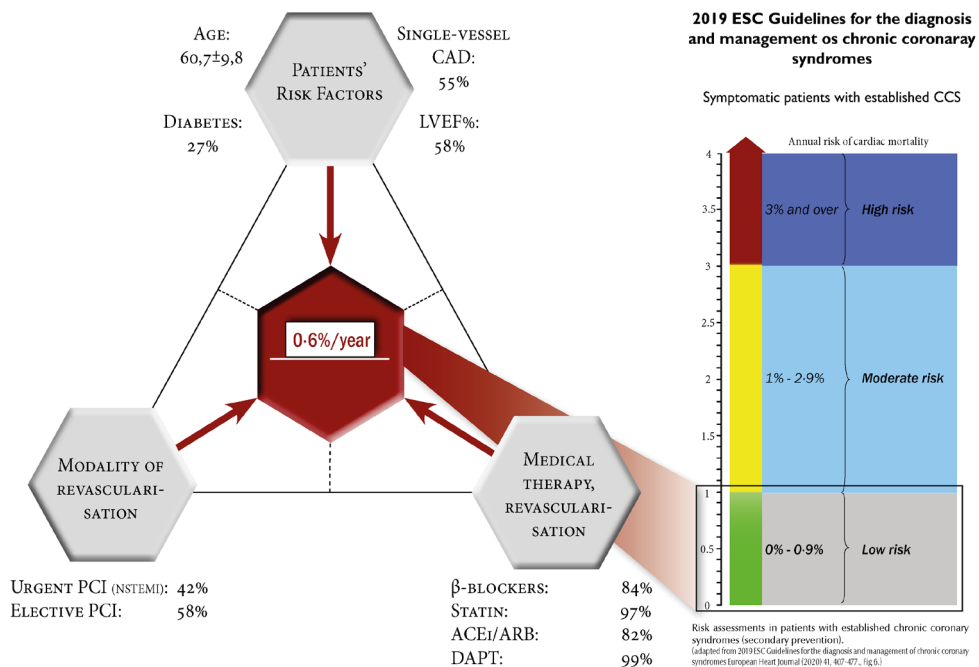


Figure 1: ATPCI study patient characteristics and consequences

Given the patient characteristics, the low average annual cardiac mortality of 0.6% was not surprising (Figure 1). However, an added benefit cannot be expected of any medication in a low-risk population with such a low rate of cardiac death.

A similar problem was highlighted regarding the Reminder study, in which the efficacy of eplerenone was investigated after revascularisation in STEMI in patients with preserved left ventricular function and a very low CV mortality of 0.4% in the placebo arm. [3]

ATPCI simply confirms the previous observation that it is not just the presence of coronary artery disease and its type but also the patients' risk status that determines the outcome.

Risk status is determined by age, revascularization status, left ventricular systolic function and optimized medical therapy as indicated by the results of the TIGRIS registry [4] and the COURAGE risk prediction follow-up study.[5]

Competing interests: We declare no competing interests.

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