

# Optimal Medical Treatment vs. Timely Intervention Therapy for Stable Coronary Artery Disease

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**General concept:** The decision to revascularize a patient should be based on the presence of significant obstructive coronary artery stenosis, the amount of related ischemia and the expected benefit to prognosis and/or symptoms. For a given patient in a given hospital, clinical judgments with consensual rather than individual decision-making, with a **Heart Team discussion**, should prevail, although this has to be individualized since, in many patients, the preferred approach is often quite clear-cut. When technically feasible, with an acceptable level of risk and a good life expectancy, revascularization is indicated in chronic angina refractory to OMT.

- **Revascularization in higher-risk populations**
- **Post-myocardial infarction:** Early PCI with a conservative ischemia guided strategy, have demonstrated favorable trends with early PCI and a significant reduction of death or MI in a meta-analysis.
- **Left ventricular dysfunction:** In general, revascularization improves survival in 'sicker' patients, especially in the presence of LV dysfunction.
- **Multivessel disease and/or large ischemic territory:** CABG vs. medical therapy suggested a survival advantage of surgery in patients with 3-vessel disease (or LM disease), but no difference in patients with 1- or 2-vessel disease, except in patients with involvement of the proximal LAD plus one other major CAD
- **Revascularization in lower-risk populations**
- The Clinical Outcomes Utilizing Revascularization and Aggressive Drug Evaluation (**COURAGE**) trial compared PCI + OMT with OMT only, in patients with SCAD or ischemia and coronary lesions suitable for PCI. The primary endpoint of all-cause death or non-fatal MI did not differ between the two groups during a mean follow-up of 4.6 years.
- The Clinical Outcomes Utilizing Revascularization and Aggressive Drug Evaluation (**BARI-2D**) trial evaluated whether PCI or CABG combined with OMT, would be better than OMT alone in patients with SCAD and type 2 DM. The primary endpoint of all-cause mortality at 5 years follow-up did not differ between the two treatment strategies.

**Conclusion:** Under good LV function, no comorbidities and excluding patients at high angiographic risk, patients with LM coronary disease, CABG, multivessel disease, there is no advantage of revascularization over OMT alone to reduce mortality in angiographically selected patients.

## Reference:

- 2013 ESC guidelines on the management of stable coronary artery disease. European Heart Journal Aug 30, 2013; doi:10.1093/eurheartj/eh296