Multivessel PCI in STEMI

Safety First, Leave it Alone for Staged PCI!

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DISCLOSURE

Relevant Financial Relationship(s)

None

Immediate vs. Staged Multivessel PCI in Patients with STEMI & MVD

 Let's accept that in PRAMI-like patients immediate complete revascularization is better than culprit lesion only PCI.

Is complete revascularization better done immediately or staged?

Immediate vs. Staged Multivessel PCI in Patients with STEMI

Immediate

- Convenient to patient
- Longer procedure time, and higher radiation dose, and contrast volume
- Potential for overtreatment (non ischemia producing stenoses)
- Cost?
- Safety and efficacy

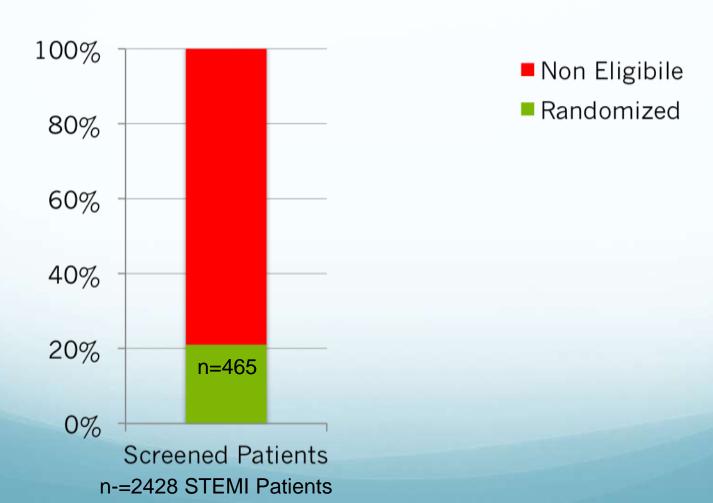
Staged

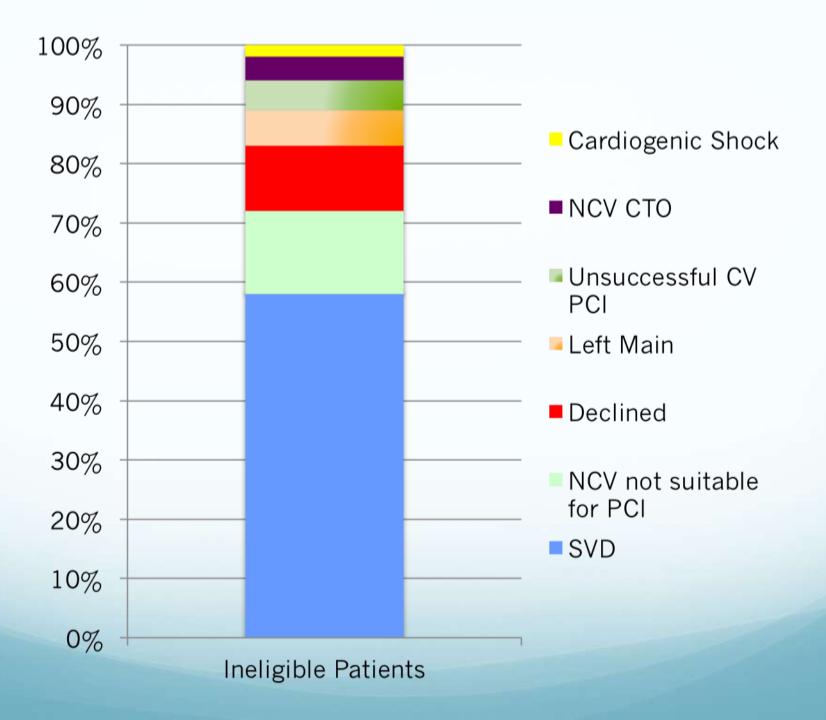
- Inconvenient to patient
- Shorter procedure time, and lower radiation dose and contrast volume
- Avoidance of overtreatment
- Cost?
- Safety and efficacy

The PRAMI Trial

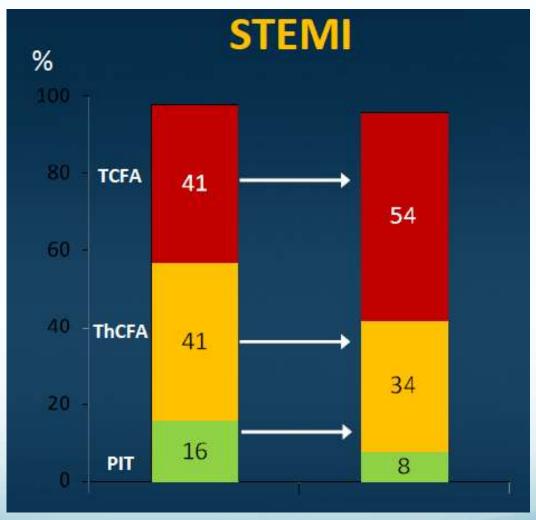
Patient Population

465 pts at 5 UK sites with MVD; after successful primary PCI randomized to NCL PCI of 50-99% stenoses vs. conservative care





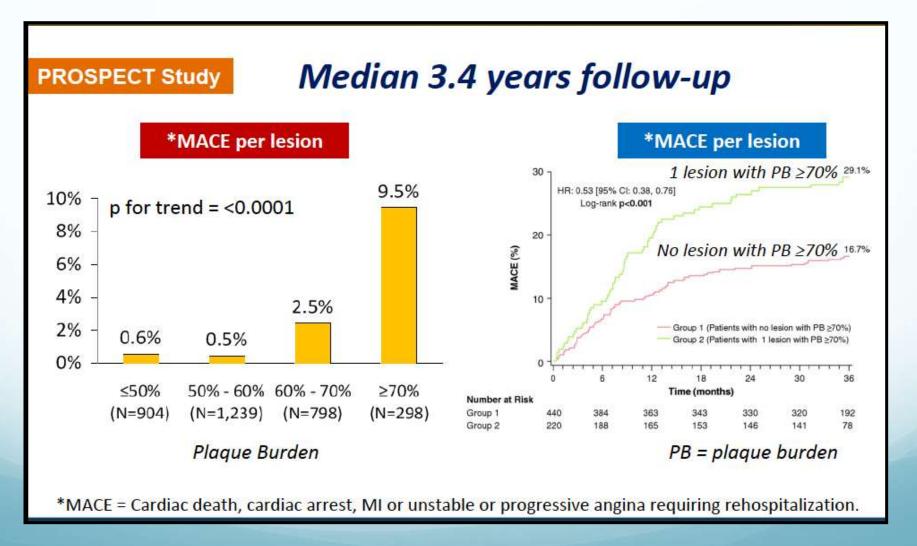
Natural History of Non Culprit Lesion Morphology in STEMI



Baseline Follow Up

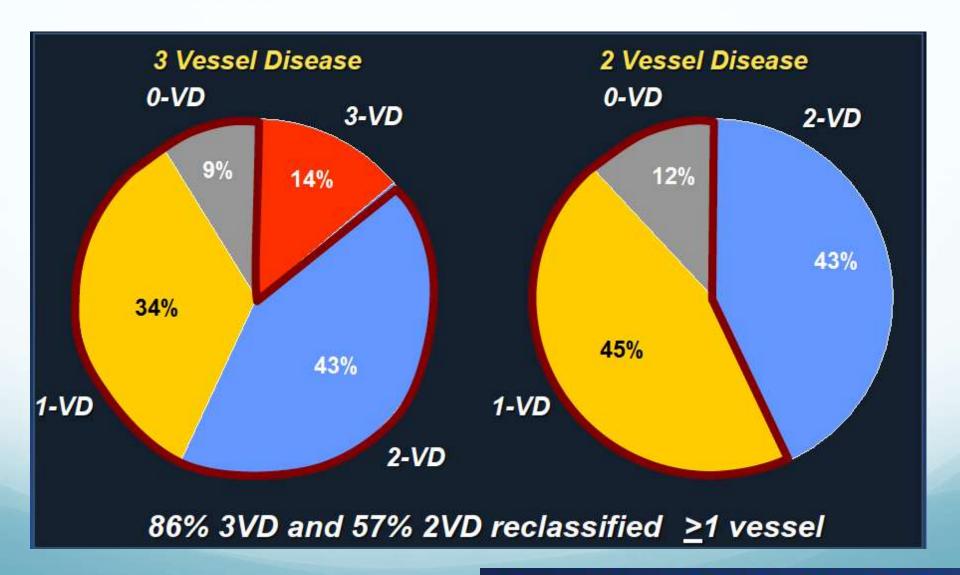
Zhao Z et al, HORIZON-AMI. J Am Coll Cardiol Img 2013;6:86-95

Impact of Lesion Severity on Long-Term Outcome in ACS



McPherson JA et al. J Am Coll Cardiol Img 2012;5:S76-85.

FAME: FFR & Defining MVD

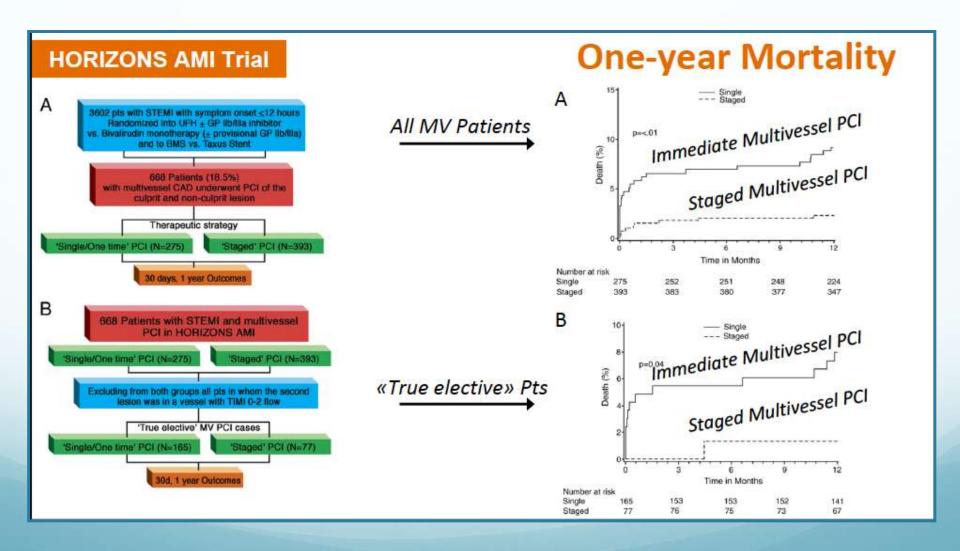


Immediate vs. Staged Multivessel PCI in Patients with STEMI



Vlaar PJ, et al. J Am Coll Cardiol 2011;58:692-703.

Immediate vs. Staged Multivessel PCI in Patients with STEMI



Kornowsky R et al. J Am Coll Cardiol. 2011;58:704-11.

Conclusions

- In patients with STEMI and MVD, the currently available evidence supports staged, not immediate, complete revascularization.
- Immediate complete revascularization should be considered in:
 - Patients with cardiogenic shock or severely reduced LVEF without shock
 - When the non culprit stenoses have high risk of causing an MI within 30 days!