Transmyocardial Revascularization as an adjunctive therapy in complex revascularization cases

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Adjunctive TMR in Complex Revascularization Cases

- **TMR + CABG versus CABG Alone (Inclusion Criteria)**
  - 219 patients revascularized by CABG Alone
  - 36 patients revascularized by TMR + CABG
  - Indications for surgery (both groups) were:
    - CCSAS III or IV angina
    - EF $\geq$ 30%
  - Indications for adjunctive TMR:
    - Arterial target not amenable to angioplasty or stenting
    - Arterial target not amenable to CABG (I.e., $\leq$ 1 mm diameter)
- **Exclusion Criteria**
  - Emergency procedure within 12 hours
  - Unstable angina
  - Acute MI within 72 hours

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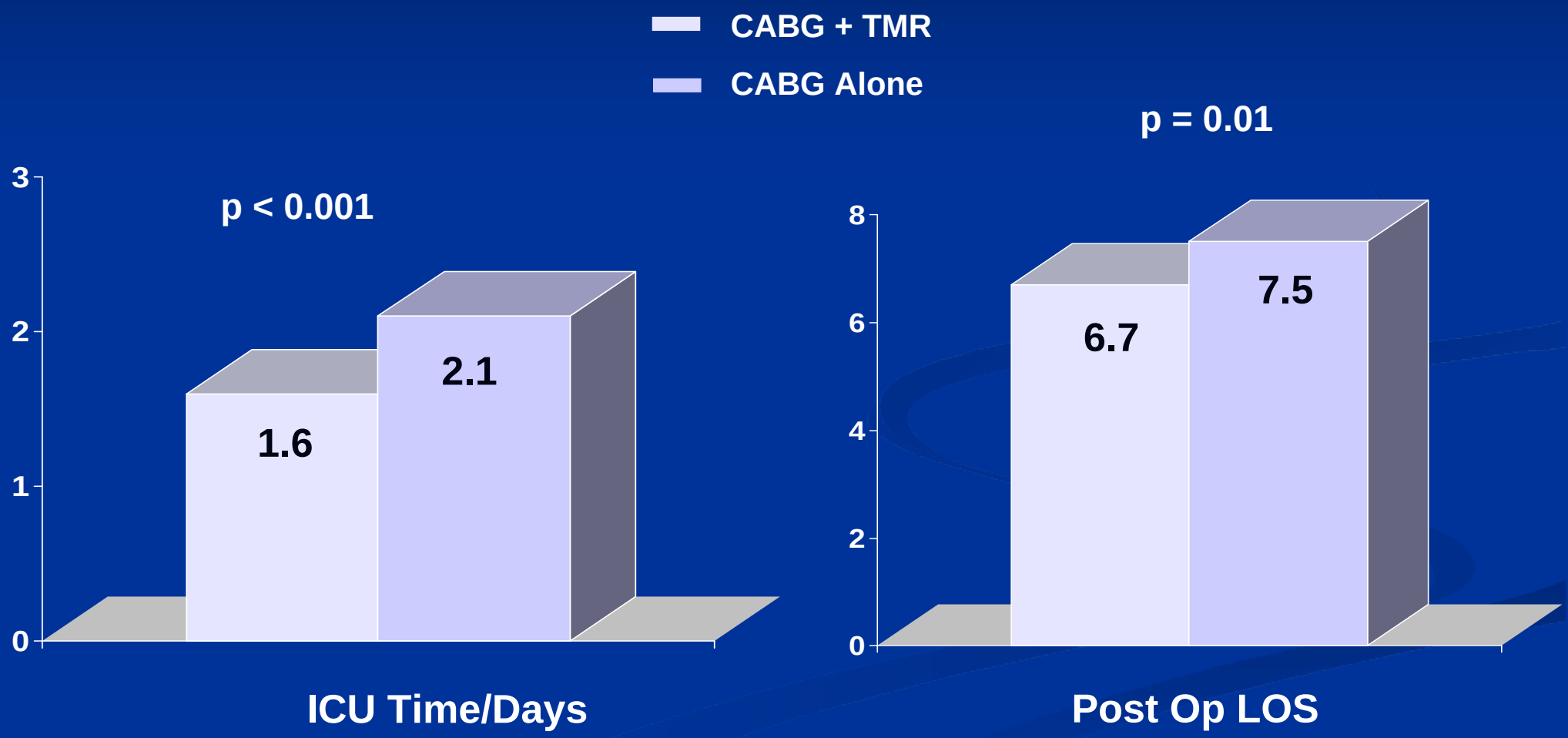
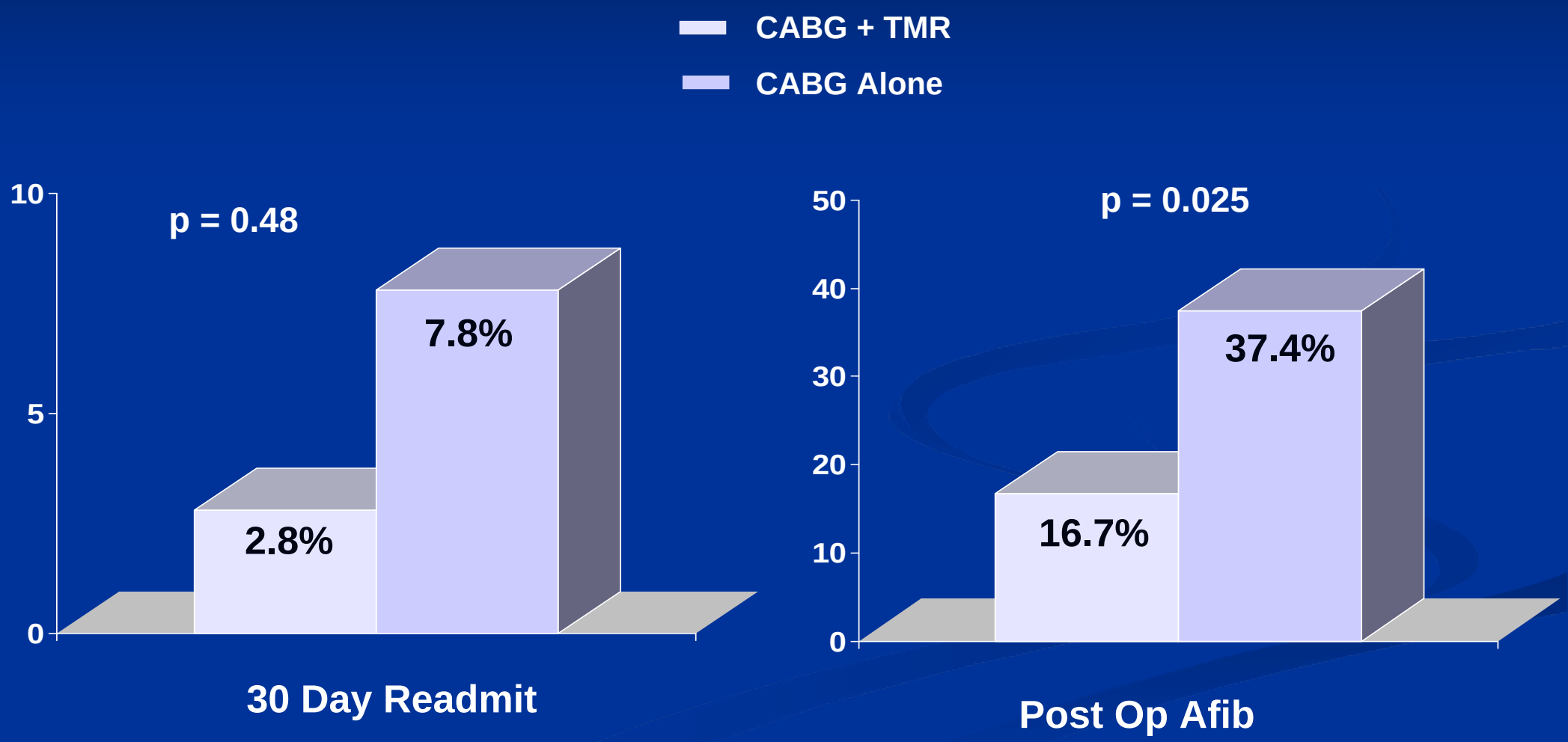
Study Results

- Baseline characteristics of two groups; ages and EF's were similar
- Procedural characteristics similar
  - 3.1 vs 2.9 mean grafts
  - 276 vs 272 minutes total procedural time
- 30 day outcomes compared

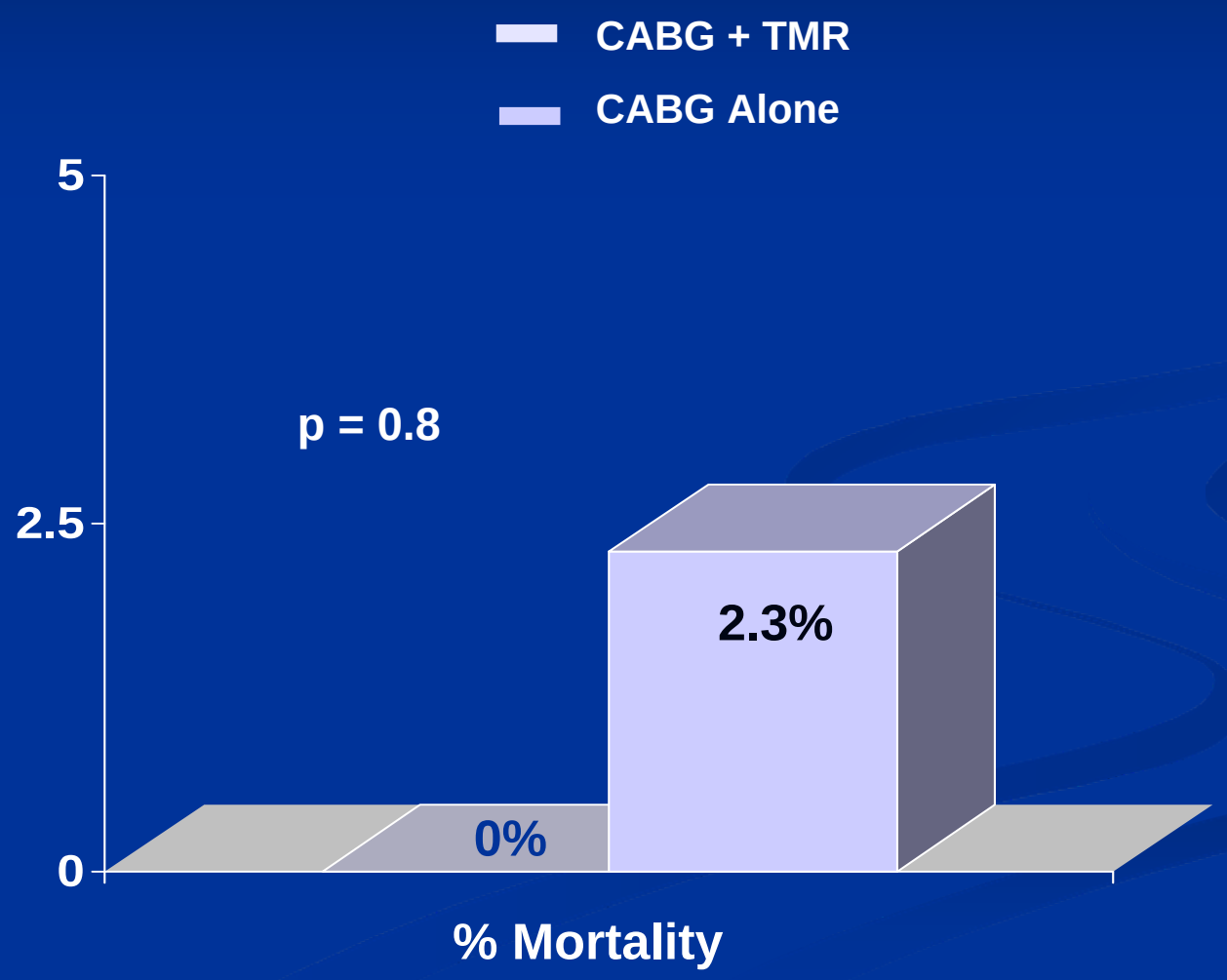
Perioperative Outcomes



Perioperative Outcomes



30 Day Mortality



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Conclusions

- CABG + TMR compared to CABG alone in these selected patients is associated with reduced ICU time, post op length of stay, and incidence in post op atrial fibrillation.

- CABG + TMR may also provide an advantage in operative survival and reduction in rehospitalizations, compared to CABG alone.

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