

Aortic Valve Replacement During Acute Type A Dissection Repair: Mechanical Versus Bioprosthetic

Background and Objectives

Acute Type A Dissection

- AVR is often required at the time of acute type A dissection repair
- Valve Choice in this setting is often debated and little data exists to guide surgeons

Objectives

- Identify factors associated with valve choice and mortality
- Describe early and late outcomes

Patients

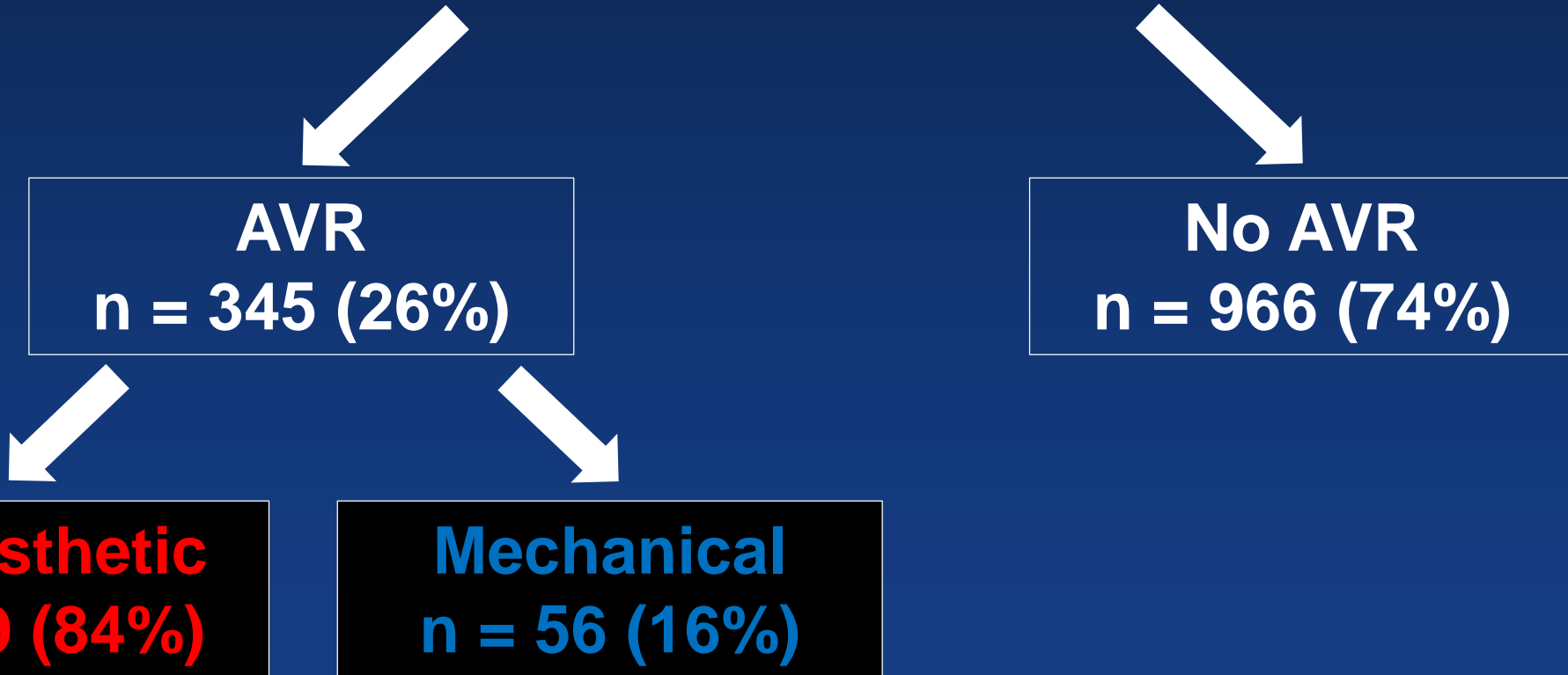
Acute Type A
Dissection Repair
2000 to 2020
n = 1,311

AVR
n = 345 (26%)

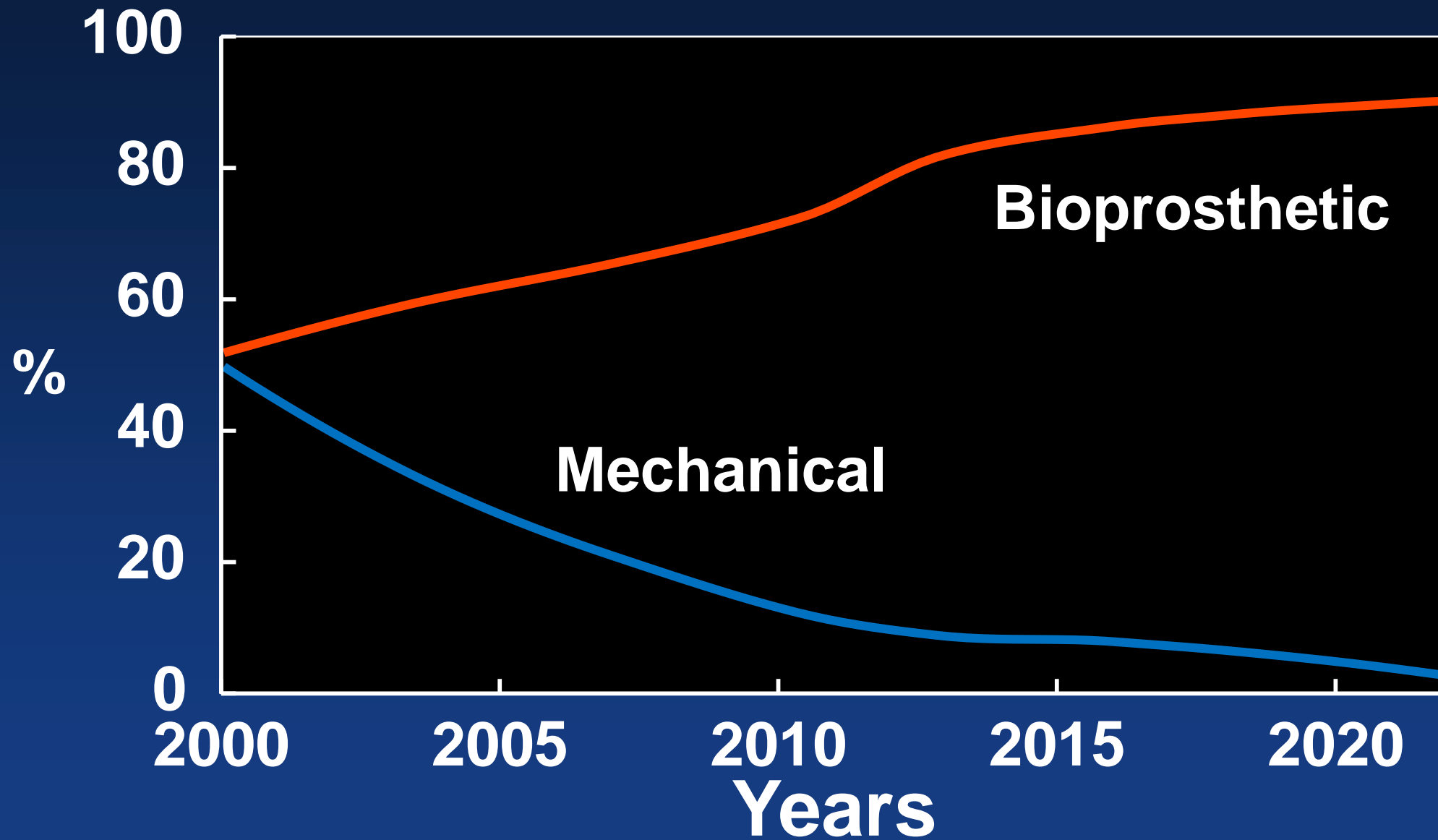
No AVR
n = 966 (74%)

Bioprosthetic
n = 289 (84%)

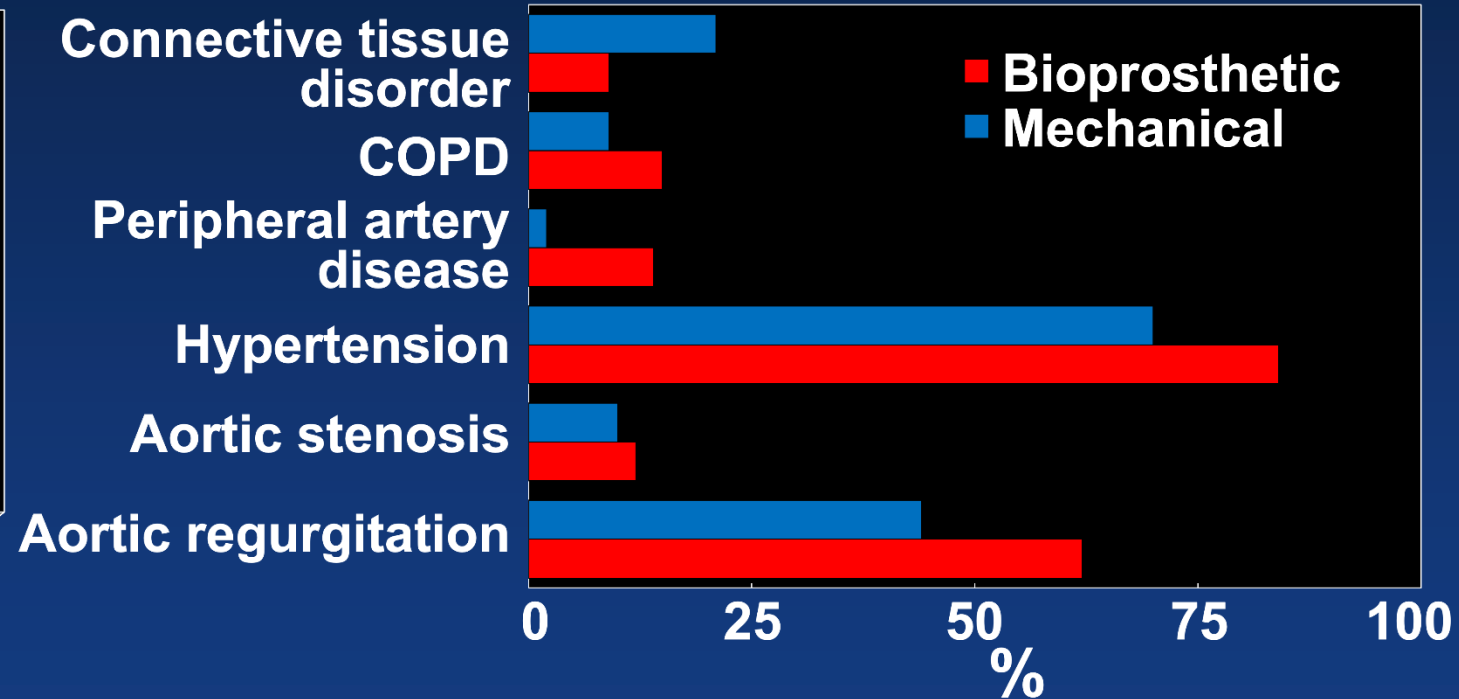
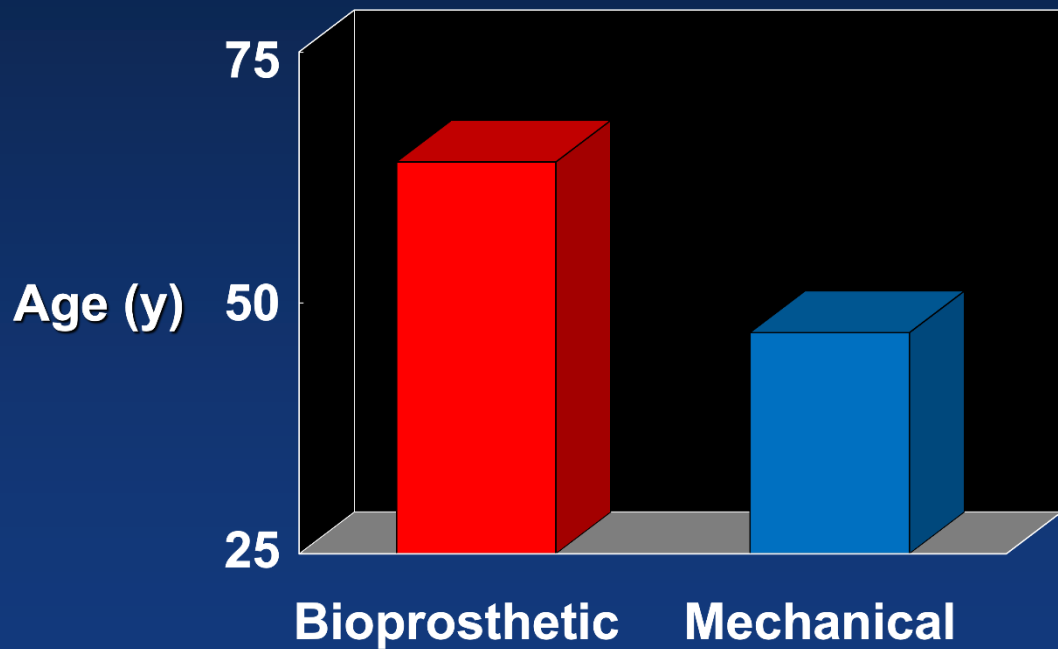
Mechanical
n = 56 (16%)



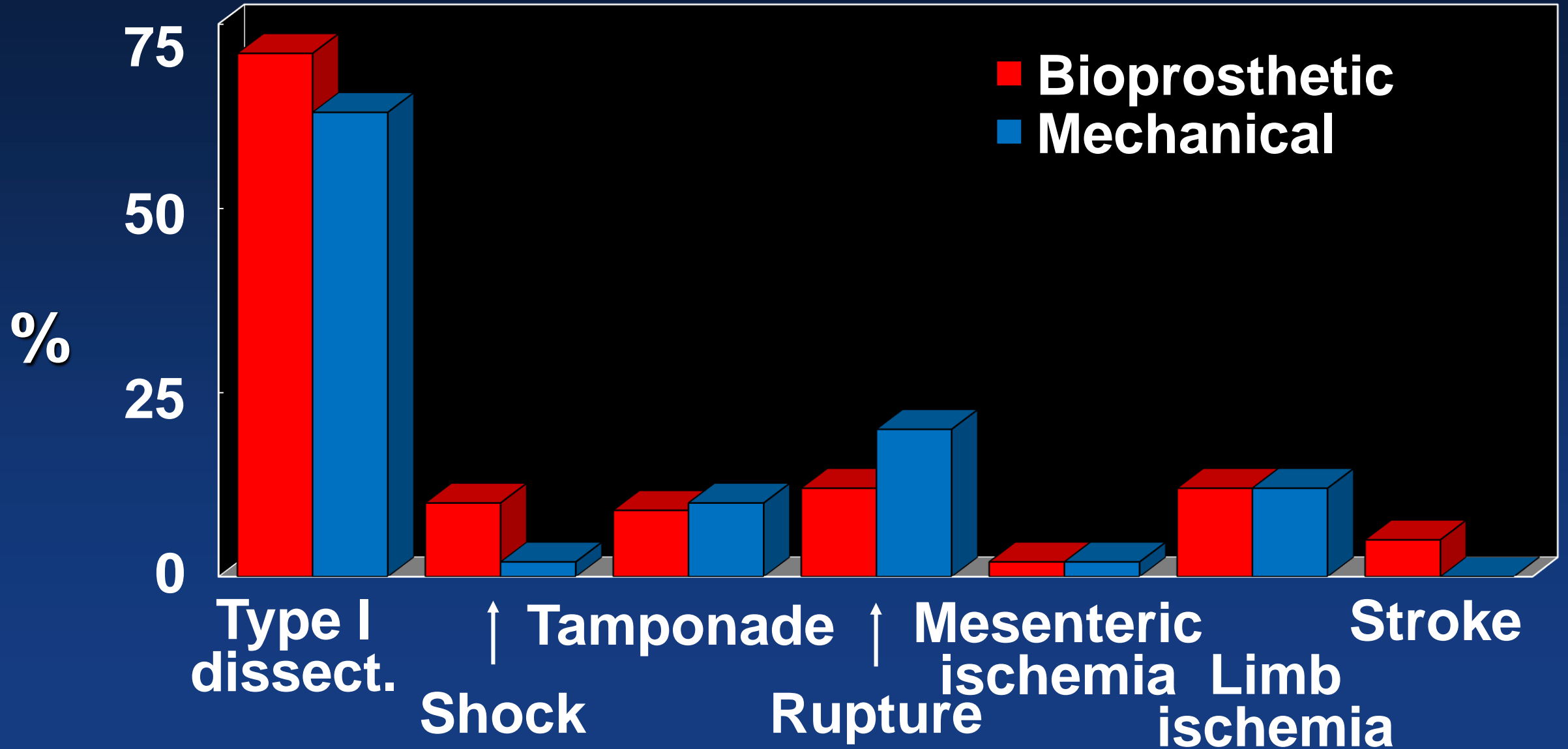
Trend



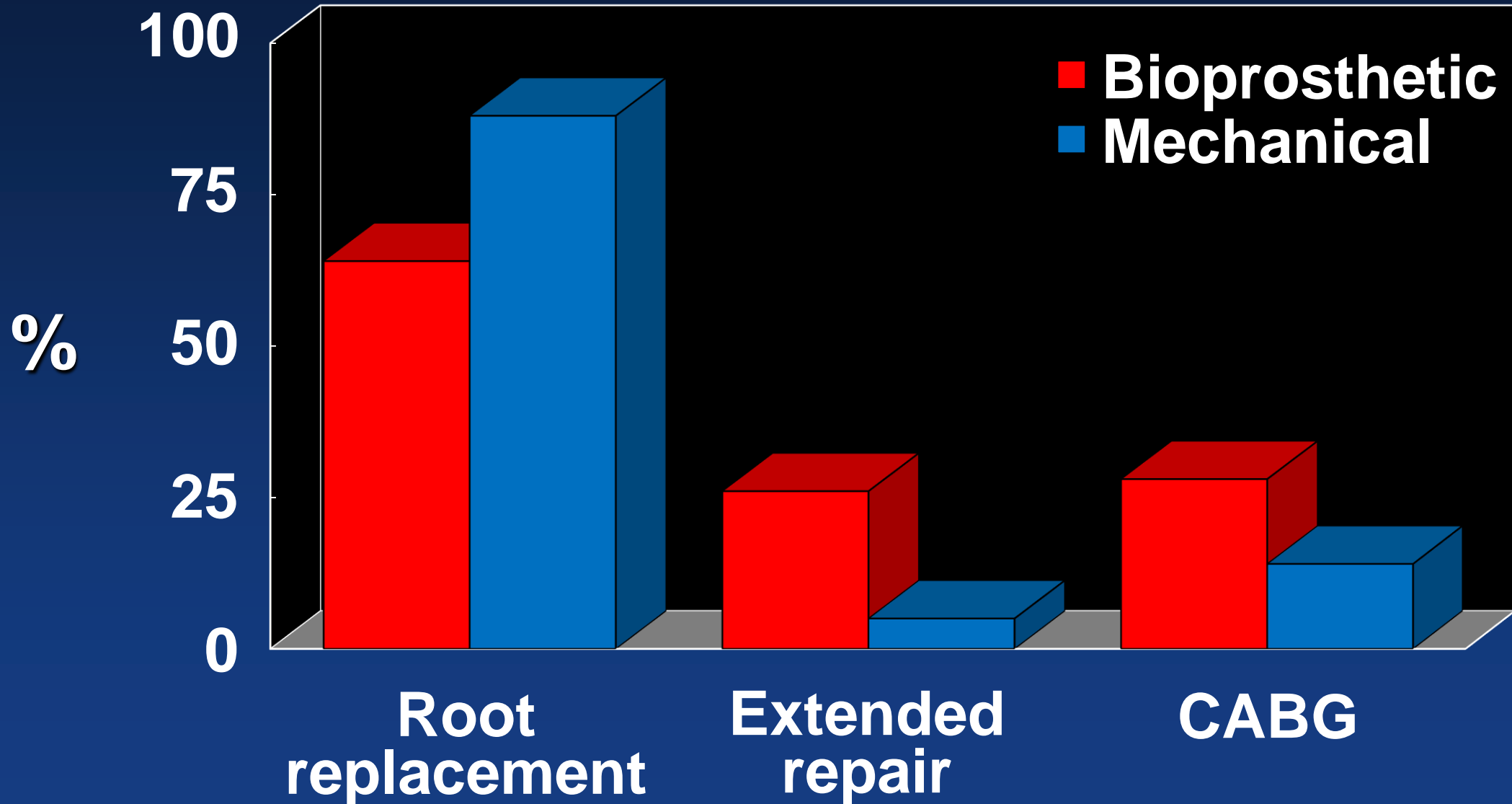
Patient Characteristics



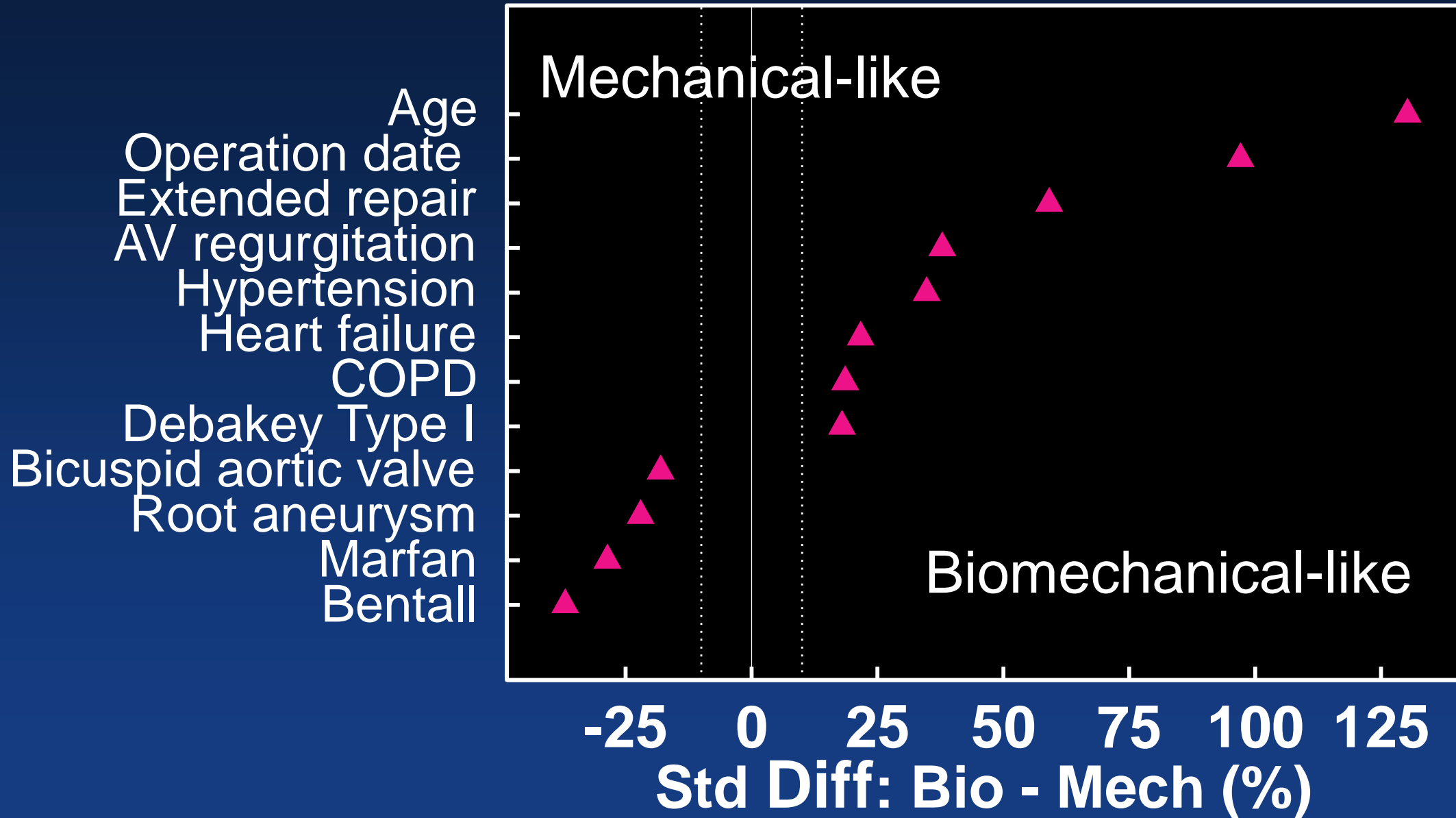
Presenting Characteristics



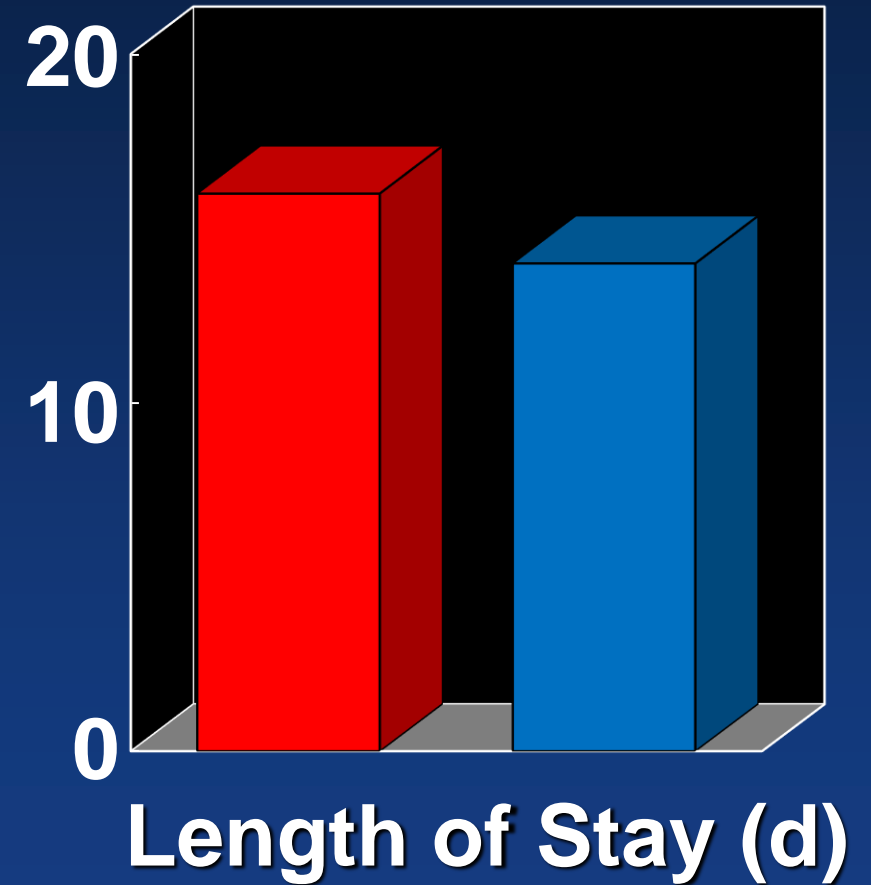
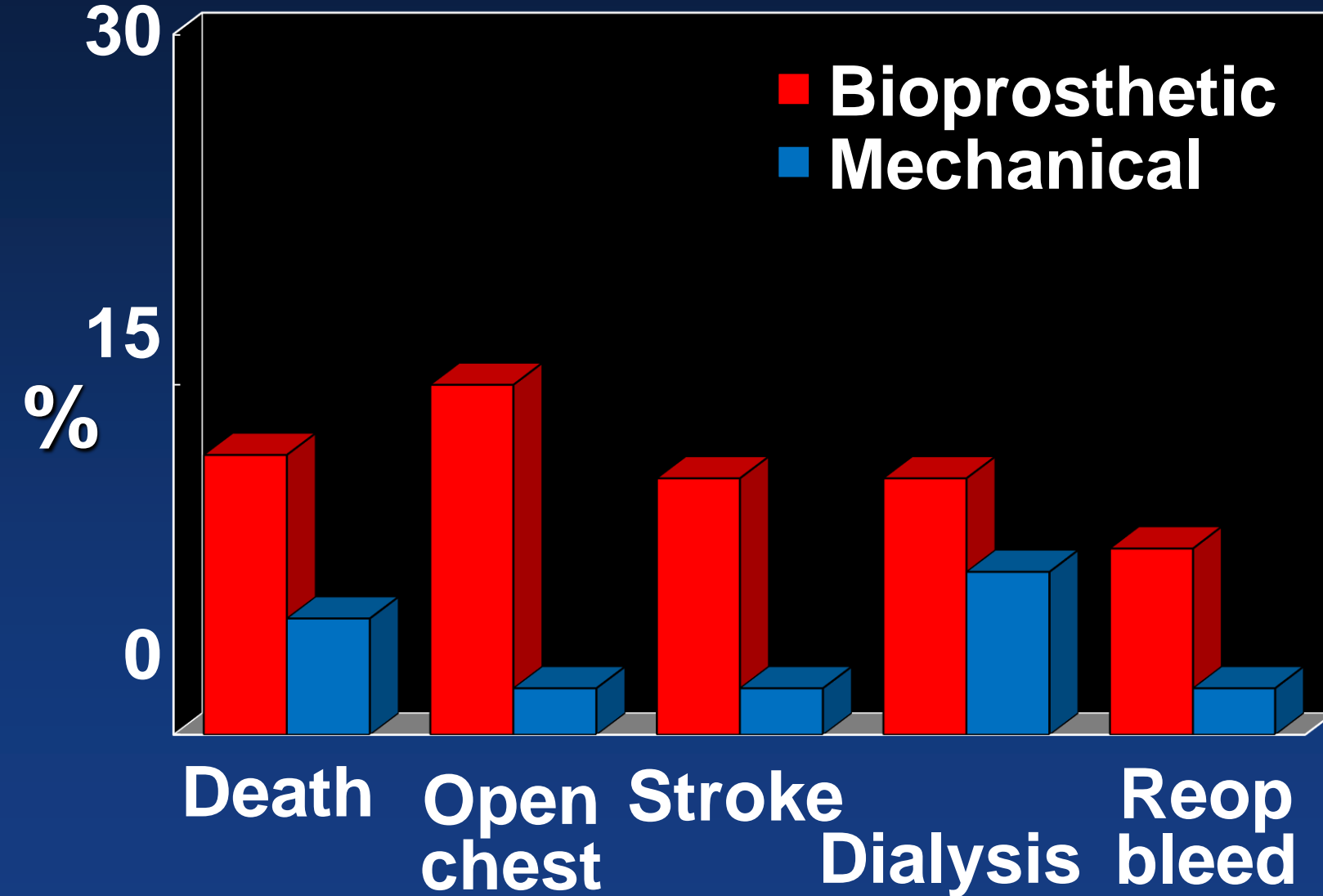
Intraoperative Details



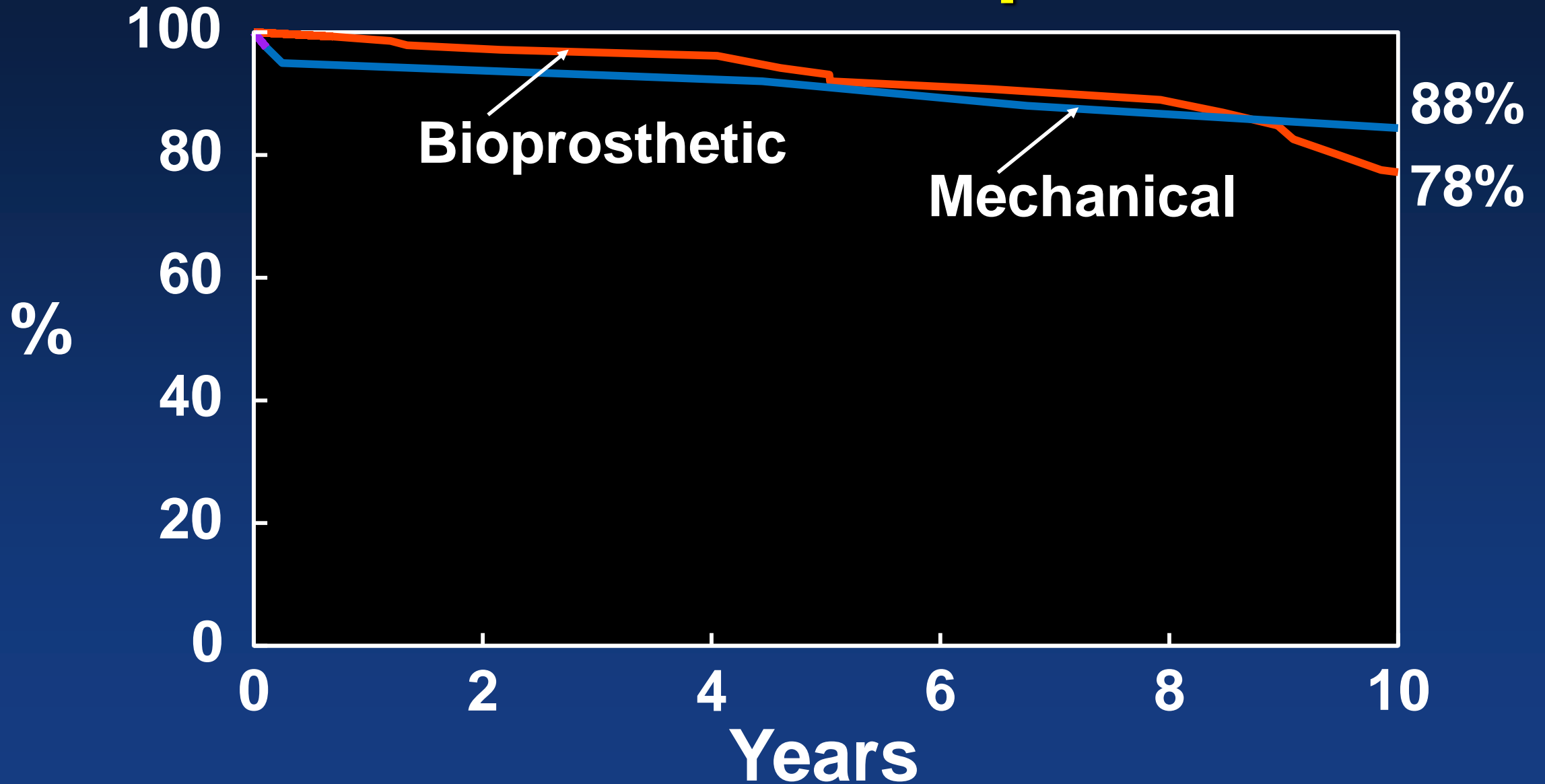
Standard Differences



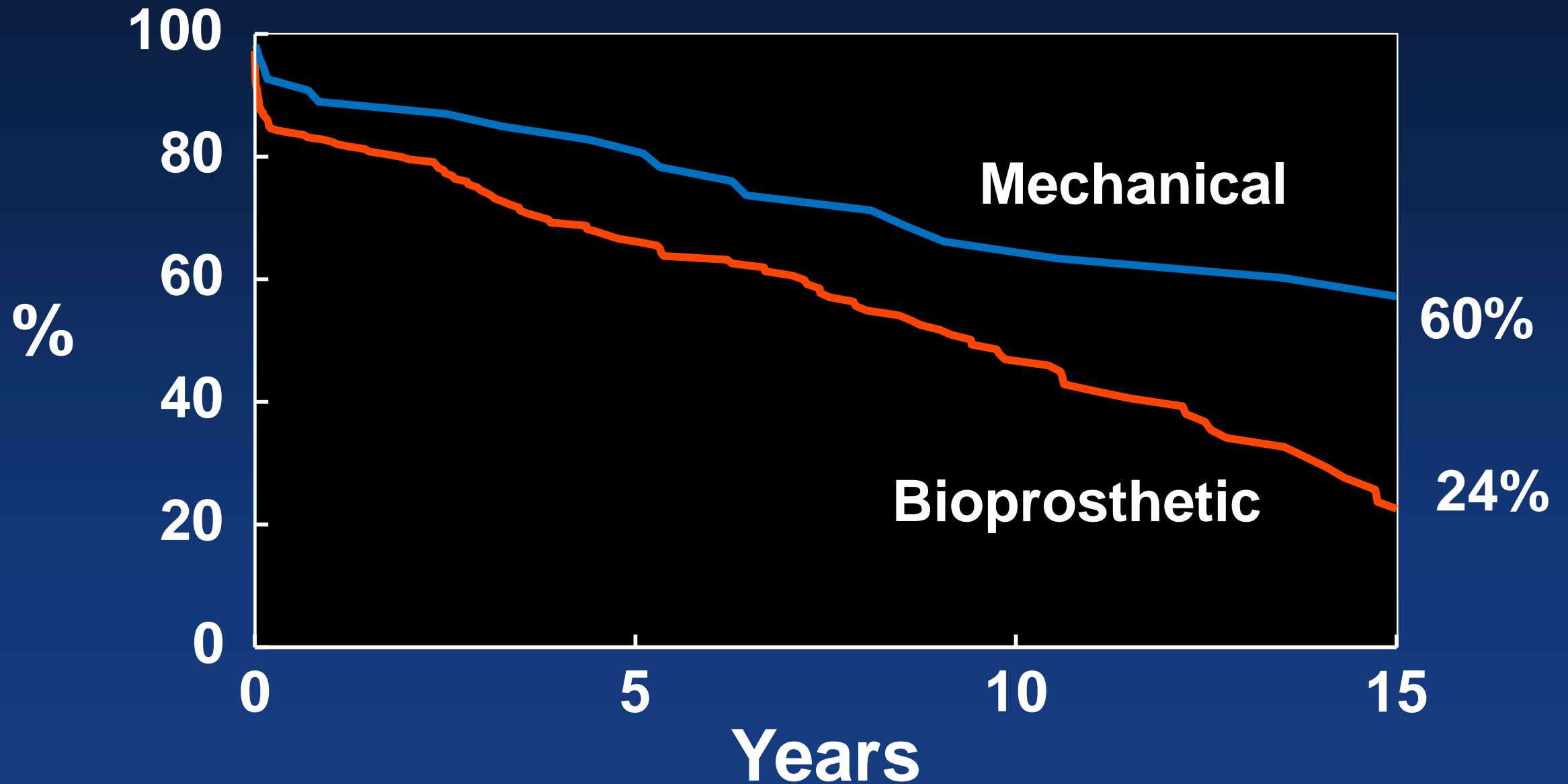
In-Hospital Outcomes



Aortic Valve Reoperation



Survival



Conclusions

Survival: influenced by age preoperative complications, and preexisting comorbidities

Factors guiding valve selection are distinct

- **Mechanical:** younger patients, genetic aortopathies
- **Bioprosthetic:** older patients with comorbidities and more extensive aortic disease requiring complicated aortic arch reconstruction

Valve choice: should be made preoperatively when feasible without concern for valve-associated mortality