

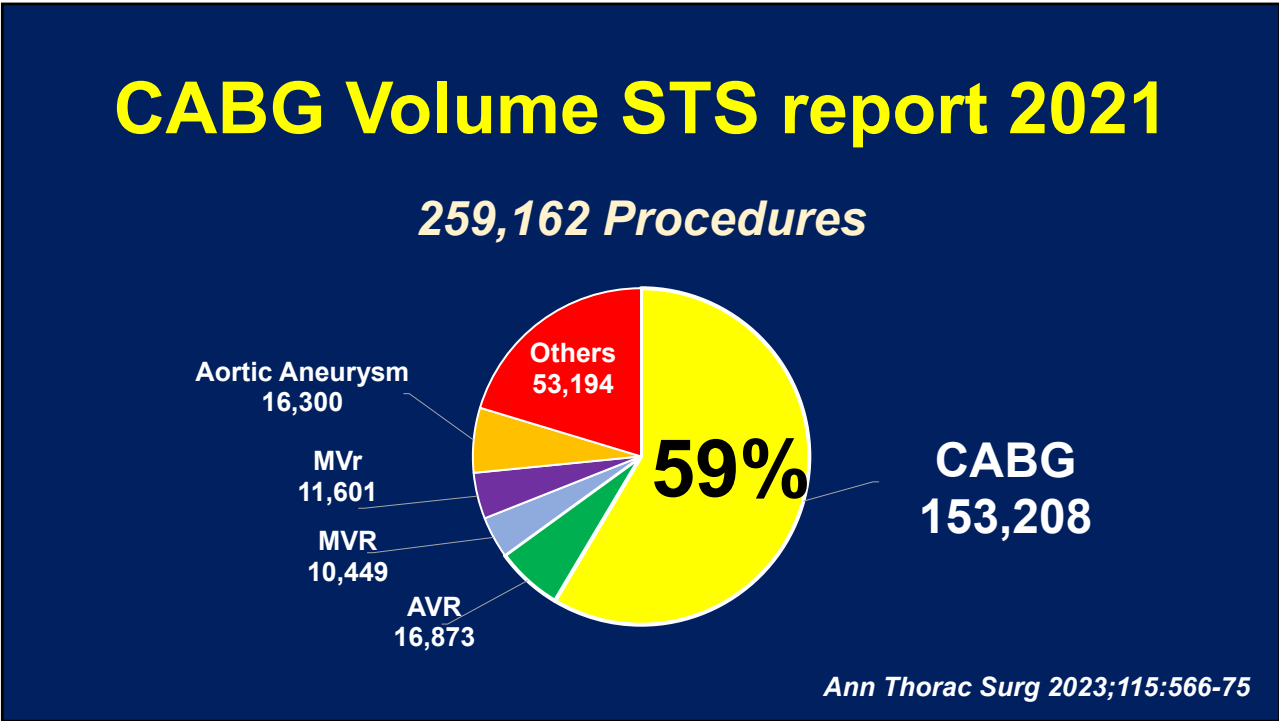


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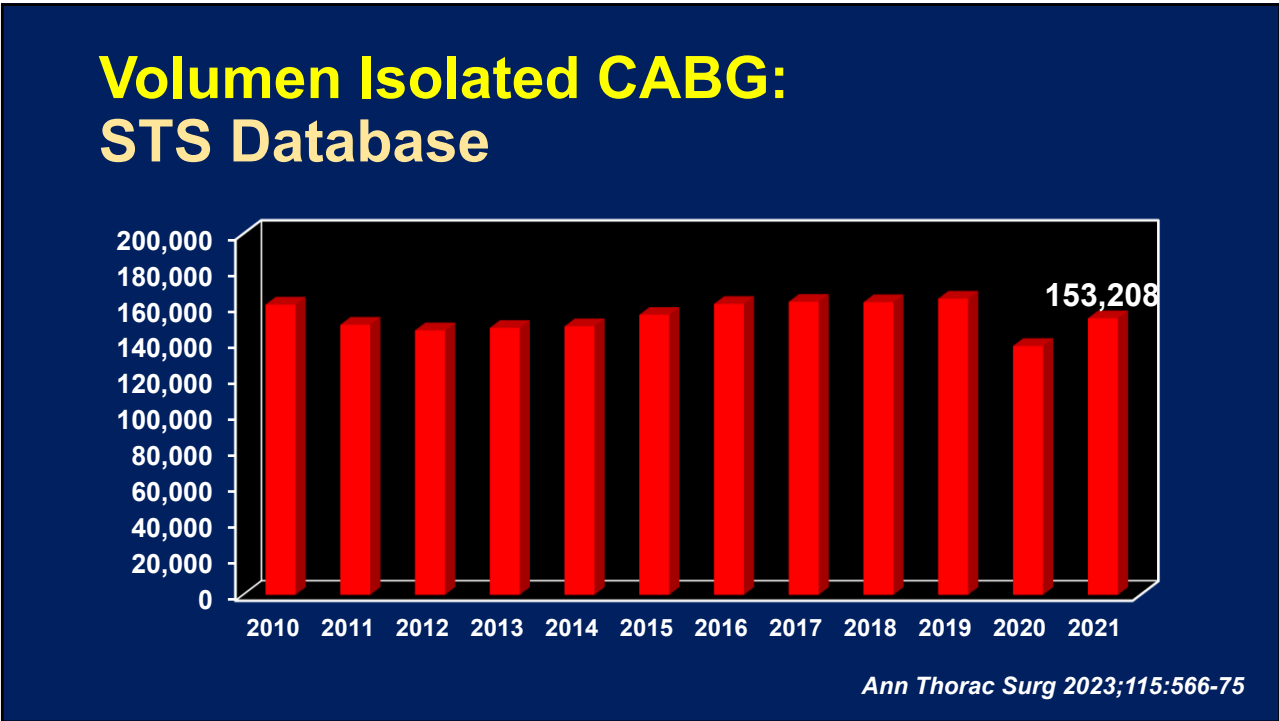
**How does
Coronary Artery Bypass
Grafting
work?**

Gabriel Olivares, MD
Cardiac Surgeon, MHI

2



3



4

31,000+ CABG
patients randomized
versus
*medical treatment, PCI or different
surgical techniques*

5



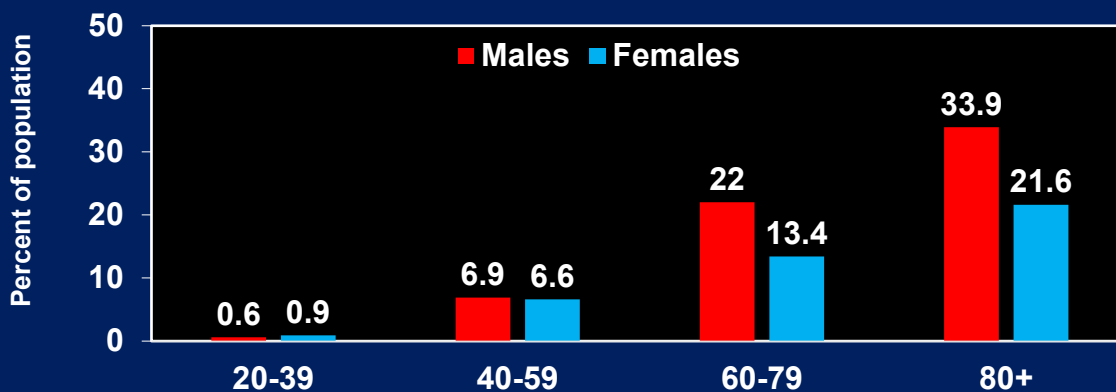
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Natural History Coronary Artery Disease

7

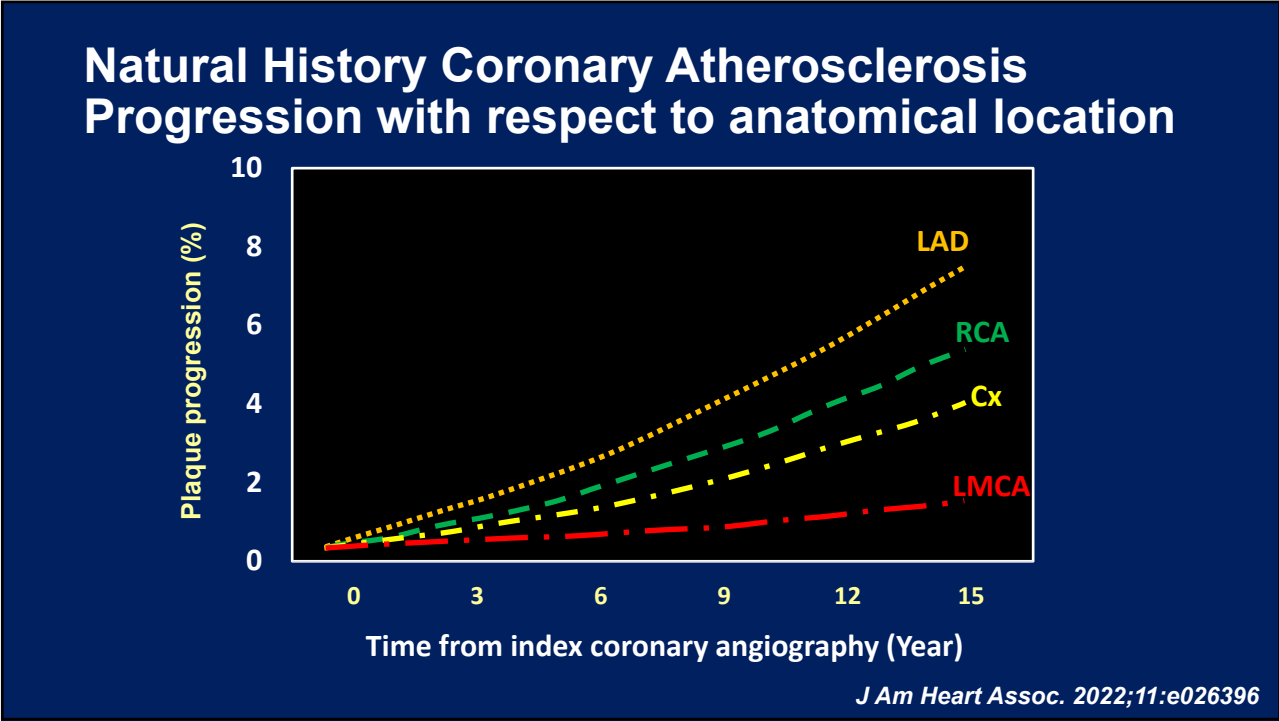
Coronary Heart Disease in US

Prevalence of CHD by Age and Sex

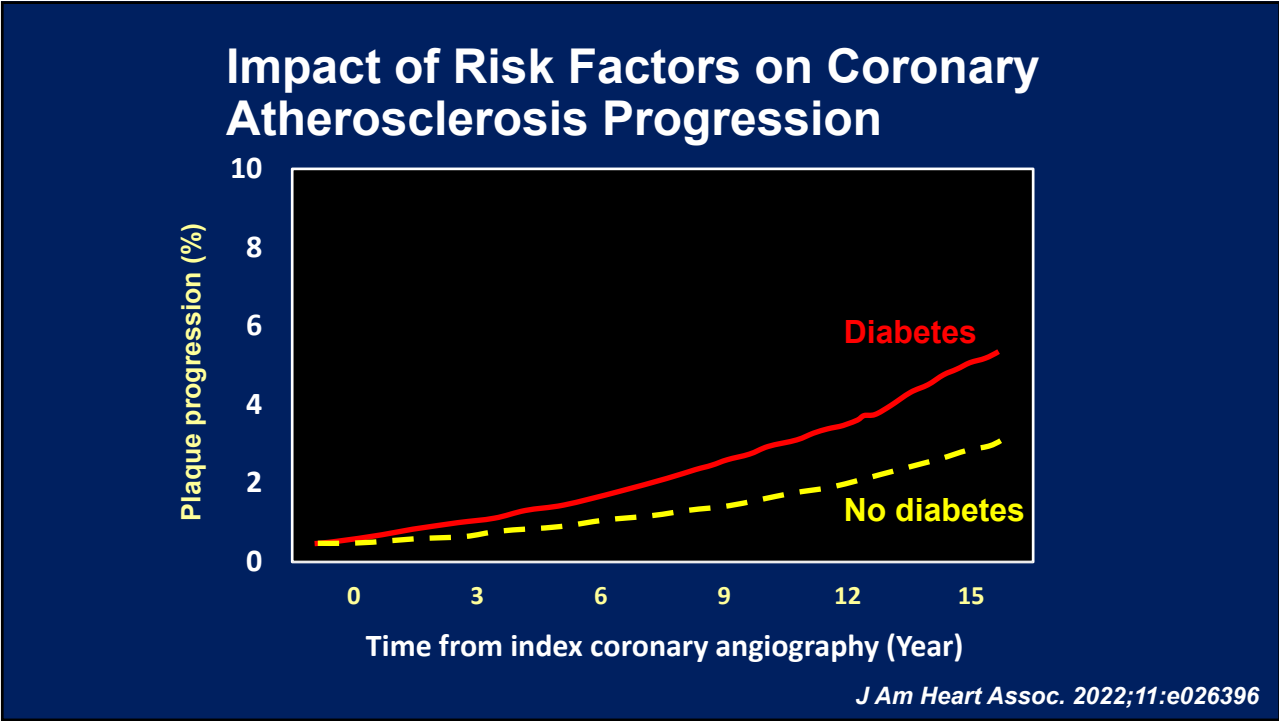


Circulation. 2023;148:e9–e119

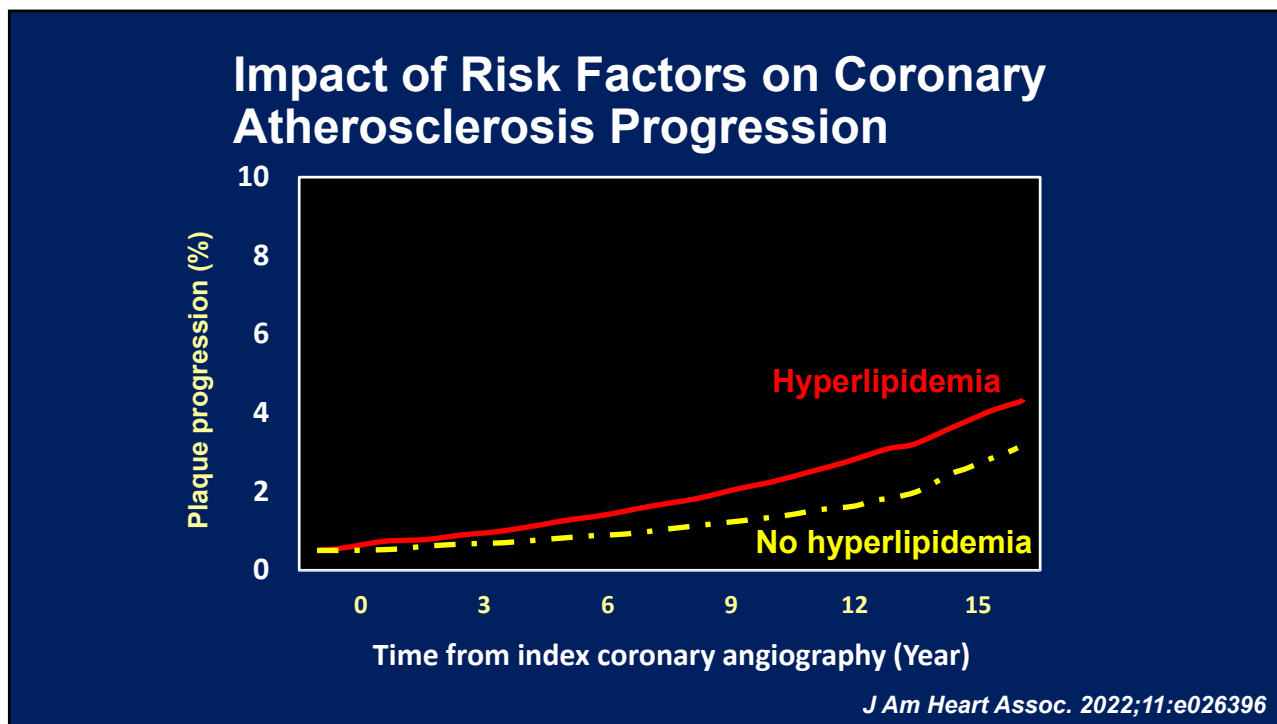
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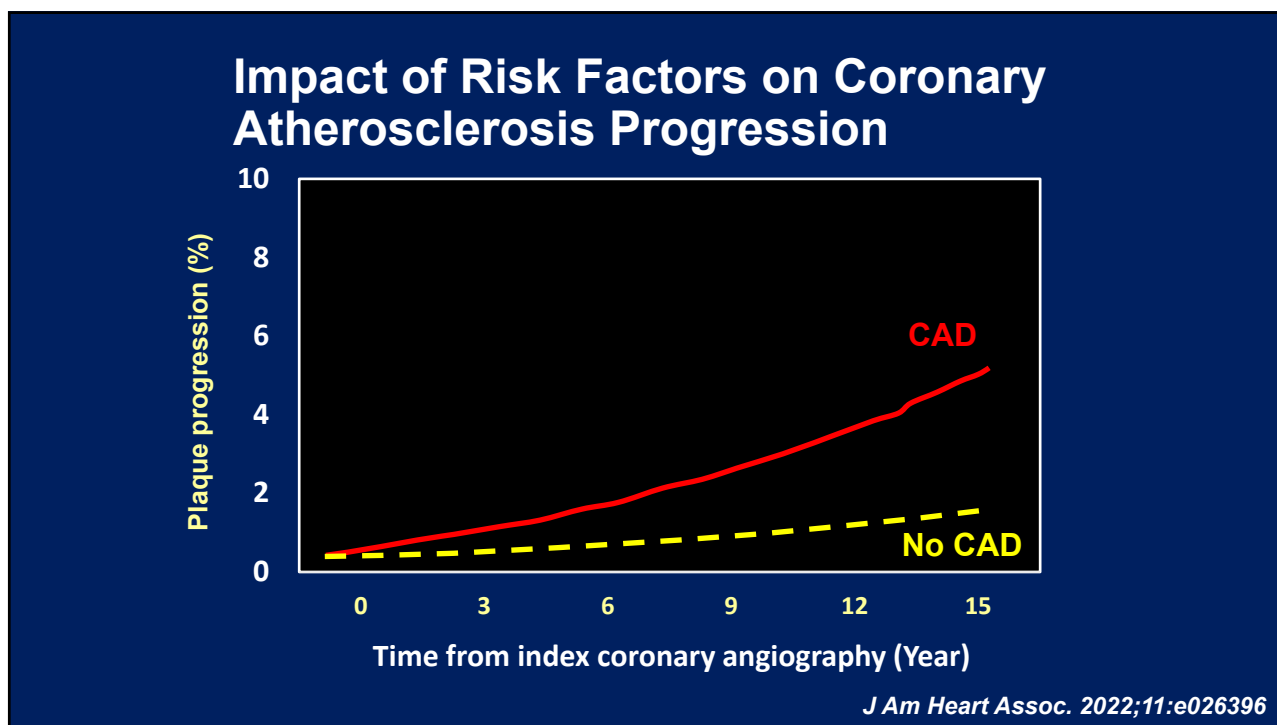
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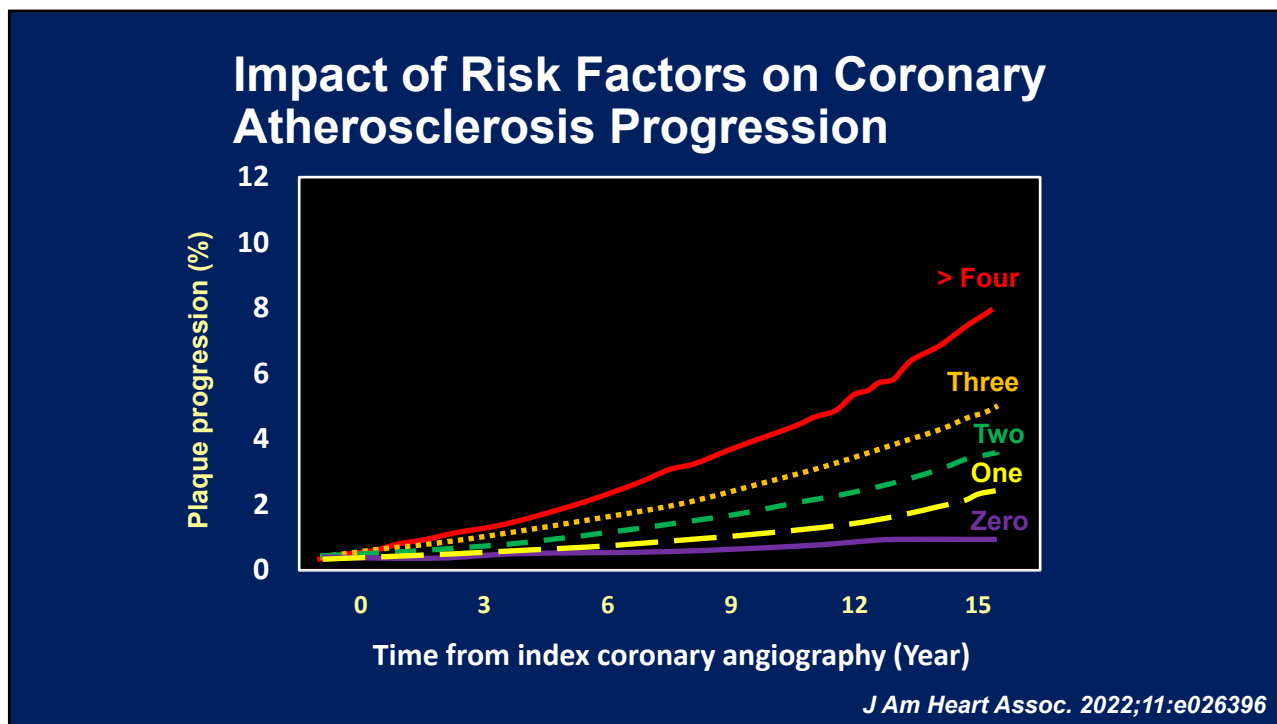
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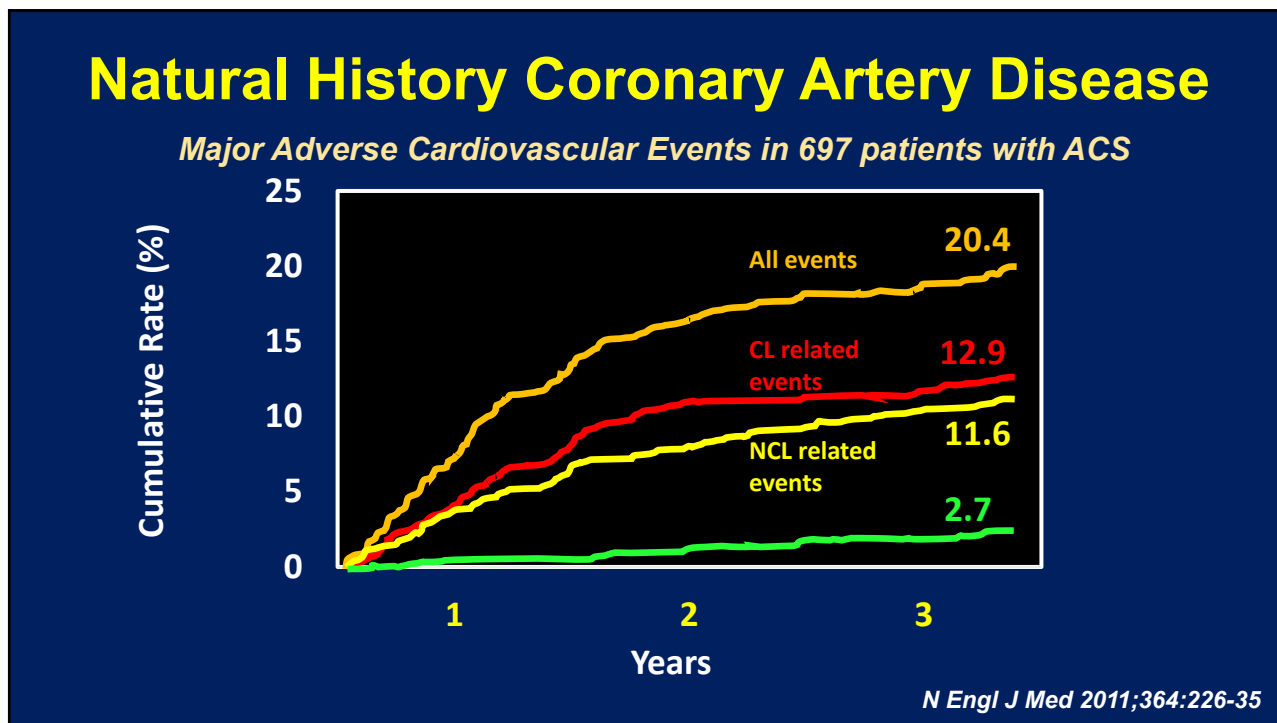
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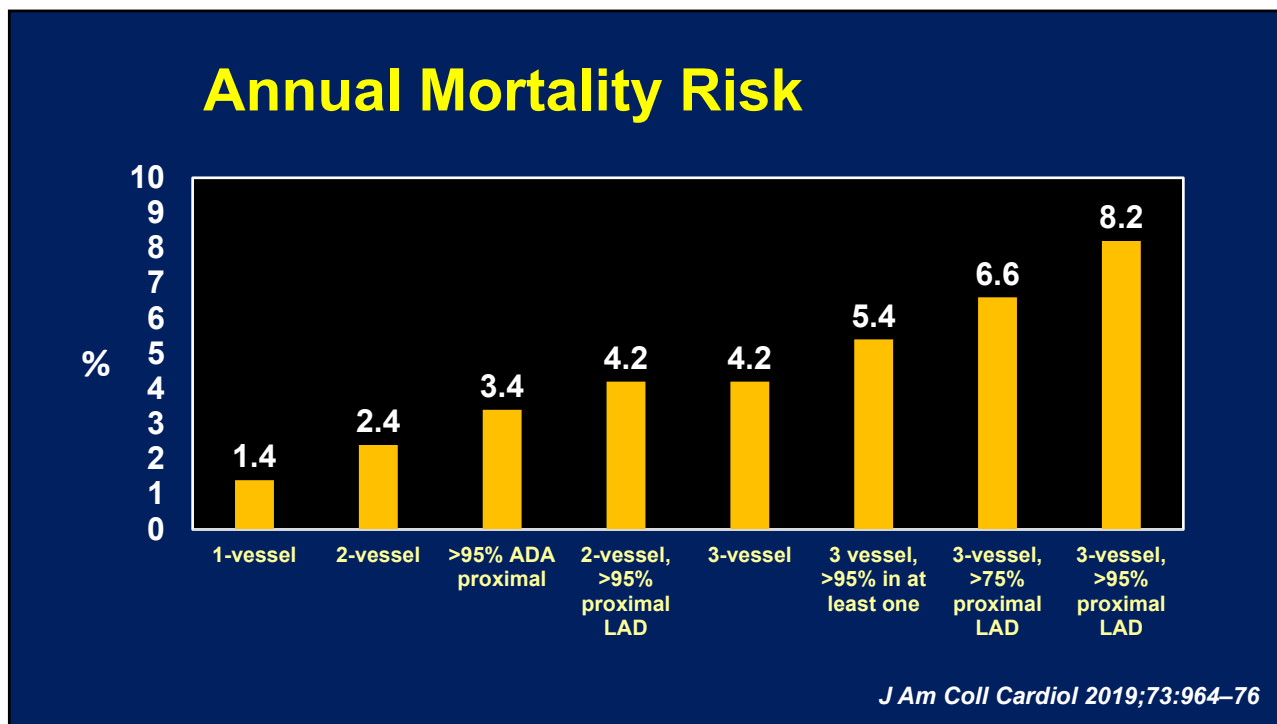
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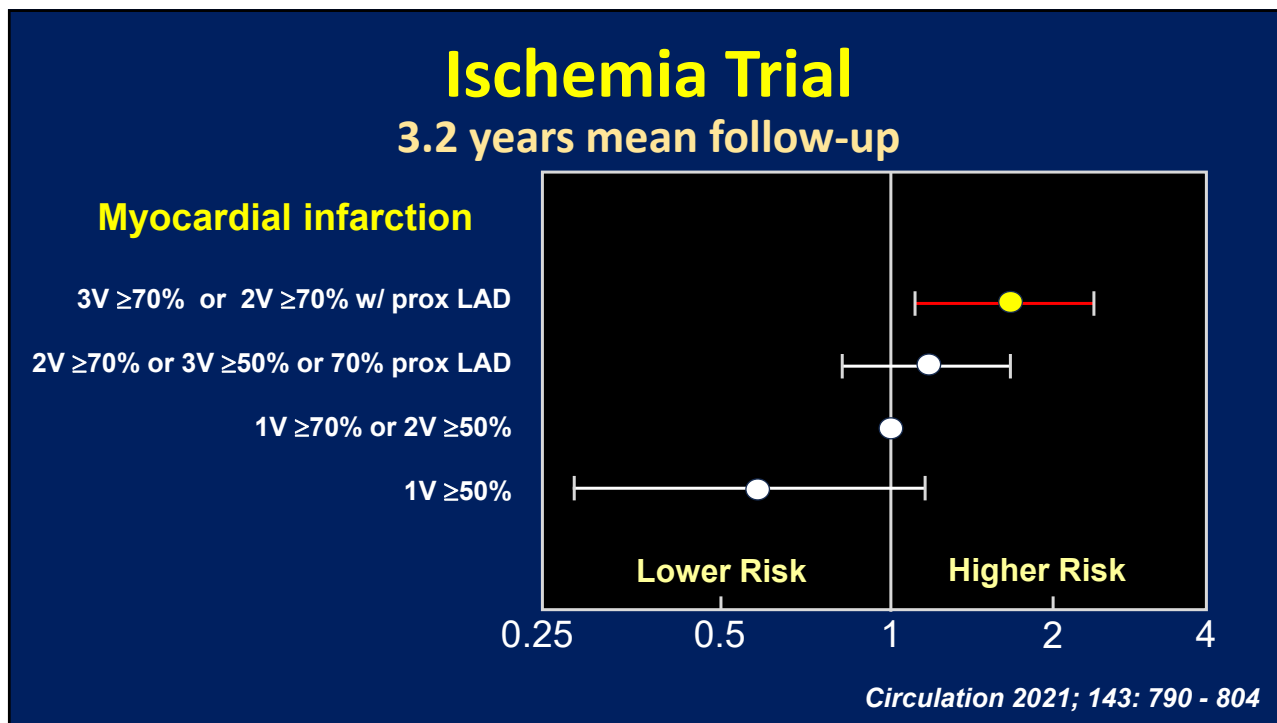
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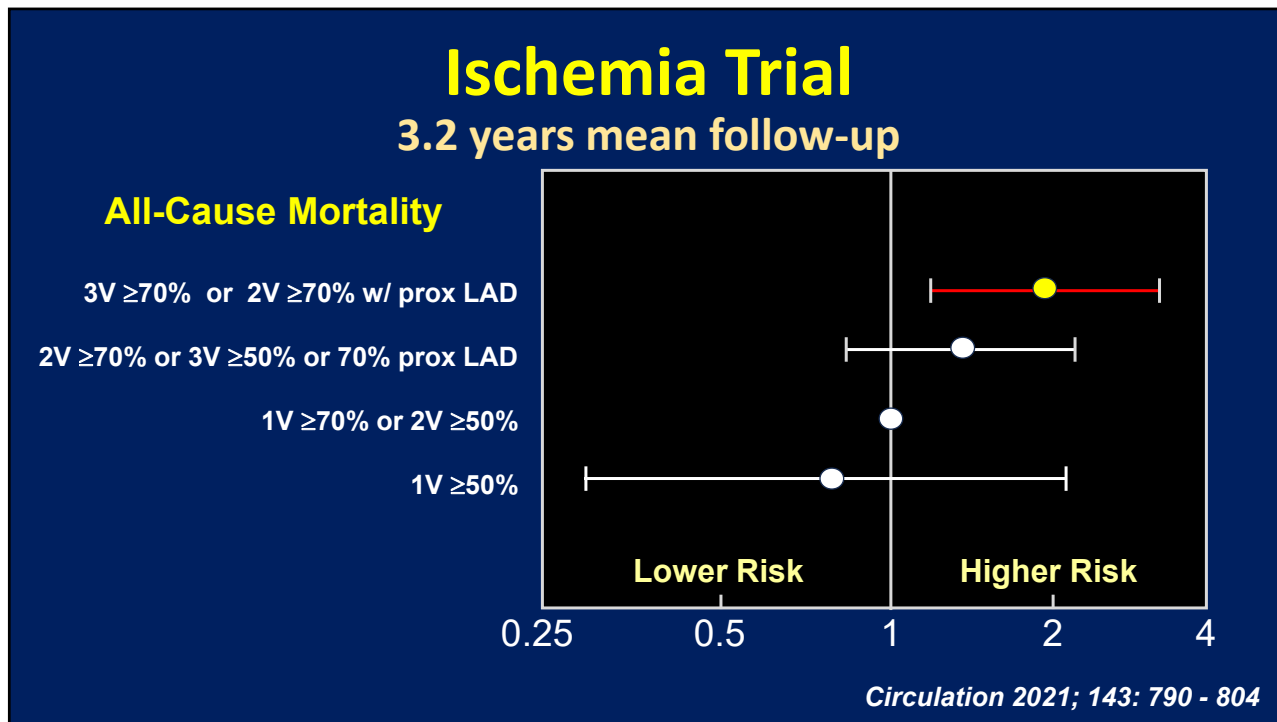
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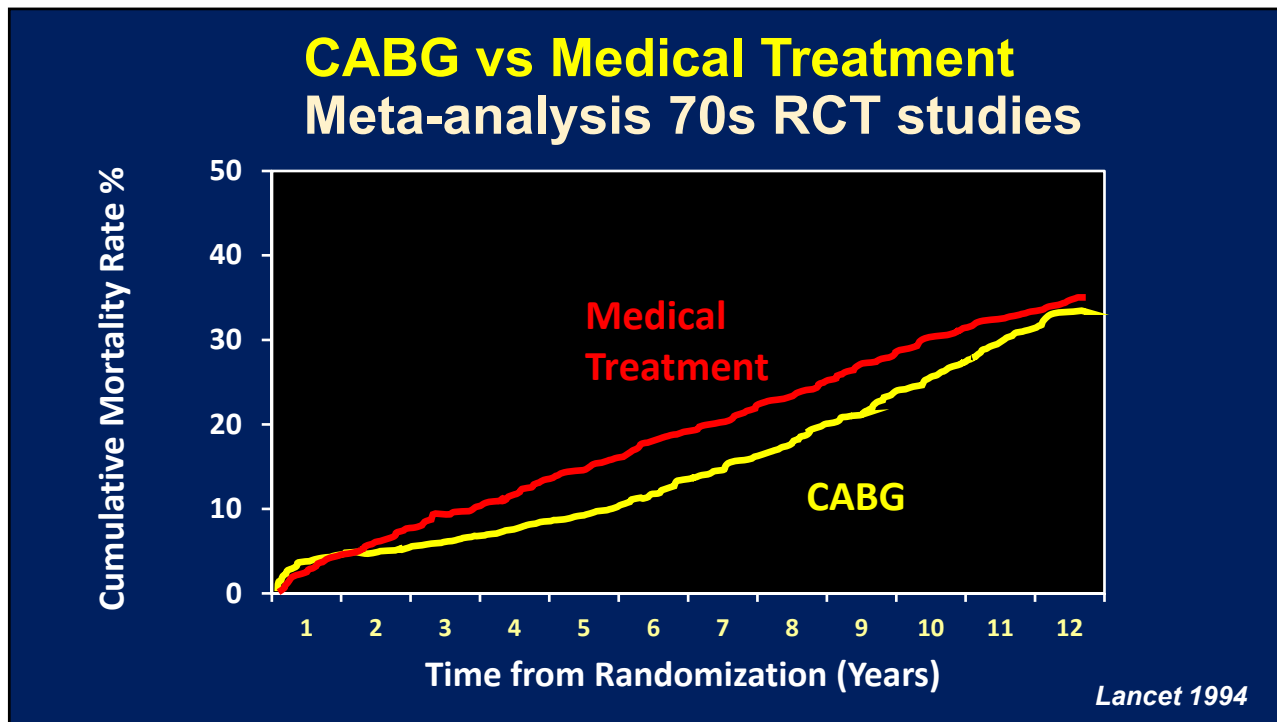


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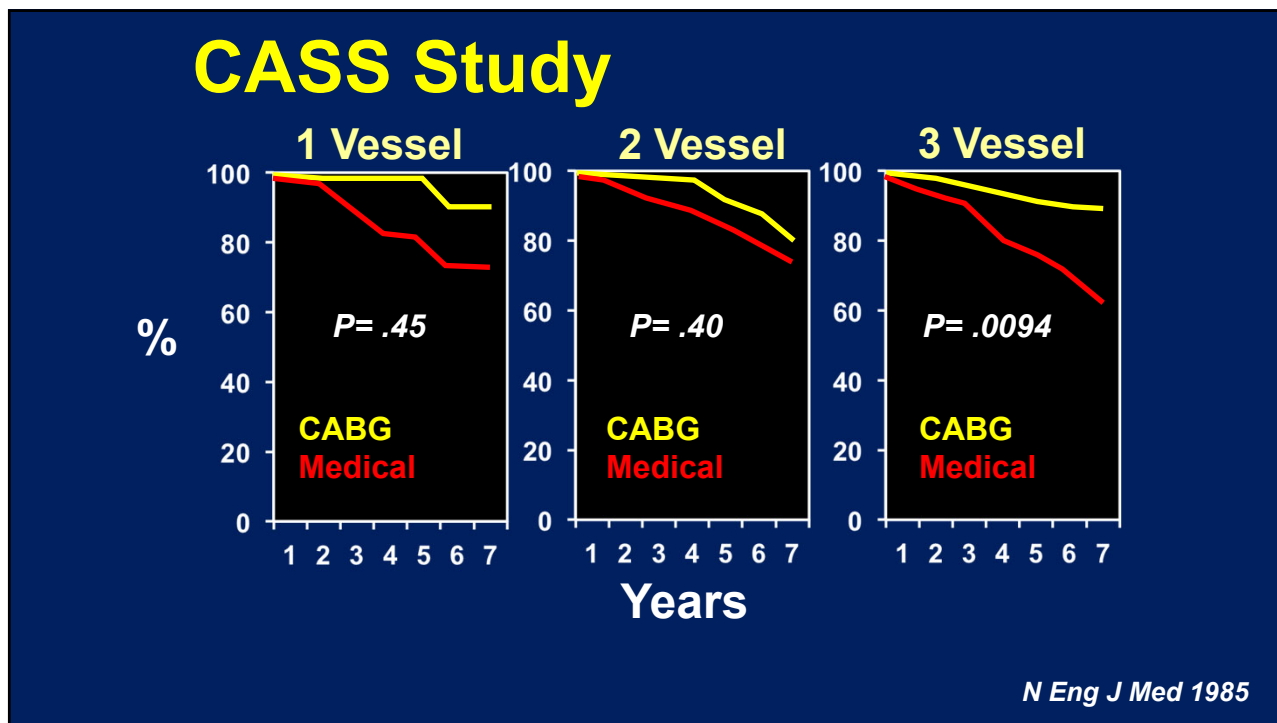
Medical Treatment vs CABG

70s RCTs

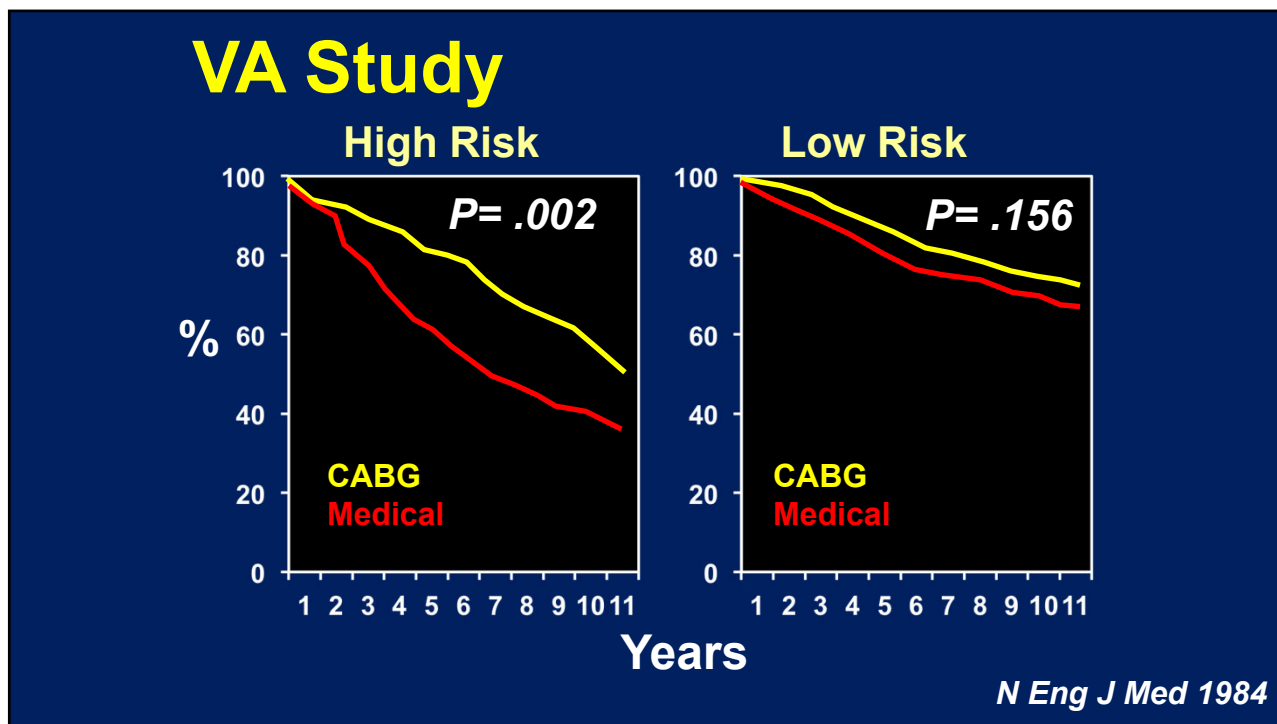
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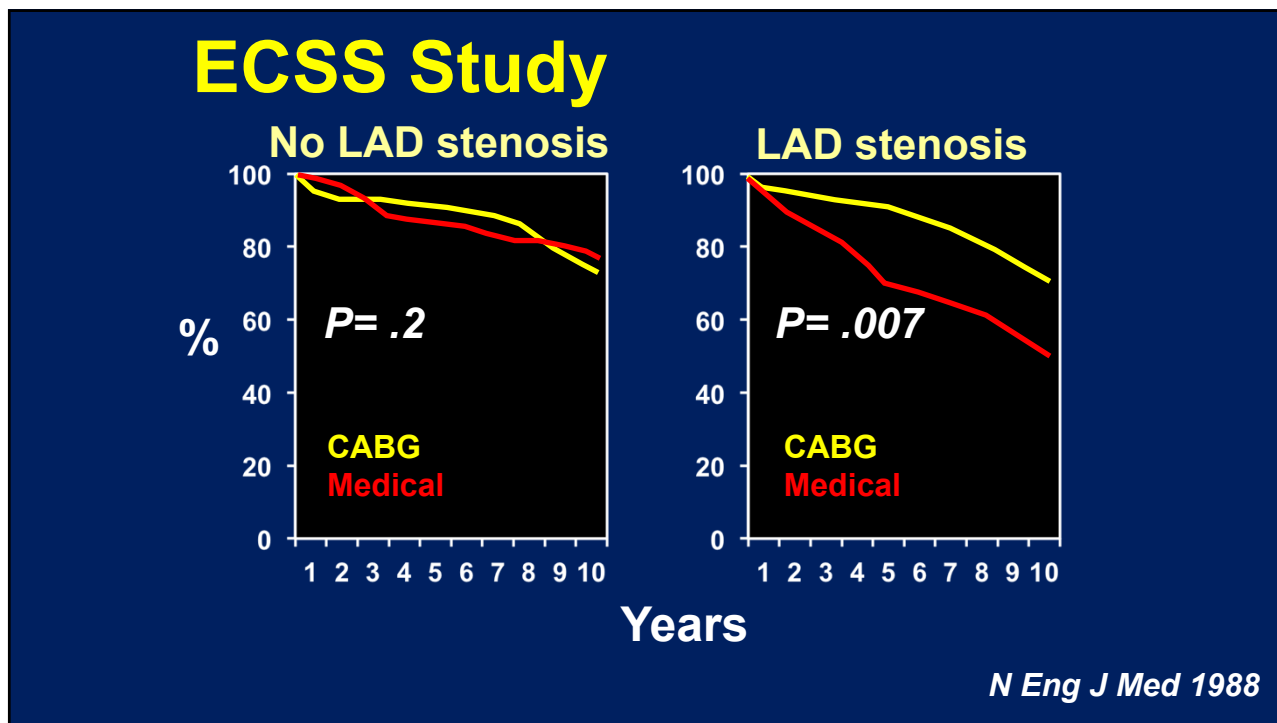
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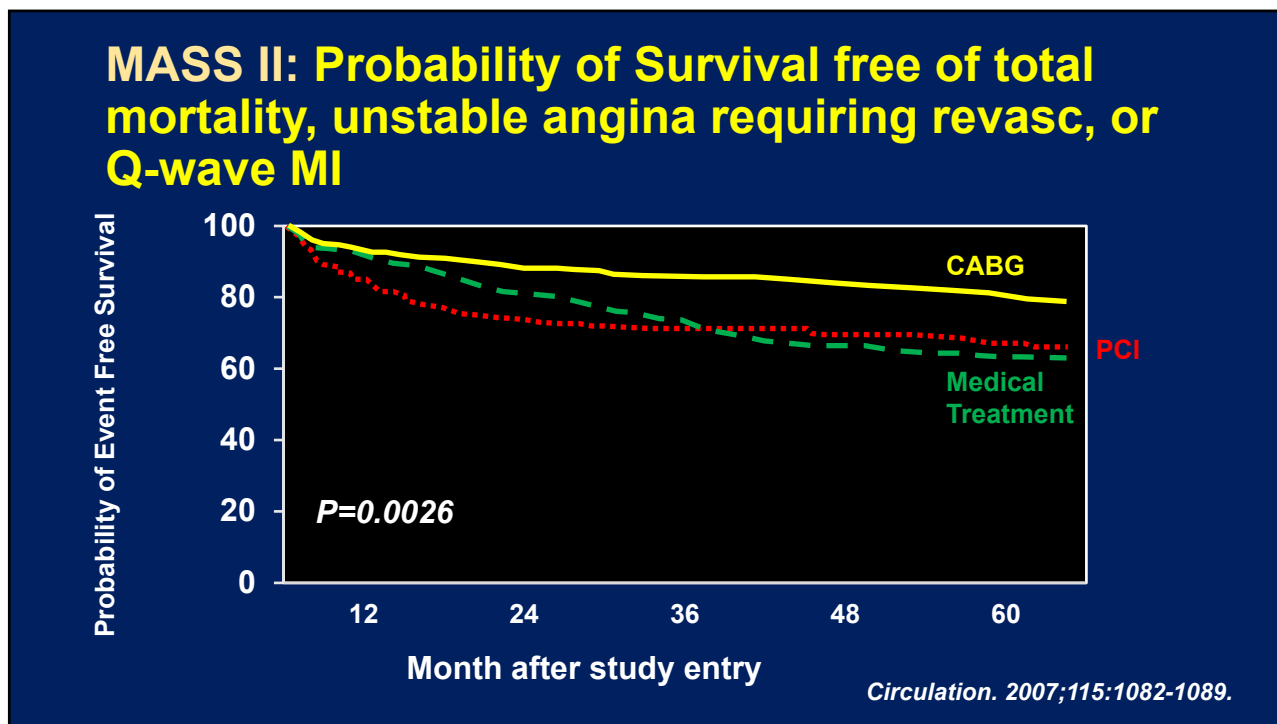
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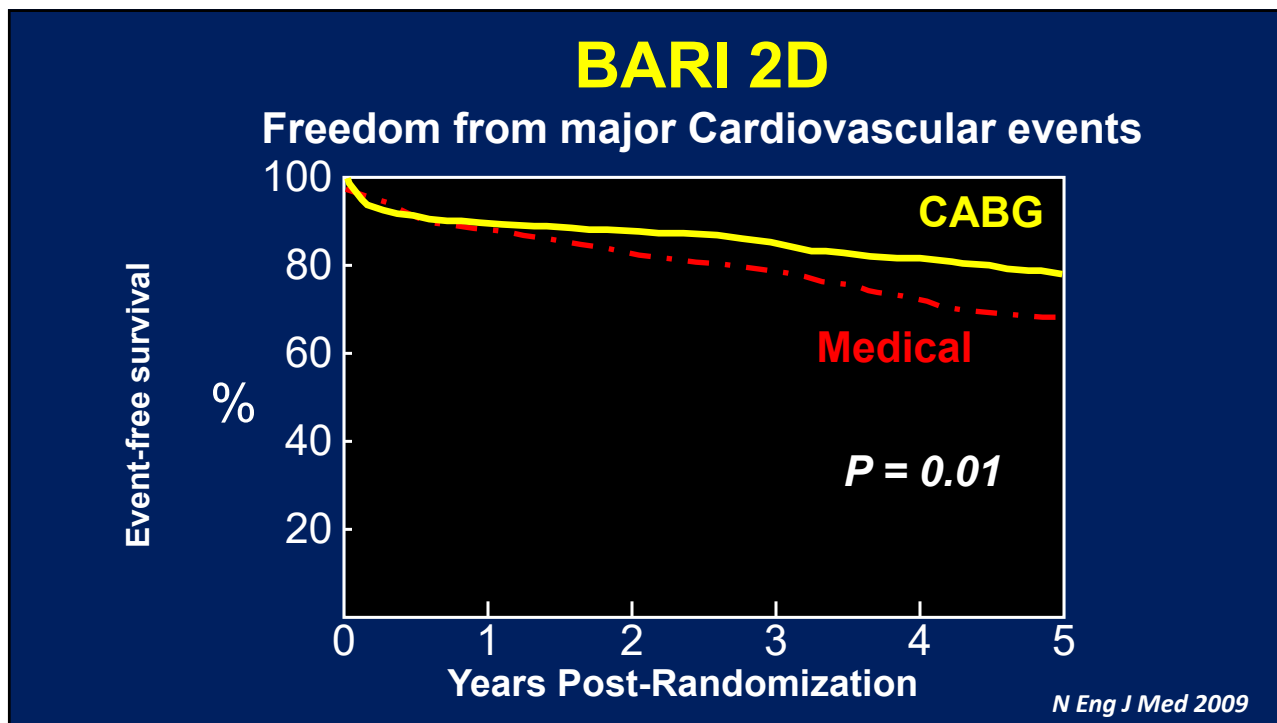
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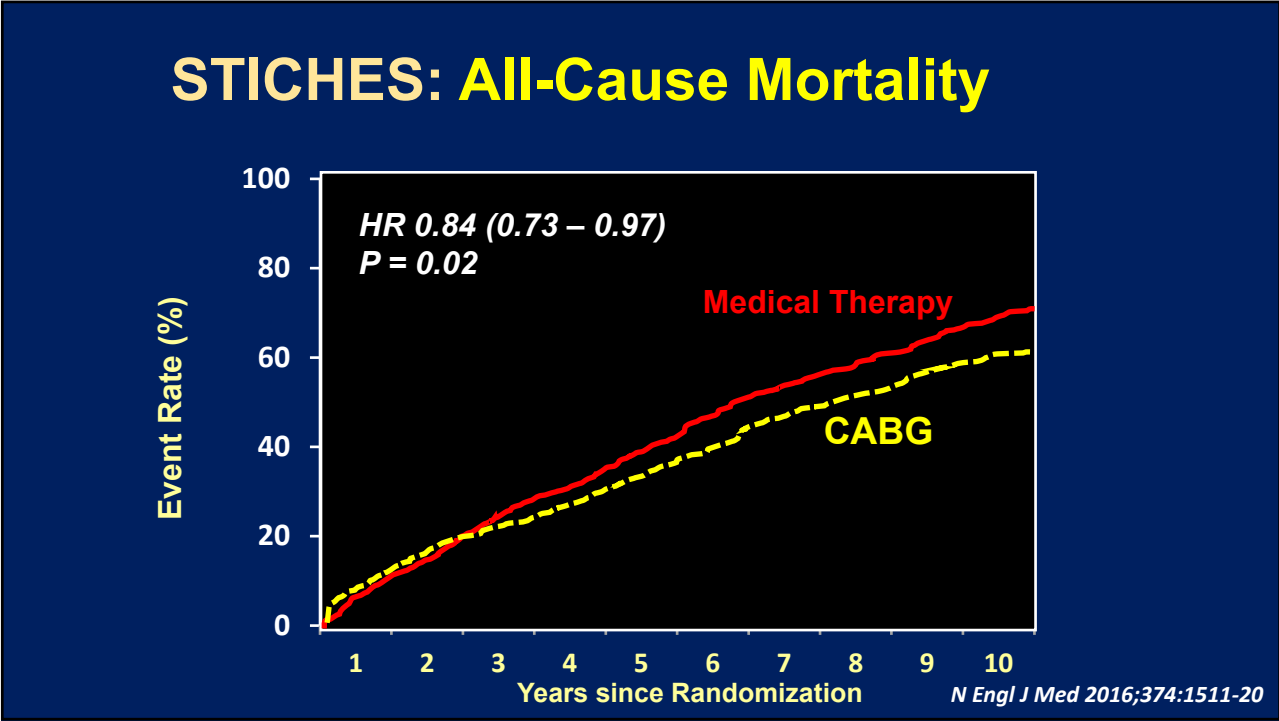
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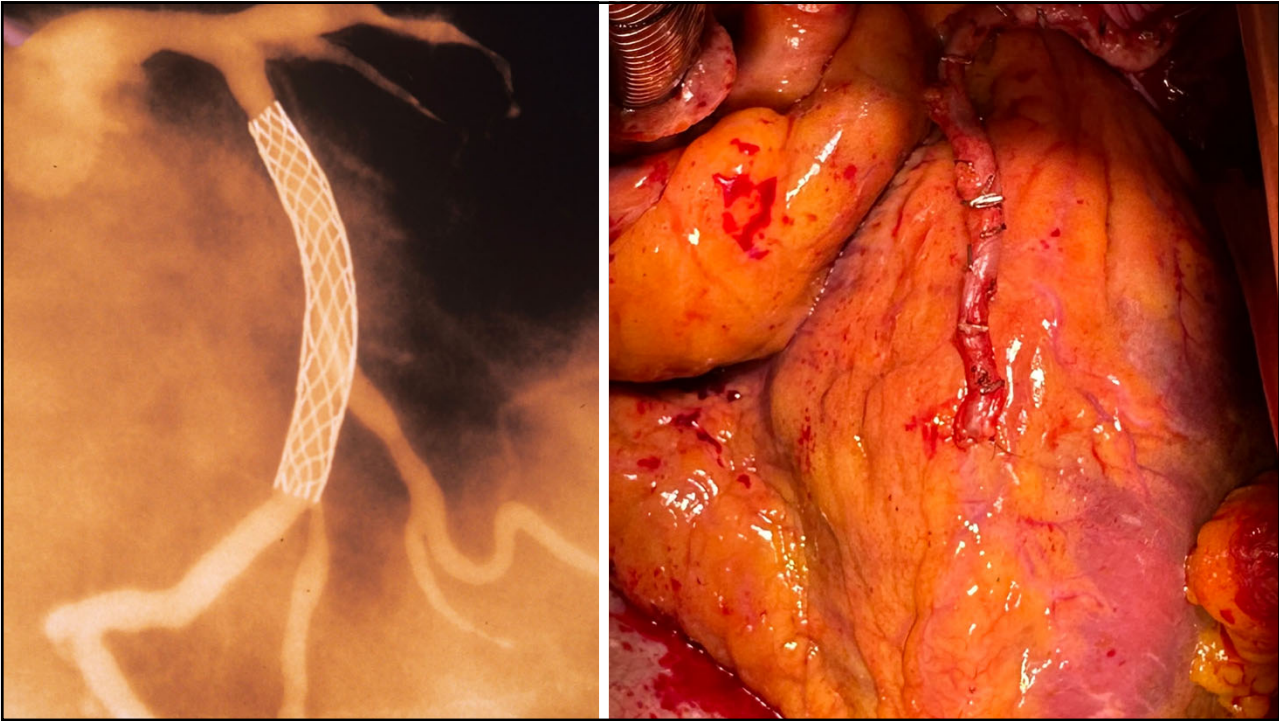
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Evaluation revascularization strategies

Controversy Interpretation Results

**MACE vs MACCE
Repeat Revascularization**

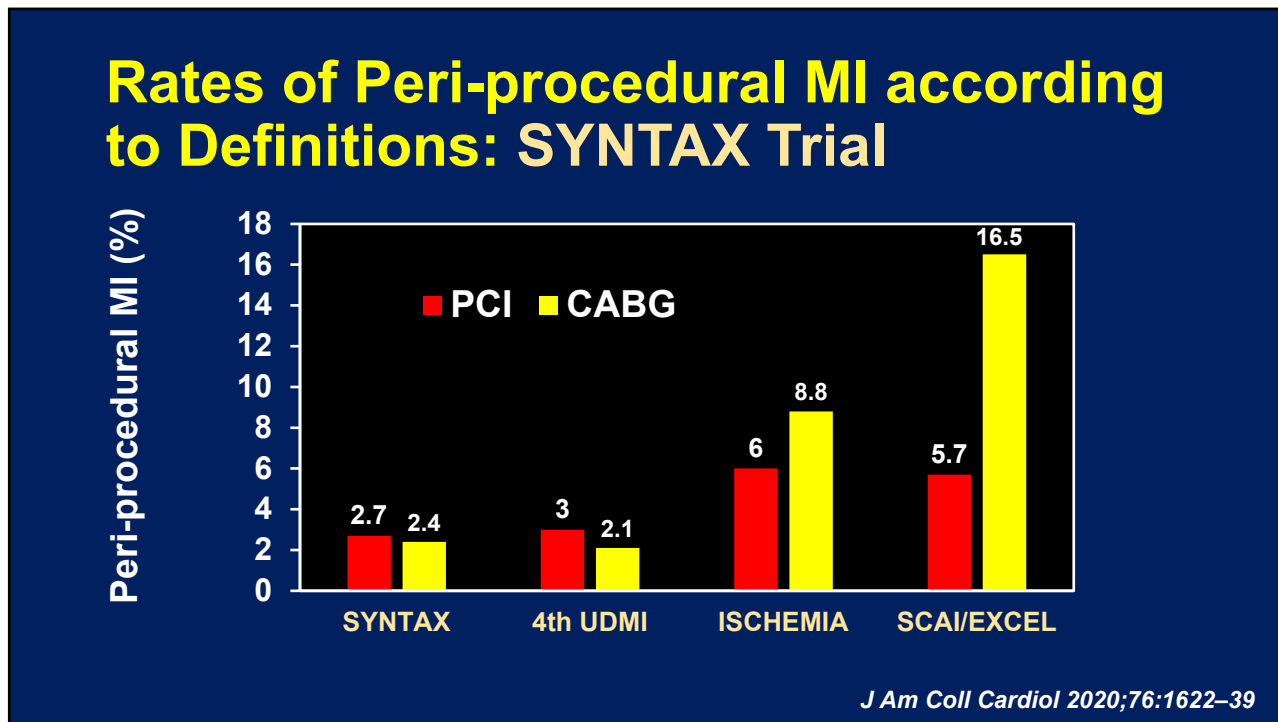
**Myocardial Infarction:
(Definitions & Peri-procedural vs Spontaneous)**

All-Cause Mortality vs Cardiac Death

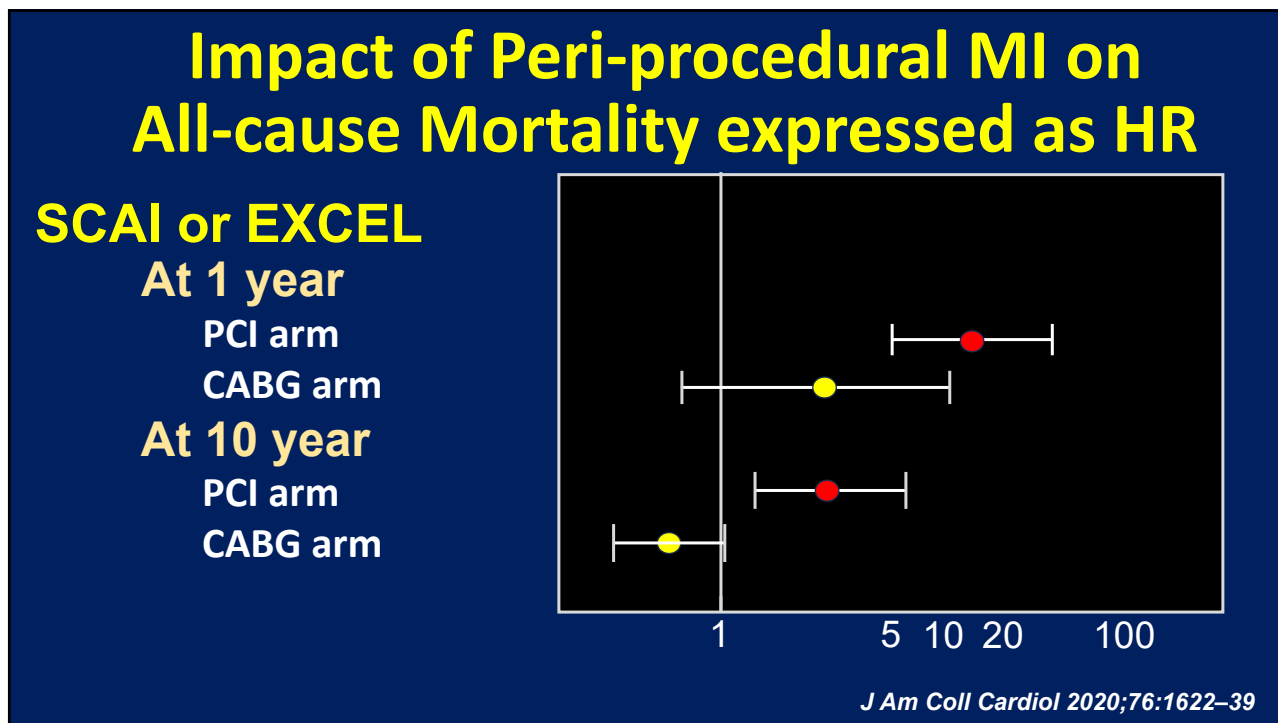
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Myocardial Infarction

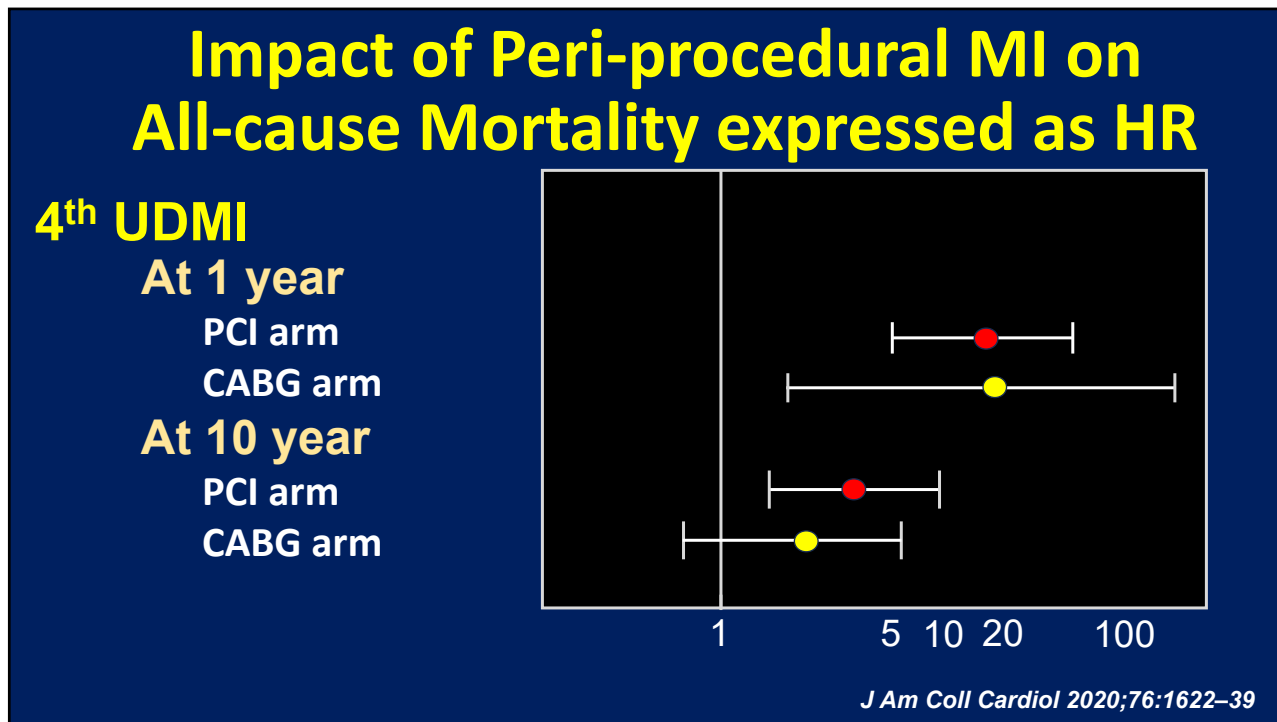
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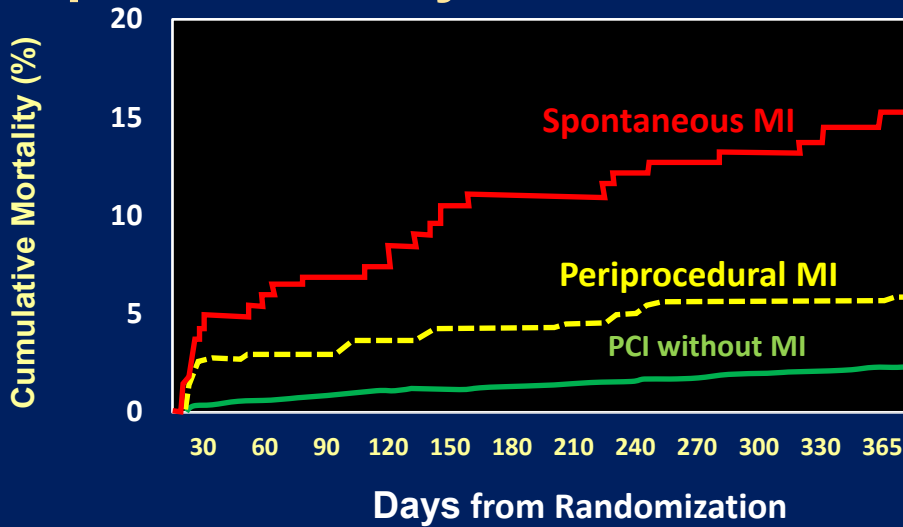


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Peri-procedural vs Spontaneous

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ACUITY Trial: Impact Spontaneous vs Periprocedural Myocardial Infarction

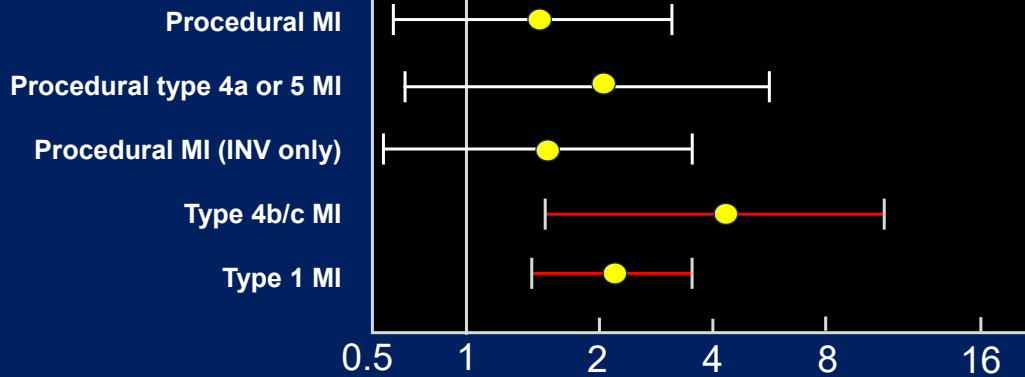


J Am Coll Cardiol 2009;54:477-86

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Ischemia Trial Prognosis of MI types

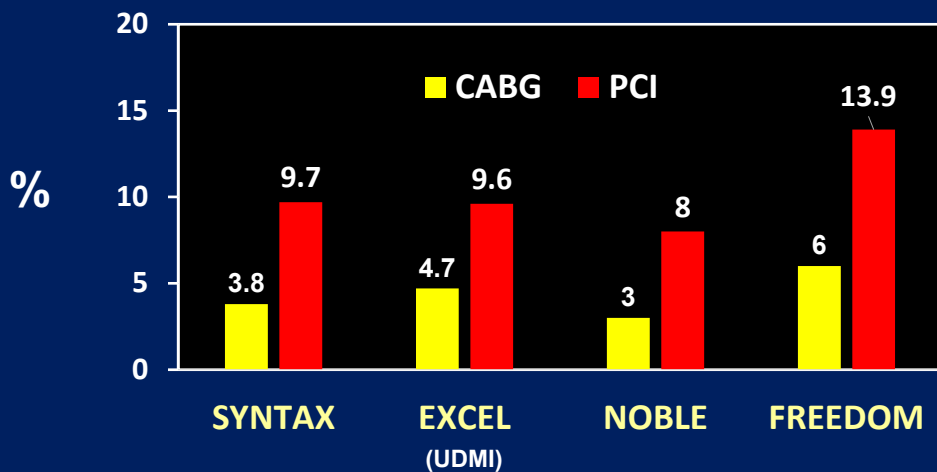
All-Cause Death



Circulation 2021; 143:790-804

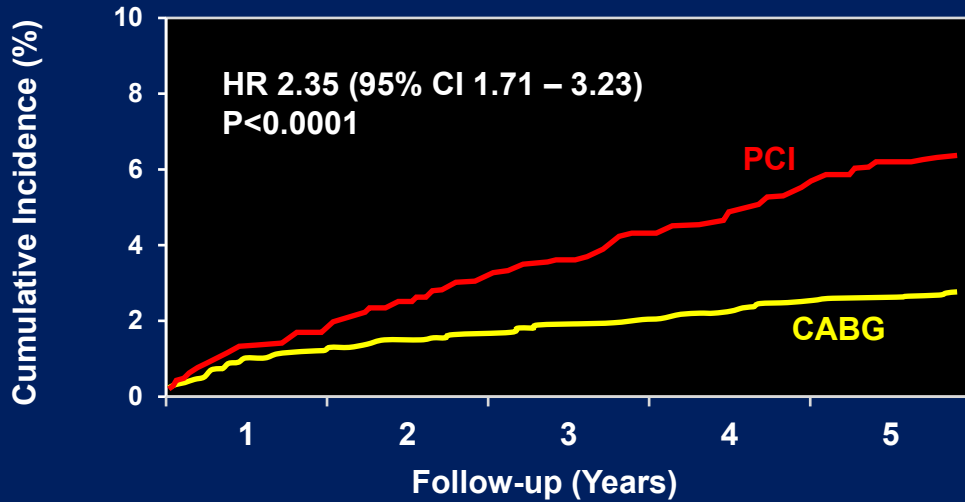
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5-year follow-up: Spontaneous Myocardial Infarction



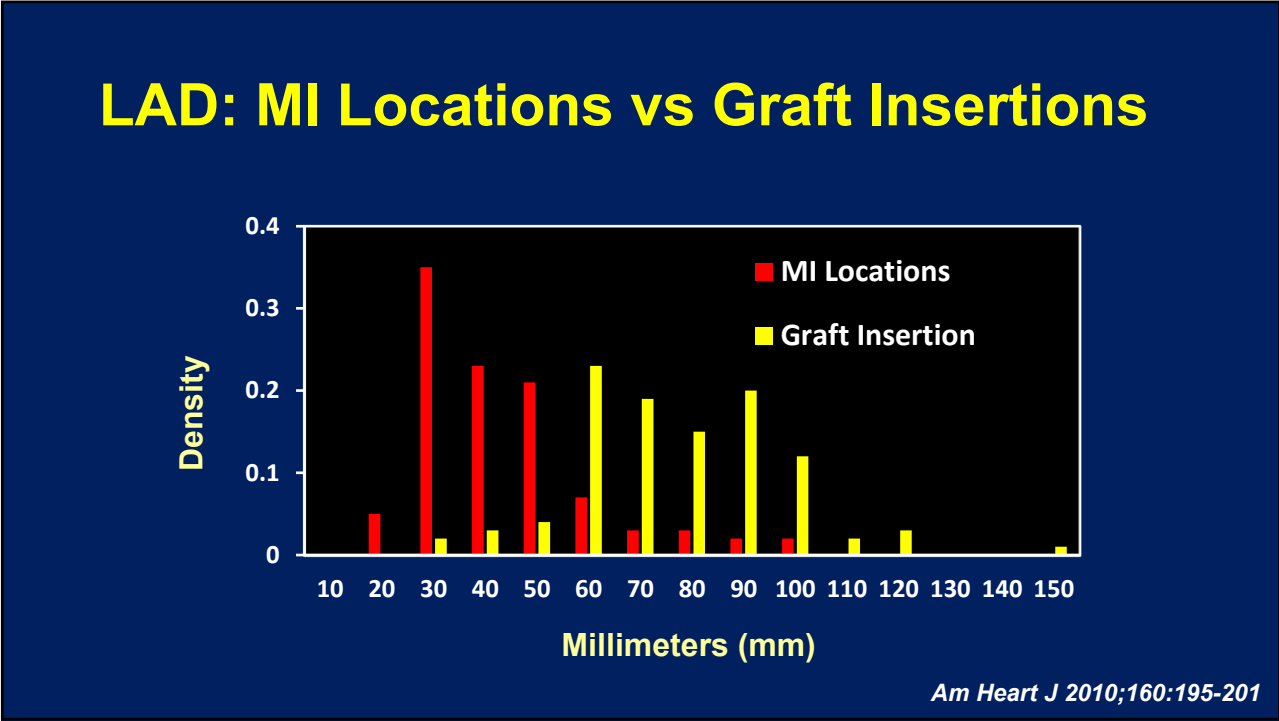
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Spontaneous Myocardial Infarction: Left Main RCTs

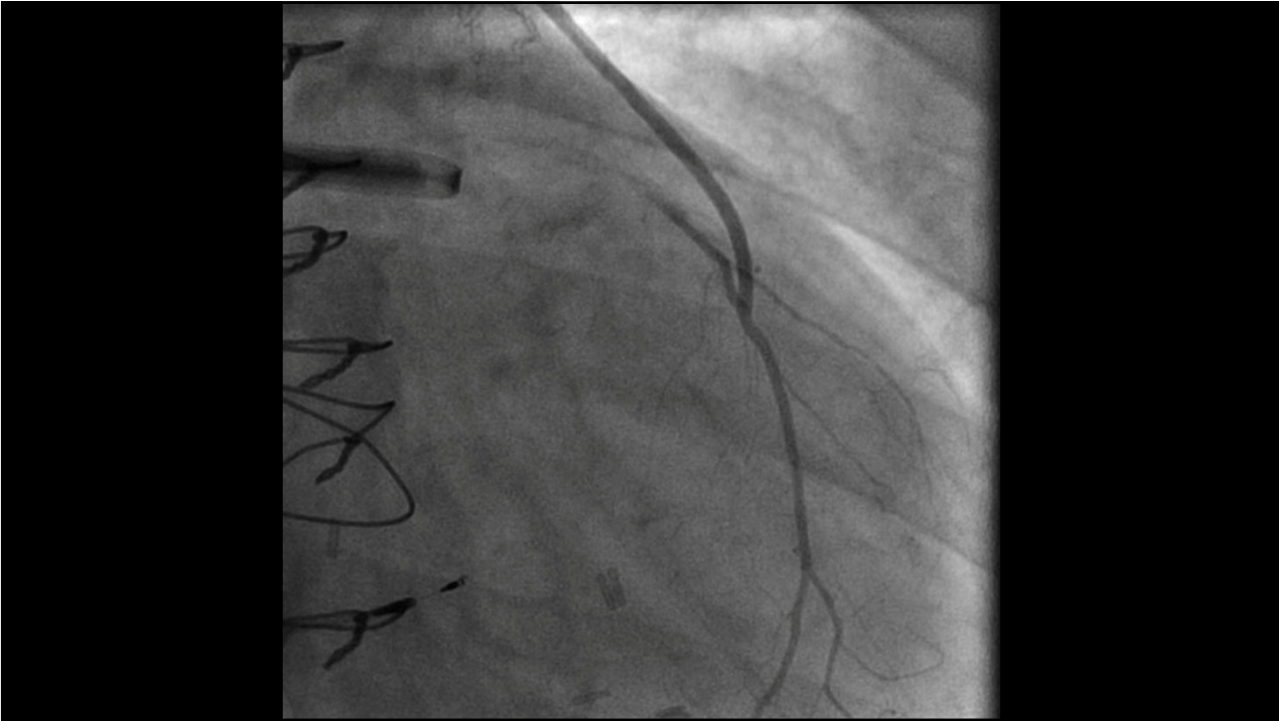


Lancet 2021; 398: 2247–57

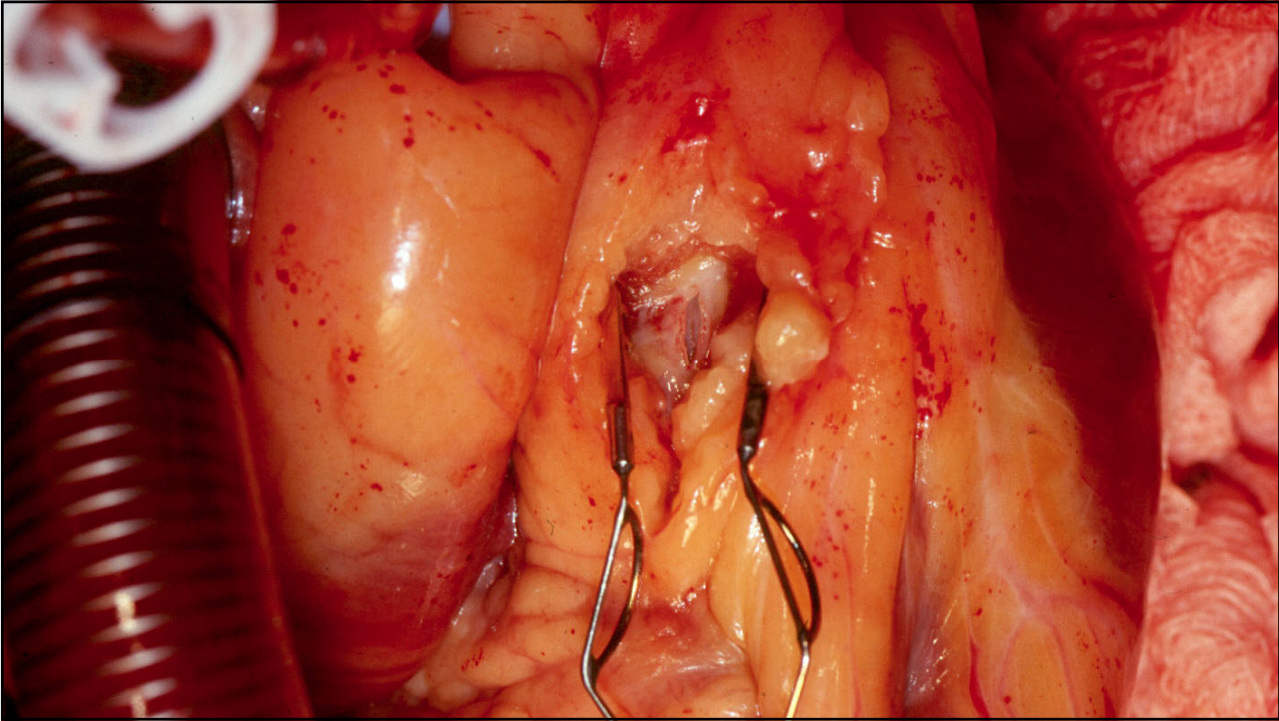
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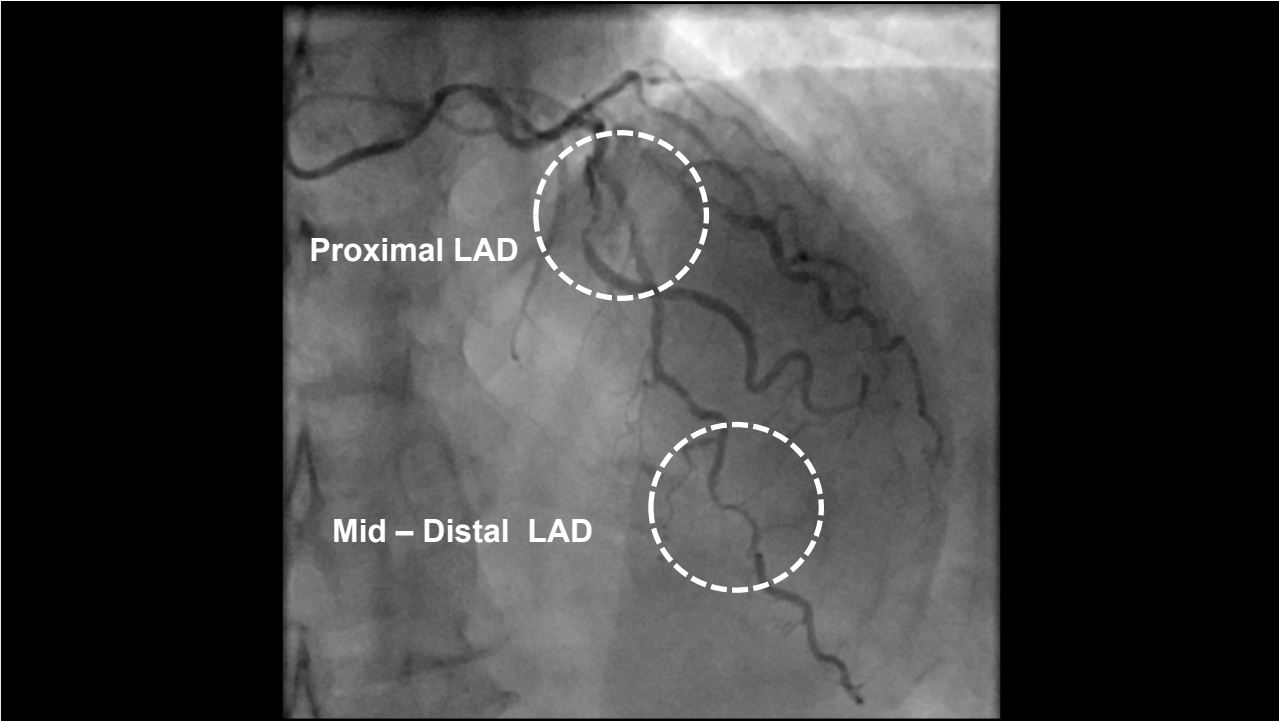
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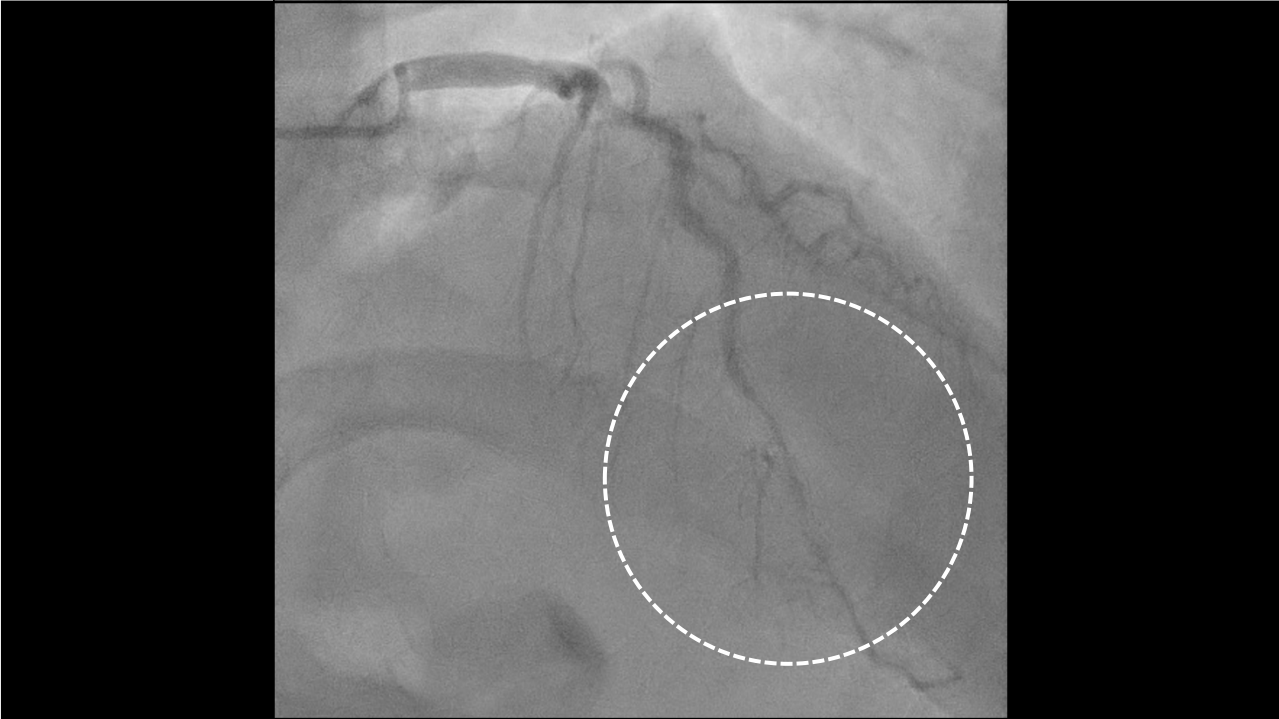
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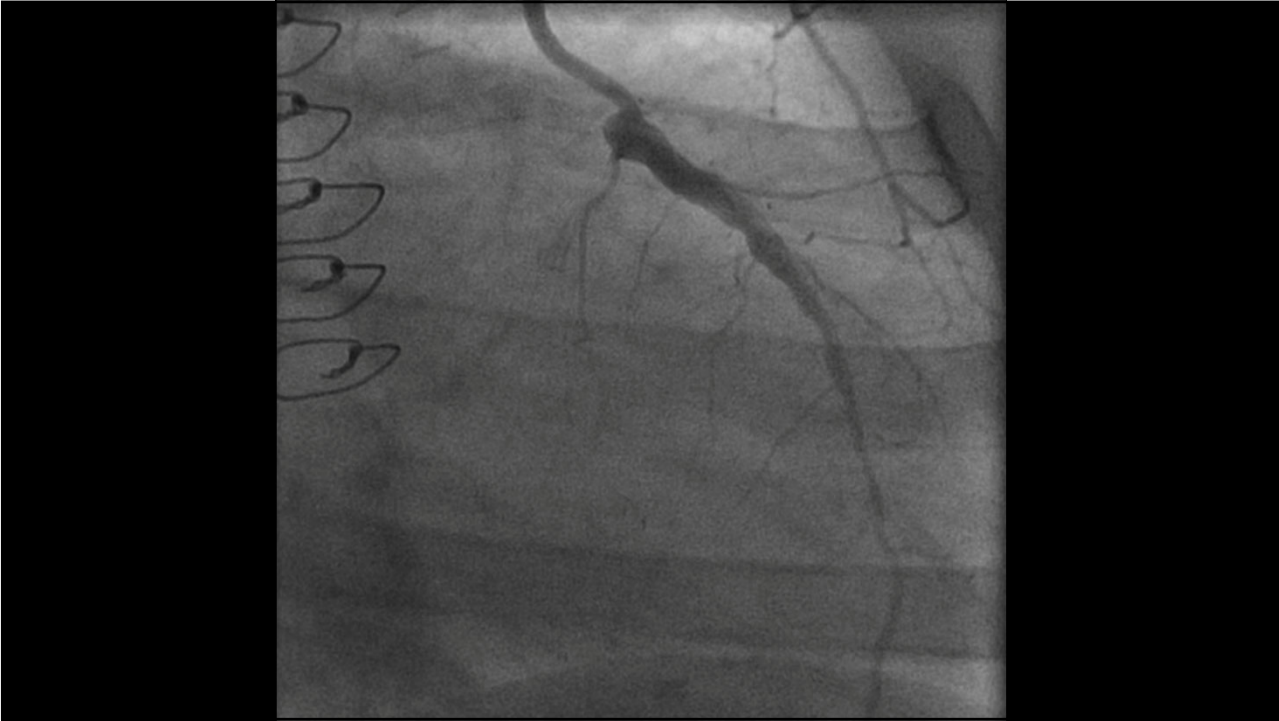
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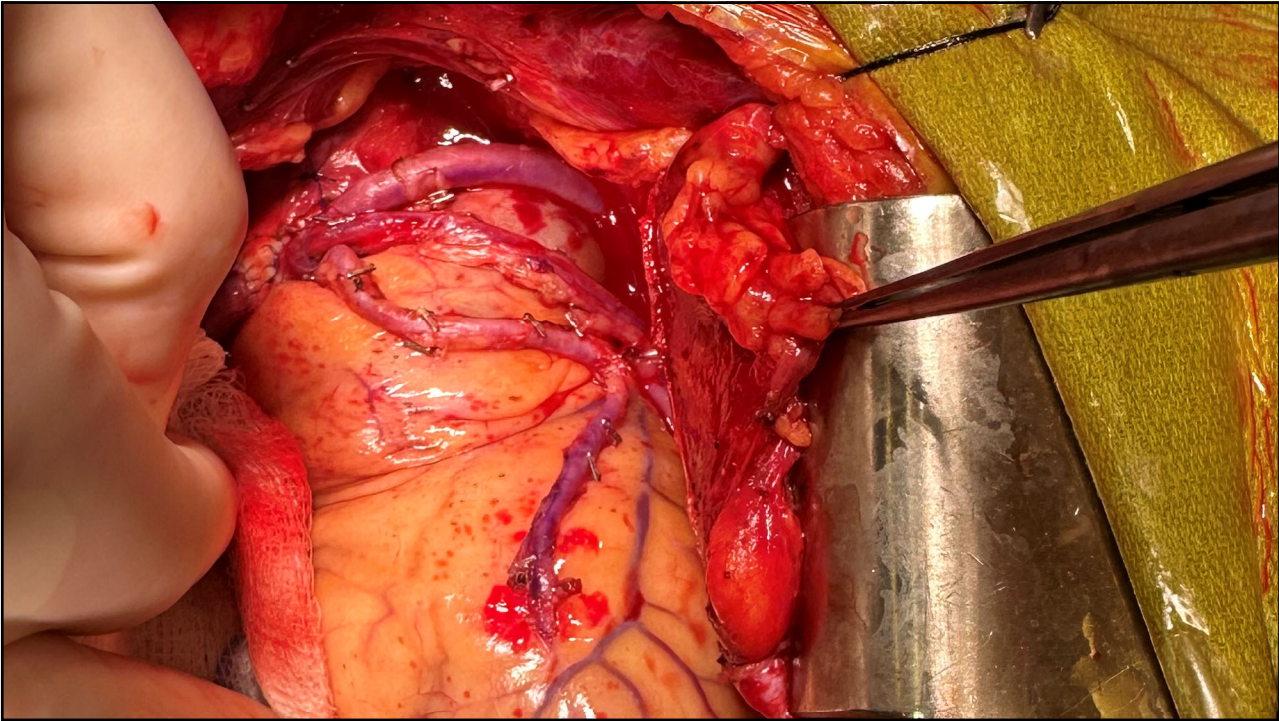
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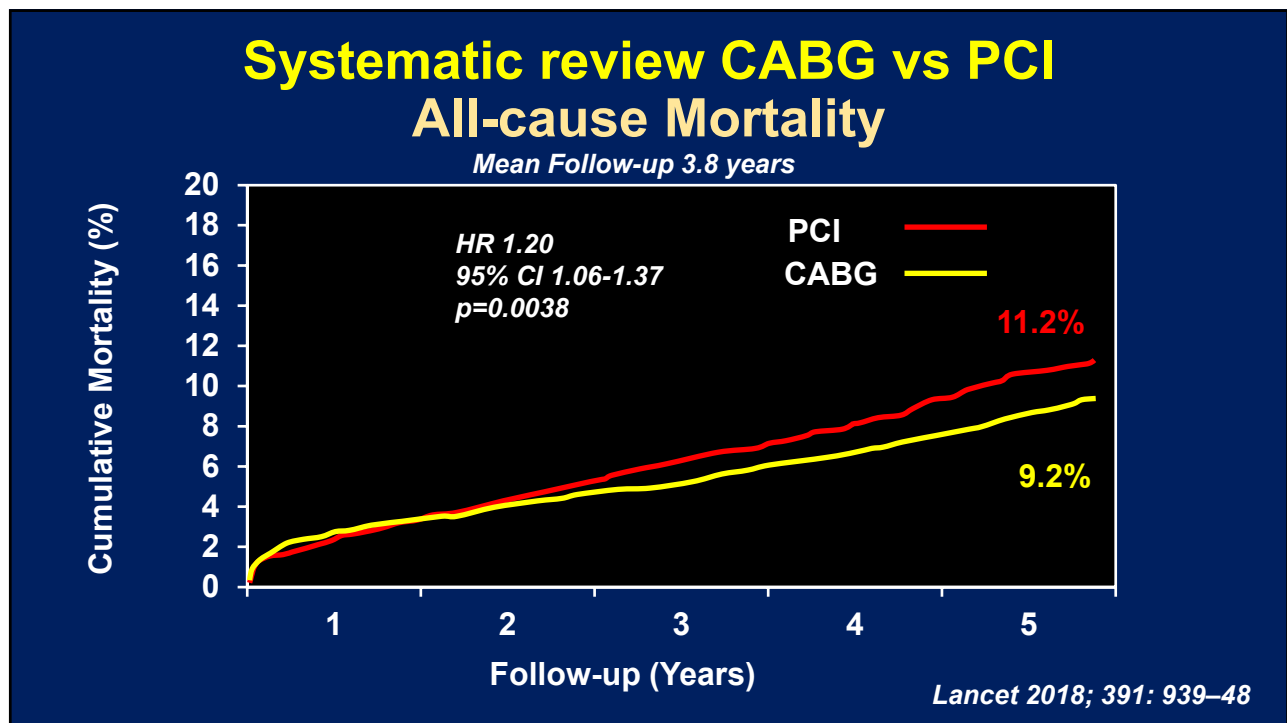
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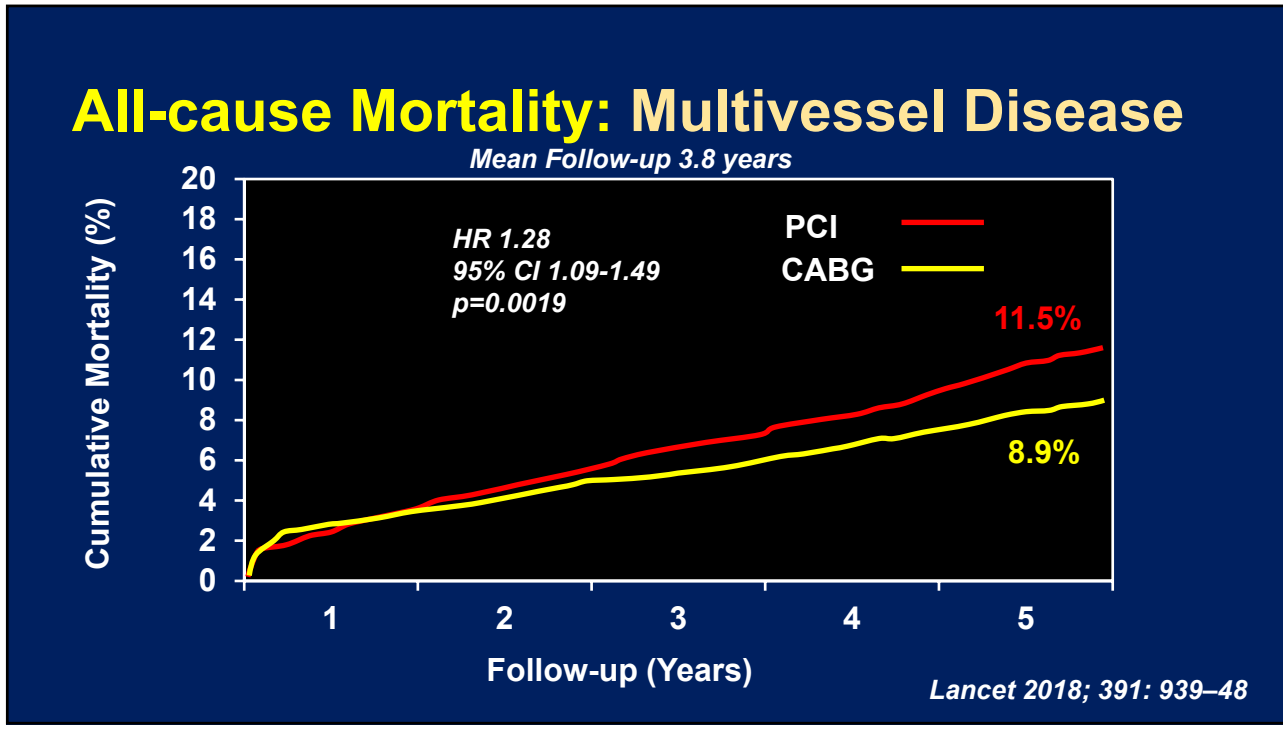
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All-cause Mortality

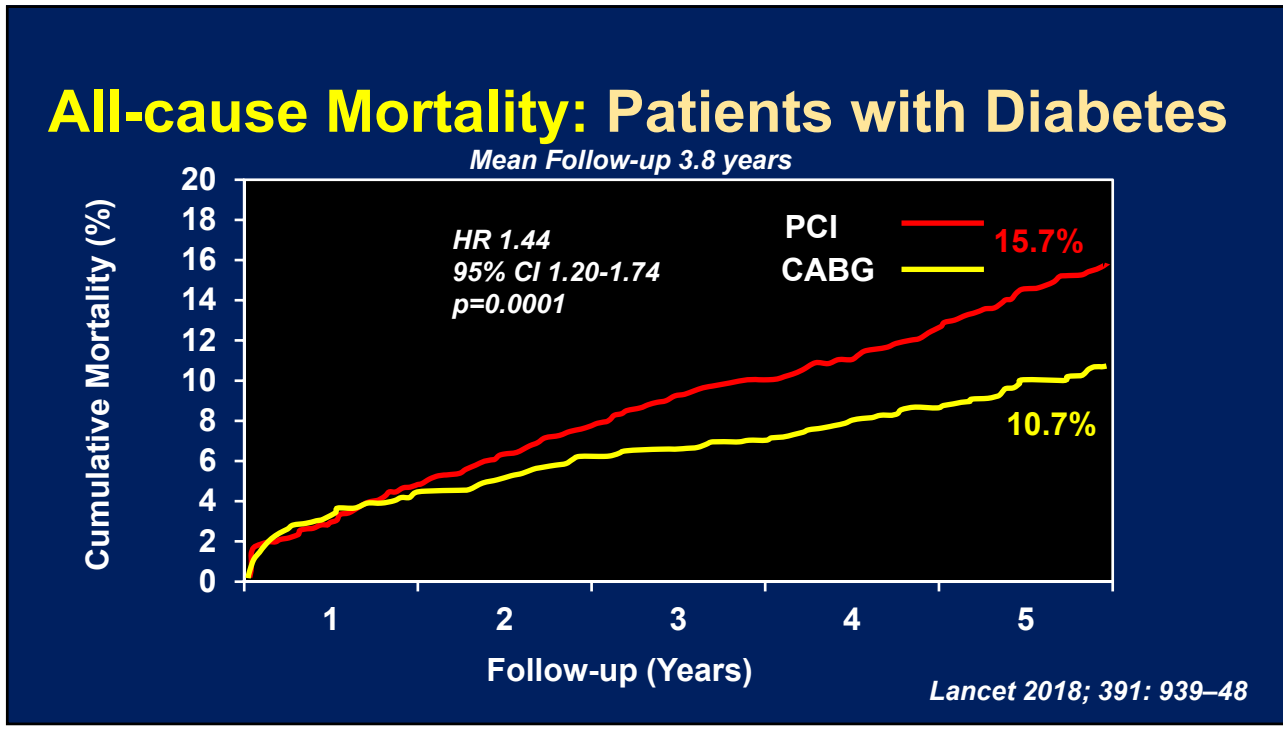
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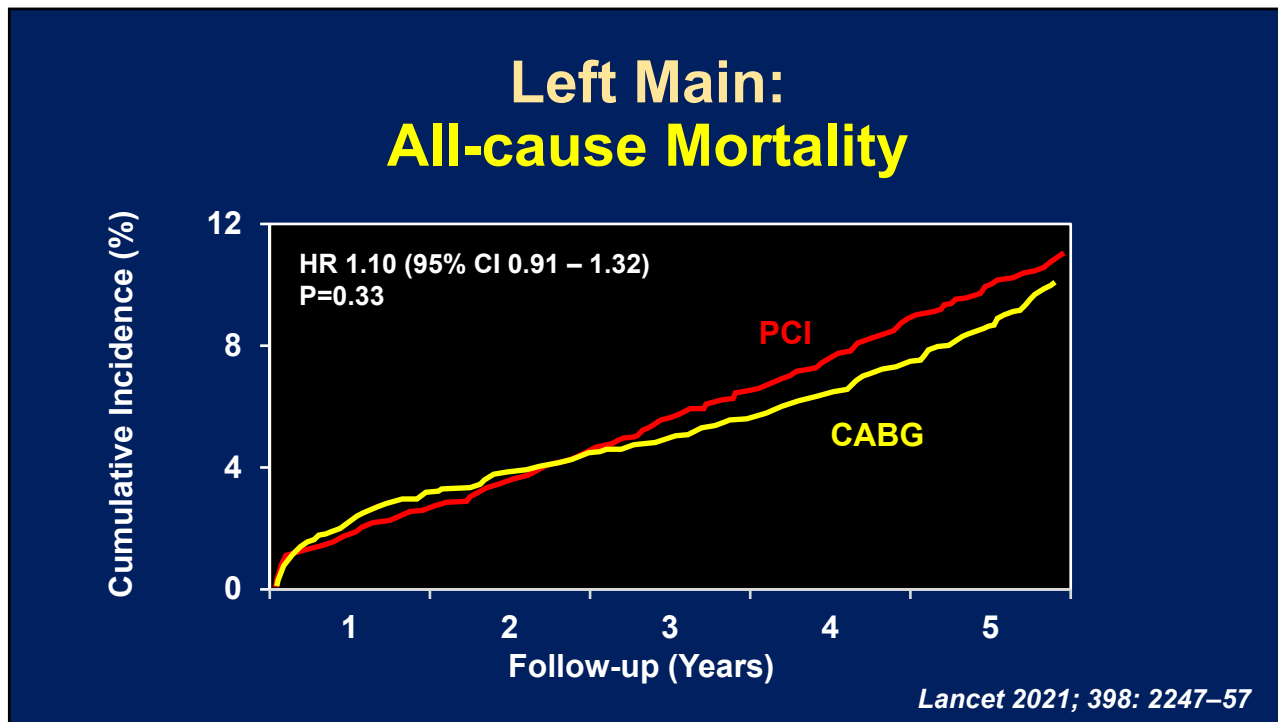
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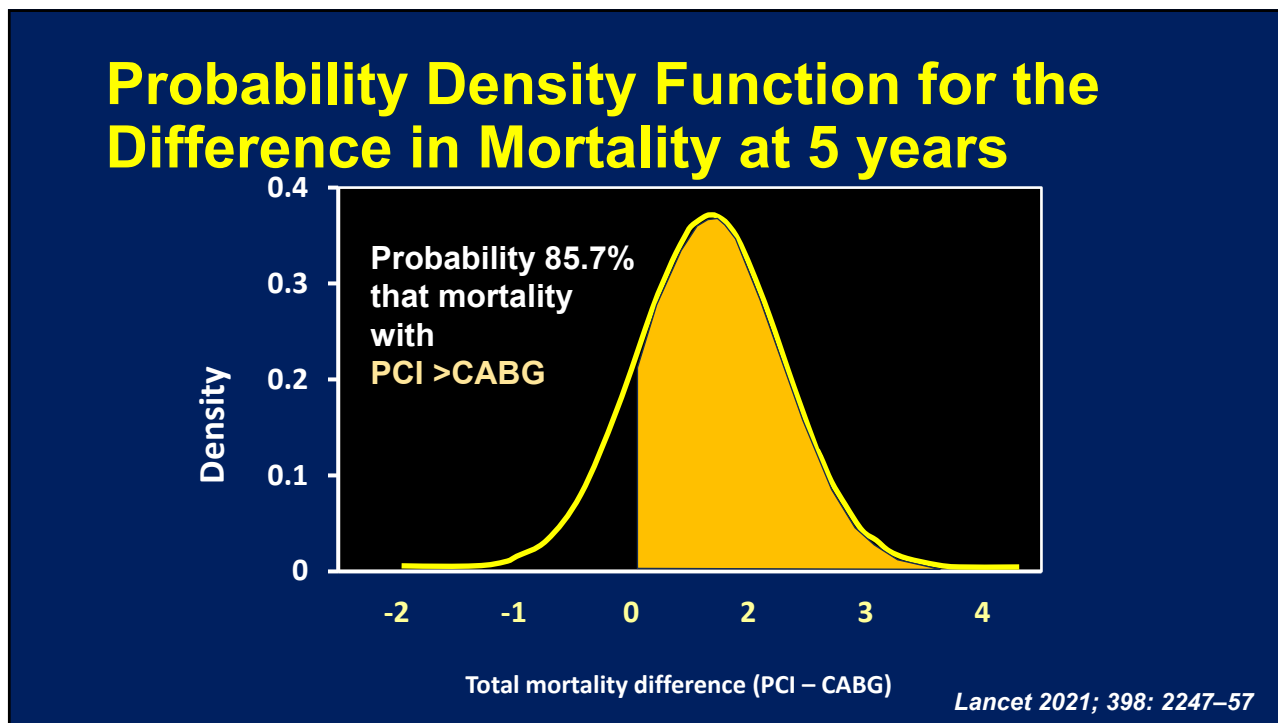
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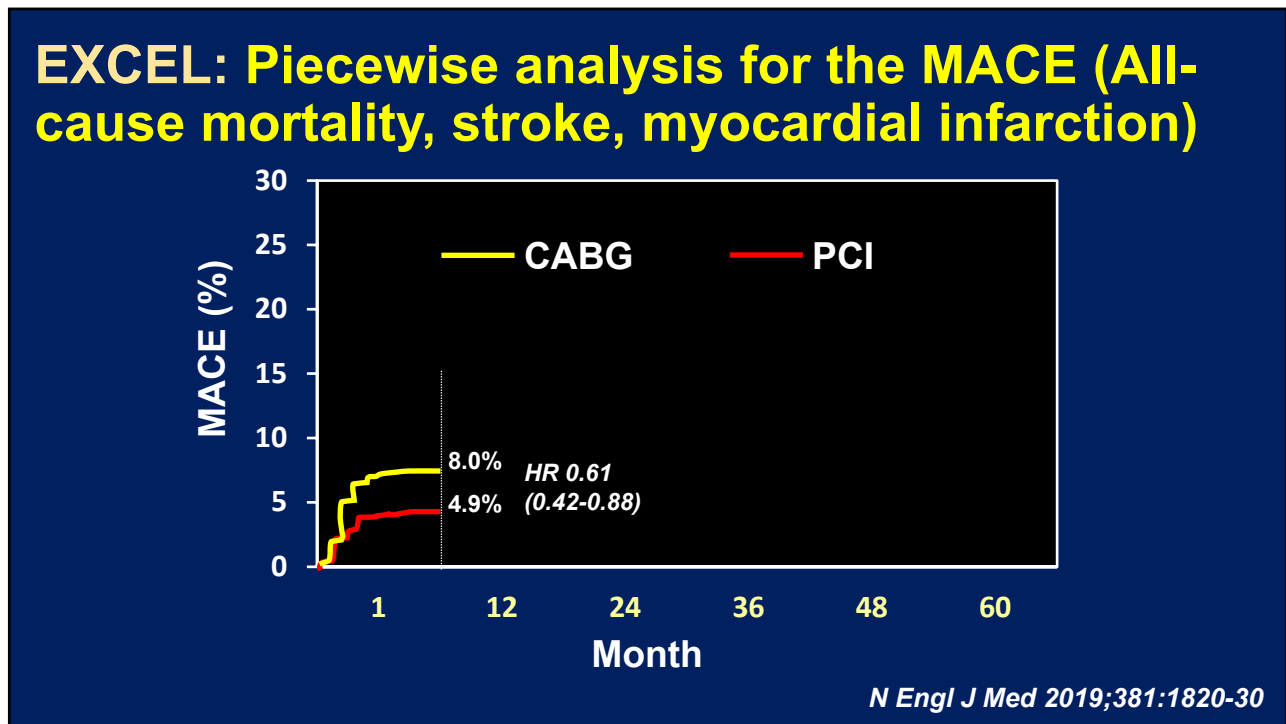
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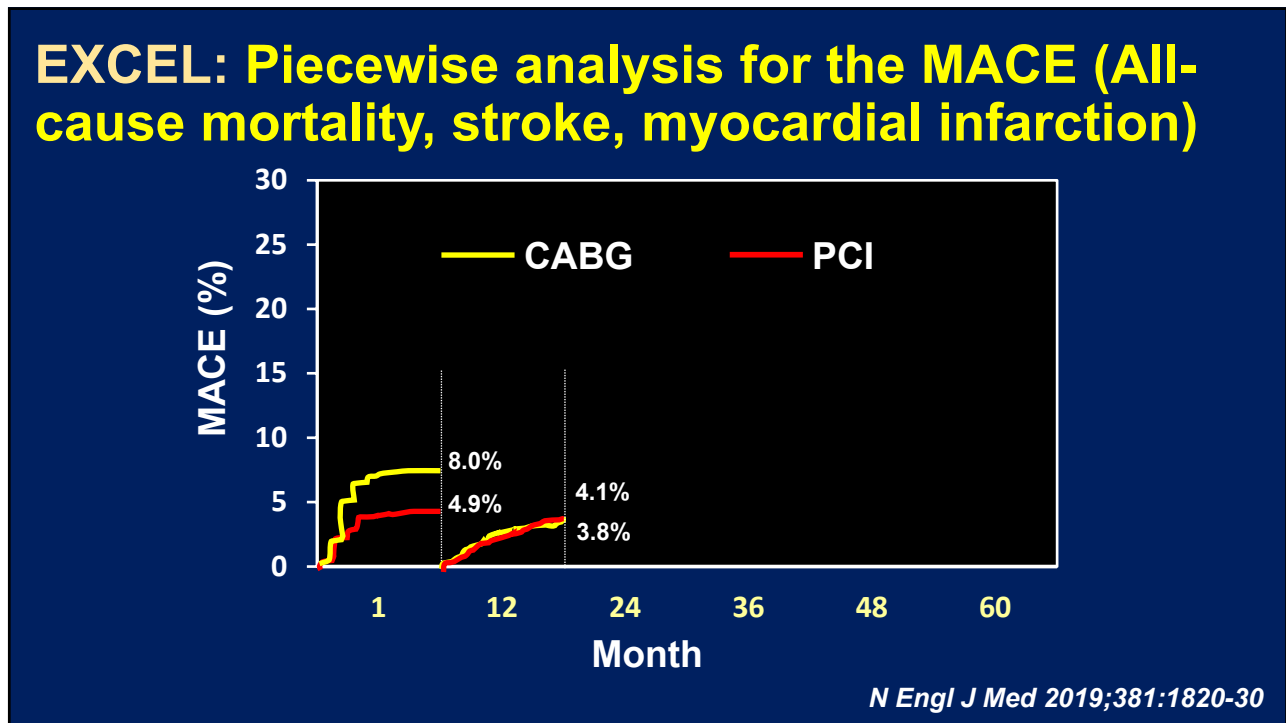
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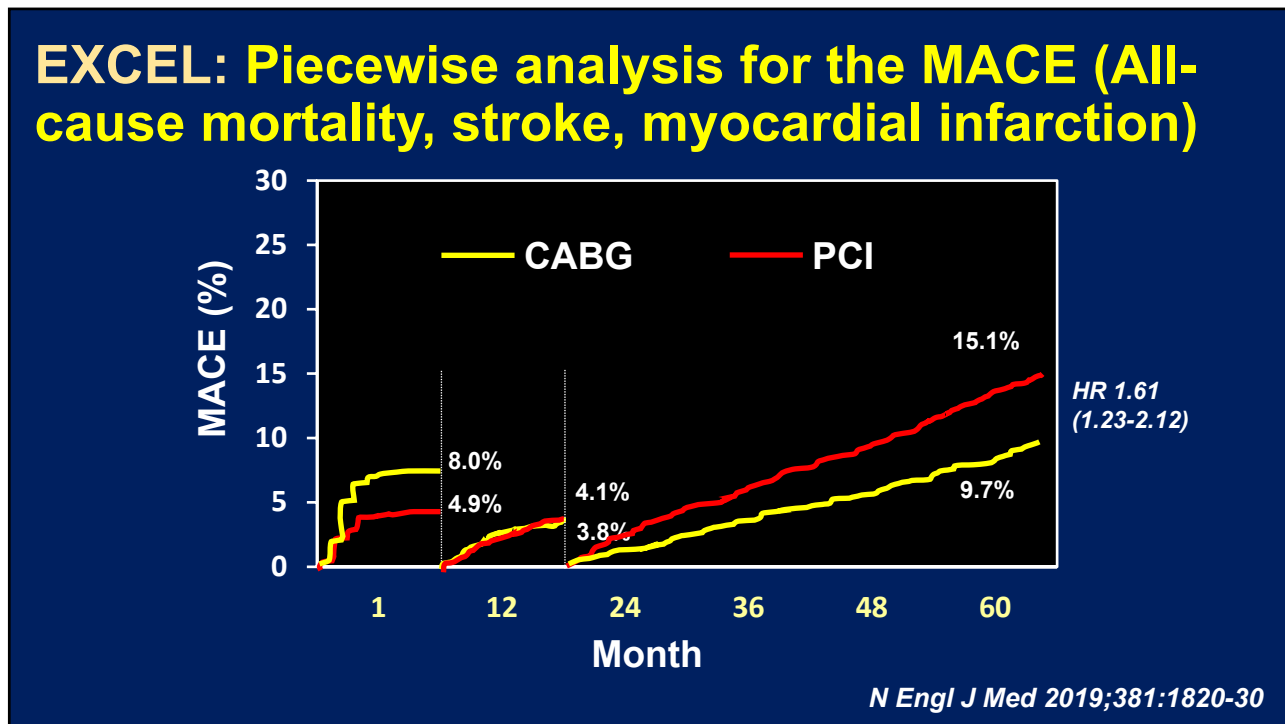
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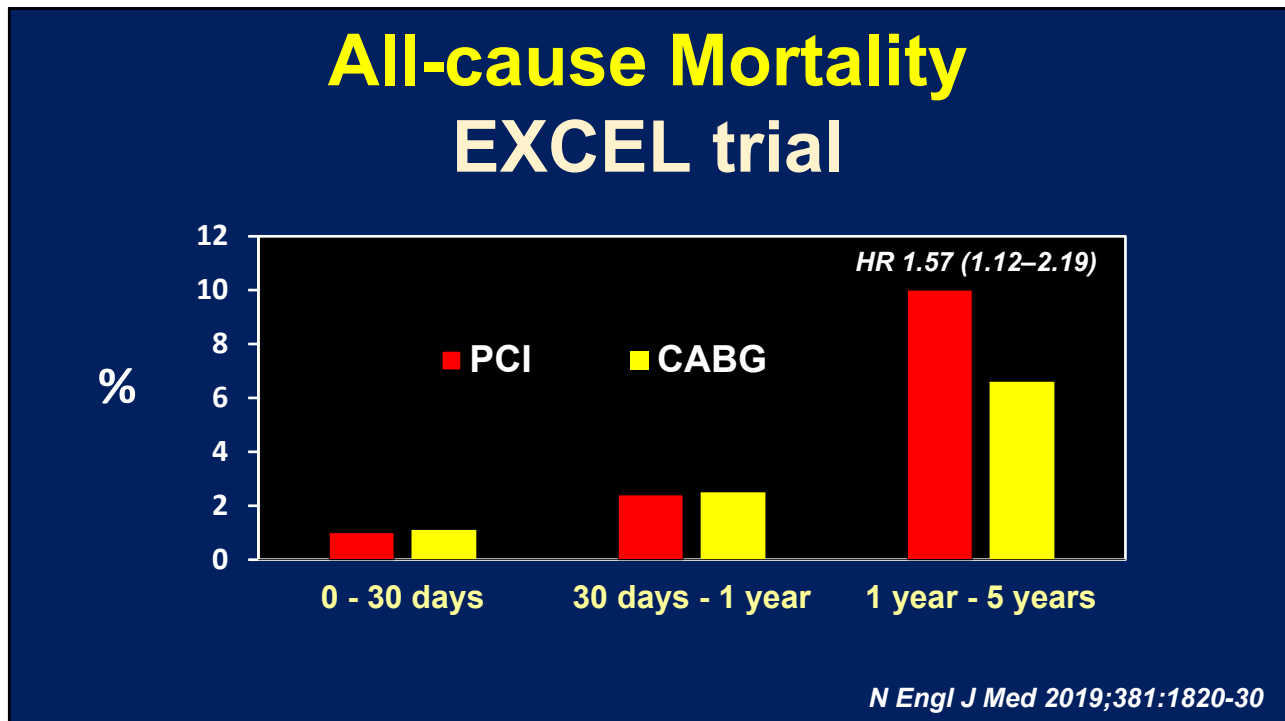
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Results as a Team

PCI / CABG Ratio

Balance ratio
Better outcomes

55

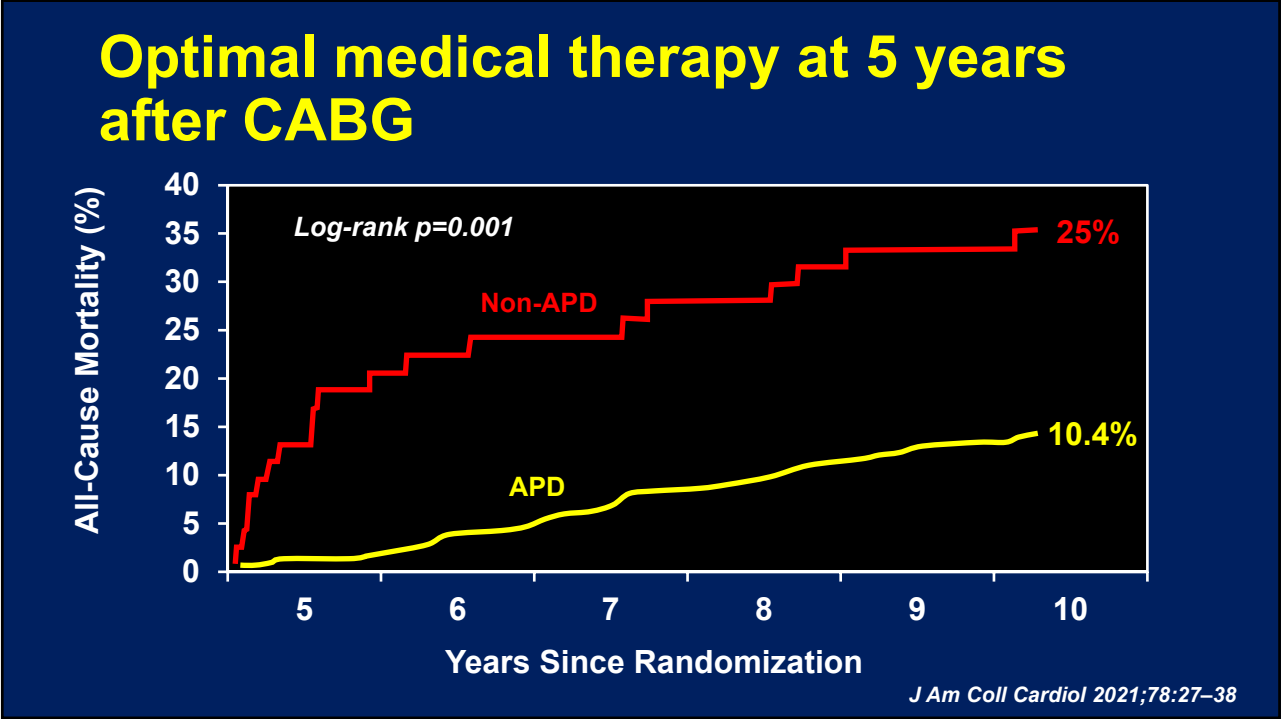


**Rene
Favaloro**

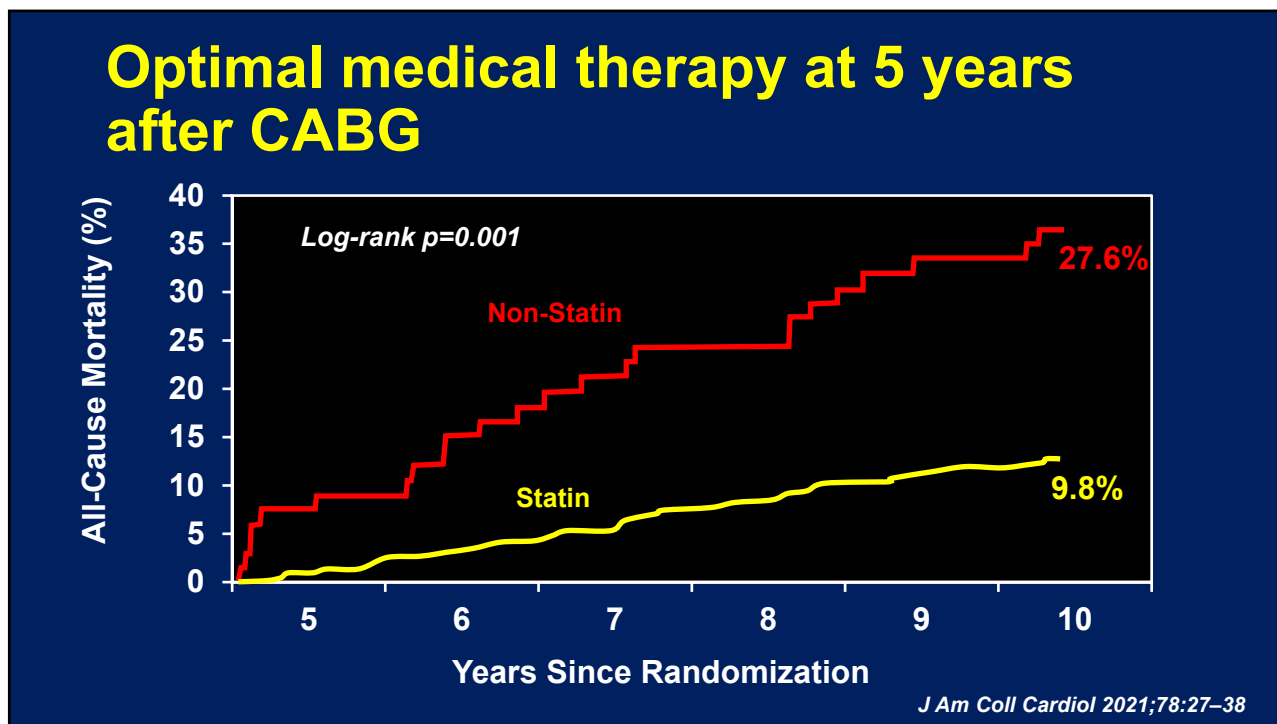
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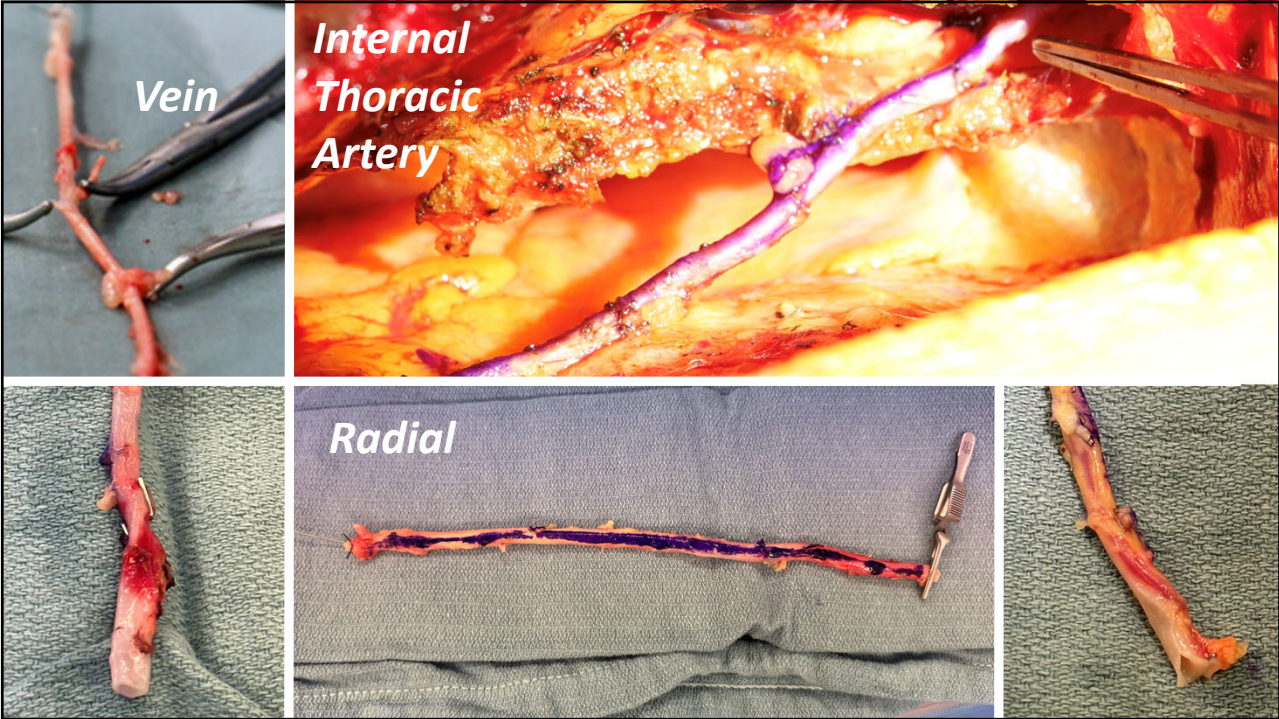
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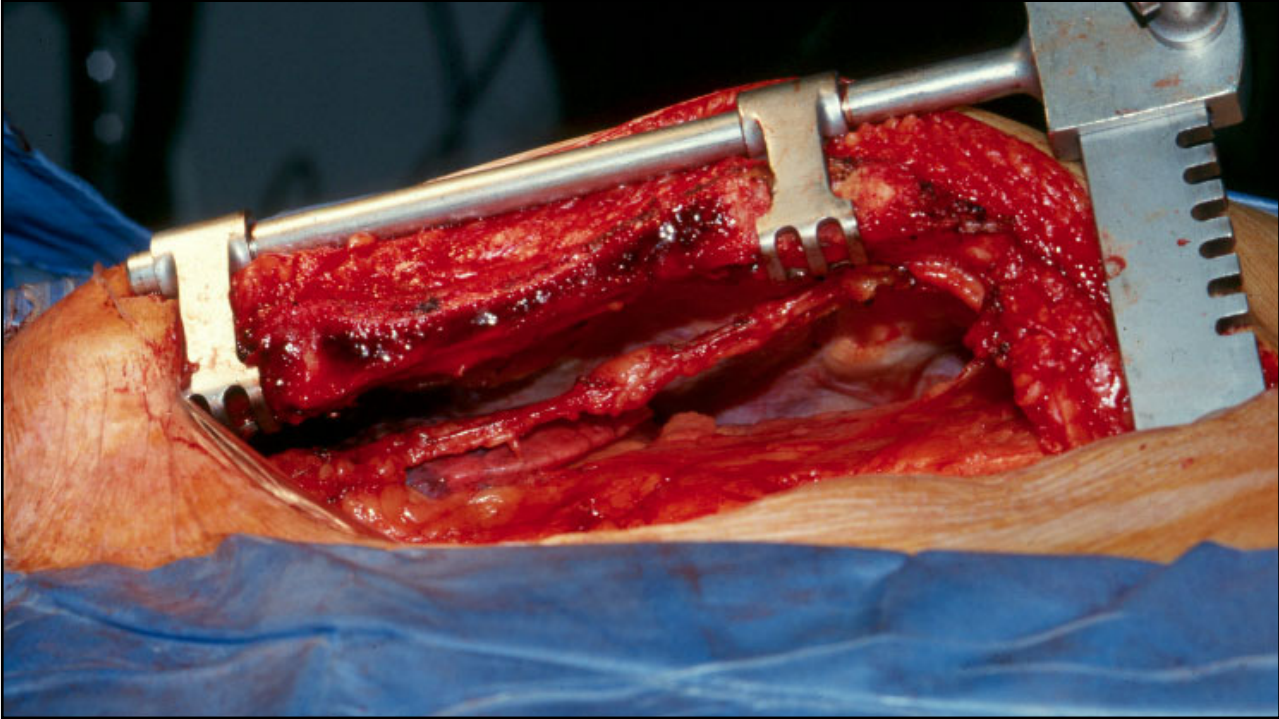
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CABG Conduits

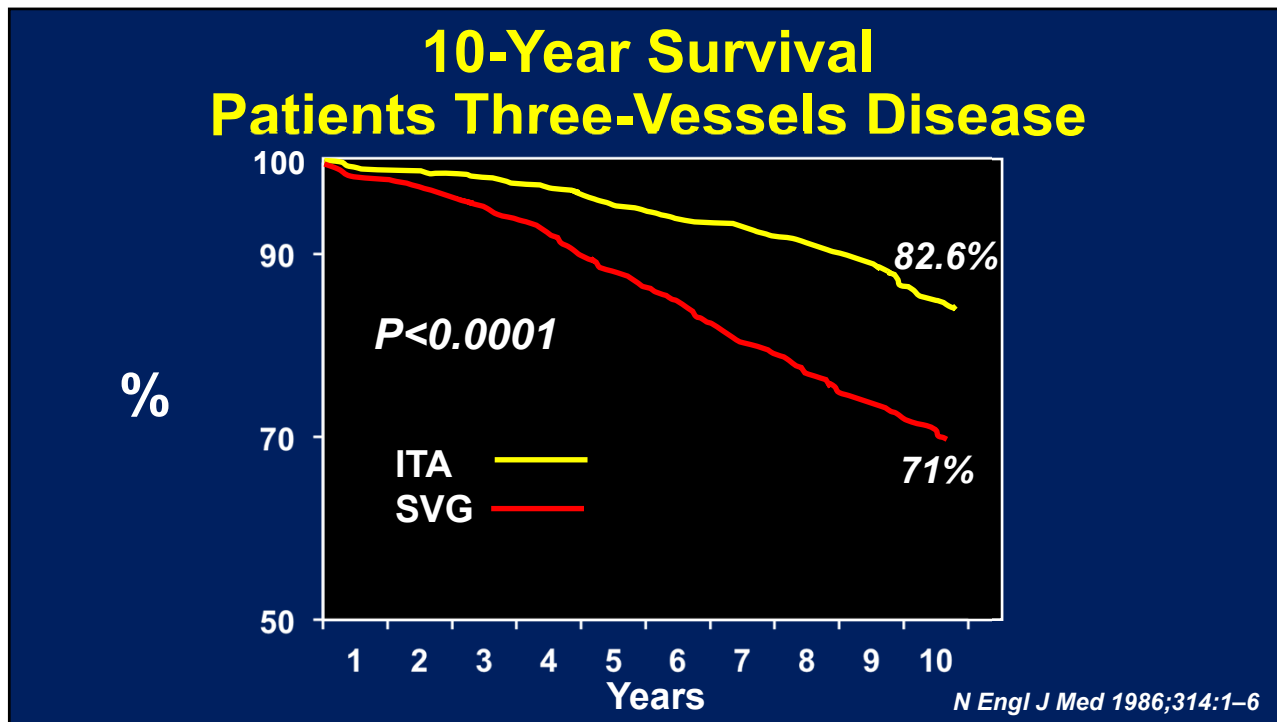
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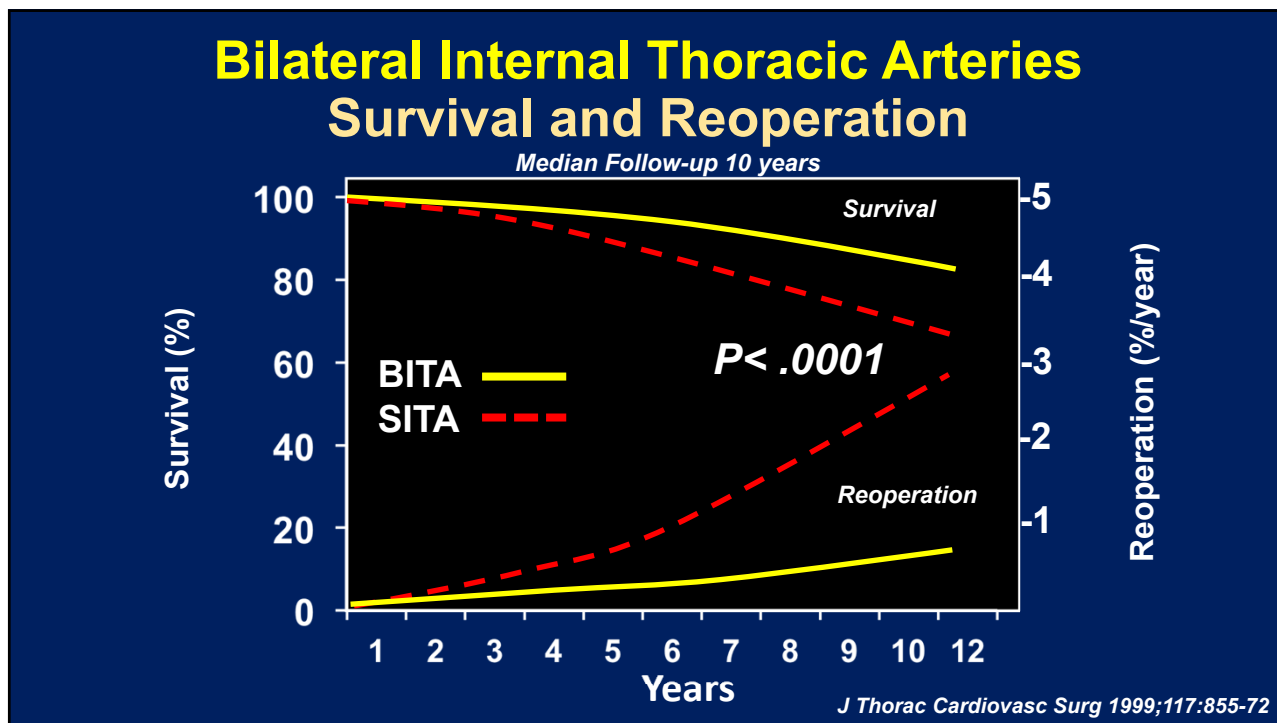
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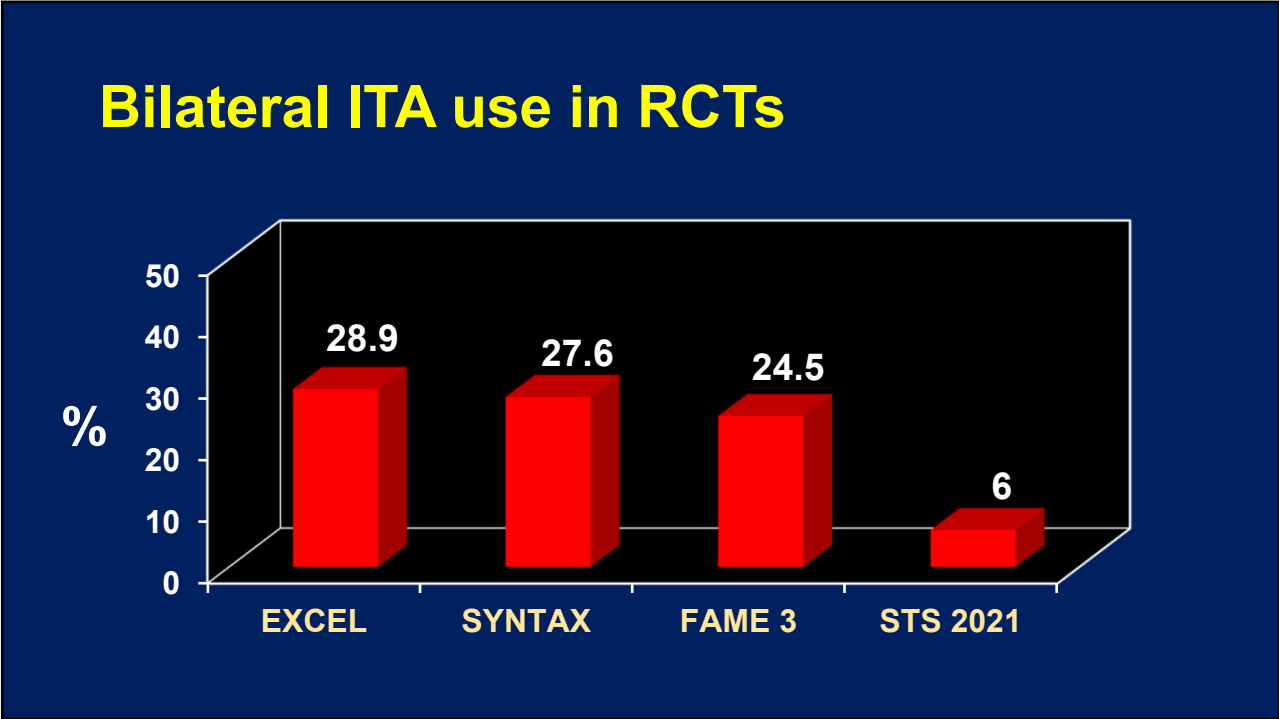
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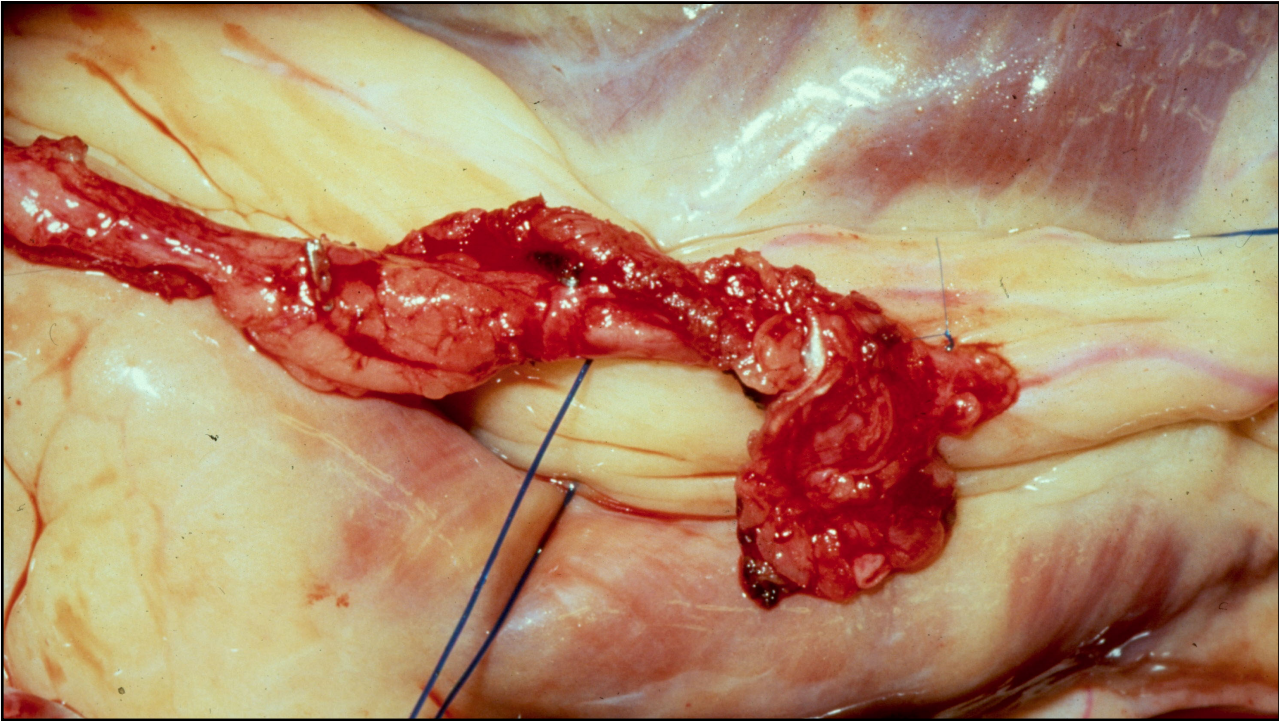
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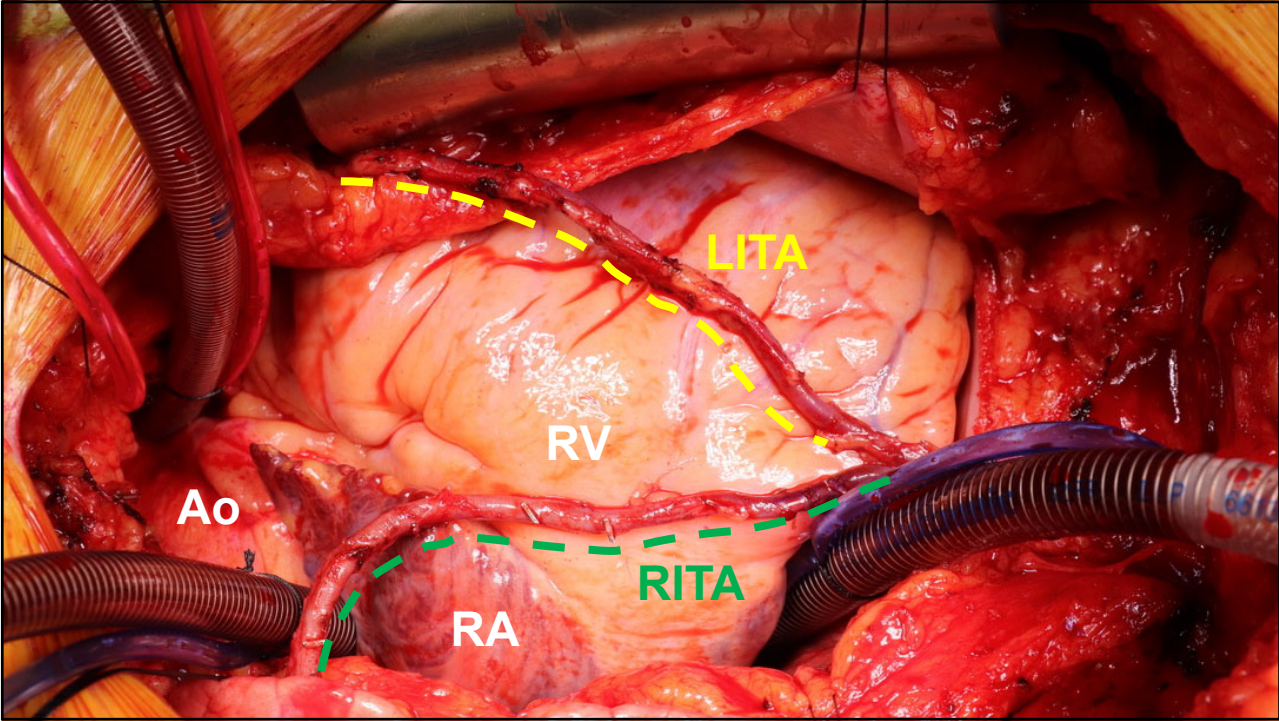
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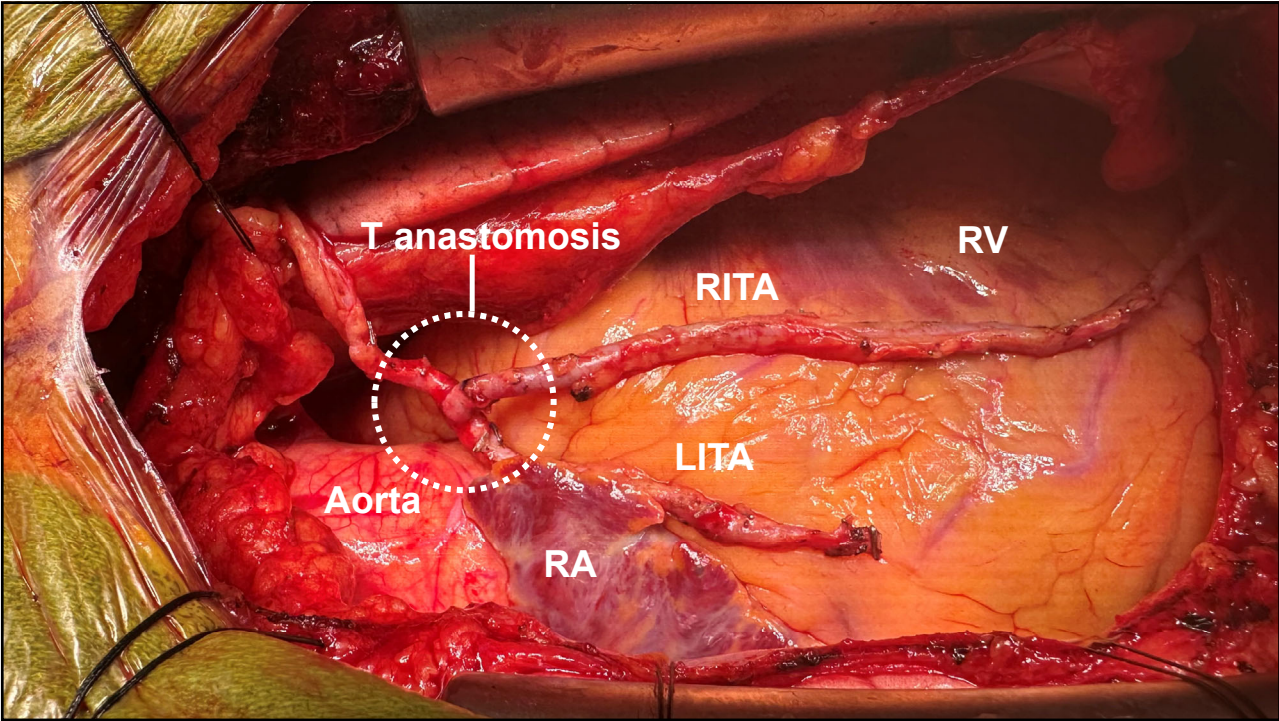
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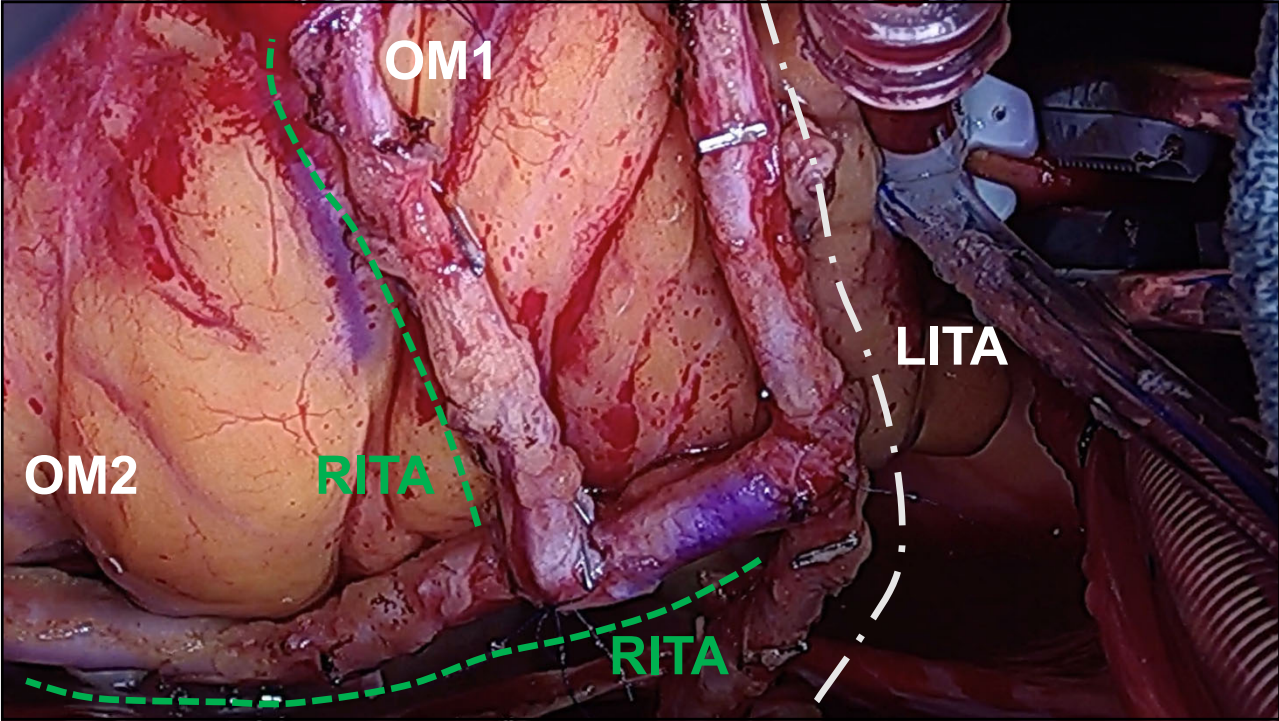
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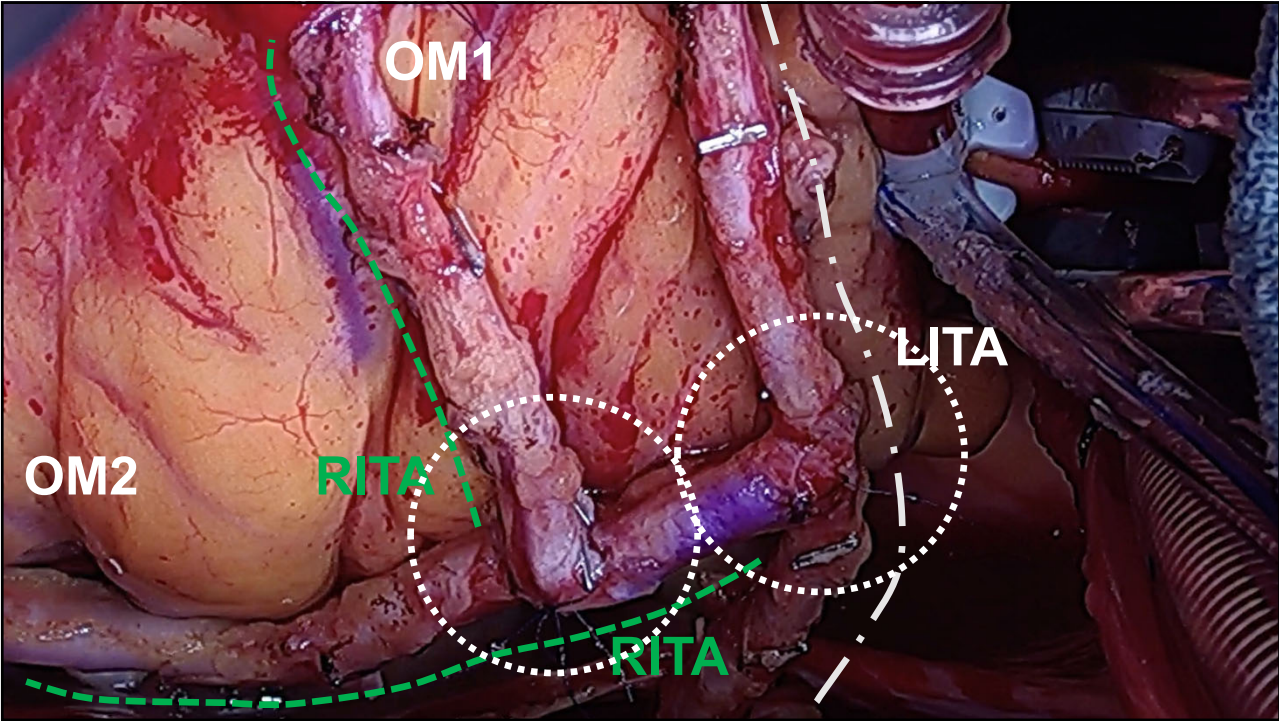
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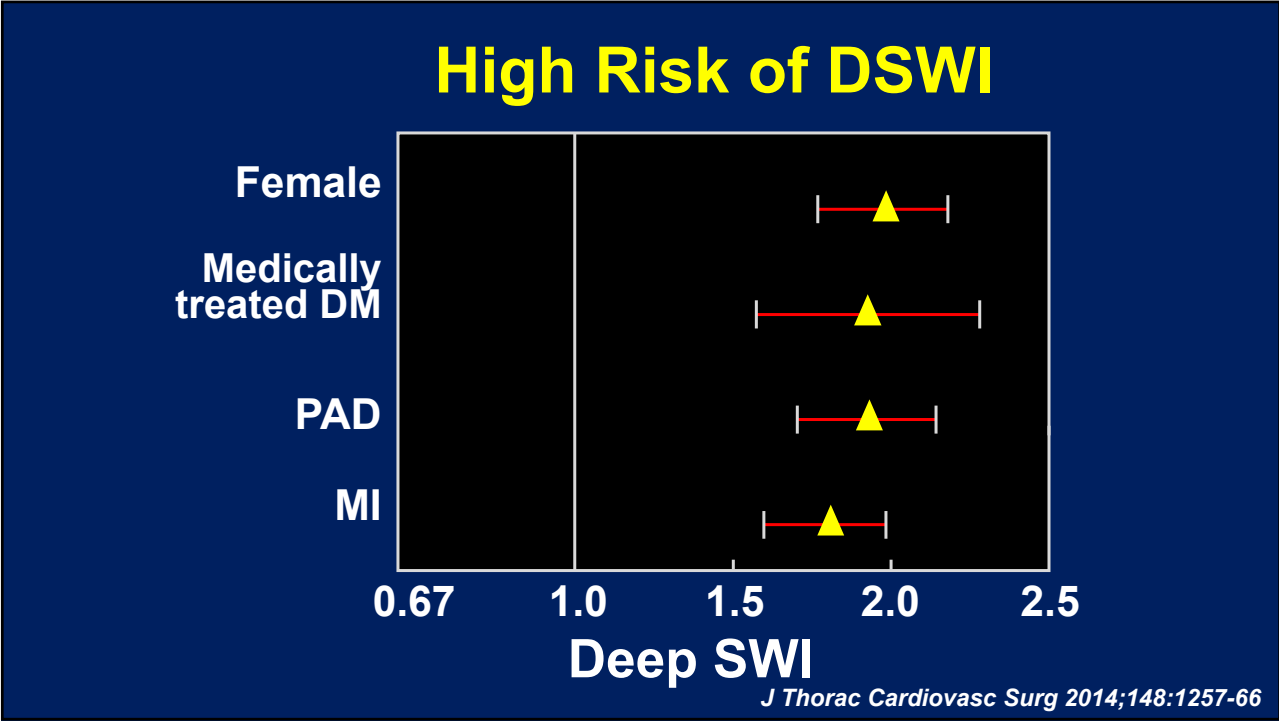
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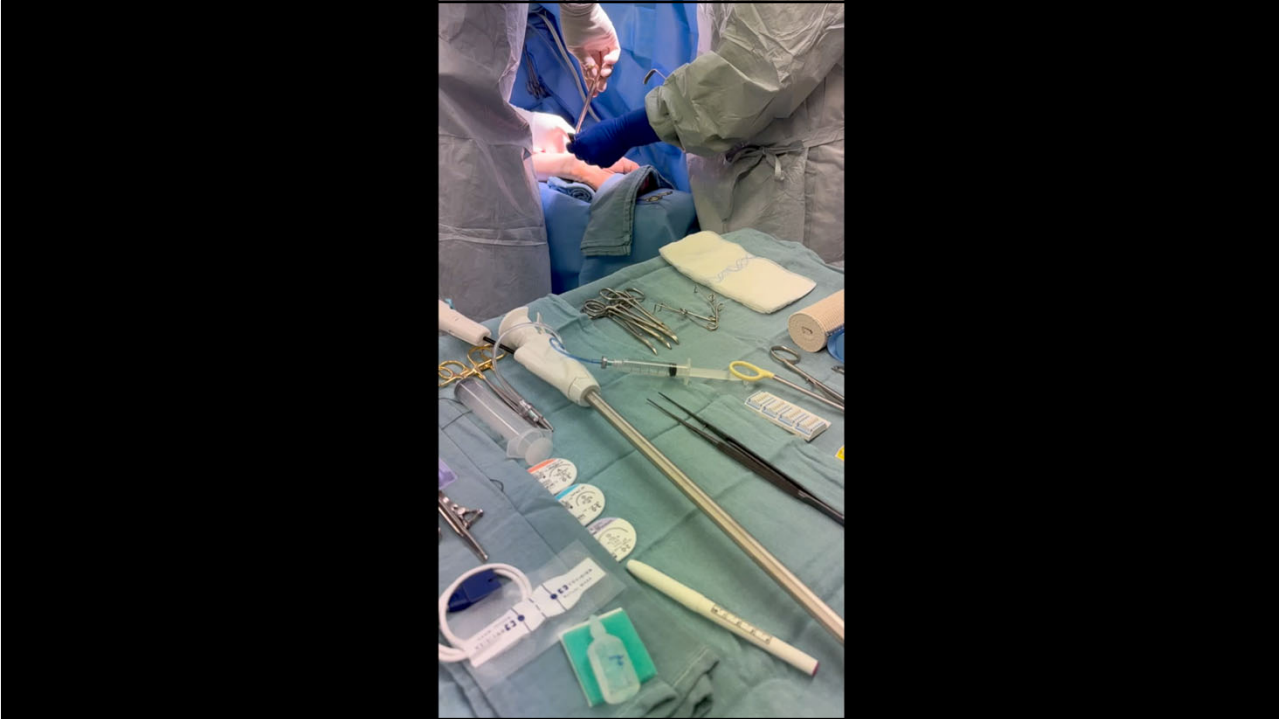
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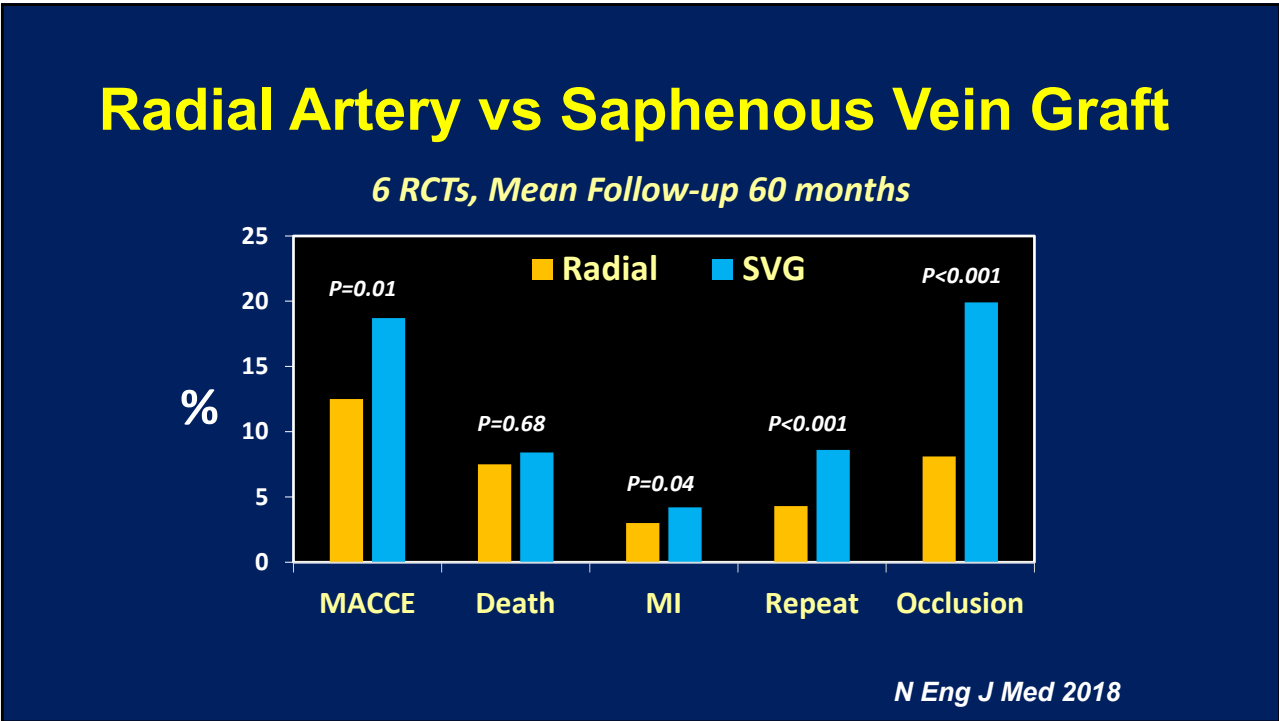
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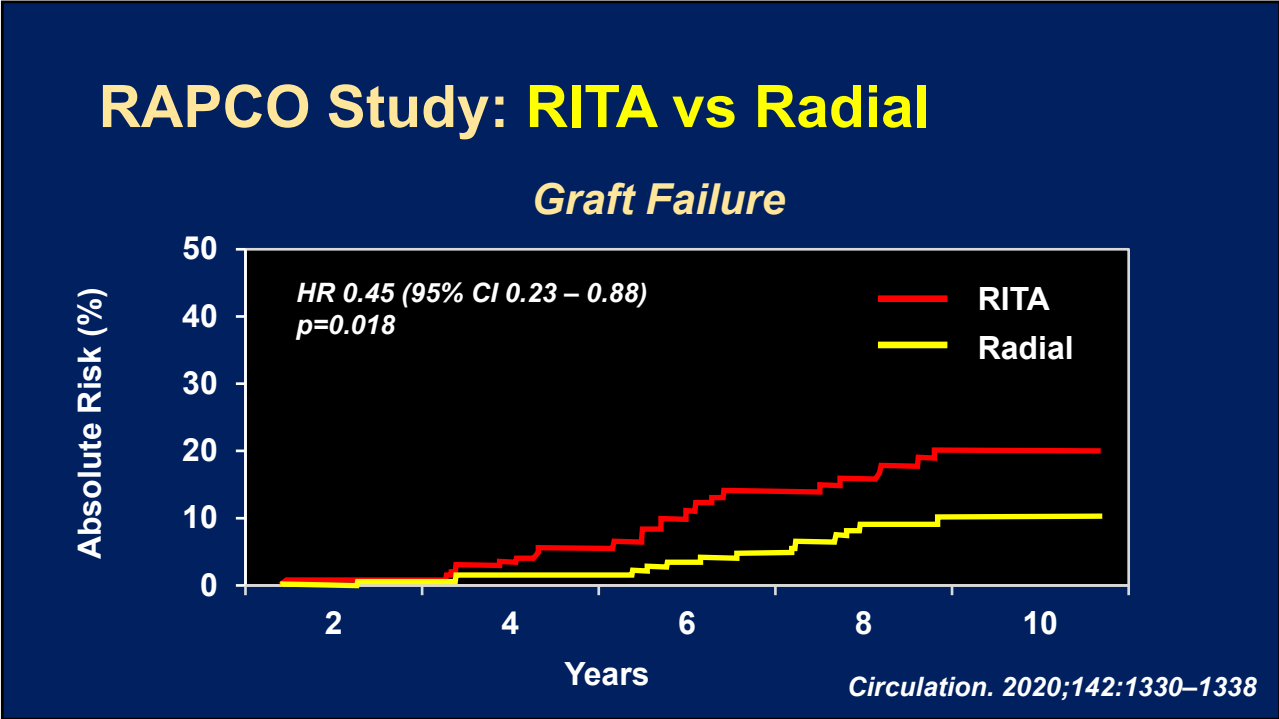
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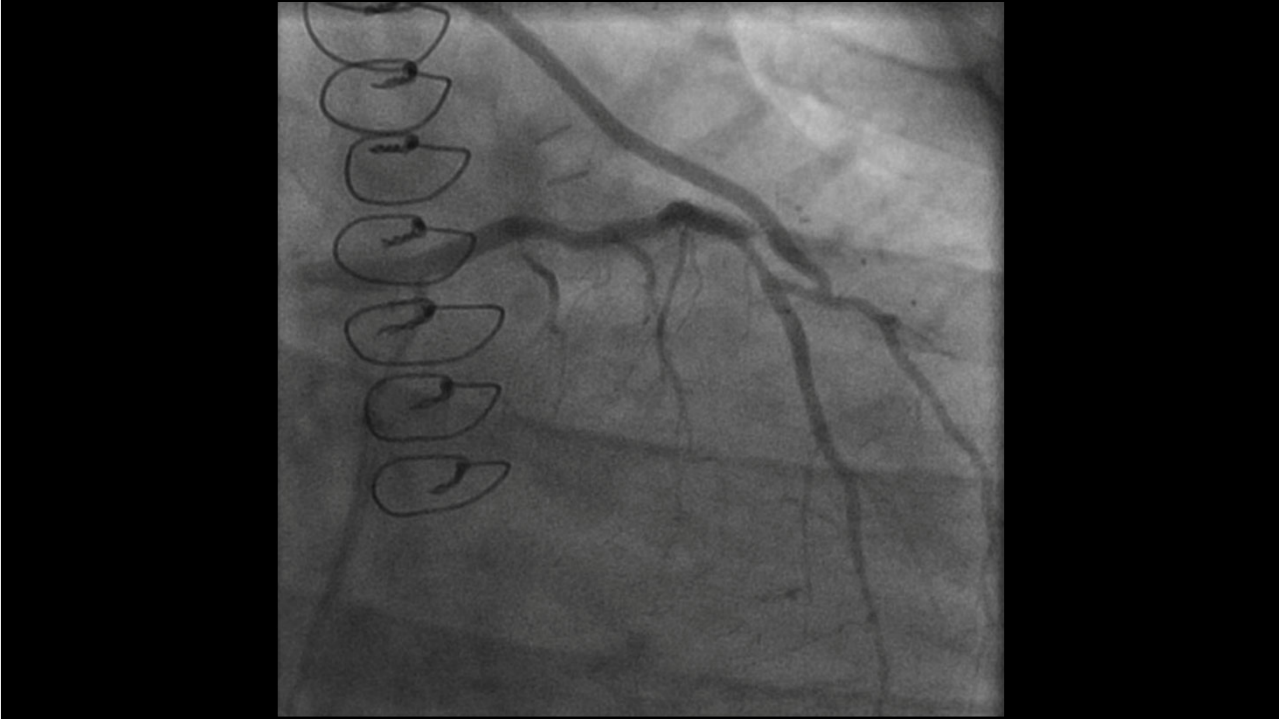
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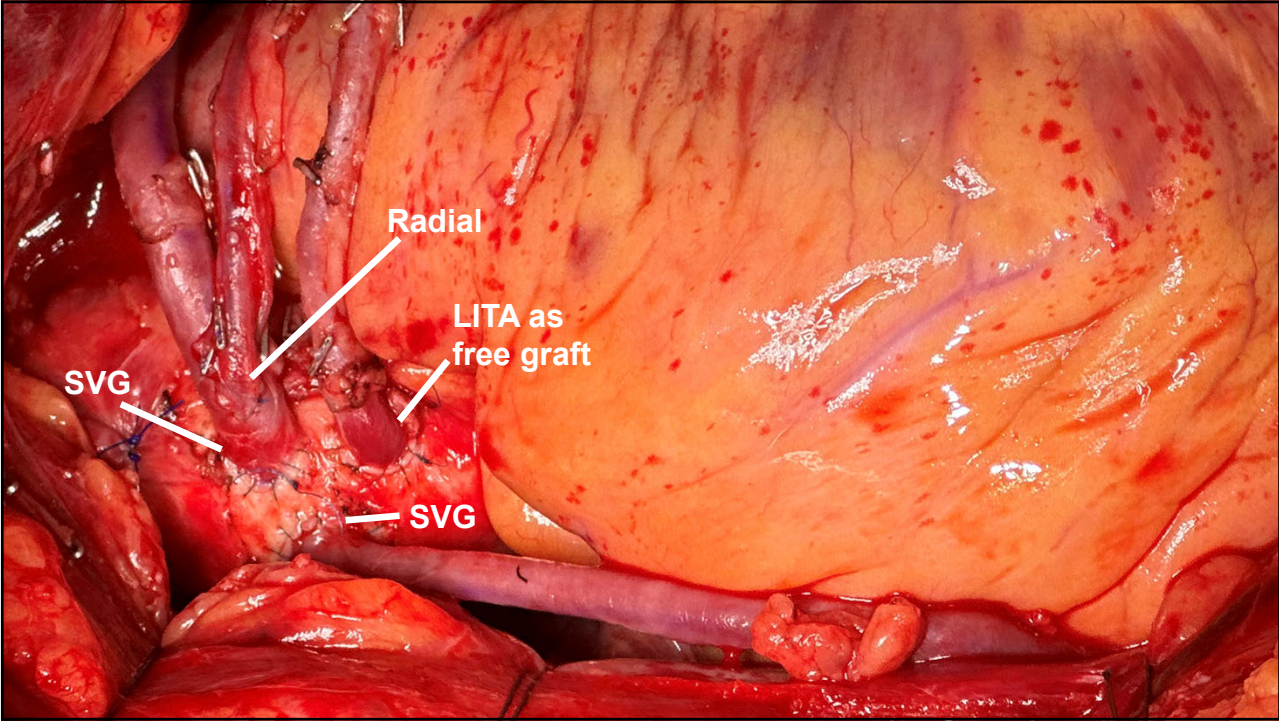
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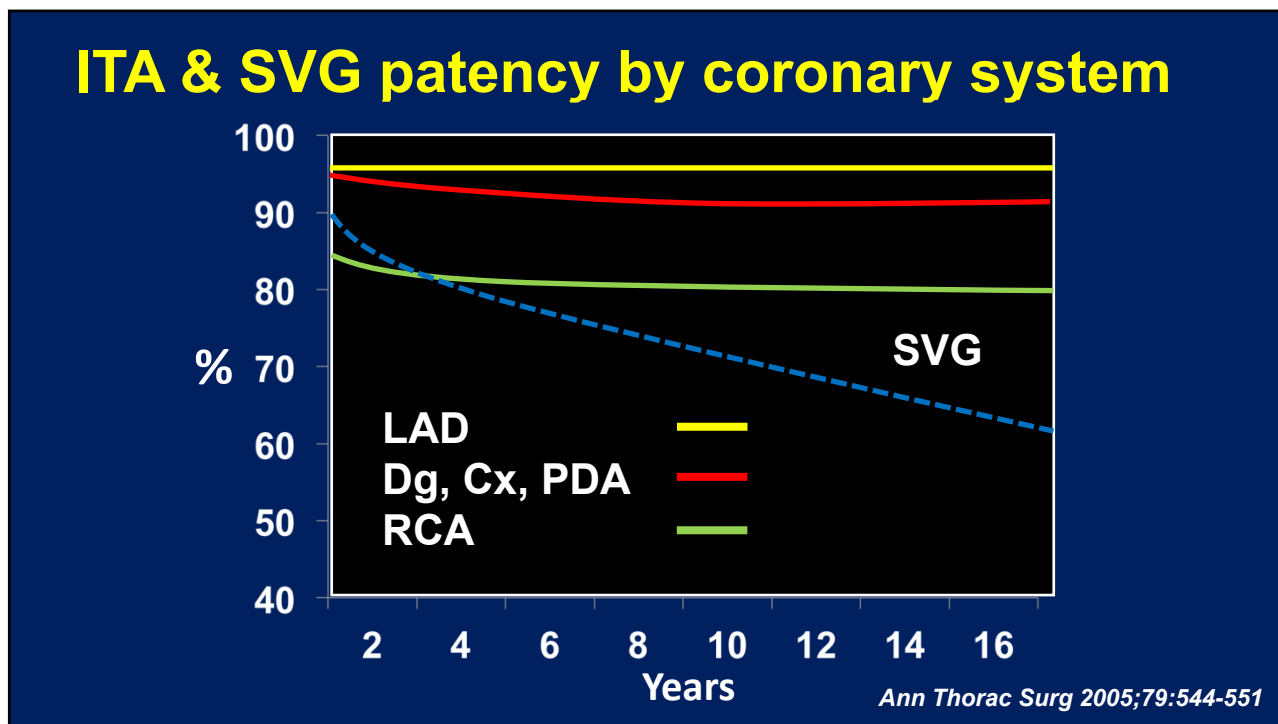
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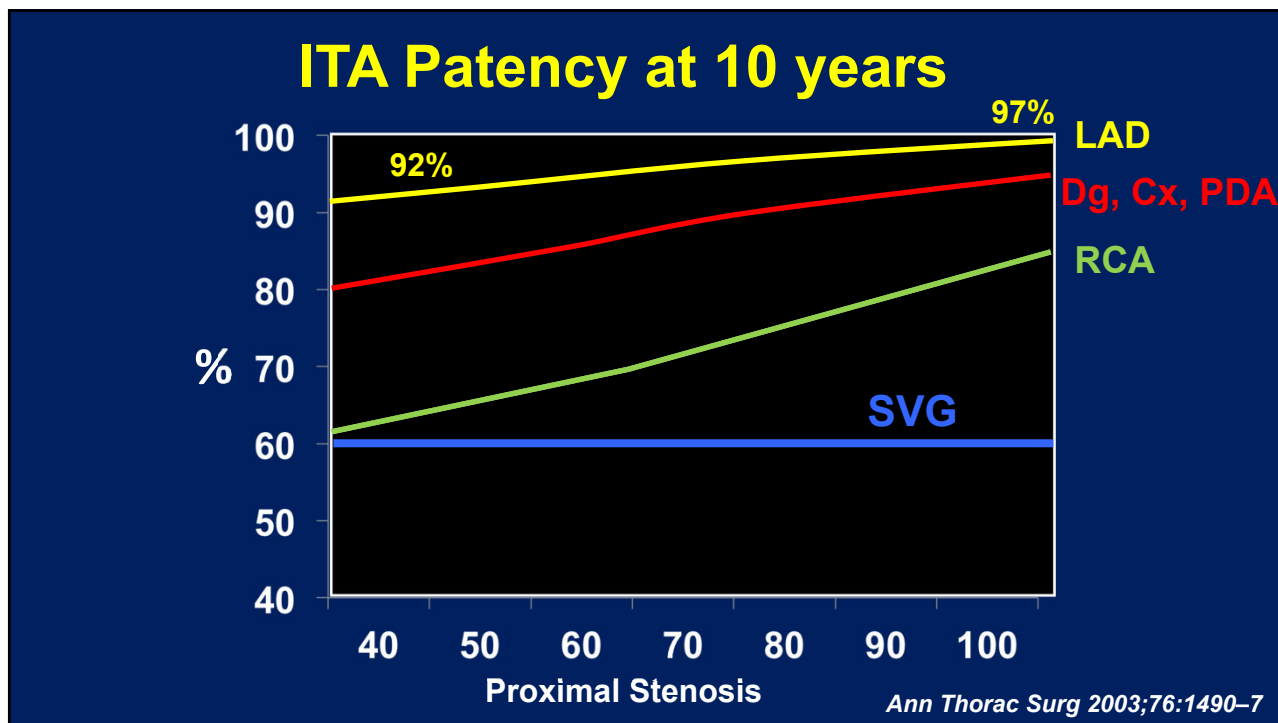
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Long Term Graft Patency

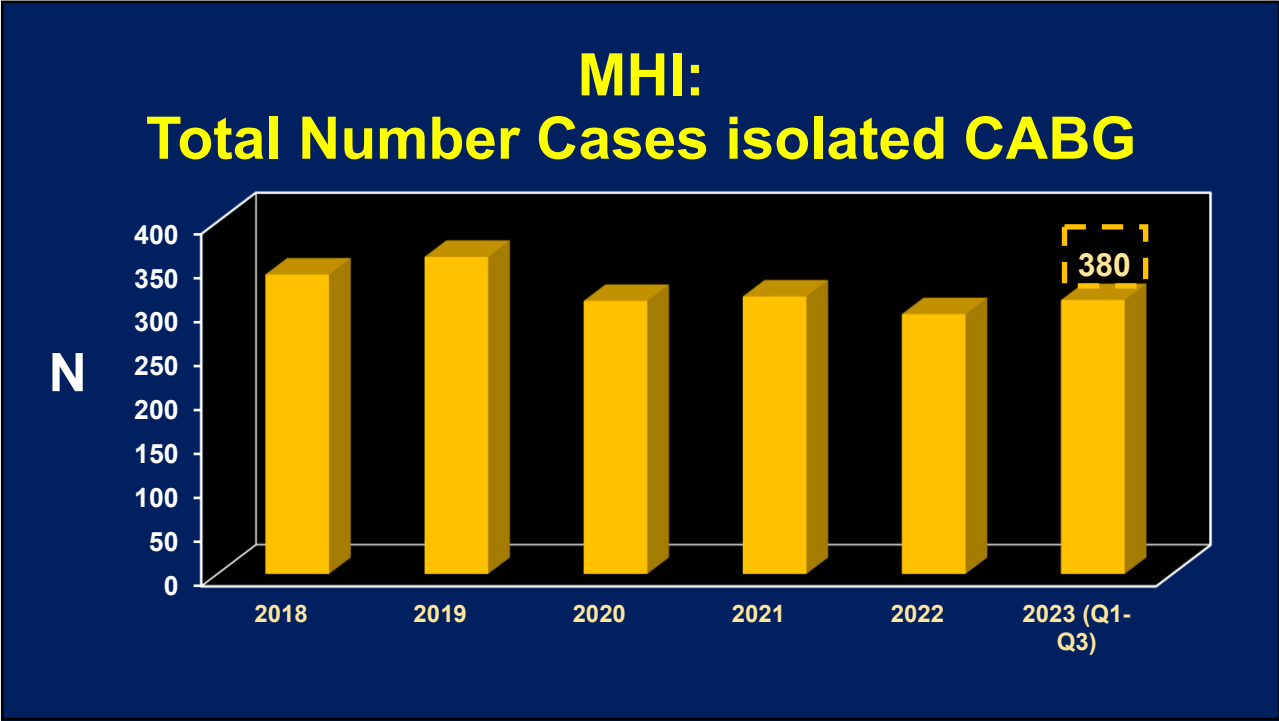
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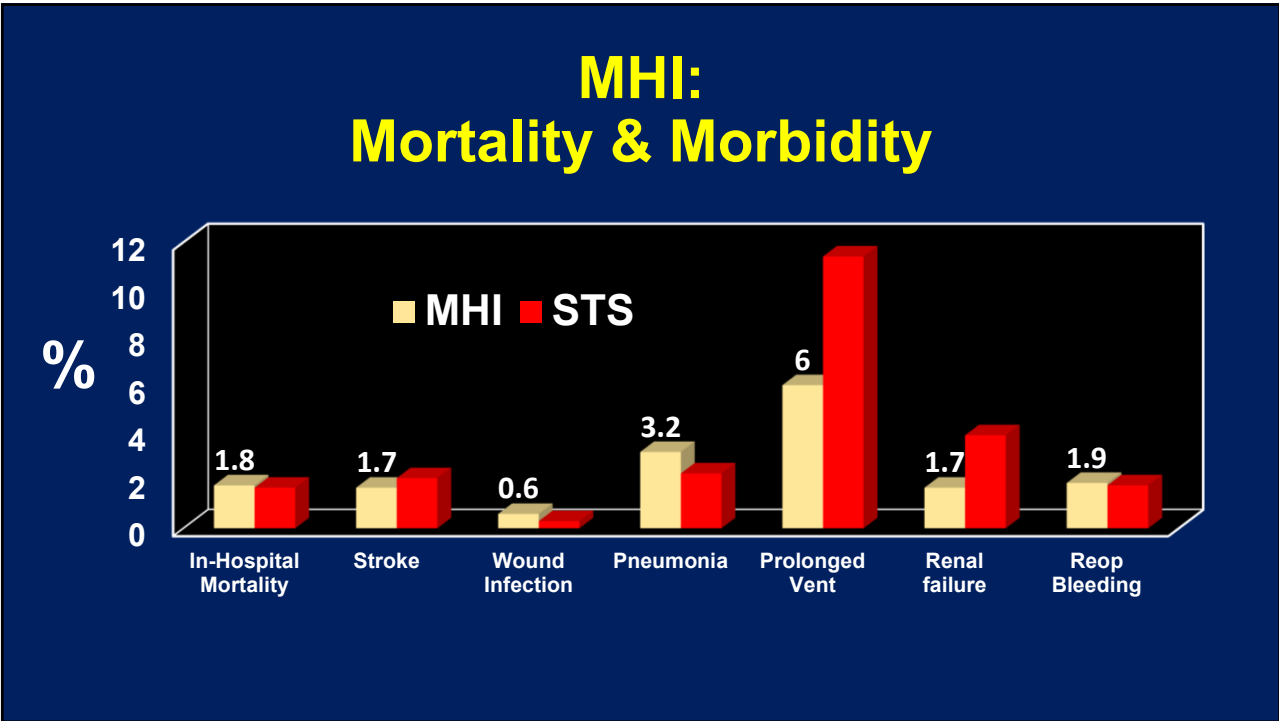
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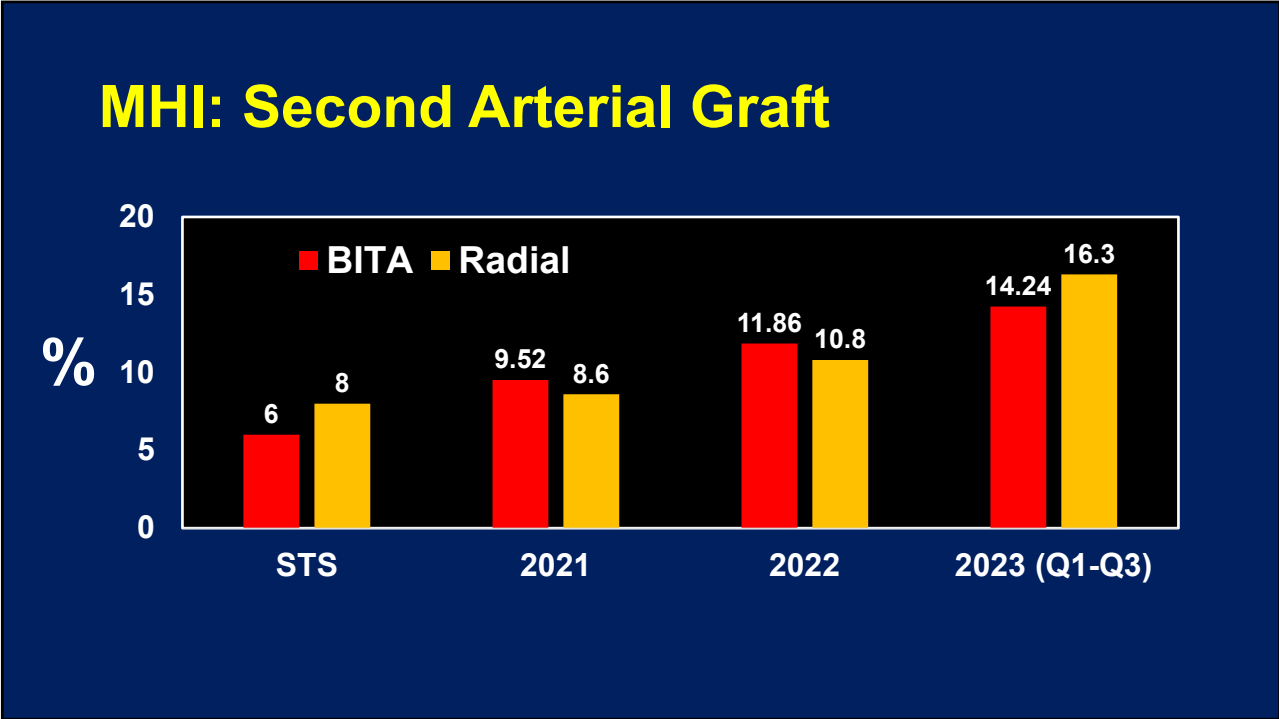
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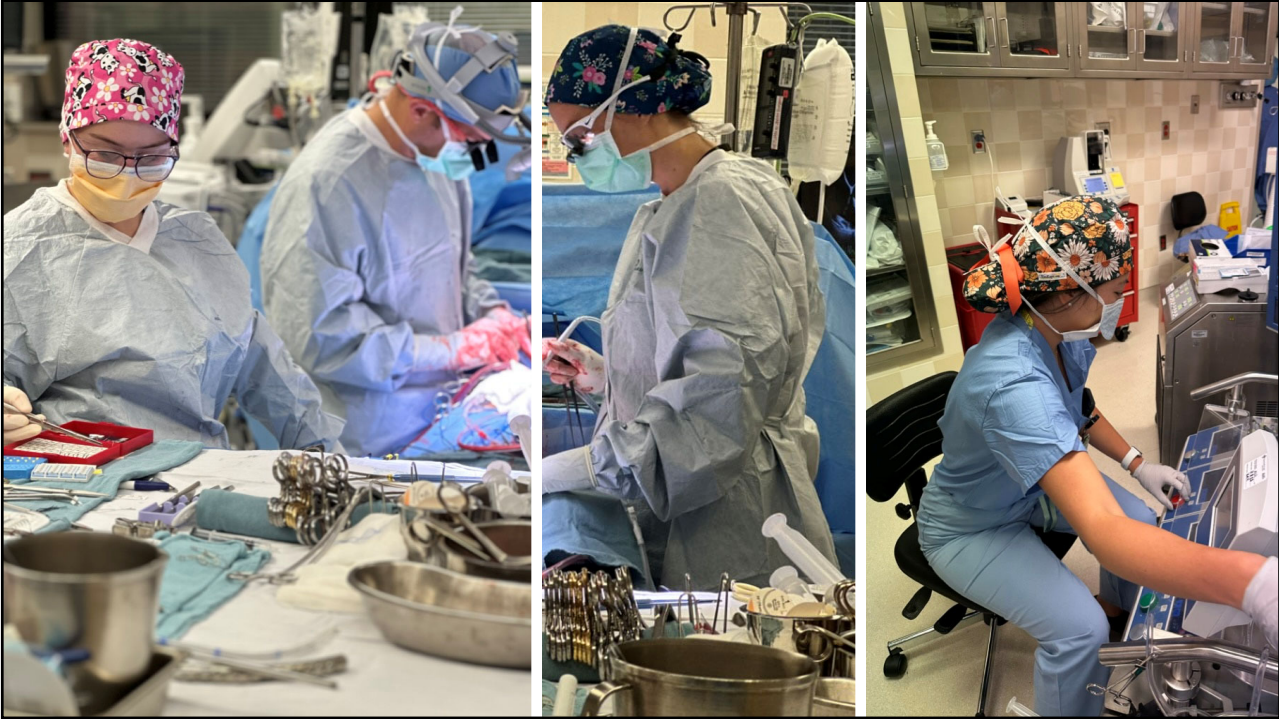
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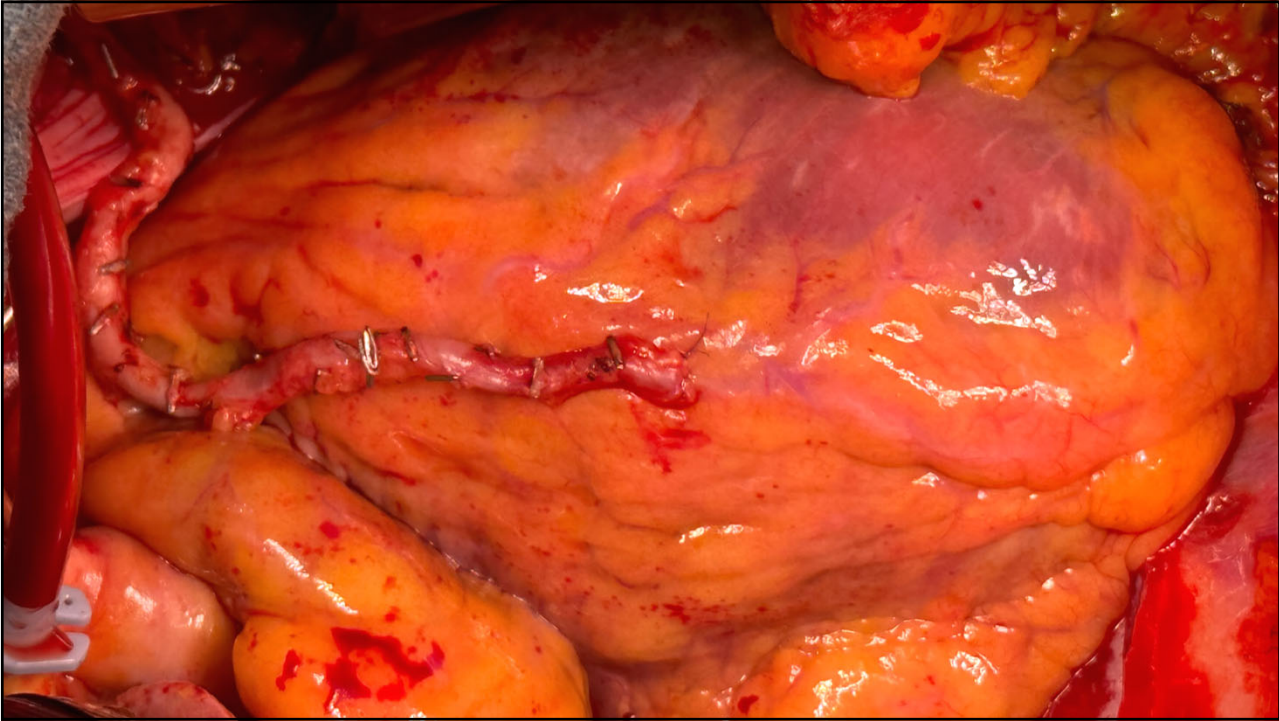
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