

The PCI Patient on the ITU

A Cardiologist's Perspective

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Philosophy and the Matrix



Hospitals deny patients facts on death rates

Guardian investigation under freedom of information extracts first data on heart surgeons and reveals successes and failures of system

Risk adjusted data (EuroSCORE)

Hospital

Blackpool Victoria Hospital

Surgeon Deaths % Cases Deaths %

Au 425 5 1.2 349 1 0.3 76 4 5.3

Duncan 448 2 0.4 379 1 0.3 69 1 1.4

Millner 503 11 2.2 419 5 1.2 84 6 7.1

Sogliani** 280 1 0.4 229 1 0.4 51 0 0

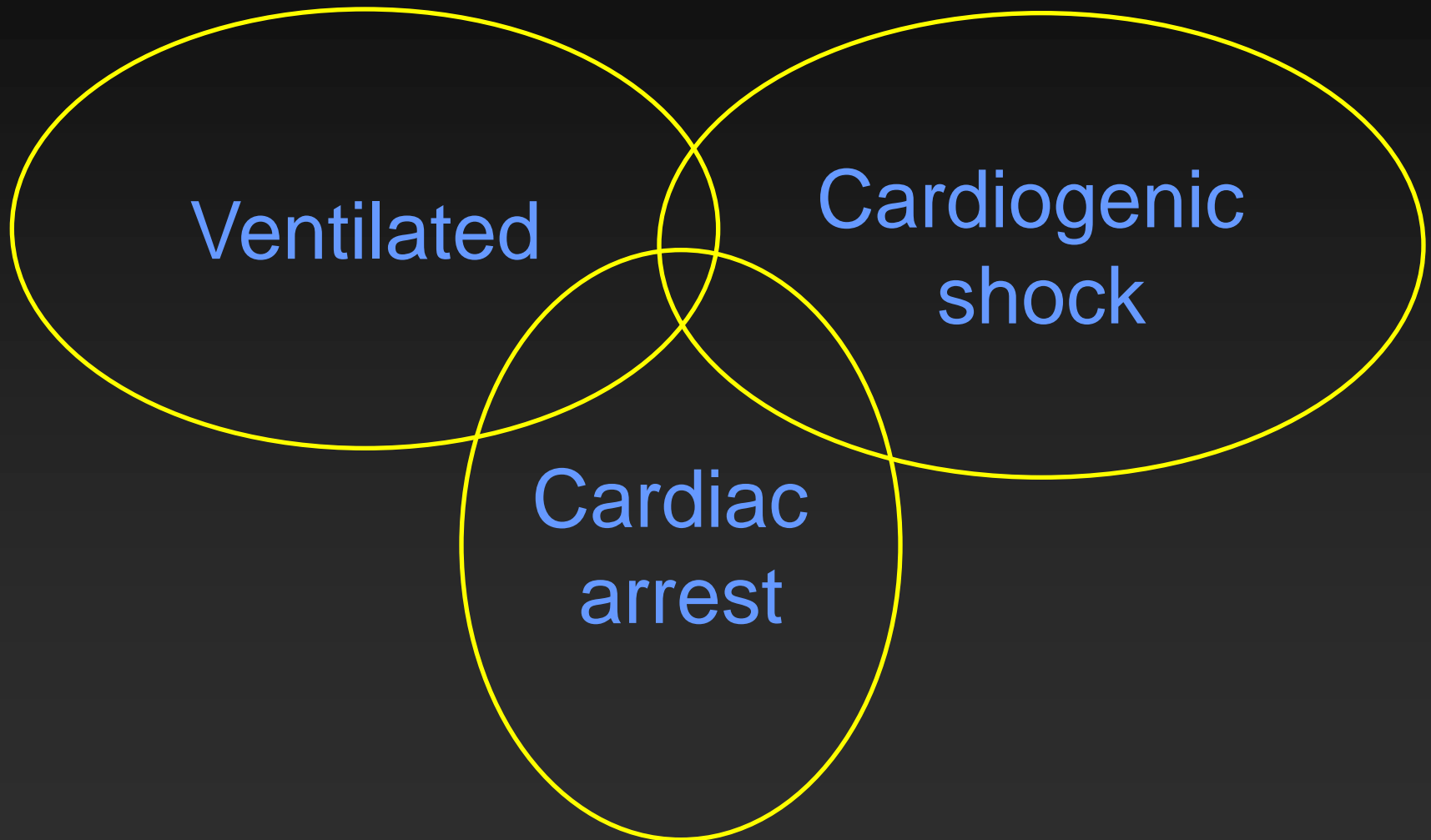
[Sarah Boseley](#), [John Carvel](#) and [Rob Evans](#)

[The Guardian](#), Wednesday 16 March 2005 13.17 GMT

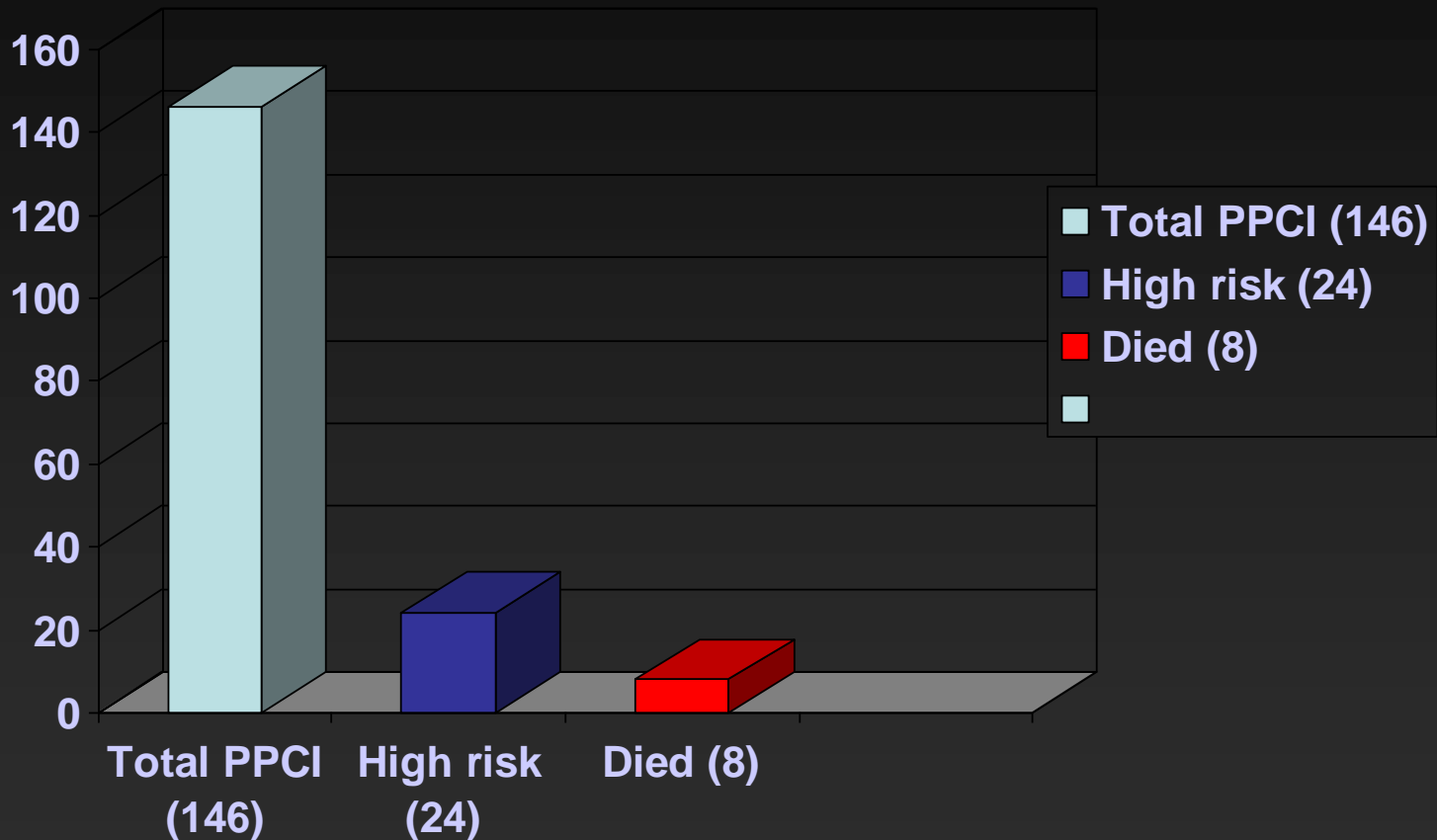
EVERYONE COUNTS: PLANNING FOR PATIENTS 2013/14

- “The Healthcare Quality Improvement Partnership (HQIP) will develop methodologies for casemix comparison and, in conjunction with NHS Choices, publish activity, clinical quality measures and survival rates from national clinical audits for every consultant practising by summer 2013 in the following specialities:
 - Adult cardiac surgery
 - Interventional cardiology
 - Vascular surgery
 - Upper gastro-intestinal surgery
 - Colorectal surgery
 - Orthopaedic surgery
 - Bariatric surgery
 - Urological surgery
 - Head and neck surgery
 - Thyroid and endocrine surgery.”

High Risk PPCI



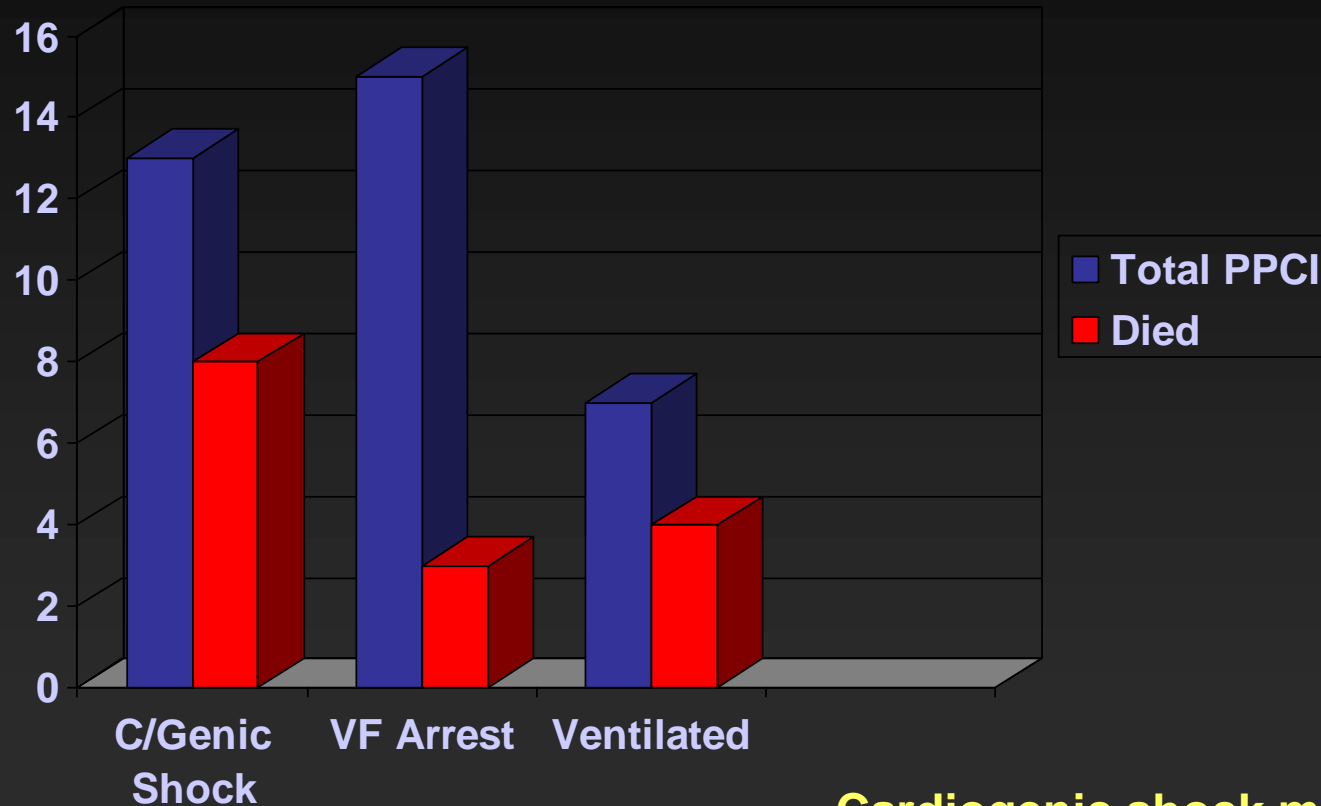
Total PPCI



High risk = 16% of total PPCI

Mortality rate = 33% in this high risk group

High Risk PPCI



Cardiogenic shock mortality = 62%

VF arrest mortality = 20%

Ventilated mortality = 57%

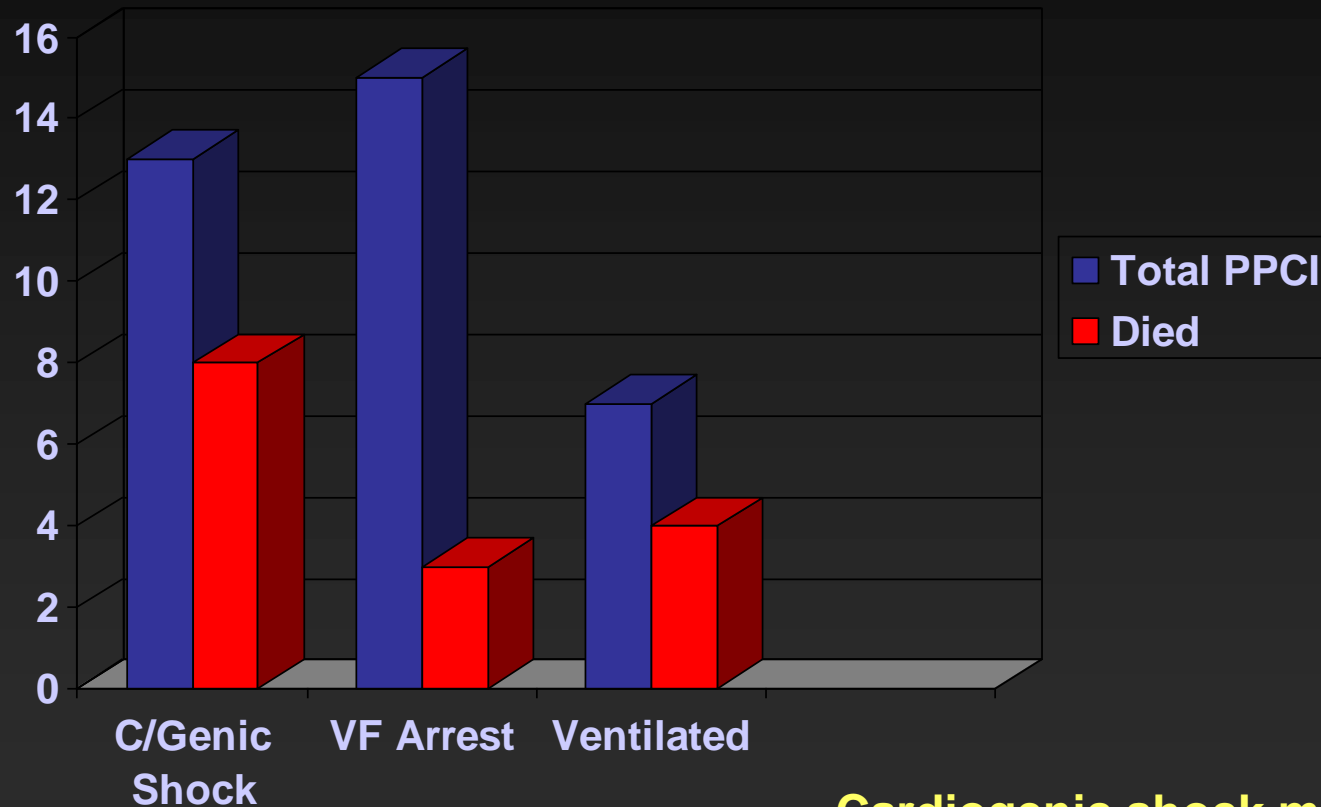
The Cardiac Arrest Patient

Survival According to Initial Rhythm

Initial Rhythm	Frequency (n)	Surviving Resuscitation Attempt (n)	Surviving (%)
SVT	28	17	60.7
VT	59	34	57.6
Perfusing	614	306	49.8
VF	325	104	32.0
PEA	869	127	14.6
Asystole	473	43	9.1

SVT, supraventricular tachycardia; VT, ventricular tachycardia; VF, ventricular fibrillation; PEA, pulseless electrical activity.

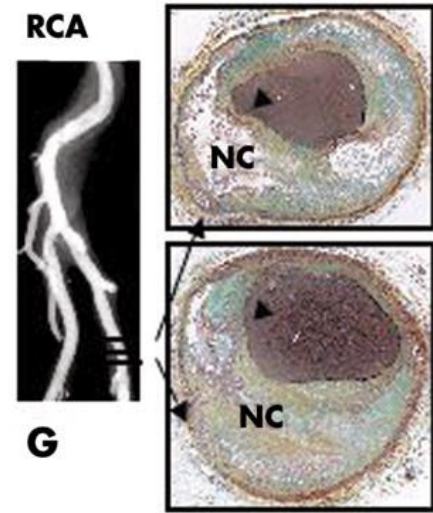
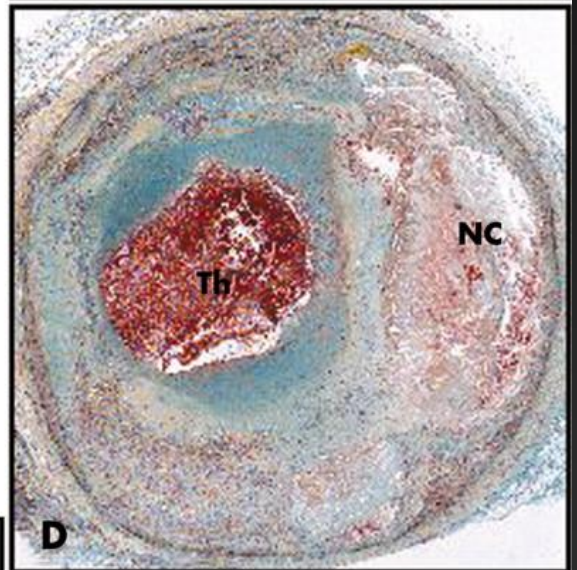
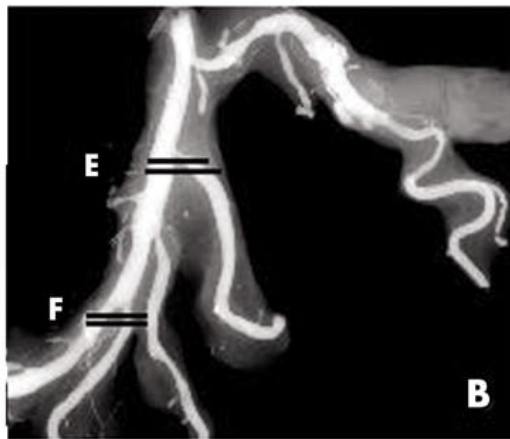
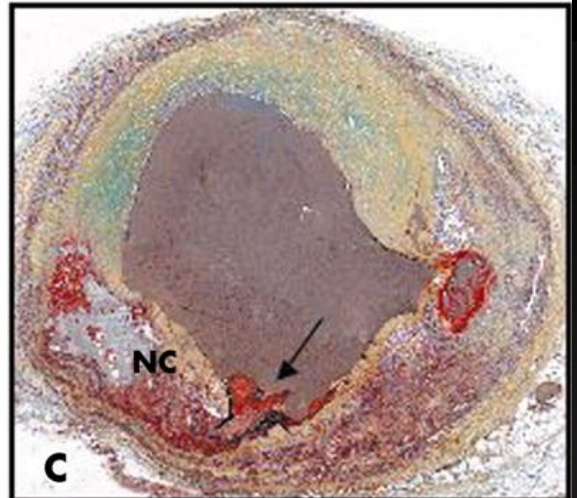
Cardiac Arrest Mortality



Cardiogenic shock mortality = 62%

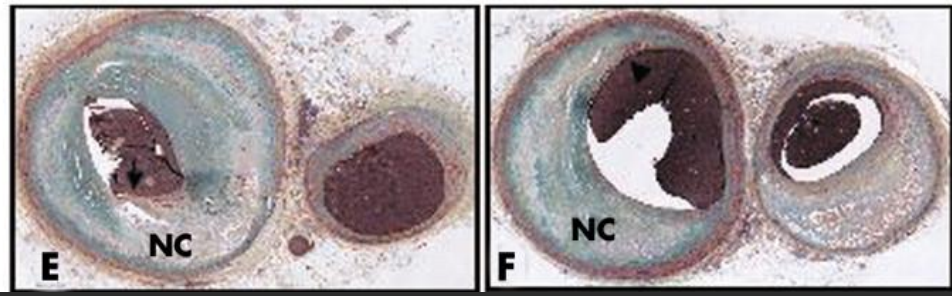
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Thin cap
Fibro-
atheroma

Thin cap
fibroatheroma



LAD

E

NC

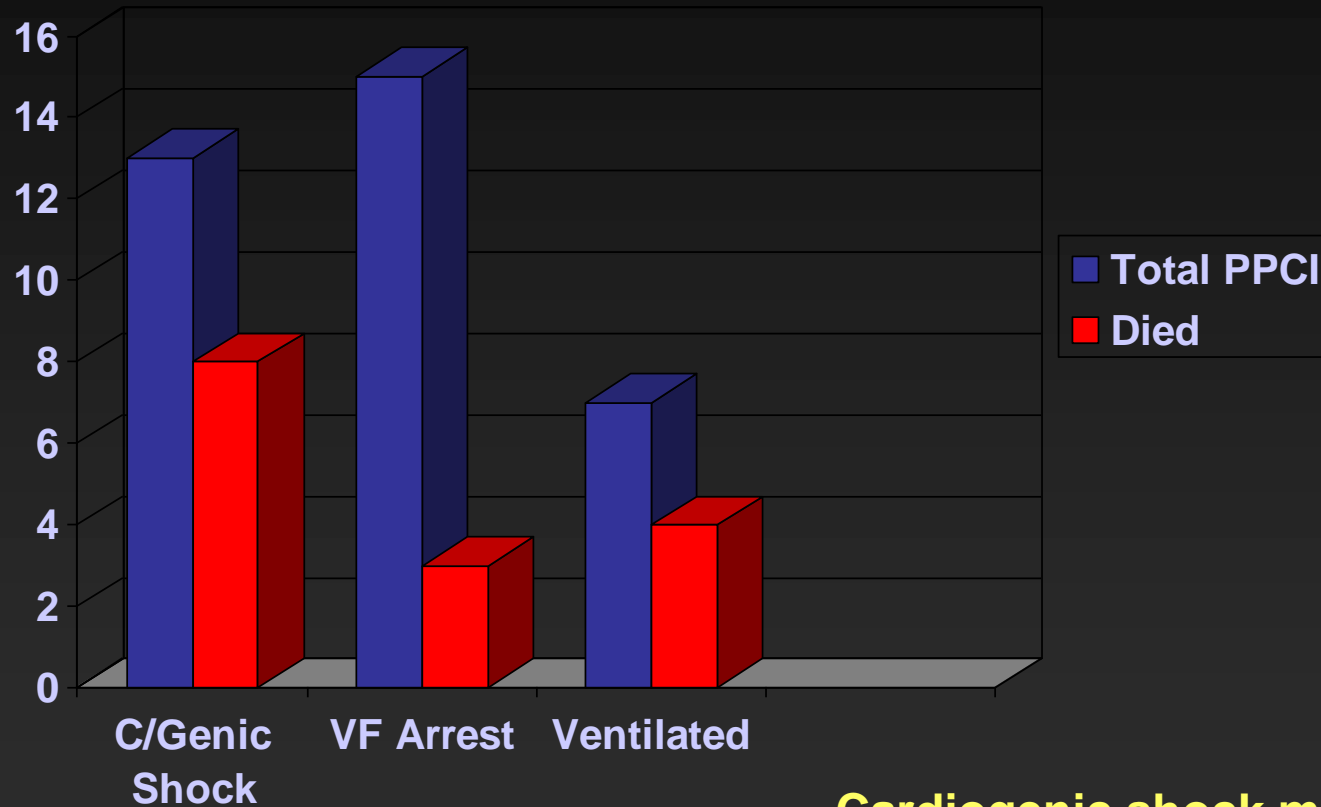
F

NC

Ventilated Patient

- ?Proxy for neurological cooling

Ventilated

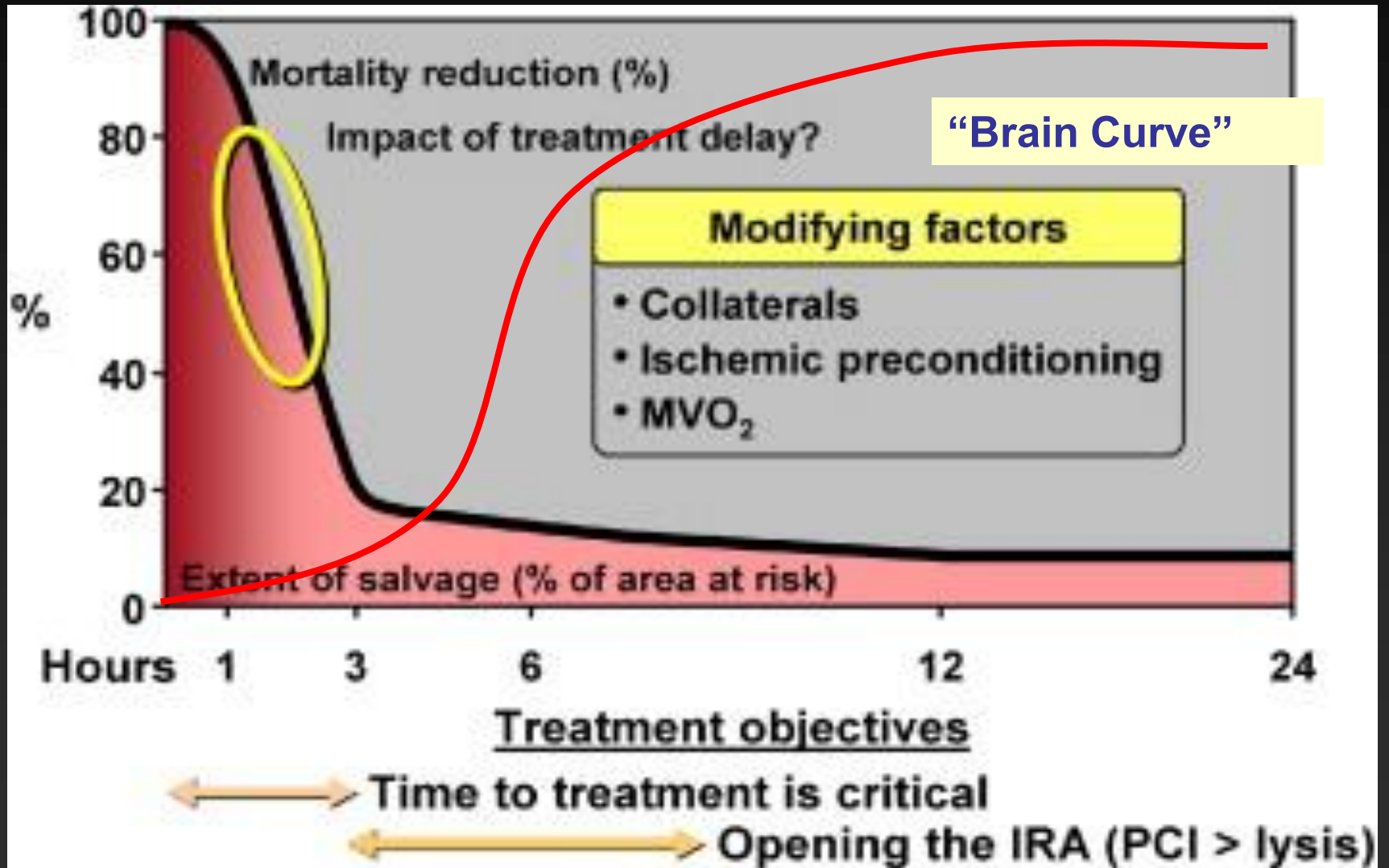


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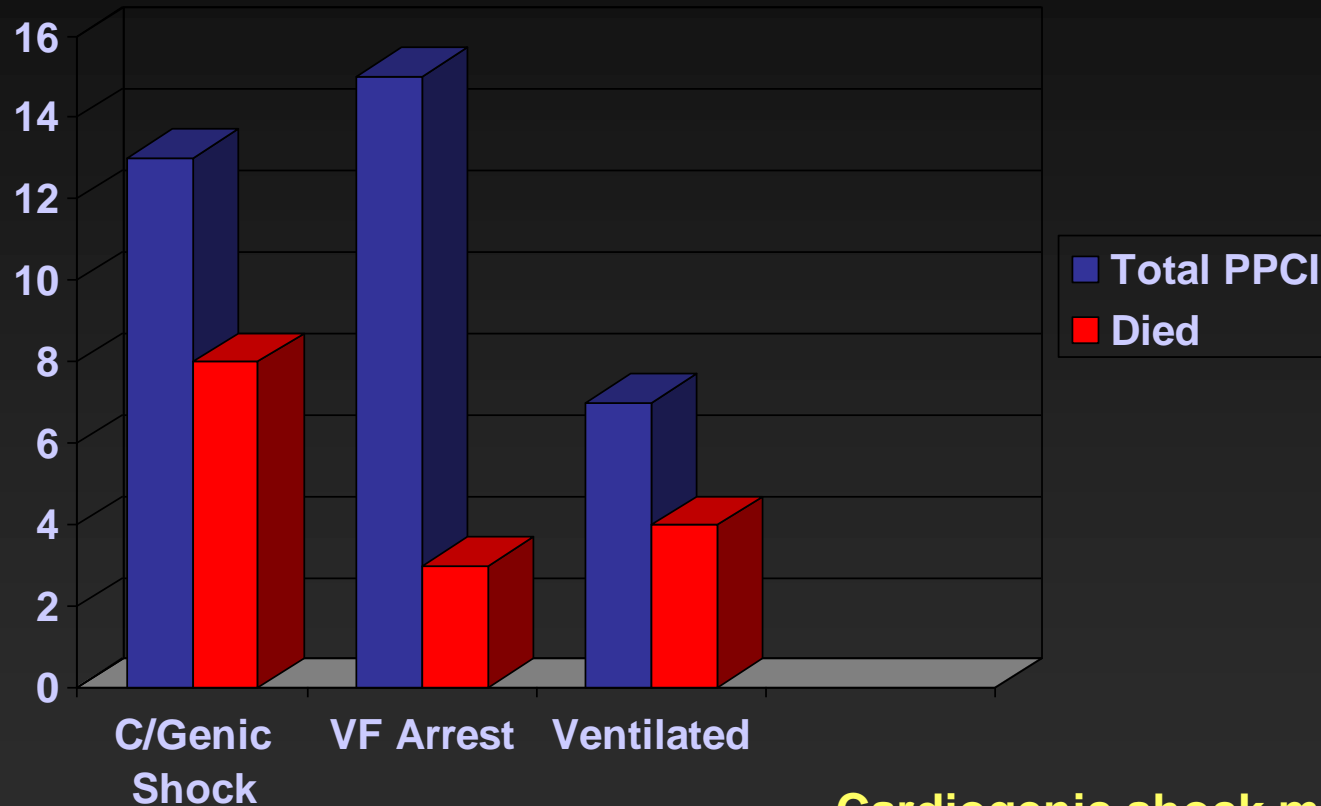
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Heart v Brain



Cardiogenic Shock



Cardiogenic shock mortality = 62%

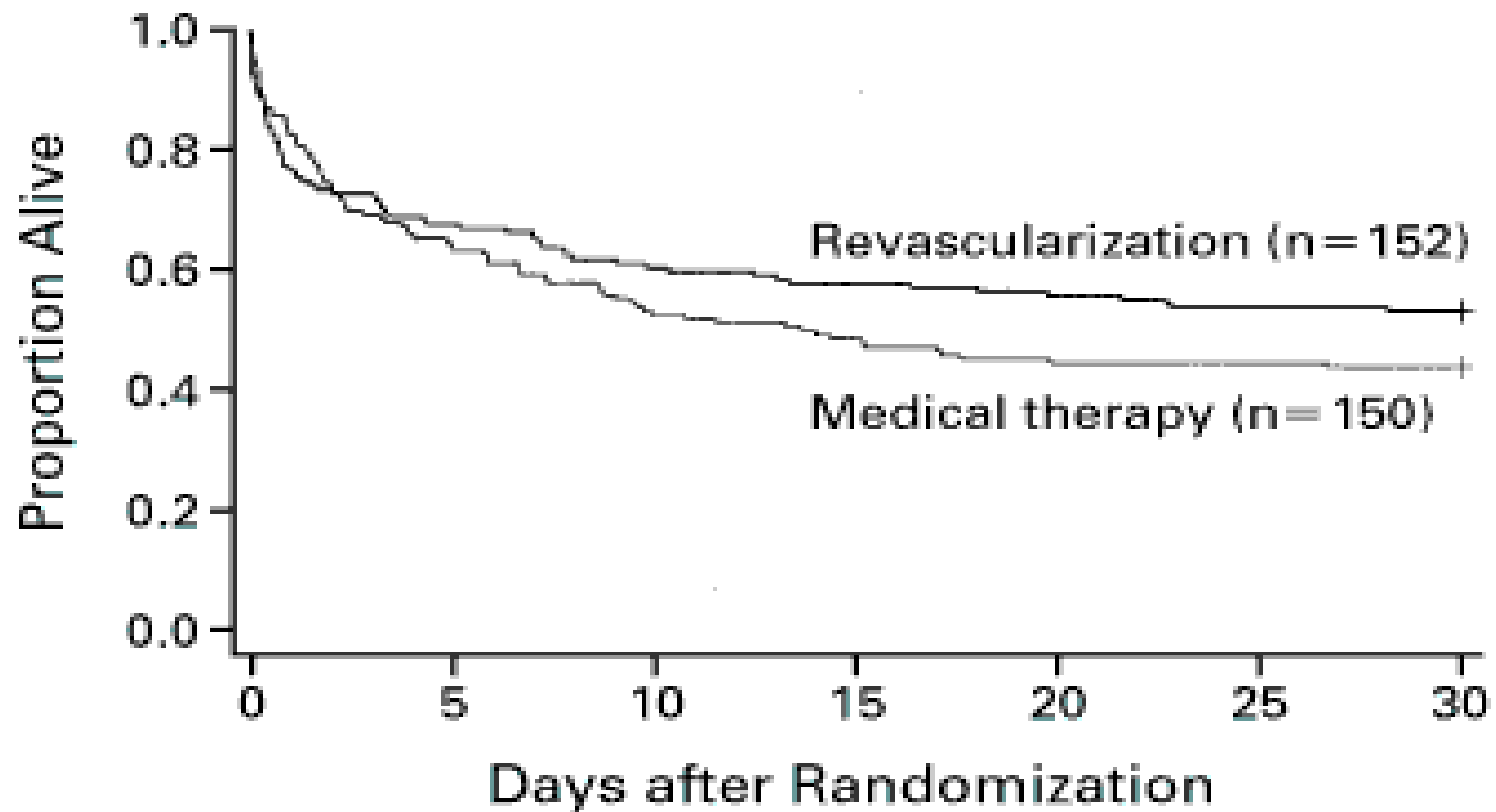
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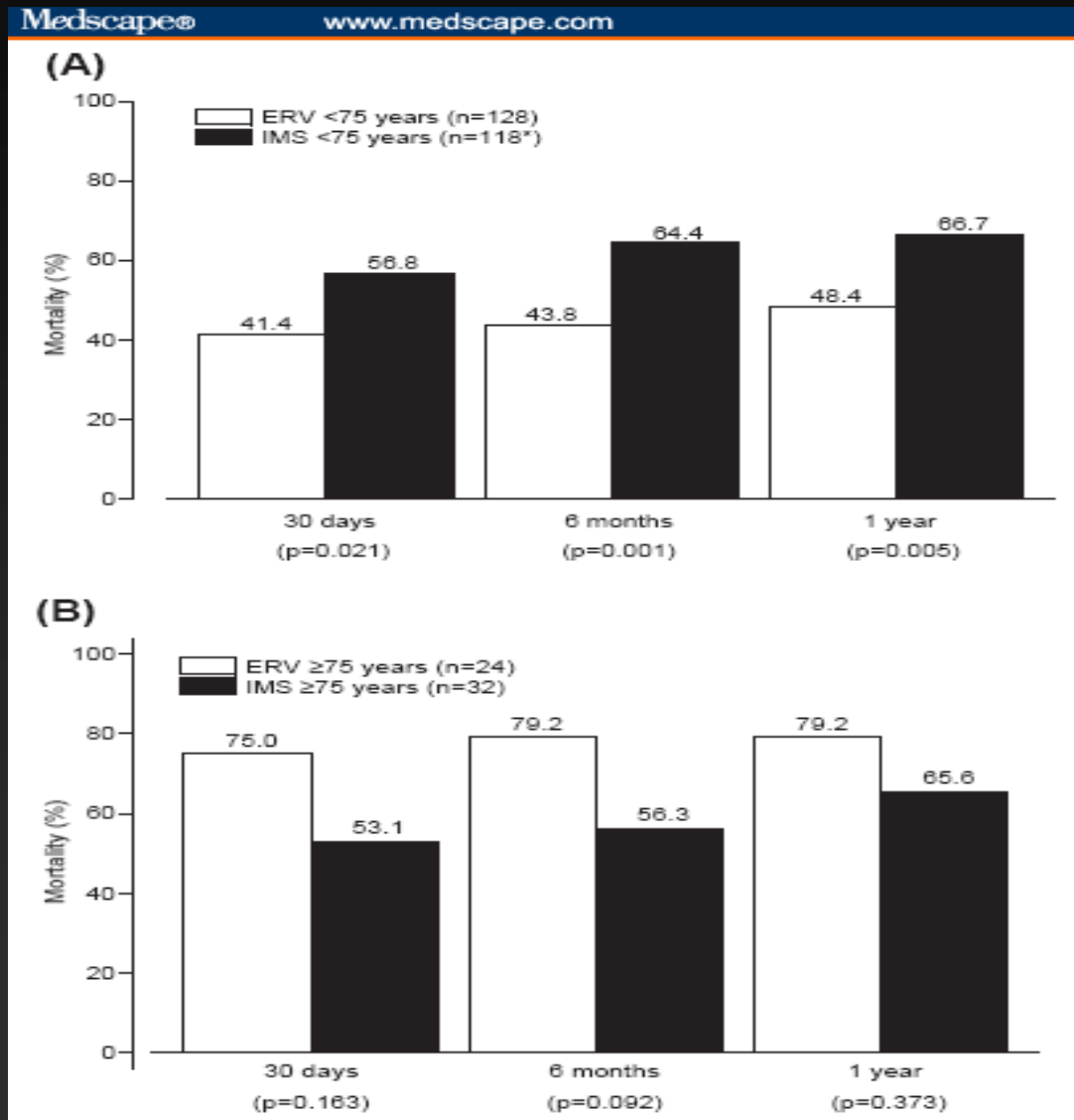
Cardiogenic shock

- Incidence +/- 7.5%
- Mortality +/- 75%!
- Usually 3 V disease / LAD and large infarcts
- Develops rapidly and early (72% in 24 hrs.)
- Early reperfusion (thrombolysis / PCI) best strategy to minimise above

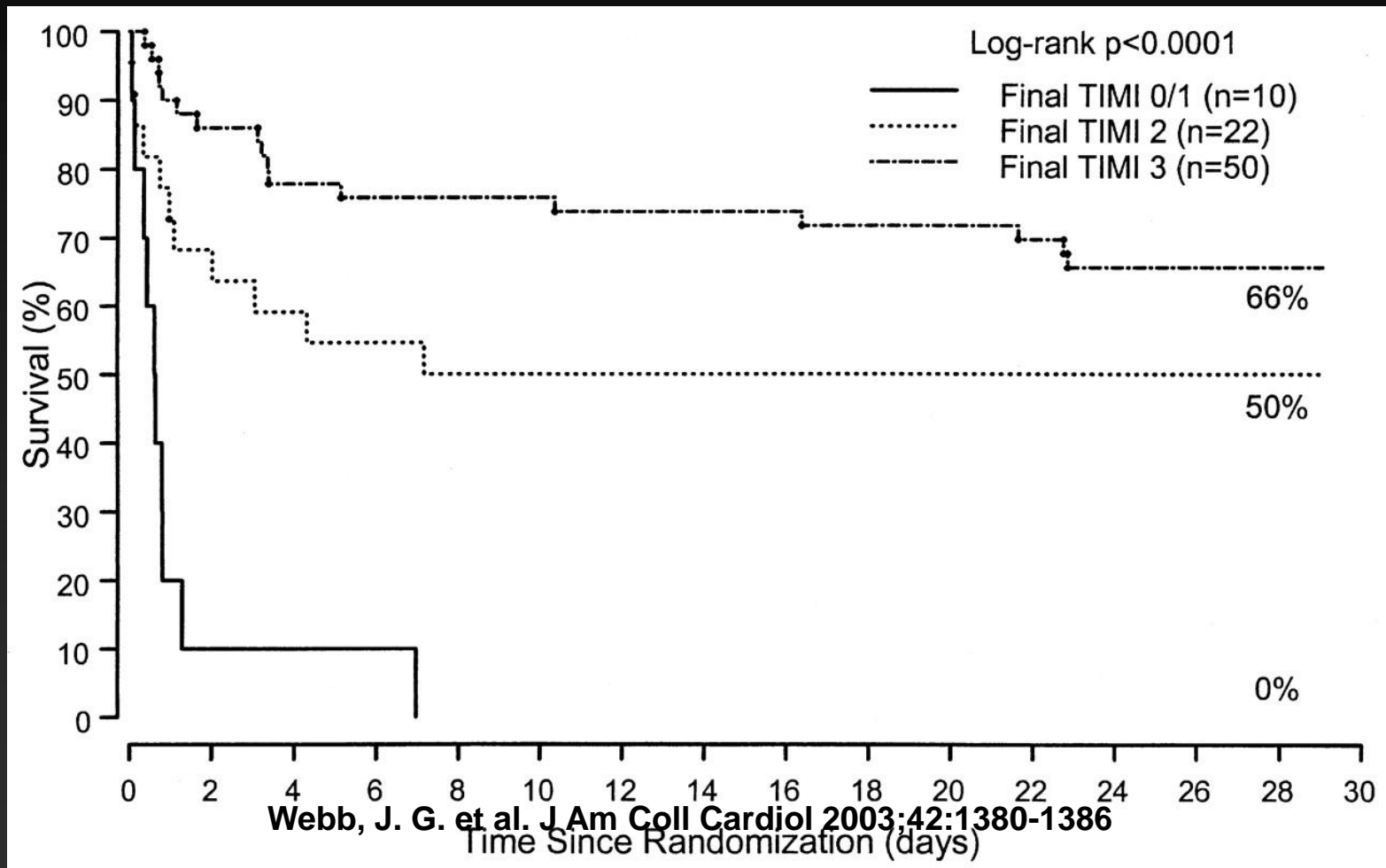
SHOCK trial - 1999



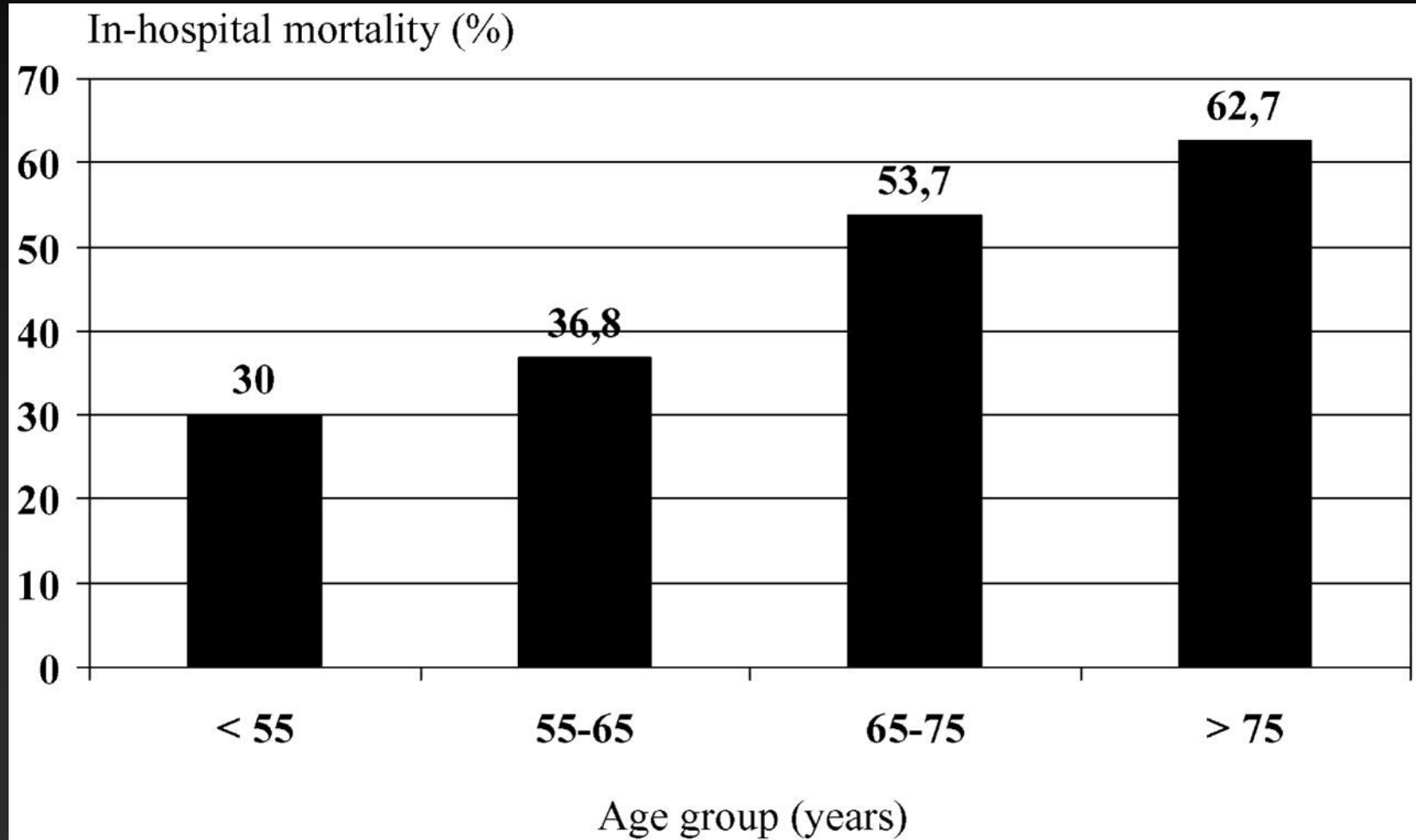
Results by age



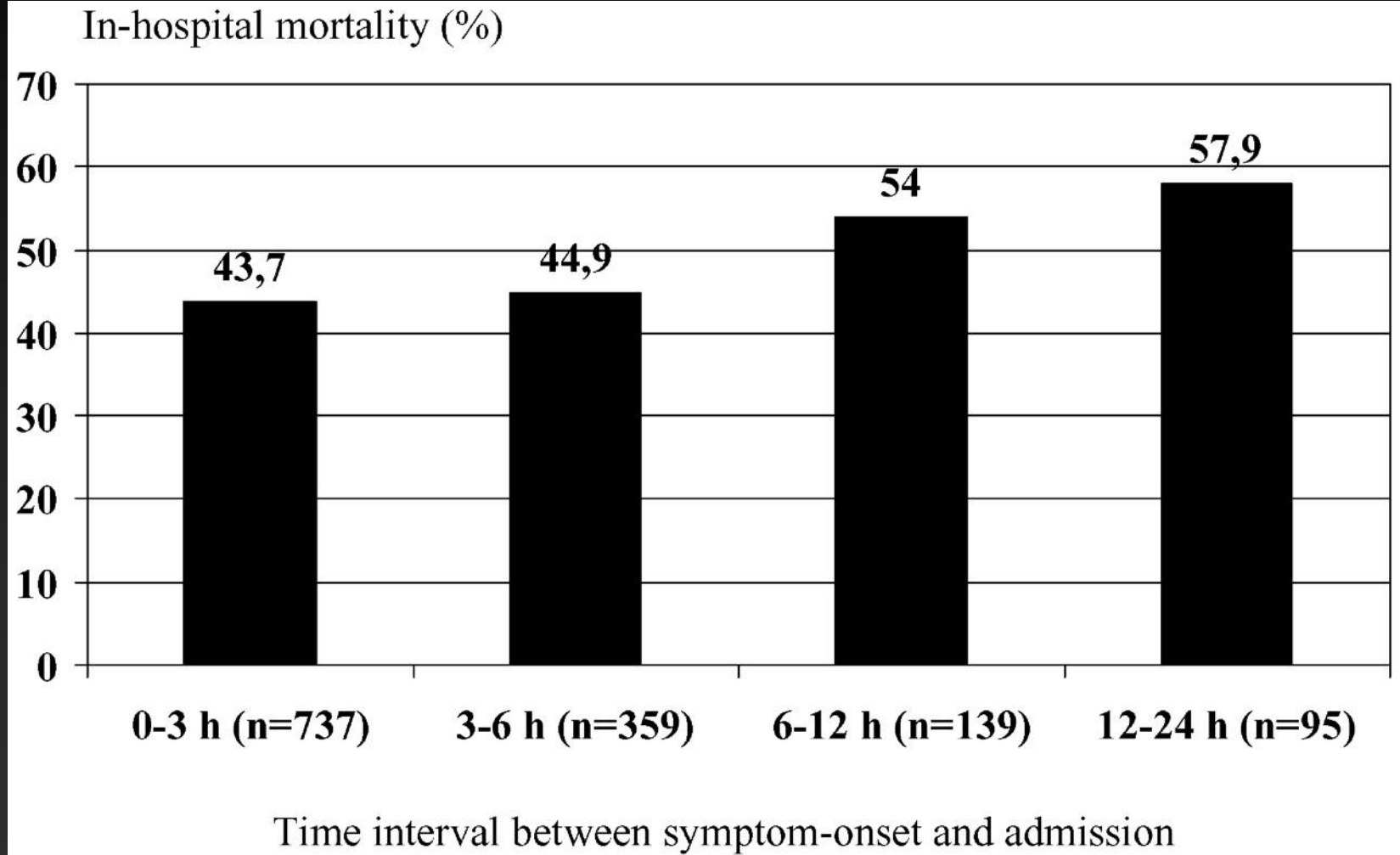
Relationship of final angiographic culprit artery Thrombolysis In Myocardial Infarction (TIMI) flow grade after percutaneous coronary intervention and 30-day survival in SHOCK trial patients assigned to early revascularization



ALKK Registry

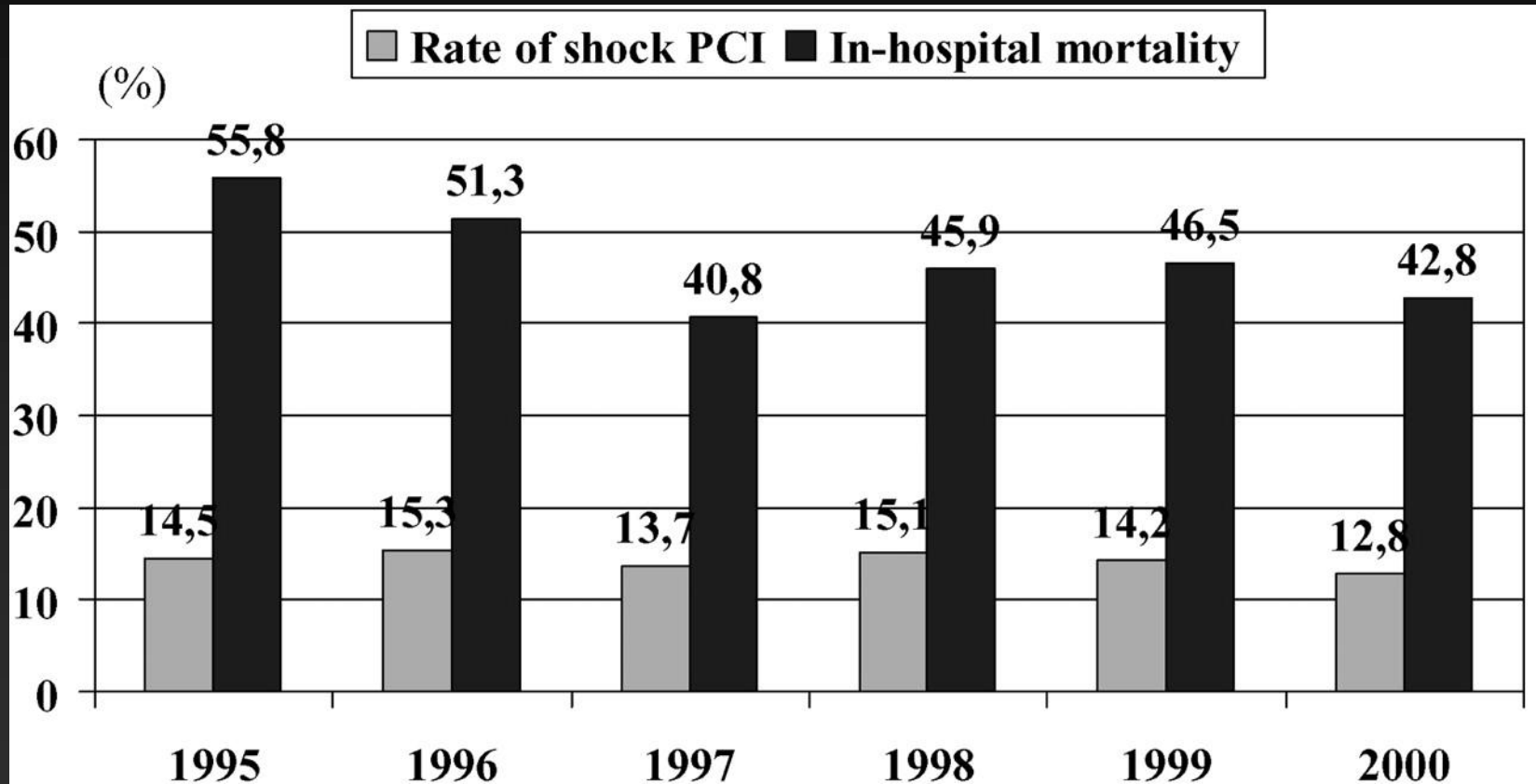


ALKK Registry

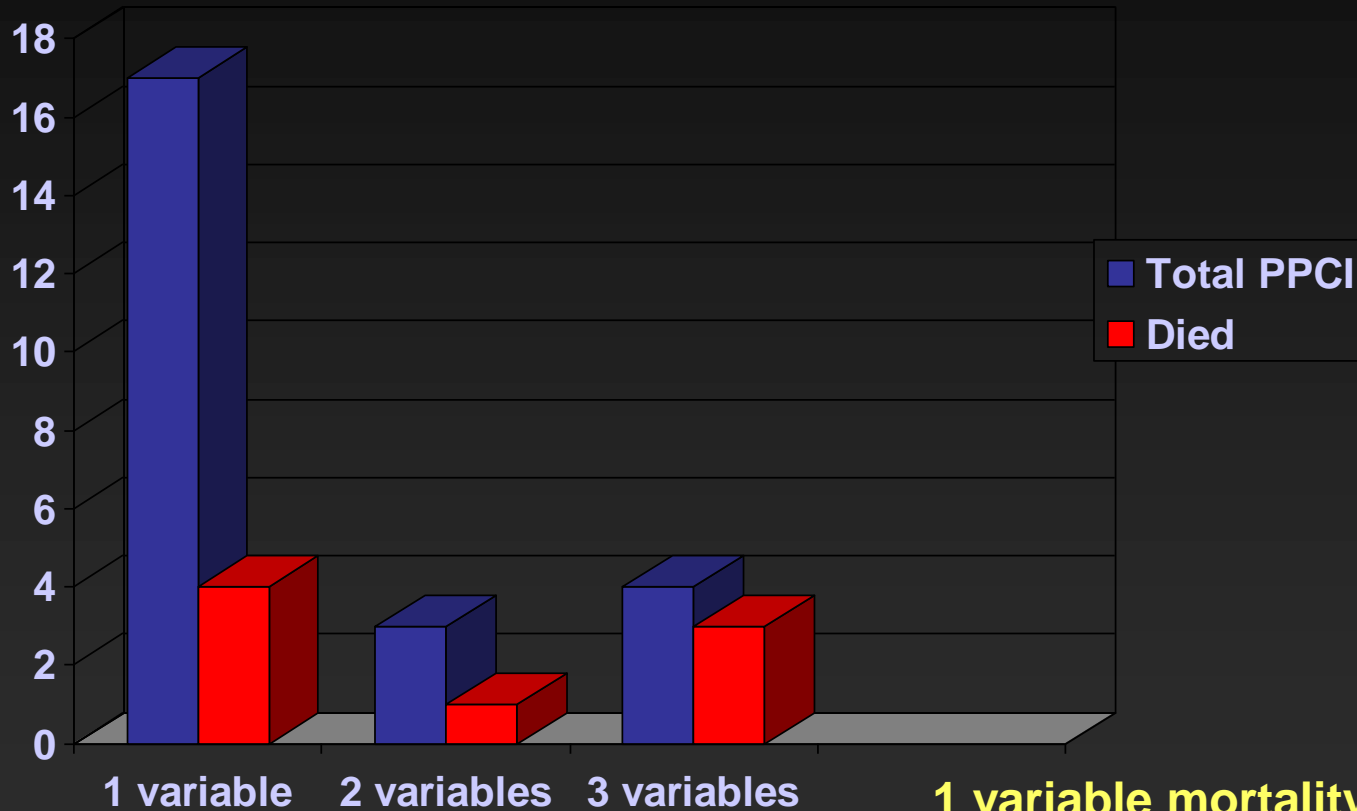


ALKK Registry

cardiogenic shock in the ALKK Registry of the ALKK. There was a trend towards a decrease of mortality for patients with shock (p=0.06) in univariate analysis.



High Risk PPCI



1 variable mortality = 24%

2 variables mortality = 33%

3 variables mortality = 75%

Radial Approach

EuroIntervention

Official Journal of EuroPCR and the European Association of Percutaneous Cardiovascular Interventions (EAPCI)



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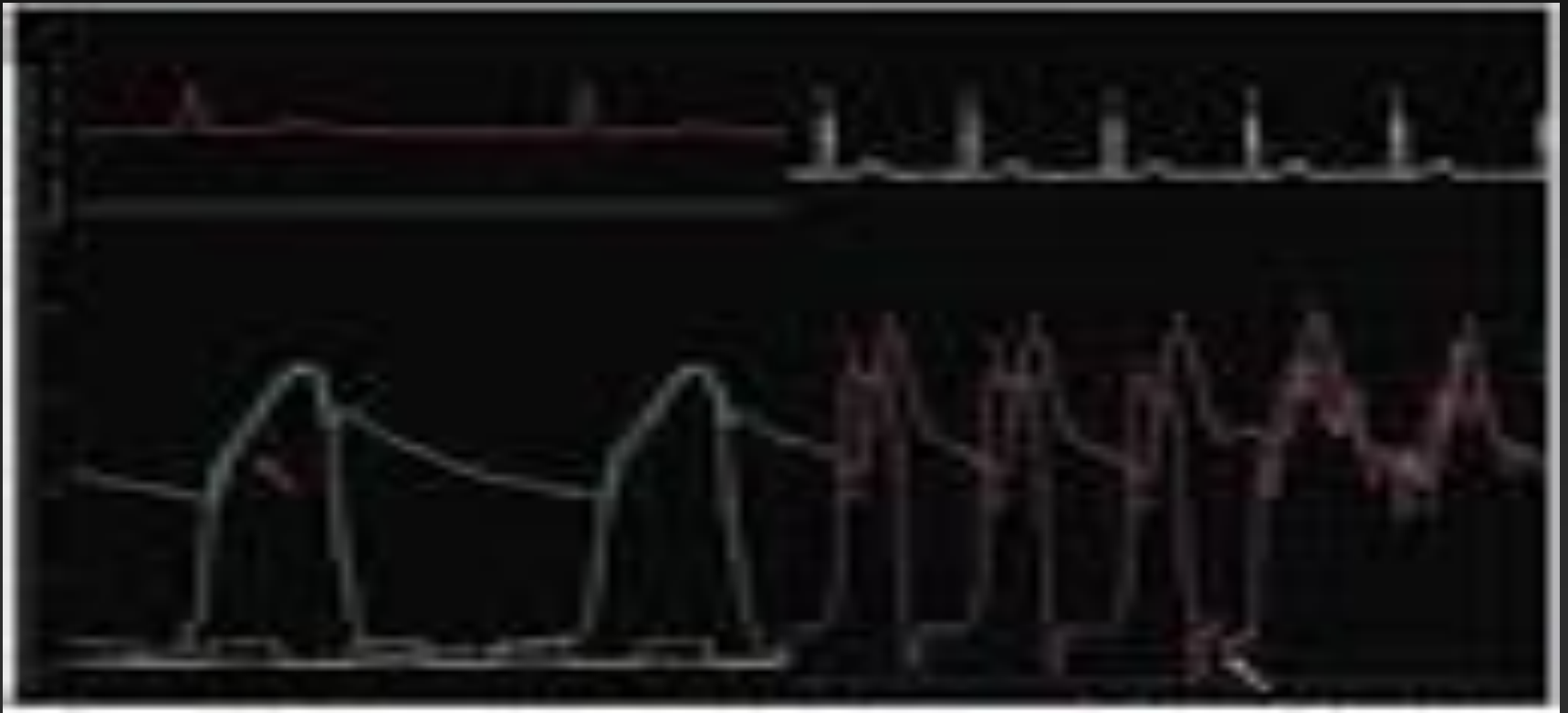
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Safety and efficacy of the radial approach for emergency angioplasty in ST-segment elevation acute myocardial infarction

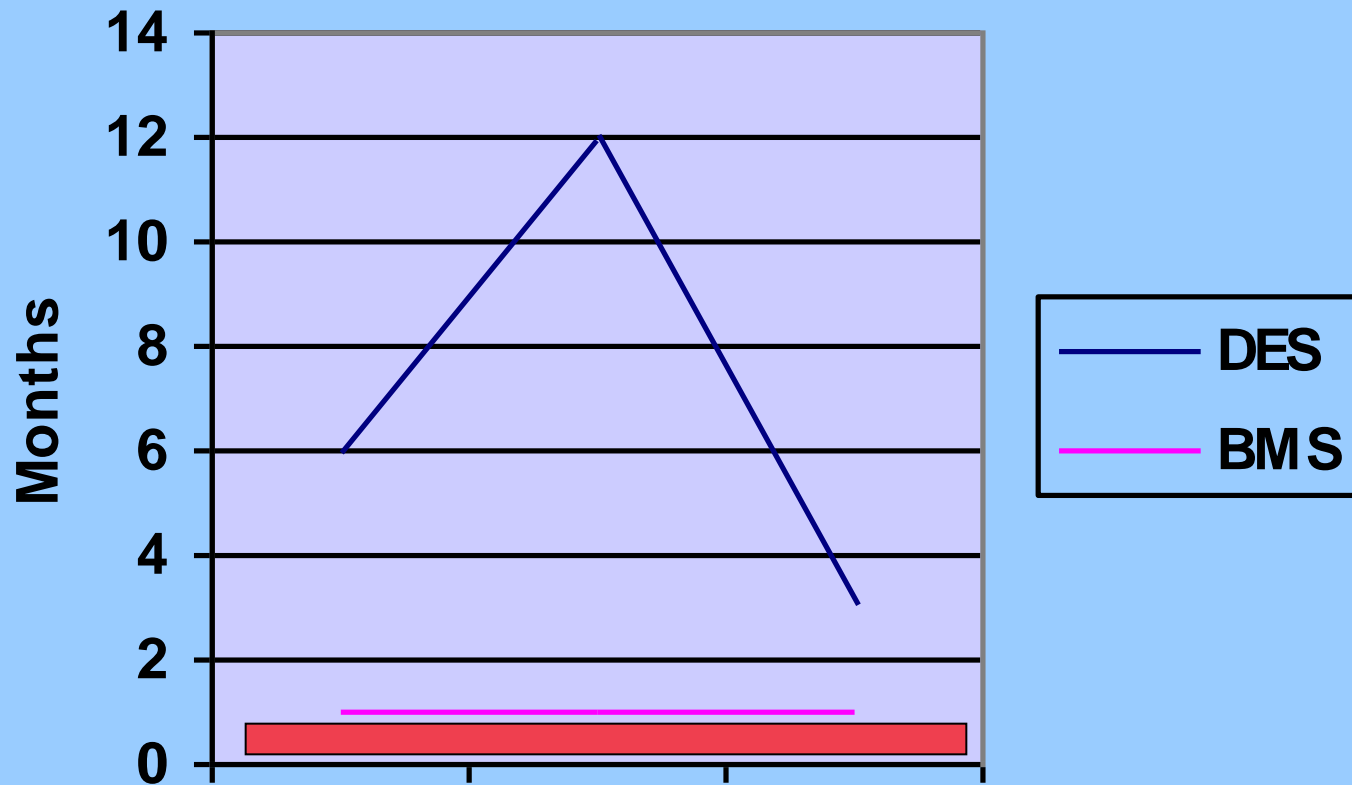
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Aims: The transradial access (TRA) to percutaneous coronary intervention (PCI) offers several crucial advantages over the traditionally used transfemoral approach (TFA). It is a particularly attractive option for patients undergoing emergency PCI for ST-segment elevation acute myocardial

Monitoring



DAPT



More Philosophy...



Do, or do not – there is no try.

Cardiologist's Perspective

- Risk markers are far from perfect
- These are very high risk patients
- Increasingly important with public reporting of operator mortality data
- If you intervene – do it early and aggressively
- Once you intervene you are committed
- There is still room to facilitate these pathways

Thank you

Below is a diagram of the heart. Please label the relevant sections.

