

# Coronary Artery Bypass Graft

## Introduction

Welcome to the cardiac surgery urgency assessment tool for Coronary Artery Bypass Graft (9078).

This implementation is a temporary work around replacing the old CPS tool which 'died' sooner and more completely than expected.

It is planned that a more comprehensive, user friendly, environment will be created to improve the utility and look and feel. The goal is to ensure all patients undergoing elective or urgent cardiac surgery, and soon cardiological intervention, will be scored consistently.

## Prioritisation

# Coronary Artery Bypass Graft

## Coronary anatomy

- 1 or 2 vessels  $\geq 50\%$
- 3 vessels  $\geq 50\%$  or Proximal LAD  $\geq 70\%$
- 2 or 3 vessels and proximal LAD  $\geq 70\%$
- Left main stem 50-69%
- Left main stem  $> 70\%$

## Severity of stable angina

- No angina / Class I
- Class II
- Class III
- Class IV

## Treadmill exercise / perfusion imaging / territory at risk

- Negative/mildly positive or akinetic or small territory at risk
- Positive or moderate territory at risk
- Very positive or large territory at risk
- Markedly positive

## Left ventricular ejection fraction

- EF < 30%, no or mild reversible ischaemia or viability
- EF > 50%
- EF 30-50%
- EF < 30% with reversible ischaemia or viability

## Acute coronary syndrome during last 2 weeks

- No recent acute coronary syndrome
- No or  $\leq$  1mm ST depression
- 1-2mm ST depression
- > 2mm ST depression or Dynamic ST elevation
- Haemodynamic instability or serious arrhythmias due to ischemia

## Troponin

- Troponin negative or STEMI
- Troponin positive NSTEMI

## LVF due to ischaemia

- No
- Yes

## Predicted benefit to quality of life after surgery

- No or small benefit
- Moderate benefit
- Large benefit

## Expected duration of benefit of surgery

- Life expectancy < 2 years, or age > 85 with moderate co-morbidity, or age > 80 with severe co-morbidity
- Age > 85 or age 80-85 with moderate co morbidity, or age < 80 with severe co-morbidity
- Age > 80 with no co-morbidity, or age 72-80 with moderate co-morbidity
- Age 72-80 with no co-morbidity, or age < 72 with moderate co-morbidity
- Age < 72 with no co-morbidity

## Risk of cardiac surgery

Calculate Euroscore (<http://www.euroscore.org/calc.html>)

(opens in new tab)

- Very high – mortality > 30% (Euroscore 13+)
- High – mortality 15-30% (Euroscore 9-12)
- Increased – mortality 5-14% (Euroscore 6-8)
- Low – mortality < 5% (Euroscore 1-5)