while 279 (36%) had impaired glucose tolerance and 152 (20%) had newly detected diabetes. The outcome of MACE are described in Abstract 147 table 1. The analysis shows a significantly higher incidence (p<0.05, HR 1.56, CI 1.15 to 2.13) of adverse cardiovascular outcome in patients with impaired glucose tolerance as well as diabetes (post challenge hyperglycaemia).

Conclusion The study concludes that a significant proportion of patients who present with ACS have abnormal glucose tolerance. Patients with abnormal glucose tolerance have significantly higher incidence of adverse cardiovascular outcome.

Abstract 147 Table 1 Predictive variables associated with adverse cardiovascular events

Variable	p Value	HR (95% CI)
Age	<0.001	1.04 (1.03 to 1.06)
Discharged on β-blocker	0.003	0.64 (0.47 to 0.86)
Abnormal glucose tolerance	0.005	1.56 (1.15 to 2.13)
Past history of MI	0.013	1.87 (1.14 to 3.08)
Hypertension	0.031	1.37 (1.03 to 1.84)
Discharged on ACE-I/ARB	0.041	0.63 (0.40 to 0.97)
Discharged on aspirin	0.067	1.64 (0.96 to 2.80)
Hypercholesterolaemia	0.159	0.80 (0.60 to 1.08)
Gender (male)	0.217	1.22 (0.89 to 1.69)
Smoking status (current smoker)	0.410	1.13 (0.83 to 1.54)
Revascularisation	0.478	0.90 (0.66 to 1.22)

Results of survival analysis using Cox regression with p<0.5.
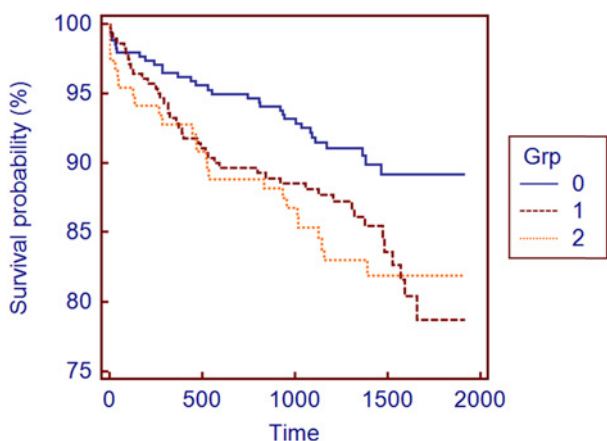
Abstract 147 Figure 1 Life status for MedCalc.

148 INSULIN DEPENDENT DIABETES RESULTS IN WORSE OUTCOMES COMPARED TO NON-INSULIN DEPENDENT DIABETES FOLLOWING CORONARY ARTERY BYPASS GRAFT SURGERY (CABG)

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Aims Previous research has demonstrated that patients with diabetes mellitus (DM) have a worse prognosis than patients without diabetes following coronary artery bypass graft surgery (CABG). However, patients with insulin treated diabetes (ITD) may have a different prognosis when compared with non-insulin treated diabetic patients (NITD) after CABG. There is limited data investigating long term outcomes following CABG in patients with ITD and NITD patients. This study compared outcomes at 5 years following CABG in these two patient groups.
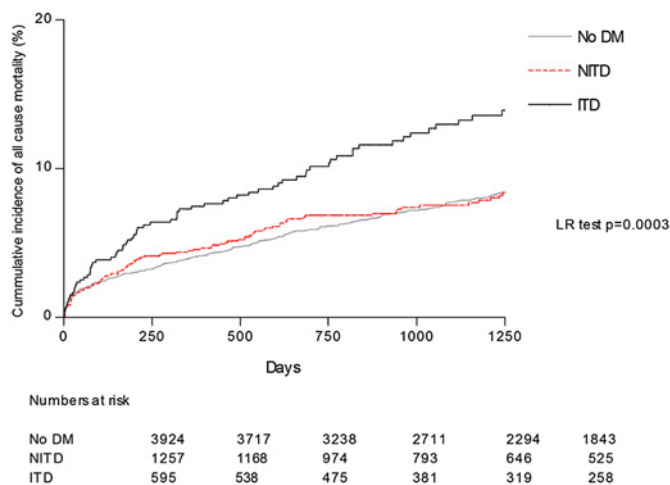
Abstract 148 Figure 1 All cause mortality after coronary artery bypass graft.

Methods 7442 consecutive patients underwent CABG at a single cardiac centre between 2003 and 2011. We identified 2471 patients with DM within this group. Demographic and procedural data were collected at the time of intervention. All cause mortality data were obtained from the Office of National Statistics via the BCIS/CCAD national audit out to a median of 2.80 years (CI 2.08 to 3.56 years).
Results Of 2471 patients with DM, 741 (30.0%) were ITD and 1730 (70.0%) were NITD. ITD patients had significantly higher rates of previous MI (65% vs 52%, p<0.0001) and higher rates of renal disease (10% vs 3%, p<0.0001). There were more female patients in the ITD group compared to the NITD patients (26% vs 20%, p=0.001). There was no difference in Age, rates of Hypertension, Hypercholestrolaemia, Previous PCI, or In-Hospital MACE between the two groups. At 5 years, there was no difference between non-diabetic patients and the NITD (p=0.63). However, by 5 years all cause mortality was greater in the ITD group than in the NITD group 14% vs 9% (p<0.001). After adjusting for comorbidities, using multivariate analysis, ITD remained an independent predictor of long-term mortality (HR 1.64, 95% CI 1.19 to 2.25, p<0.002).
Conclusions Our data suggest that insulin treatment is an independent predictor of long term mortality for patients undergoing CABG. Treatment with insulin rather than diabetic status alone is an important factor affecting outcome in patients with coronary artery disease requiring surgical intervention. Furthermore, these differences in mortality appear after the first year. Hence there is a role for intensive medical therapy in ITD patients and further research is required to confirm these outcomes.

149 ETHNIC DIFFERENCES IN PERFORMANCE OF THE 2010 EUROPEAN SOCIETY OF CARDIOLOGY CRITERIA FOR ECG INTERPRETATION IN ATHLETES

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Background Physical activity is associated with ECG phenotypes that may overlap with those observed in conditions predisposing to sudden cardiac death. In 2005 the study group of sports cardiology produced guidelines to differentiate ECG changes likely to reflect physiological adaptation to exercise from those, which should prompt further investigations. The guidelines were updated in 2010 resulting in improved specificity in predominantly Caucasian cohorts (white athletes; WA). We sought to examine the performance of the 2010 guidelines in athletes of African/Afro-Caribbean origin (black athletes; BA).