between rs727139 (KCNH8) on chromosome 3 and rs11167496 (PDGFRB) on chromosome 5 ($p=2.45 \times 10^{-8}$). Analysis of subsets of SNPs pre-selected based on their nominal association with CAD ($p<0.05$) or molecular functionality (non-synonymous SNPs) did not contribute more significant findings than investigation of random set of SNPs.

Conclusion Our analysis suggests that common SNP-SNP interactions are unlikely to account for a large proportion of the missing heritability of CAD.

56

CLINICAL AND FINANCIAL REPERCUSSIONS OF THE MARCH 2010 NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE (NICE) GUIDELINE "CHEST PAIN OF RECENT ONSET" ON THE RAPID ACCESS CHEST PAIN CLINIC (RACPC)

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Background The RACPC is a well-established "one-stop" service, with goal to identify patients with stable chest pain due to coronary artery disease (CAD) and quickly reassure those with non-cardiac pain. In March 2010, NICE published a new guideline, which advocates assessing likelihood of CAD based on age, gender, history and risk factors (RF). If estimated likelihood is $>60\%$, invasive coronary angiography (ICA) is recommended as the first-line diagnostic investigation. If estimated likelihood is $30\%–60\%$, functional imaging is recommended. If estimated likelihood is $<30\%$, CT calcium scoring CT coronary angiography (CTCA) is recommended. Significantly, the guideline discourages the use of ETT to diagnose or exclude stable angina in patients without known CAD.

Methods 167 consecutive patients referred to RACPC between October 2009 and March 2010 were retrospectively assessed for likelihood of CAD according to the new NICE guideline. Choice of investigations and eventual outcome (confirmed CAD vs no evidence of CAD) were compared between subgroups defined by estimated likelihood of CAD. An economic analysis of cost of investigation per patient was undertaken using current Payment by Results national tariffs.

Results Our patient population had a high prevalence of RF with 38.1% having a total of three or more RF. Consequently 23.2% of patients had an estimated likelihood of CAD of $<30\%$. 27.4% had an estimated likelihood of $30\%–60\%$. 49.4% had an estimated likelihood of $>60\%$. 7.2% of patients were lost to follow-up. 14.4% of patients were ultimately confirmed to have CAD on ICA, which correlated with pre-test estimated likelihood. 6% of patients with likelihood $<30\%$, 8.7% of those with likelihood $30\%–60\%$ and 23.2% of those with likelihood $>60\%$ were confirmed to have CAD. Average cost of investigation per patient was £528. A negative ETT resulted in average cost per patient of £347. An inconclusive ETT resulted in higher cost (£728) as did inability to exercise (£435) due to the need for further investigations. A positive ETT resulted in average cost of £1174 due to the high cost of ICA. Were the NICE guideline strictly applied to our patient population, average cost per patient would have been substantially higher at £838 (£362 per patient if likelihood $<30\%$, £566 if likelihood $30\%–60\%$ and £1218 if likelihood $>60\%$). Overall this corresponds to a 60% increase in cost.

Conclusion The 2010 NICE guideline appears to significantly overestimate the true risk in our patient population. Were the guideline strictly applied, almost half of our patients would proceed to ICA as a first-line investigation, but many of them would be found to have unobstructed coronary arteries. As ICA is an expensive investigation, this would inevitably result in a significant increase in average cost per patient. Relatively few patients would be eligible for CTCA, which is an excellent non-invasive "rule-out" test for CAD and relatively inexpensive compared with other investigations.

Abstract 56 Figure 1

Abstract 56 Table 1

	All	Men	Women
Numbers (%)	167	86 (51.5)	51 (48.5)
Age (mean $\pm$ SD)	56.0 $\pm$ 12.6	55.2 $\pm$ 13.3	57.0 $\pm$ 11.8
Diabetes (%)	29 (17.4)	15 (17.4)	14 (17.3)
Hypertension (%)	72 (43.1)	40 (46.5)	32 (39.5)
Hypercholesterolaemia (%)	100 (59.9)	53 (61.6)	47 (58.0)
Family history (%)	58 (34.7)	28 (32.6)	30 (37.0)
Smoking (%)	87 (52.1)	54 (62.8)	33 (40.7)
Systolic BP (mean $\pm$ SD) / Diastolic BP (mean $\pm$ SD)	134 $\pm$ 21 / 79 $\pm$ 11	131 $\pm$ 18 / 80 $\pm$ 11	137 $\pm$ 23 / 78 $\pm$ 10
Fasting glucose (mean $\pm$ SD)	5.2 $\pm$ 1.0	5.7 $\pm$ 1.0	5.3 $\pm$ 1.1
Total cholesterol (mean $\pm$ SD)	5.17 $\pm$ 1.04	5.06 $\pm$ 1.06	5.29 $\pm$ 1.01
LDL (mean $\pm$ SD) / HDL (mean $\pm$ SD)	3.19 $\pm$ 0.90 / 1.30 $\pm$ 0.43	3.14 $\pm$ 0.90 / 1.23 $\pm$ 0.46	3.33 $\pm$ 0.86 / 1.38 $\pm$ 0.38
BMI (mean $\pm$ SD)	30.1 $\pm$ 6.0	29.4 $\pm$ 4.9	30.9 $\pm$ 6.9

Abstract 56 Table 2

	Average cost per patient prior to NICE guideline implementation	Average cost per patient were NICE guideline strictly implemented
Predicted likelihood $<30\%$	£324	£362
Predicted likelihood $30\%–60\%$	£467	£566
Predicted likelihood $>60\%$	£661	£1218
OVERALL AVERAGE COST PER PATIENT	£528	£838

57

THE IMPACT OF PREOPERATIVE RENAL DYSFUNCTION AND THERAPY TYPE IN PATIENTS WITH TYPE 2 DIABETES UNDERGOING CORONARY ARTERY BYPASS SURGERY

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Introduction There is limited data addressing the impact of preoperative renal dysfunction in type 2 diabetics (T2DM) undergoing first-time coronary artery bypass surgery (CABG); specifically exploring the influence of diabetic management (oral hypoglycaemic (OH) and insulin therapy (IN)). We assessed the impact of preoperative renal status and diabetic management on the post operative renal status, morbidity, 30-day and long-term survival in T2DM-CABG.

Methods We reviewed prospectively accrued data from 1/1/1999 to 31/12/2009. Pre and 4 to 5-day postoperative creatinine clearance