between rs727139 (KCNBH8) on chromosome 3 and rs11167496 (PDGFRB) on chromosome 5 (p=2.45×10⁻⁸). 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.

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**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)**

**T Rogers, S Claridge, K Al Fakh. University Hospital Lewisham, London, UK**

**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 25.2% 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 25.2% 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 £338 (£362 per patient if likelihood <30%, £556 if likelihood 30%–60% and £1128 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.

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**THE IMPACT OF PREOPERATIVE RENAL DYSFUNCTION AND THERAPY TYPE IN PATIENTS WITH TYP E2 DIABETES UNDERGOING CORONARY ARTERY BYPASS SURGERY**

**A Menon, J Hodson, D Pagano, J Mascaro, I C Wilson, S J Rooney, T R Graham, R S Bonser. University Hospital Birmingham, Birmingham, UK**

**Introduction** There is limited data addressing the impact of preoperative renal dysfunction in type 2 diabetes (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 was measured. Estimated GFR was calculated using the Modification of Diet in Renal Disease Study equation.

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**Table 1**

<table>
<thead>
<tr>
<th>Predicted likelihood</th>
<th>All</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30%</td>
<td>£324</td>
<td>£362</td>
<td></td>
</tr>
<tr>
<td>30%–60%</td>
<td>£467</td>
<td>£566</td>
<td></td>
</tr>
<tr>
<td>&gt;60%</td>
<td>£661</td>
<td>£1218</td>
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<tr>
<td>OVERALL AVERAGE COST PER PATIENT</td>
<td>£528</td>
<td>£838</td>
<td></td>
</tr>
</tbody>
</table>

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**Table 2**

<table>
<thead>
<tr>
<th>Predicted likelihood</th>
<th>Average cost per patient prior to NICE guideline implementation</th>
<th>Average cost per patient where NICE guideline strictly implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30%</td>
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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)

T Rogers, S Claridge and K Al Fakih

*Heart* 2011 97: A36
doi: 10.1136/heartjnl-2011-300198.56

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