

**Methods:** We examined all patients in the NHLBI Dynamic Registry presenting with ACAD and SA to understand difference in clinical characteristics and 1-year adverse events.

**Results:** Of all patients in the NHLBI Dynamic Registry, 2174 underwent PCI for SA, and 742 for ACAD. Patients receiving revascularization for ACAD compared to SA were more likely to have a history of congestive heart failure (14% vs 9%,  $p < 0.0001$ ) and HTN (75% vs 71%,  $p < 0.05$ ). In addition, Patients with ACAD had an increased prevalence of non-cardiac comorbidities compared to SA patients (43% vs 31%,  $p < 0.0001$ ) which included a significant increase in renal disease (10% vs 6%  $p < 0.001$ ), peripheral vascular disease (10% vs 7%,  $p < 0.05$ ), pulmonary disease (10% vs 6%,  $p < 0.01$ ), and cancer (15% vs 11%,  $p < 0.01$ ). The prevalence of hyperlipidemia (72% vs 75%) and diabetes (33% vs 30%) were similar in both groups. There were no differences between the extent of coronary artery disease or prior myocardial infarction in patient revascularized for ACAD and SA. The combined adjusted 1-year mortality and reinfarction incidence (hazard ratio 0.95; 95% CI; 0.69-1.3) were similar between ACAD and SA patients.

**Conclusions:** Our analysis shows that patients with ACAD have similar 1-year outcomes to SA patients after undergoing PCI while having increased co-morbid conditions. Given these findings, further study is needed on the outcomes of patients with ACAD so that they can be more appropriately represented in the AUC guidelines.

### TCT-663

#### A United Kingdom Perspective on the Appropriateness of Percutaneous Coronary Intervention in Stable Angina

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**Background:** The utilization of the 'appropriate use criteria' (AUC) has been controversial and suggested inappropriate and uncertain PCIs may not be uncommon. The issues raised are unlikely to be confined to the US. We therefore applied the AUC to patients with stable angina undergoing PCI at our tertiary centre in order to gain a UK perspective.

**Methods:** We performed a retrospective analysis of 200 consecutive patients with known stable angina referred from the chest pain clinic for PCI. The appropriateness of PCI was adjudicated using the published AUC and patients were grouped into those apparently undergoing appropriate, inappropriate or uncertain PCI. We determined the proportion of patients in the uncertain group who had either significant symptoms, intermediate risk or optimal medical therapy (OMT) in order to determine those in whom PCI is known to be beneficial and those where the evidence is less clear.

**Results:** One hundred and twenty nine (64.5%) of PCIs were classified as appropriate, while 64 (32%) could be classified as uncertain indications and 7 (3.5%) were deemed inappropriate (Table 1). Inappropriate procedures were more common in patients with CCS I/II, those with low risk stress testing and in those not receiving OMT. Of the uncertain PCIs, 55 (85.9%) patients had either CCS III/IV, intermediate risk stress tests or were on OMT, with 9 (14.1%) having either CCS I/II, low risk stress tests or no OMT.

Variable	Appropriate (n=129)(%)	Uncertain (n=64) (%)	Inappropriate (n=7) (%)	p value
Angina				0.036
none	0	0	0	
CCS I	13 (10.1)	11 (17.2)	0	
CCS II	73 (56.6)	44 (68.8)	7 (100)	
CCS III	36 (27.9)	8 (12.5)	0	
CCS IV	7 (5.4)	1 (1.6)	0	
Risk on noninvasive testing				<0.001
low	11 (8.5)	10 (15.6)	7 (100)	
intermediate	65 (50.5)	40 (62.5)	0	
high	39 (30.2)	0	0	
not performed	14 (10.9)	14 (21.9)	0	
Antianginals				0.027
optimal ( $\geq 2$ drugs)	83 (64.3)	13 (20.3)	0	
minimal/none (<2 drugs)	46 (35.7)	51 (79.7)	7 (100)	
Coronary stenoses				0.027
1	67 (51.9)	40 (62.5)	5 (71.4)	
2	37 (28.7)	22 (34.4)	2 (28.6)	
3	25 (19.4)	2 (3.1)	0	
Proximal LAD stenosis				0.043
CCS III/IV or intermediate risk or OMT	-	55 (85.9)	-	-
CCS I/II or low risk or no OMT	-	9 (14.1)	-	-

**Conclusions:** The majority of PCI for stable angina was appropriate, with only 3.5% of procedures deemed inappropriate. Almost one third fall within the uncertain category creating a clinical challenge. We have shown that the majority have either significant symptoms, an intermediate risk on stress testing or are on optimal medication. Consequently, many are likely to warrant and benefit from PCI and care must be taken not to deny them this treatment for the fear of 'inappropriate' criticism.

### TCT-664

#### Seven-year Clinical Outcomes of Sirolimus-Eluting Stent Versus Bare-Metal Stent; A Matched Analysis From A Real World, Single Center Registry

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**Background:** The aim of this study is to compare clinical outcomes for seven years, between sirolimus-eluting stent (SES) and BMS.

**Methods:** During the BMS and drug-eluting stent (DES) transition period (from April 2002 to April 2004), 434 consecutive patients with 482 lesions underwent percutaneous coronary intervention, using BMS or SES. Using propensity score matching, 186 patients with BMS and 166 patients with DES were selected. Seven year clinical outcomes of major adverse cardiac events (MACE), such as cardiac death, myocardial infarction (MI) and ischemia-driven target vessel revascularization (TVR), and angiographic definite stent thrombosis (ST) were compared.

**Results:** At the clinical follow up for 1 year, patients with DES showed significantly lower MACE (9.1% in BMS vs. 3.0% in DES,  $p = 0.024$ ) than those with BMS. This reduction was mainly driven by a decrease in TVR (8.1% vs. 2.4%,  $p = 0.024$ ), although there was no significant difference in MI or death. However, cumulative MACE for 7 years was similar (24.7% in BMS vs. 17.4% in DES,  $p = 0.155$ ). There was no significant difference in MI (4.3% in BMS vs. 3.0% in DES,  $p = 0.571$ ), TVR (15.6% in BMS vs. 15.7% in DES,  $p = 0.862$ ), death (9.1% in BMS vs. 5.4% in DES,  $p = 0.218$ ) and ST (1.1% in BMS vs. 1.8% in DES,  $p = 0.533$ ).

**Conclusions:** The TVR were gradually increased from 1 to 7 years in DES, on the contrary to that of BMS. Although DES showed better clinical outcomes in the early period after implantation, it didn't show significant benefits in the long-term follow up, compared with that of BMS.