Abstract 025 Table 1

Patient number	Age	Sex	Coronary disease	CMR stress perfusion	FFR pre PCI	FFR post PCI	Outcome
1	65	F	Minor	N/A	N/A		Medical
2	77	M	LAD	Negative	N/A		Medical
			Cx	Negative			
3	71	M	RCA	N/A			PCI RCA
4	76	F	LAD	Positive	0.68		PCI LAD
5	79	M	LAD	Positive	0.38	0.92	PCI LAD
6	79	F	LAD	Negative	0.73	0.83	PCI LAD
			Cx	Negative	0.90		
7	86	F	LAD	Scar	N/A		Medical
8	61	M	Cx	Positive	0.55	0.95	PCI Cx
			RCA	Negative	0.29		
9	75	M	LAD	Negative	0.83		Medical
			Cx	Negative	0.91		
			RCA	Negative			
10	51	M	LAD	Positive	0.45	0.98	PCI LAD
			Cx	Negative	0.96		
			RCA	Positive			

Cx, circumflex artery; LAD, left anterior descending artery; RCA, right coronary artery.

Conclusions Combined CMR and interventional coronary procedures are feasible and well tolerated in an XMR laboratory. This set-up has exciting research and clinical applications which should improve knowledge and management of coronary artery disease.

026 LEFT BUNDLE BRANCH BLOCK AS AN ACTIVATION CRITERION FOR PRIMARY PERCUTANEOUS CORONARY INTERVENTION: WHERE IS THE EVIDENCE?

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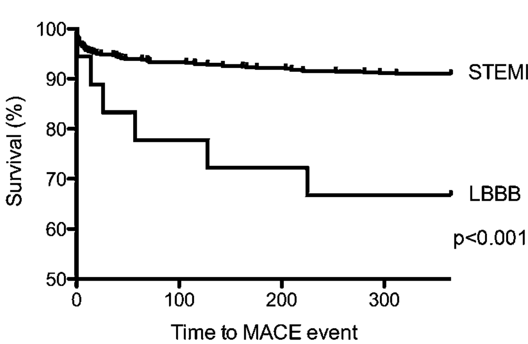
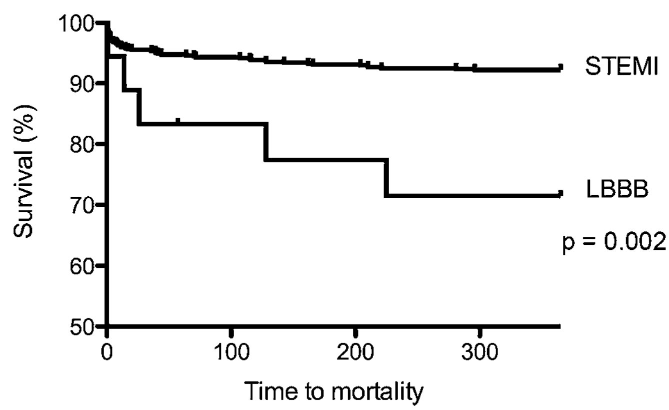
Background The activation criteria for primary percutaneous coronary intervention (PPCI) includes chest pain in association with either ST-segment elevation (STEMI) or new-onset left bundle branch block (LBBB) on the ECG. However, defining LBBB as new is challenging acutely and the poor specificity of indeterminate chronicity LBBB may result in unnecessary PPCI activations. Published data are conflicting with regard to the utility of LBBB as a triage criterion for PPCI and subsequent outcomes are undefined.
Methods Consecutive patients attending a single UK tertiary centre for presumed PPCI between September 2008 and December 2010 were included (n=1328). The activation ECG was obtained from the hospital PPCI database, as were demographic data. Outcome data were obtained from notes and national databases. MACE was defined as a composite of mortality and unplanned revascularisation. Two interventionists blinded to patient outcome reviewed the angiographic images and adjudicated if the activation was appropriate.



Abstract 026 Figure 1

Results Chest pain with LBBB (LBBB-activation) occurred in 88 patients (6.6%) of the PPCI cohort. Comparing LBBB-activations to those with STEMI demonstrated that LBBB-activations were older (mean age 70.3±12.4 vs 64.6±13.4 years; p<0.001) and less likely to be male (67.0% vs 76.8%; p=0.004). Otherwise, baseline demographics were similar. Eighteen (20.5%) patients with LBBB had an acute thrombotic coronary occlusion confirmed at angiography and received PPCI. The final adjudicated diagnoses for LBBB-activations were acute coronary syndrome (ACS) (39.8%), non-ACS cardiac (28.4%) and non-cardiac (31.8%). A history of previous MI (p=0.002) and presence of cardiogenic shock on arrival (p=0.04) were more prevalent in the appropriate LBBB-activations. One-year mortality and MACE were higher for appropriate LBBB-activations than the STEMI activations (27.8% vs 7.9%; p=0.002 (Abstract 026 figure 1) and 33.3% vs 9.1%; p<0.001 respectively).
Conclusions Less than half of LBBB-activations had an ACS and, of these, only half had a thrombotic coronary occlusion requiring PPCI. However, LBBB-activations have a significantly worse prognosis and merit urgent referral. Enhanced triage methods are required to correctly identify acute MI requiring PPCI in those with LBBB.



Abstract 026 Figure 2

027 PERCUTANEOUS CORONARY INTERVENTION IN OCTOGENARIANS: RESULTS FROM A HIGH VOLUME CENTRE

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Aims Octogenarians constitute a fast growing group of patients referred for percutaneous coronary intervention (PCI) for stable angina and acute coronary syndromes (ACS). However, there are limited outcome data for PCI in this group. We evaluated the outcome of PCI in patients aged ≥80 years and compared them with younger patients treated in our centre.
Methods We analysed all patients aged ≥80 years who underwent PCI in our unit between September 2009 and December 2010. Prospectively entered data were obtained from our dedicated cardiac service database system (Philips CVIS). Mortality data were obtained from the summary care record (SCR) database. Follow-up data were obtained from patients' respective district general hospitals and general practitioners' medical records. We defined major bleeding as anyone requiring at-least one unit of red cell transfusion.
Results Of the 2931 patients who underwent PCI in our unit during the study period, 401 (13.7%) patients were ≥80 years of age. Out of this 163 (40.6%) had primary PCI (PPCI) for STEMI, 120 (29.9%)

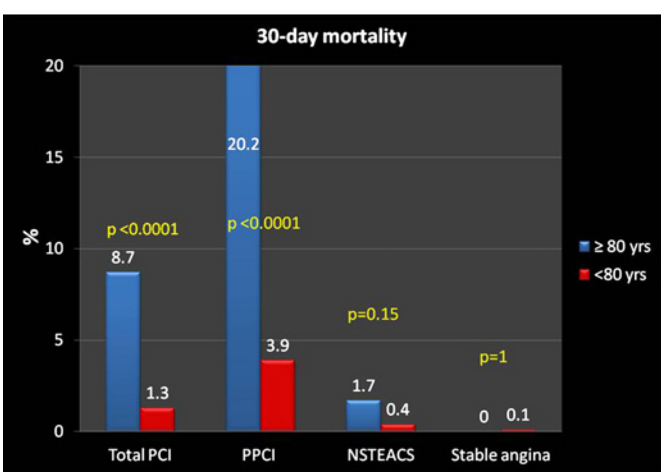
had PCI for non-ST elevation ACS (NSTEACS) and 118 (29.4%) had PCI for stable angina. Of the 2530 patients in the younger cohort (<80 years) who had PCI, 765 (30.2%) had PPCI, 739 (29.2%) had PCI for NSTEACS and 1026 (40.6%) had PCI for stable angina. The demographic and procedural data of octogenarians are compared with younger patients (Abstract 027 table 1). The clinical outcomes for octogenarians are shown in Abstract 027 table 2. The total 30-day mortality for patients aged ≥ 80 years was 8.7% compared with a mortality rate of 1.3% for those aged <80 years ($p<0.0001$). This highly significant mortality difference related almost entirely to a fivefold higher mortality in patients aged ≥80 years undergoing PPCI compared with younger patients (Abstract 027 figure 1).

Abstract 027 Table 1

n (%)	≥80 years (n=401)	<80 years (n=2530)	p Value
Age (mean±SD)	84±4	63±10.2	<0.0001
Male	225 (56.1)	1917 (75.8)	<0.0001
Diabetes	70 (17.5)	402 (15.9)	0.38
Previous MI	135 (33.7)	599 (23.7)	<0.0001
Previous CABG	33 (8.2)	158 (6.2)	0.13
Previous PCI	55 (13.7)	488 (19.3)	0.007
LMS involvement (≥75% stenosis)	14 (3.5)	44 (1.7)	0.03
Single vessel PCI	303 (75.6)	2073 (81.9)	0.003
DES usage	196 (48.9)	1667 (65.9)	<0.0001

Abstract 027 Table 2

n (%)	Total PCI (n=401)	PPCI for STEMI (n=163)	PCI for NSTEACS (n=120)	PCI for stable angina (n=118)
In-hospital mortality	25 (6.2)	24 (14.7)	1 (0.8)	0
30-day mortality	35 (8.7)	33 (20.2)	2 (1.7)	0
Major bleeding	13 (3.2)	6 (3.7)	6 (5)	1 (0.85)
Myocardial infarction	6 (1.5)	4 (2.5)	2 (1.7)	0
CVA	2 (0.5)	1 (0.61)	0	1 (0.85)



Abstract 027 Figure 1

Conclusion In this consecutive series from a high volume tertiary centre, patients aged ≥80 years undergoing PCI have 30-day mortality rates comparable with younger patients treated for stable angina or NSTEACS. Further studies are required to refine treatment strategies in unselected patients aged ≥80 years undergoing PPCI for STEMI.

028 AGE RELATED MORTALITY OF PRIMARY PCI PATIENTS AT A HIGH VOLUME UK CARDIAC CENTRE

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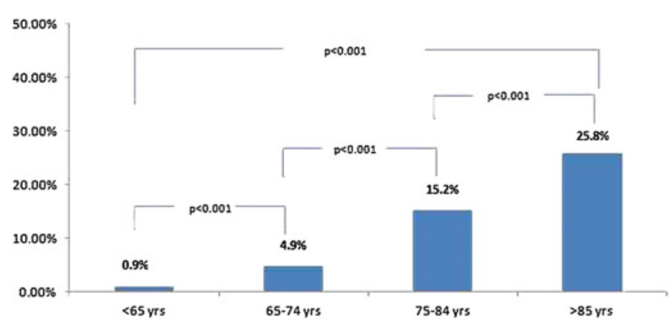
Introduction Despite being the fastest growing population group, the elderly have usually been excluded from reperfusion clinical trials. We studied the difference in mortality in different age groups after primary percutaneous coronary intervention (PPCI) for ST elevation myocardial infarction (STEMI) at our high volume 24/7 cardiac centre.

Methods From the start of our PPCI service, there has been no age criteria to access the service. We collected data from our prospective cardiac database for the 24-months period between September 2009 and September 2011, with mortality provided by the summary care records.

Results There were 1322 PPCI procedures with an age range of 14–98 years (mean 65.3). 656 patients (50%) were under 65 years, 326 (25%) were 65–74, 243 (18%) were 75–84 and 97 (7%) were 85 years or over. The 30-day all-cause mortality rates are shown in the graph below.

Conclusions The data presented demonstrate a clear significant correlation between age and mortality following PPCI. For those patients aged under 65 years, the 30-day mortality following PPCI for STEMI is very low. There is then a stepwise increase in mortality with age. This report from a high volume centre adds to the sparse literature documenting outcome for the elderly following PPCI in an unselected "all-comer" real world population. It raises the issue of what the most appropriate treatment strategy should be in very elderly patients presenting with STEMI and warrants further investigation.



Abstract 028 Figure 1

029 MANAGEMENT AND OUTCOMES OF PATIENTS FOLLOWING OUT-OF-HOSPITAL CARDIAC ARREST

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Introduction Treatment of patients with out-of-hospital arrest (OOHA) is complex, may be time sensitive and depends on the coordinated actions of diverse healthcare providers. There are no clear guidelines for the management of these patients and there is a lack of outcome data for those presenting with cardiac causes. We reviewed the characteristics and outcomes of a series of patients with OOHA referred and accepted to a tertiary cardiac service.

Methods and Result Between January 2010 and October 2011, 76 pts with OOHA were accepted by our unit. Median age was 62 years (21–91) and 66% were male. The diagnosis of STEMI was made prior to the arrest in 38 pts (Gp 1) and emergency angiography