Abstract 39 Figure 2

Abstract 40 Table 1 Baseline SYNTAX score and residual SYNTAX score, stratified by frailty phenotype. SYNTAX score presented as mean ± standard deviation (SD). † Residual SYNTAX score only includes patients that underwent PCI to an identified culprit lesion (n=187, robust n=41, pre-frail n=97, frail n=49).

Abstract 40 FRAIL PATIENTS WITH NON-ST ELEVATION ACUTE CORONARY SYNDROME UNDERGOING PERCUTANEOUS CORONARY INTERVENTION HAVE MORE ADVERSE ANGIOGRAPHIC FEATURES BUT NO DIFFERENCE IN RATE OF COMPLETE REvascularisation COMPARED TO NON-FRAIL PATIENTS

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Introduction Over half of patients that present with non-ST elevation acute coronary syndrome (NSTEMACS) are older than 70 years, with these adults having a higher incidence of frailty. There is little data describing the angiographic features of the very oldest, frailest adults. We aimed to investigate angiographic and procedural characteristics in older adults with NSTEMACS referred for PCI.

Methods Patients aged ≥75 years presenting with NSTEMACS to two tertiary centres (n=271) were recruited. Frailty was assessed using Fried Frailty Index and defined as frail (≥3 criteria met), pre-frail (1-2) and robust (0). Angiograms underwent quantitative and qualitative angiographic analysis, including SYNTAX score and residual SYNTAX score. The primary powered outcome was difference in incidence of complete revascularisation (defined as residual SYNTAX score = 0) between frailty phenotypes. Patients were followed up at one-year for incidence of composite major adverse cardiovascular events (MACE), defined as death, myocardial infarction, stroke or TIA, urgent revascularisation, or major bleeding. A secondary exploratory analysis was association between baseline SYNTAX and residual SYNTAX scores and one-year incidence of MACE. Multivariate logistic regression was performed for associations between frailty and SYNTAX scores. Cox proportional hazards modelling was performed for association between SYNTAX scores and one year MACE.

Results Mean age was 80.5 ± 4.9 years, 60.5% were male. 53 patients (19.6%) were robust, 145 patients (53.5%) pre-frail and 73 patients (26.9%) frail. Baseline SYNTAX scores were split into tertiles: low (a score of 0–7), medium (7.5–15.5), and high (≥16) (table 1). Frail patients had an adjusted 2.67 increased odds (95% confidence interval CI 1.17–6.10, P=0.02) of being in the high tertile. Frail patients were more likely to have severe culprit lesion calcification (adjusted OR 5.13, 95% CI 1.59–16.5, P=0.006). Frailty phenotype did not impact the likelihood of culprit lesion PCI being performed (P=0.58). Frail patients had a lower mean improvement in culprit lesion diameter stenosis post-PCI compared to robust patients (50.6%, 95% CI -45.7 to -55.6 vs. -58.6%, 95% CI -53.5 to -63.7, P=0.042). There were no differences in rate of procedural complications between frailty phenotypes (P>0.05). There was no relationship between frailty and incidence of complete revascularisation (adjusted OR 0.96, 95% CI 0.36–2.56, P=0.94). There was no exploratory adjusted relationship between one-year MACE and either baseline SYNTAX score (HR 1.10, 95% CI 0.59–2.04, P=0.77) or residual SYNTAX score (HR 1.36, 95% CI 0.68–2.71, P=0.38).

Conclusions Frail adults presenting with NSTEMACS have more adverse baseline angiographic characteristics, independent of age. Despite this, frail adults were just as likely to achieve complete revascularisation. In an exploratory analysis, baseline or residual SYNTAX score did not predict MACE at one year.

Conflict of Interest Nil