been described as a viable therapeutic option. We highlight our experience treating failed surgical bioprostheses in the tricuspid position utilising the Edwards SAPIEN 3 valve which poses unique clinical and re-interventional coronary disease. 

**Objective:** Demonstrate the feasibility and effectiveness of tricuspid VIV implantation.

**Methods:** Four patients underwent VIV implantation. Underlying diagnoses were: Ebstein anomaly n = 2, Carci-noid syndrome n = 1 and previously replaced native valve for infective endocarditis n = 1. Previous valve type and size was: Biocor (St Jude Medical), n = 2 (27 mm, 33 mm), Perimount n = 1 (29 mm) and Medtronic Intact n = 1 (33 mm). Valve dys-function was regurgitation in 3 and stenosis in 1. Procedural access was via the femoral vein in 3 and jugular vein in 1. Edwards Sapien S3 valves (29 mm n = 3 and 26 mm n = 1) were deployed and all procedures were successful and uncompli-cated.

**Results:** None or trivial residual tricuspid regurgitation was present in all cases and median post procedural tricus-pid valve mean gradient was 4mmHg (range 2-5). Median follow-up was 13.5 months (range 2-17) and median gradient was 6mmHg. One patient has developed progressive severe stenosis (MG 14mmHg) despite anticoagulation.

**Conclusion:** All four patients underwent successful tricus-pid VIV implantation for severely degenerated (regurgitant or stenotic) tricuspid surgical bioprostheses. Both the trans-papillary and femoral approach may be used successfully, with unique clinical advantages for each depending on the surgi-cal valve orientation. Tricuspid VIV implantation is clinically feasible with excellent acute haemodynamic outcomes and safety.

http://dx.doi.org/10.1016/j.hlc.2019.06.663

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**Patients with Aortic Stenosis Exhibit Early Improved Endothelial Function Following Aortic Valve Replacement**

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**Background:** Patients with severe aortic stenosis (AS) have impaired coronary flow reserve (CFR), resulting in myocardial ischaemia in absence of obstructive coronary disease. Endothelial dysfunction (ED) contributes towards impaired CFR in patients with AS, although it remains unknown whether endothelial function recovers following valve replacement. It is also unclear whether any hypothe-sised improvement immediately as consequence of arterial haemodynamics or more long-term.

**Methods:** Patients with severe AS undergoing transcatheter and surgical valve replacement had assessment of endothelial-independent and -dependent flow mediated dilata-tion (FMD) via ultrasound and EndoPAT2000. Measurements were performed prior to, 24 hrs and 28 days after valve replacement. Intraobserver FMD reproducibility was excellent (intraclass correlation coefficient 0.96).

**Results:** To date, 8 out of 40 patients have been recruited into the trial (75% male). Seven (87.5%) patients underwent transcatheter valve replacement. FMD was successfully per-formed in all patients pre- and immediately post-procedure, whereas EndoPAT measures were possible in 75% of patients. FMD significantly increased from 5.8% (pre-) to 11.6% post-procedure (p = 0.01). Although a similar trend was observed for EndoPAT measures (pre 2.00 vs. post 2.36), this did not reach statistical significance (p > 0.05). FMD follow-up data at 28 days was available for 2 patients and demonstrated that the improvement was sustained (8.5%). We anticipate complete data will be available by time of presentation.

**Conclusion:** Our preliminary data shows that endothelial function in patients with AS improves quickly after valve replacement, likely as a result of improved arterial haemody-namics. This improvement may result in restoration of CFR and alleviate myocardial ischaemia.

http://dx.doi.org/10.1016/j.hlc.2019.06.664

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**Percutaneous Coronary Intervention Outcomes Following Out-of-Hospital Cardiac Arrest For Patients With and Without ST-Elevation Myocardial Infarction**

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**Background:** Outcomes after out-of-hospital cardiac arrest (OHCA) remain poor, and percutaneous coronary interven-tion (PCI) may have prognostic benefit in patients with a culprit coronary lesion. We aimed to describe outcomes among patients undergoing PCI following OHCA and the effect of ST-elevation myocardial infarction on outcome.

**Methods:** Data were prospectively collected on 1,047 con-secutive PCI procedures following OHCA at six Victorian public hospitals from 2005 to 2017. Patients were divided into those with STEMI (OHCA-S) and those without (OHCA-NS). Outcomes were compared against patients with STEMI only without OHCA (n = 9,694).

**Results:** OHCA-S patients were younger and the treated lesion was more commonly occluded at time of PCI (63% vs 22%, p < 0.001). GP-IIb/IIIa antagonists, thrombus aspira-tion and intra-aortic balloon pump insertion were more frequently used for OHCA-S (p < 0.01). Cardiogenic shock (CS) was present in 47% of OHCA-S and 29% of OHCA-