group. Two ICDs have been removed/deactivated after exclusion of a known familial mutation.

163 THE UNITED KINGDOM TRANSCATHETER AORTIC VALVE REGISTRY - OUTCOMES TO DECEMBER 2009 AND UPDATE

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Introduction The United Kingdom Transcatheter Aortic Valve (TAVI) Registry was established to define the clinical and procedural details of all patients being treated by TAVI, regardless of access route or technology used, and to assess their outcomes. The registry has captured all cases in England and Wales.

Methods For every TAVI performed, all centres complete an agreed dataset. The data are encrypted and sent electronically to servers at the Central Cardiac Audit Database (CCAD) for analysis. A unique patient identifier (the NHS number) is used to link with the NHS Central Register to track mortality. This analysis is based on all procedures performed up to 31st December 2009.

Results 25 centres in England and Wales performed a total of 877 procedures in 870 patients; 66 in 2007, 273 in 2008 and 538 in 2009. Median number of cases per centre was 24. Median (IQR) age was 82 (78–87) yrs. 52% were male, and mean logistic Euroscore (LES) was 22.2%. 68% were transfemoral, the remainder being mainly transapical. 90% of CoreValve implants and 46% of Edwards used a transfemoral approach. Patients needing a transapical route had more comorbid conditions than those treated by a transfemoral route (LES 25.2% vs 20.9%). Mortality tracking was successful in 100% of patients. Survival at 30 days was 93.1%, 78.9% at 1 year (443 at risk) and 72.3% at 2 years (114 at risk). Survival was significantly poorer in those needing non-transfemoral approaches (1 year survival 73.5% vs 81.4%). Survival was also poorer in those with poorer LV ejection fraction, with moderate or severe post procedural aortic regurgitation and with a LES > 40. Survival was not associated with age, NYHA class, or the presence of concomitant coronary artery disease, and not different between those with a LES < 21 compared with LES 21–40. There was also no difference in survival between patients treated with CoreValve or Edwards technologies, or between proctored and non proctored cases. There was a significant improvement in survival over the 3 years of the registry, and a change in demographics with the proportion of patients with prior CABG rising from 16.4% in 2007 to 29.9% in 2009. The total number of cases in the UK TAVI registry has risen to 1490 as of 29 Nov 2010. More details of the 2010 cohort will be available at the time of presentation (Abstract 163 figure 1).

Abstract 163 Figure 1

Conclusions The UK TAVI Registry has successfully captured the entire TAVI activity of England and Wales incorporating the learning curves of every centre. Outcomes following TAVI are excellent in a high risk patient population. Outcomes are better in the population who are suitable for a transfemoral approach (with less comorbidity) than those treated with the transapical approach. These data suggest that careful proctoring allows the introduction of a new treatment method without an adverse effect on patient outcome, and we have demonstrated no systematic difference in outcome between the two commercially available technologies.

164 EARLY HAEMODYNAMIC CHANGES AND MYOCARDIAL INJURY AFTER TRANSFEMORAL TRANSCATHETER AORTIC VALVE IMPLANTATION (TAVI)

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Purpose Transfemoral (TF) TAVI is a novel procedure for the treatment of severe aortic stenosis, without the need for thoracotomy or cardiopulmonary bypass. The procedure results in almost instantaneous normalisation of transvalvular gradients, but little is yet known about the periprocedural haemodynamic effects. We aimed to describe these effects using 3D and tissue Doppler (tD) transthoracic echocardiography (TTE) and Cardiac Output monitoring. **Methods** In 16 patients undergoing TF TAVI haemodynamics were characterised with a number of tD and 3D TTE measurements.

Abstract 164 Figure 1