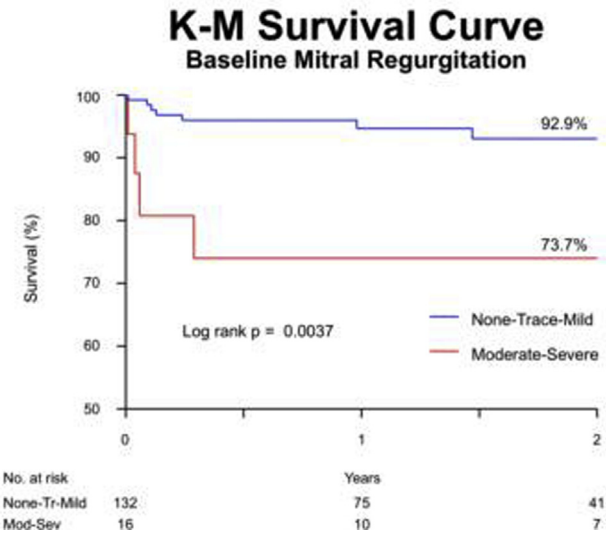
p = 0.009). At 1-year, mortality rate was higher in group II (6.1% vs. 26.3%; hazard ratio [HR], 4.46; 95% CI, 1.34 – 14.83: p = 0.029). Multivariate Cox regression analysis identified preoperative mitral regurgitation ≥ moderate (HR, 5.35; 95% CI, 1.58 – 18.10; p = 0.007) and body mass index (HR, 0.75; 95% CI, 0.60 – 0.94; p = 0.012) as independent predictors of mortality.
Conclusions: Preoperative mitral regurgitation ≥ moderate was associated with higher 30-day and 1-year mortality.

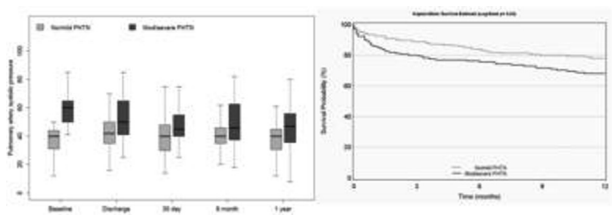


TCT-726

Patients With Aortic Stenosis and Pulmonary Hypertension Experience a Decrease in Pulmonary Artery Pressure Following Transcatheter Aortic Valve Replacement

Rebecca Torguson[1], Itsik Ben Dor[2], Fang Chen[3], Augusto Pichard[4], Lowell F. Satler[2], Ron Waksman[5]
[1]Washington Hospital center, Washington, DC, [2]Washington Hospital Center, Washington, DC, [3]Medstat Washington Hospital Center, Washington, DC, [4]washsington hospital center, Washington, United States, [5]Medstar Washington Hospital Center, Washington, DC

Background: Pulmonary hypertension (PHTN) is a major risk factor for patients undergoing cardiac surgery as it associated with high peri- and post-operative mortality. There is limited data on PHTN among patients who undergo transcatheter aortic valve replacement (TAVR). This analysis sought to assess the prevalence and clinical impact of PHTN of such patients.
Methods: Clinical data of patients with AS who underwent TAVR was retrospectively analyzed. Patients were divided into two groups based on systolic pulmonary artery pressure: 0-50 mmHg (No/Mild group) versus >50 mmHg (moderate/severe group).
Results: A total of 415 patients were included. No/mild PHTN was present in 172 (41.5%) and moderate/severe PHTN in 243 (58.5%). The average age was 84±8 years and 47% were male. Average STS score was 10.0±4.7. There were no significant differences between groups in baseline characteristics or in baseline echo, apart from moderate/severe tricuspid regurgitation, which was more frequent among moderate/severe PHTN patients (23% vs. 5.9%, p < 0.001) and average baseline pulmonary pressure (61±12 vs. 37±9, p < 0.001). Procedural and post-procedural complications were similar. (Figure) Mortality at 30 days and 1-year follow up was significantly higher in the moderate/severe PHTN group (30 days 14.5% vs. 7.4%, p=0.019, and 1 year 30.8% vs. 21.0%, p=0.023).



Conclusions: Patients with severe aortic stenosis and pulmonary hypertension, undergoing TAVR may have some improvement in their PHTN and tricuspid regurgitation indices. Nevertheless, this group has higher mortality rate and should subjected ti intense monitoring and treatment

TCT-727

First Report of Two-Year Outcomes With the Repositionable Lotus Aortic Valve Replacement System: Results From the REPRISE I Feasibility Study

Ian T. Meredith[1], Stephen G. Worthley[2], Robert J. Whitbourn[3], Paul Antonis[4], Joseph Montarello[5], Andrew E. Newcomb[6], Paul Underwood[7], Keith D. Dawkins[8]
[1]Monash University, Melbourne, Australia, [2]The University of Adelaide, Adelaide, Australia, [3]Cardiovascular Research Centre, St. Vincent Hospital Melbourne, Melbourne, Australia, [4]Monash Heart, Melbourne, Victoria, [5]Royal Adelaide Hospital, Adelaide, Australia, [6]St. Vincent's Hospital, Melbourne, Fitzroy, Victoria, Australia, [7]Boston Scientific, Marlborough, MA, [8]Boston Scientific Corporation, Natick, MA

Background: The repositionable and fully retrievable, CE-marked Lotus Valve is designed to facilitate controlled, precise positioning and minimize paravalvular aortic regurgitation. Results to 2 years post-implantation with Lotus have not yet been reported.
Methods: REPRISE I is a prospective, single-arm, 3-center feasibility study designed to assess acute safety and performance of the 23mm Lotus Valve in symptomatic patients with calcified aortic stenosis and high surgical risk.
Results: The Lotus Valve was implanted in 11 female patients (mean age 83.0±3.6 years; mean STS score 4.9±2.5%). All patients were considered high risk for surgery due to frailty or associated comorbidities (gait speed ≥6s [9/11], grip strength ≤18kg [7/11], and cognitive dysfunction [5/11; defined as a score < 4 on the Mini-Cognitive Assessment for Dementia]). Clinical procedural success was achieved in 9/11 and partial resheathing/repositioning was successfully performed in 4 patients; no valves required full retrieval. At 1 year, follow-up was 100% (11/11 patients). There were no new VARC1 Safety Composite events, bleeding events, or new pacemaker implantation between 30 days and 1 year. The safety composite remained 3/11 (2 patients with non-valve-related disabling bleeding, 1 with major ischemic stroke and vascular complication). Conduction disturbance requiring new permanent pacemaker implantation remained at 4 patients; only 2 patients were pacemaker dependent at 1 year. NYHA class was significantly (P=0.004) improved at 1 year with 5 (46%) patients in Class I, and 6 (55%) in Class II. Significant improvements in mean aortic gradient and aortic valve area were sustained at 1 year (mean gradient 15.4±4.6mmHg; mean area 1.5±0.2cm^2; P< 0.001 vs baseline for each). Core laboratory adjudicated paravalvular aortic regurgitation was trace/trivial in 1 patient, mild in 1 patient, and absent in 8 patients at 1 year.
Conclusions: One-year feasibility results suggest that the Lotus Valve can be positioned accurately and successfully with virtually no aortic regurgitation and low clinical event rates. Two-year outcomes from REPRISE I will be presented for the first time at TCT 2014.

TCT-728

The Impact of FDA Approval of Transcatheter Aortic Valve Replacement on the Treatment Assignment of Patients with Severe Aortic Stenosis

Ricardo O. Escarcega[1], Rebecca Torguson[2], Joelle Salmon[3], Sandeep Kumar[1], Marcus Weaver[3], Nevin C. Baker[3], Marco A. Magalhaes[3], Michael J. Lipinski[1], Sa'ar Minha[3], Fang Chen[1], Thibault Lhermusier[1], lakshmana Pendyala[1], Wenjie Tian[1], Hideaki Ota[4], William O. Suddath[1], Lowell F. Satler[3], Augusto Pichard[5], Ron Waksman[1]
[1]Medstar Washington Hospital Center, Washington, DC, [2]MedStar Washington Hospital center, Washington, DC, [3]MedStar Washington Hospital Center, Washington, DC, [4]Medstar Washington Hospital Center, Washington , DC, [5]MedStar Washington hospital center, Washington, United States

Background: The number of Transcatheter Aortic Valve Replacement (TAVR) programs has increase in the US. However, the number of referrals to TAVR centers for evaluation remains uncertain. We sought to describe the temporal changes of treatment allocation after FDA approval of currently available transcatheter aortic valves.
Methods: We retrospectively analyzed all patients who were referred to our center between January 1, 2010, and July 31, 2013. The number of referrals were grouped and analyzed by year with three distinct landmark time points. These landmark points represent the approval of the two currently available transcatheter heart valves.
Results: Following initial screening of 1051 patients, 18% (n=192) patients underwent TAVR, 34% (n=357) balloon aortic valvuloplasty (BAV), 8% (n=84) surgical replacement (SAVR) and 40% (n=418) medical therapy. Mean time from last screening to TAVR was 26 ± 47 days, and mean time from last screening to SAVR was 10 ± 15 days. As shown in Figure 1 the number of patients receiving TAVR and SAVR has increased overtime in contrast to the number of patients treated with BAV and medical therapy.