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Presentation Number: 403-16
Topic 1: Valvular Heart Disease
Patients Enrolled: 56
Published Acronym: TRISCEND
Published Name of Trail: TRISCEND Study
Trial Type: Late-breaking clinical trial: major study
Publishing Title: Transfemoral Tricuspid Valve Replacement In Patients With Tricuspid Regurgitation: 30-day Results Of The Triscend Study

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Background: Treatment of tricuspid regurgitation (TR) is rapidly evolving. Transcatheter valve replacement is emerging as a minimally invasive alternative for reducing TR and improving quality of life.

Methods: The prospective, single-arm, multicenter TRISCEND study investigated 56 patients receiving transcatheter tricuspid valve replacement (EVOQUE system, Edwards Lifesciences, Irvine, CA). Participants had \geq moderate TR and were followed for 30 days. A data safety monitoring board, echocardiographic core lab, and clinical events committee provided oversight.

Results: Mean age was 79 years, 77% female. Patients had TR \geq severe (92%), atrial fibrillation (91%), and New York Heart Association (NYHA) class III/IV (84%). Society of Thoracic Surgeons mortality risk score (MV Repair) was 7.7%. 34% had a pacemaker/ICD. At 30 days (**Figure**), TR reduced to \leq mild in 98%. Composite major adverse event rate was 22.6%, with 1 cardiovascular death, 2 non-elective tricuspid re-interventions, 1 major access site/vascular complication, and 12 severe bleeding events (none life-threatening or fatal). NYHA improved ($p < 0.001$); 77% in class I/II. 6-minute walk distance improved by 46 m ($p = 0.001$) and Kansas City Cardiomyopathy Questionnaire score by 19 points ($p < 0.001$).

Abstract Body:

Conclusion: Treatment of TR with EVOQUE using a transfemoral approach demonstrated technical feasibility, safety, and symptomatic improvement at 30 days in patients with clinically significant TR. The TRISCEND study is ongoing (NCT04221490).

