



## Valvular Heart Disease

### PRE-PROCEDURAL SIX-MINUTE WALK TEST AS A PREDICTOR OF MORTALITY IN PATIENTS UNDERGOING TRANSCATHETER AORTIC VALVE IMPLANTATION

Poster Contributions

Poster Sessions, Expo North

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**Background:** - The 6-minute walk test (6MWT) is a simple and safe functional test used in clinical trials to assess treatment outcomes, however its prognostic value in transcatheter aortic valve implantation (TAVI) is unknown. The aim of this study is to evaluate the prognostic role of the 6MWT in patients with severe symptomatic aortic stenosis undergoing TAVI.

**Methods and Results:** - A total of 212 patients (mean age 79 years, STS score: 7.0%) with severe aortic stenosis had completed a 6MWT within two weeks of their TAVI procedure. Mean baseline distance walked was  $182 \pm 108$ m as compared with a mean expected distance of  $370 \pm 47$ m ( $p < 0.001$ ). Female gender, anemia and prior stroke were associated with lower baseline 6MWT (each  $p < 0.01$ ). Thirty-day and cumulative mortality [median 12 (4-20) months] were 7.1% and 23.6%, respectively. A shorter distance walked was associated with a higher 30-day [OR 1.06 (1.00-1.13),  $p = 0.05$ ] and cumulative mortality [HR 1.07 (1.04-1.12),  $p = 0.0002$ ]. In multivariate analysis, baseline 6MWT was an independent predictor of mortality [HR 1.08 (1.04-1.13),  $p = 0.0002$ ], with a distance of 160m best determining a higher risk [HR 2.61 (1.43-4.79)  $p = 0.0019$ ].

**Conclusions:** - A lower exercise capacity as evaluated by 6MWT is a strong predictor of mortality in patients undergoing TAVI. The incorporation of this simple functional test can potentially enhance risk stratification in this challenging population.