376 Incomplete functional revascularization is associated with adverse clinical outcomes after TAVI

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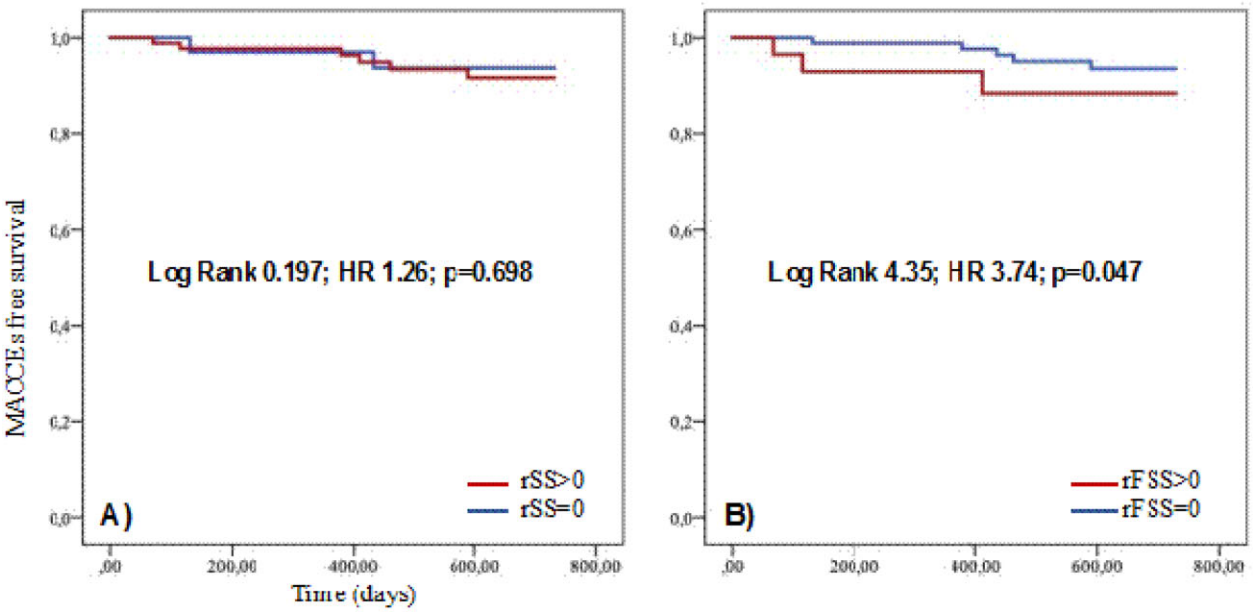
Aims: Whether incomplete functional revascularization has an impact on the clinical outcome of patients treated with transcatheter aortic valve implantation (TAVI) is



376 Central Figure MACEs free survival analysis of patients stratified according to complete revascularization vs. incomplete revascularization assessed according to anatomy (residual SYNTAX score) (*A*) or physiology (residual functional SYNTAX score) (*B*).

still unknown. We aim to assess the prognostic value of residual functional Syntax score (rFSS) in a cohort of patients undergoing TAVI.

Methods and results: One-hundred-twenty-four patients (229 lesions) with severe aortic stenosis and coronary artery disease (CAD) underwent fractional flow reserve (FFR)-guided revascularization. The primary endpoint of the study was the composite of cardiac death, myocardial infarction and revascularization at last available follow-up after TAVI. Median Syntax score (SS) and Functional Syntax score (FSS) at baseline were 7 (range 5–12) and 0 (range 0–7) respectively. After revascularization or deferral according to FFR, residual SS (rSS) and rFSS were 5 (range 0–8) and 0 (range 0–0), respectively. At COX regression analysis, angiographic incomplete revascularization (rSS = 0) was not associated with the primary endpoint (HR: 1.26; 95% CI: 0.40; 3.95; *P*-value 0.698), whereas functional incomplete revascularization was associated with worse event-free survival at Follow-up after adjusting for clinical confounders (HR: 3.74, 95% CI: 1.02–13.75, $P = 0.047$).

Conclusions: Incomplete functional revascularization is associated with adverse clinical outcome after TAVI. rFSS may be regarded as a treatment goal for patients with CAD undergoing TAVI. Further studies are warranted to confirm our hypothesis.