Results: Table 1 summarizes our results. Significant PVL incidence was 14% (n=23). A TOE-guided procedure was chosen in 51% (n=83). Post-dilatation prevalence was similar between TOE-guided and Angiography-only strategies (25% vs 18%, p=0.26, respectively). Only 13 patients (8%) had an area cover index <0%. The independent predictors of significant PVL were: self-expanding valve (OR=4.4, 95% CI: 1.2–16; p=0.03) and aortic valve calcium score ≥3266 AU (OR=3.1, 95% CI: 1.2–8; p=0.02).

	No/mild PVL (n=139)	PVL ≥ moderate (n = 23)	*P*-value
Age, years	85 (80 – 87)	85 (80 – 88)	0.887
BSA, m²	1.71 (1.51 – 1.83)	1.74 (1.57 – 1.87)	0.582
Male	43%	43%	0.978
TTE pre-TAVI			
AVA, cm²	0.7 (0.57 – 0.81)	0.66 (0.5 – 0.78)	0.425
Max gradient, mmHg	76 (66 – 92)	97 (67 – 113)	0.103
Mean gradient, mmHg	47 (41 – 58)	58 (41 – 74)	0.091
LVMi, g/m²	164 (130 – 196)	172 (128 – 217)	0.65
Aortic insufficiency	79%	87%	0.383
MDCT pre-TAVI			
LVOT max diameter, mm	26 (24 – 28)	27 (25 – 29)	0.465
LVOT min diameter, mm	21 (19 – 22)	22 (19 – 24)	0.570
LVOT area, cm²	4.08 (3.46 – 4.9)	4.3 (3.5 – 5.1)	0.454
IVS, mm	16 (14 – 17)	17 (16 – 18)	0.115
Aortic valve calcium score	2234 (1499 – 3389)	3162 (2455 – 3753)	**0.003**
TAVI procedure			
Transfemoral access	88%	96%	0.265
TOE-guided	50%	61%	0.334
Self-expanding valve	62%	87%	**0.021**
Valve size, mm	26 (23 – 29)	26 (26 – 29)	0.173
Valve area, cm²	5.3 (4.2 – 6.6)	5.3 (5.3 – 6.6)	0.173
Pre-dilation	37.4%	34.8%	0.809
Post-dilation	17.3%	47.8%	**0.001**
Area cover index, %	22.3 ± 15.5	25.1 ± 13.5	0.341
Eccentricity index, %	22.2 (15.4 – 26.4)	22.6 (17.2 – 25.9)	0.946

Table 1

Conclusions: In this population, the strategy of TOE-guided TAVI did not decrease the incidence of significant paravalvular leak when compared to Angiography-only. The major predictors of significant paravalvular leak were: implantation of self-expanding valves and aortic valve calcium score ≥3266.

P2652
Impact of transfemoral aortic valve implantation and surgical aortic valve replacement on right ventricular function up to six months of post-procedural phase

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Purpose: The right ventricular (RV) dysfunction is related to adverse outcomes after surgical replacement of the aortic valve (SAVR). The aim of this study was to assess RV function during the first six months after SAVR and transfemoral aortic valve implantation (TAVI) using standard and advanced echocardiographic measures (Speckle Tracking Strain and Tissue Doppler) in order to gain further insight into the changes of RV performance in patient undergoing SAVR or TAVI.
Methods: We performed 3 independent echocardiographic evaluations in 46 patients: 20 undergoing SAVR and 26 undergoing TAVI. Both groups were similar in mean age, gender, left ventricle ejection fraction and body surface (p>0.05) but the TAVI group showed higher Euroscore (TAVI: 5,76 vs SAVR: 2,15) and STS score (TAVI: 5,73 vs SAVR: 3,48) likewise more heart failure on admission (p<0,05). Echocardiographic measurements included: RV free wall longitudinal strain (RV strain), tricuspid annular plane systolic excursion by M mode (TAPSE), pulsed Doppler systolic velocity at the tricuspid annulus (S' TD), RV diastolic and systolic area (DA, SA), RV fractional area change (FAC) and also parameters related to the pulmonary pressure: tricuspid regurgitation peak velocity (TRV), right atrium area (RA area) and systolic pulmonary artery pressure (SPAP).
Results: Although the TAVI group had worse baseline echo characteristics, RV function and SPAP improved in this group in the immediate post-procedural echo and progressively after 6 months whereas significant deterioration of RV function was observed in patients undergoing SAVR in the first post-procedural echo and 6 months later.
Conclusion: While RV function experiences immediate and intermediate term improvement after TAVI it deteriorates significantly after SAVR. These data suggest that intermediate-high risk patients with pre-existing RV dysfunction may benefit from TAVI.

P2653
Determination of the new risk factors for predicting long term mortality in patients undergoing transfemoral tavi procedure: can the conventional risk scores be used as a long term mortality predictor

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Background: Surgical risk in transcatheter aortic valve implantation (TAVI) patients is determined by conventional surgical risk scoring systems. However, these risk scores were developed to predict operative mortality in patients undergoing cardiac surgery, and limited data is available for predicting long term mortality in TAVI patients. Because of the insufficient predictive ability of the conventional risk scores, newer and specific risc scores are required for predicting long term mortality in TAVI patients.
Purpose: To investigate the predictive value of conventional risk scores for predicting long term mortality. Also, the role of other factors on long term mortality will be evaluated.
Methods: Our study included 121 patients who underwent TAVI between 2012 and 2016. CoreValve was implanted to 88 (72.7%), Edwards SAPIEN to 30 (24.8%) and Direct Flow Medical to 3 (2.5%) patients. Transfemoral approach was used in all patients. Median follow-up duration was 23.2 months; 24 (20%) patients died, and only only one patient was lost during follow-up.
Results: The median age was 80 (min: 47 max: 91). Maximum and mean transaortic gradients decreased (75.1±22.5 vs 16.7±7.8, P=0.01), (45.3±15.1 vs 8.3±4.3, P=0.017), and AVA increased (from 0.6±0.1 to 1.9±0.4, P<0.001) on post-TAVI day one compared to pre-TAVI values. The mean Log. Euroscore, Euroscore II and STS were 27.4±9.7, 7.9±4.6, and 4.6±2.4 respectively. In-hospital mortality according to VARC-2 was 2 (%1.6). 3-month survival rate was 93.3%, 6-month survival rate was 91.6%, 1-year survival rate was 85.9%, 2-year survival rate was 78.3% and 3-year survival rate was 71.3%. Although all three risk scoring system did not predict in-hospital mortality, STS predicted 3-month mortality, EuroSCORE-II 6-month mortality and Log. EuroSCORE 3-year mortality. When the predictors of long term mortality were evaluated with multivariate analysis, it was found that male gender (OR:5.668, 95% CI: 1.055–30.446, P=0.043) and low albumin level before TAVI procedure (OR:0.109, 95% CI: 0.018–0.654, P=0.015) were independent predictors of mortality. By a ROC analysis, ≤3.4 mg albumin level before TAVI procedure predicted mortality with a sensitivity of 73% and specificity of 65%.

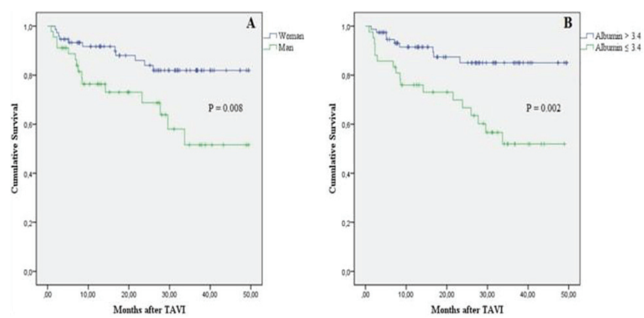

Figure 1 (A) Cumulative survival rate according to the gender differences, (B) cumulative survival rate according to the blood albumin level before the TAVI procedure.

Conclusions: Although all conventional risk scoring systems overestimated in-hospital mortality, we found that they can predict long term mortality. To our knowledge, this is the first study regarding this issue. The independent predictors of long term mortality were male gender and low blood albumin level before TAVI procedure. Low blood albumin level is an independent predictor of long-term mortality in patients undergoing TAVI. This shows that malnutrition and fragility are an important parameter to be considered in this group of patients. Therefore, we suggest that TAVI should be performed before the clinical deterioration and increased fragility.

P2654
Is common femoral artery bifurcation level still a risk factor for vascular complications of transfemoral transcatheter aortic valve implantation?

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Background: Vascular complications of transfemoral TAVI are common when the puncture site is not optimal. However, it is sometimes difficult to identify the optimal target when the common femoral artery bifurcation is high. The aim of this study is to clarify the impact of high CFA bifurcations on vascular complications in transfemoral TAVI using last generation devices.
Methods: We enrolled 744 consecutive transfemoral TAVI patients who underwent femoral angiogram both pre and post procedure from August 2014 to August 2017 at our institution. We divided patients into 3 groups depending on the position of the CFA bifurcation (Type1; bifurcation level is inferior to the lower edge line of femoral bonehead, Type2; bifurcation level is between lower edge line and midpoint line of femoral bonehead, Type3; bifurcation level is superior to midpoint line of femoral bonehead). Hemostasis was achieved using 2 proglide preclosing devices in all cases. All endpoints were defined according to the VARC-2 criteria for event definition.
Results: The prevalence of femoral bifurcations was Type 1 73%, Type 2 24%, Type 3 3% respectively. Baseline characteristics of the patients were similar but gender distribution was significantly different (48% vs 63% vs 65%, p=0.001).