compared to those with LVEF >30%. Thirty-day all-cause mortality was not signifi-
cant different between the two groups (11.1% vs 6.3%, p = 0.14, HR 1.81, 95% CI 0.81-4.06). Patients with LVEF <30% had a trend toward higher risk of 30-day cardiac mortality (11.1% vs 3.3%, p = 0.06, HR 2.16, 95% CI 0.95-4.90), which disappeared after multivariable adjustment (p = 0.22). In a prespecified subgroup
analysis restricted to patients with LVEF <30%, patients with baseline mean trans-
valvular gradient <40 mmHg (low-gradient) presented a non-significant higher risk of
all-cause death (31.6% vs 12.0%, p = 0.14, HR 2.46, 95% CI 0.69-8.74) and of cardiac death (23.7% vs 12.0%, p = 0.32, HR 1.90, 95% CI 0.51-7.03) as compared to
patients with mean transvalvular gradient ≥40 mmHg (high-gradient).

Results: Baseline severe impairment of LVEF is not a predictor of increased
short-term and mid-term mortality after TAVI. Among patients with severe
impairment of left ventricular function, those with low transvalvular gradient
deserve a careful evaluation because of numerically higher mortality rates. Selected
patients with severe impairment of left ventricular function should not be denied
TAVI.

TCT-722

Transfemoral Implantation of the balloon-expandable Edwards SAPIEN
3 Aortic Valve without Predilation

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Background: Aortic valve implantation without balloon predilation may facilitate the
procedure, reduce rapid pacing duration and may impact the stroke rate. For the self-
expandable CoreValve this strategy has been shown to be feasible and safe in small
studies. Whether direct aortic valve implantation is applicable to the balloon-
expandable Edwards SAPIEN 3 valve is unknown, is applicable to the balloon-
expandable Edwards SAPIEN 3 valve is unknown. The aim of the present study was to
assess the feasibility and safety of transfemoral implantation of the Edwards SA-
PIEN 3 aortic valve without balloon predilation.

Methods: Forty one consecutive patients with severe symptomatic aortic stenosis and
high surgical risk were prospectively enrolled to receive the Edwards SAPIEN 3 aortic
valve without predilation.

Results: Mean age of the patients was 83.2 ± 5.9 years, 58 % were male. Successful
implantation without predilation was achieved in 95.1 % of patients. In 2 patients (4.8 %)
the prosthesis could not cross the native aortic valve due to severe asymmetric
calcification and an aortic valve orifice area (AOA) of 0.4 and 0.5 cm², respectively.
After predilation was performed from the contralateral site, the valve could be suc-
cessfully implanted in both patients. Post-dilation was performed in one patient due to
moderate aortic regurgitation. The cardiovascular 30 day MACCE rate was 2.4 %,
total mortality was 9.7 %, reasons for death were pneumonia (1pt), urosepsis (1pt),
and subarachnoidal bleeding (1pt).

Conclusions: Transfemoral implantation of the Edwards SAPIEN 3 aortic valve
without balloon predilation is feasible and safe in the majority of patients, limitations
are severe asymmetric valve calcification in combination with AOA of 0.5 cm² or less.

TCT-723

The Cost of TAVR: Association Between Length of Stay and the Cost of
Transfemoral Transcatheter Aortic Valve Replacement in Medicare Patients

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Background: Reducing length of stay (LoS) in selected TAVR patients is both
safe and feasible, but its role in mitigating healthcare costs has not been fully
evaluated.

Methods: Using the Medicare Provider Analysis and Review File, we retrospectively
analyzed 14,464 Medicare patients who underwent transfemoral TAVR and were
discharged alive in fiscal year 2012. Hospitalization cost and discharge disposition
were assessed for 5 LoS cohorts (Table 1). Multivariate regression modeling, based on
patient demographics, comorbidities, and complications, was used to derive an
adjusted mean cost for each cohort. The 2013 MedPAR files, available shortly, will
also be analyzed and incorporated prior to presentation.

Results: The unadjusted mean hospitalization cost of transfemoral-TAVR cases was
$61,130 and the mean LoS was 7.7 days. Compared to patients with a LoS of 6-7
days, short-stay patients (discharged on day 1-3) had an unadjusted cost difference of
$8,216 (p < 0.0001) and an adjusted difference of -$6,036 (p < 0.0001). Importantly,
patients discharged early required less post-acute care services than patients with longer stays, alleviating concerns that early discharge of
Medicare patients may be associated with higher societal costs. Efforts aimed at
optimized patient selection and peri-TAVR care with a view to reducing LoS are
warranted.

TCT-724

Preprocedural But Not The Periprocedural High-sensitive Troponin T (hsTNT)
Levels Predict Outcome In Patients Undergoing Transcatheter Aortic Valve
Implantation (TAVI)

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Background: TAVI has gained significant relevance in the treatment of inoperable or
high-risk patients with symptomatic aortic stenosis. Several risk scores have been
proposed to estimate the perioperative and long-term risk of patients undergoing
TAVI. However, assessment of individual risk remains difficult. We thus aimed to
analyze whether biomarkers may improve risk stratification.

Methods: We prospectively included 267 patients undergoing TAVI (using balloon-
expandable Edwards Sapien XT prostheses) at our institution from Feb. 2011 until
Dec. 2013. n = 260 patients were available for complete follow up. 56.2% were fe-
males, mean age was 81.9 years (± 6.8 years), 57.3% were treated via transfemoral,
28.1% transapical, 14.6% transaortic access. Biomarkers (hsTNT and NTproBNP) as
well as other parameters were measured a day before TAVI, 3 and 7 days post-pro-
cEDURE. Median follow-up was 262 days (IQR 77-501d), the primary endpoint
was survival; a time at 74% of deaths (27.7%) occurred. 30-day mortality was 6.0%.
All possible prognostic factors were analyzed by Cox regression analysis with backward
selection based on the likelihood ratio criteria.

Results: Median preprocedural hsTNT levels were 28.4 pg/ml (IQR 16.2-46.1 pg/
ml). From all potential prognostic factors, preprocedural hsTNT (HR = 2.67 for upper
quartile vs. quartiles 1-3, CI 1.63-4.38, p < 0.001) and the log. ES (HR = 1.98, CI 1.2-
3.27 p = 0.006) emerged as independent prognostic parameters for adverse outcome. In
contrast, unimpaired renal function appeared to be protective (HR = 0.48, CI 0.21-
0.64, p = 0.047). In addition, we also tested whether the VARC-2 cut-off for
myocardial damage (hsTNT peak value exceeding 15 × the upper reference limit,
≥210 pg/ml) was of prognostic relevance. At 72 h post-TAVI, n = 87 pts (37.5%) had
blood level >210 pg/ml. None of these pts did reveal a significant difference in
survival compared to pts with a hsTNT < 210 pg/ml at this timepoint.

Conclusion: In excluded preprocedural hsTNT is an independent risk
predictor of all-cause death whilst periprocedural hsTNT elevation failed to exhibit
prognostic relevance.

TCT-725

Impact of Mitral Regurgitation on Clinical Outcomes After Transcatheter Aortic
Valve Implantation: Results from Asian TAVI Multicenter Registry

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Background: The impact of preoperative mitral regurgitation on clinical outcome of
patients undergoing TAVI is still controversial. This study is to assess the contribution of
mitral regurgitation to clinical outcomes after TAVI.

Methods: Data from Asian TAVI multicenter registry were pooled and analyzed. In
total, 185 patients with severe symptomatic aortic stenosis undergoing TAVI were
included. Mean patients (8.6%) had preoperative mitral regurgitation ≥ moderate and
the study patients were divided into 2 groups according to preoperative mitral regur-
gitation: group I (mitral regurgitation ≤ mild) and group II (≥ moderate).

Results: Baseline LVEF and aortic valve area were smaller in Group II, but there were
no difference in other demographics including age, sex, diabetes, hypertension, pre-
vious CABG, peripheral artery disease, mean pressure gradient and Logistic EuroSCORE. There was no difference in device success rate (79.7% vs. 81.3%; p > 0.099), however 30-day mortality was higher in group II (30-day mortality: 1.5% vs. 18.8%; Relative Risk, 12.53; 95% confidence interval [CI], 2.31 – 98.84;