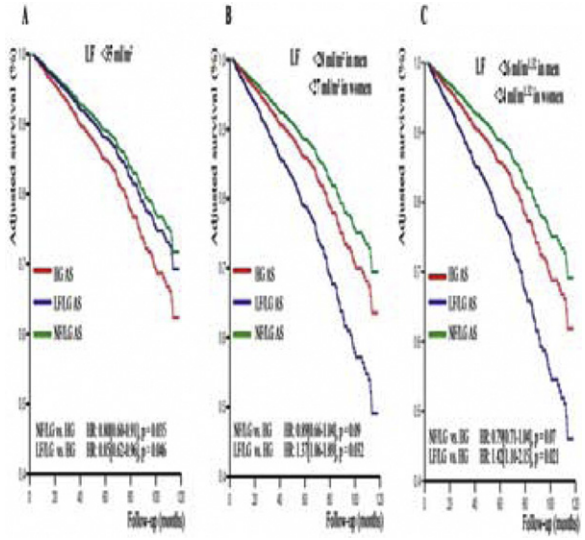

Fig. 1

Disclosure of interest The authors have not supplied their declaration of competing interest.

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Poster n°12

Transaortic valvular replacement prognosis according to aortic stenosis category

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Introduction Transcatheter aortic valve replacement (TAVR) has revolutionized the prognosis of patients with severe aortic stenosis. Four categories of aortic stenosis can be defined depending on left ventricular ejection fraction (EF), mean transvalvular gradient and stoke volume index.
Aim Whether aortic stenosis category influence prognosis after TAVR regarding functional improvement and mortality.
Method In total, 263 TAVR patients with a complete baseline echocardiography and one year follow-up, were retrospectively classified into four categories: high gradient ($n = 211$); low-flow, low-gradient aortic stenosis with reduced EF ($n = 21$); low-flow, low-gradient aortic stenosis with preserved EF ($n = 8$) and normal-flow, low-gradient aortic stenosis with preserved EF ($n = 23$).
Results At 12 months follow-up, 39 deaths occurred (14.8%): 25 in the high gradient group (11.8%), 9 in the low-gradient, low-flow, reduced EF group (43%), 1 in the low-gradient, low-flow, preserved EF group (12.5%), 4 in the low-gradient, normal flow group (17.4%). In a multivariate model, one-year all-cause mortality was higher in low-gradient, low-flow, reduced EF group ($P < 0.0001$) than in others (HR = 3.86; 95% CI 1.83—8.14; $P = 0.0004$). Patients with low-gradient, low-flow, reduced EF had less improvement in terms of dyspnea one month after the procedure with more patients in the NYHA 4 stage in this group ($P = 0.003$).
Conclusion A complete echocardiography is necessary to evaluate aortic stenosis, its severity and its type before TAVR. Patients with low-gradient, low-flow reduced EF had a higher mortality rate one year after TAVR and remained more symptomatic one month after the procedure.
Disclosure of interest The authors declare that they have no competing interest.

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Poster n°13

Characteristics and prognosis of patients with significant tricuspid regurgitation

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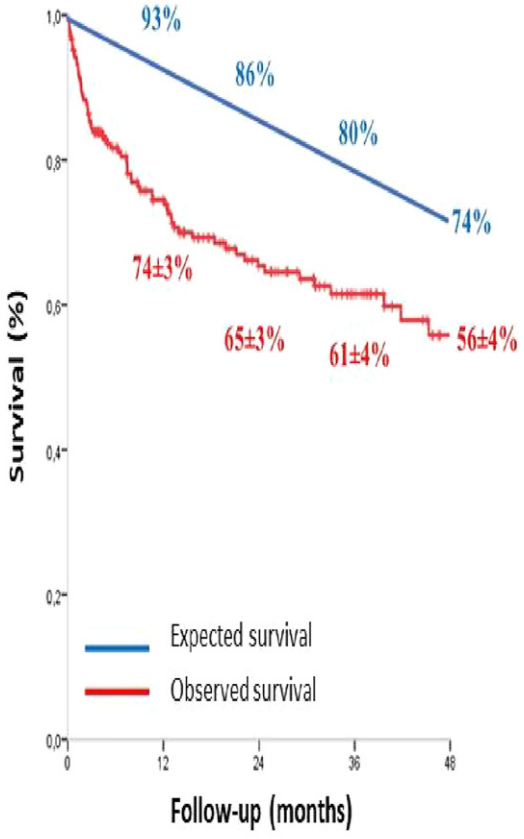
Introduction Severe tricuspid regurgitation (TR) usually remains asymptomatic for a long period, and the diagnosis is often delayed, at an advanced stage of right heart failure (RHF). Only a minority of patients are referred to surgery. We aim to describe the characteristics and prognosis according to aetiologies of patients with significant TR.
Method Two hundred and eight consecutive patients with moderate-to-severe (grade III) or severe (grade IV) TR were included from echocardiography reports between 2013 and 2017. Median follow-up was 18(6—38) months.
Results Patients (mean age 75 years, 46.6% males) were divided into 4 groups according to TR aetiology, group 1: primary TR (15.4%), group 2: TR secondary to left heart disease with a history of left heart valve surgery (24.5%), group 3: TR secondary to left heart disease with no history of left valvular surgery (26%) and group 4: idiopathic TR (34.1%). During follow-up, 61 patients (29%) experienced at least one decompensation of RHF requiring hospitalization. Only 11 patients (5.3%) underwent tricuspid valve surgery during follow-up with a perioperative mortality of 36%. The 4 years survival was much lower than the expected survival of age- and sex-matched individuals of the general population (56 ± 4% vs. 74%). After adjustment for outcome predictors, patients with idiopathic TR had a higher risk of mortality (adjusted HR = 1.83[1.05—3.21]; $P = 0.034$) compared to other groups.
Conclusion Moderate-to-severe and severe TR is associated with a high-risk of hospitalization for RHF and death at 4 years and a low rate of surgery. (Fig. 1 Idiopathic TR is associated with worse outcome than other etiologies)



	12 months	24 months	36 months	48 months
Expected survival (%)	93	86	80	74
Observed survival (%)	74	65	61	56
Relative survival (%)	79.6	75.6	76.2	75.7

Fig. 1

Disclosure of interest The authors have not supplied their declaration of competing interest.

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Poster n°14

Prognostic significance of energy loss index in patients with low gradient severe aortic stenosis and preserved ejection fraction

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Introduction We hypothesized that among patients with low gradient severe aortic stenosis (LG-AS) and preserved left ventricular ejection fraction (LVEF), reclassification of AS severity as moderate by pressure recovery adjusted indexed aortic valve area (AVAi)—energy loss index (ELI)—may identify a subgroup of patients with a better outcome.
Method In total, 379 patients with LG-AS (defined by AVAi ≤ 0.6 cm^2/m^2 and mean aortic pressure gradient < 40 mmHg) and preserved LVEF ≥ 50%were studied. Reclassification as moderate AS by ELI was defined as AVAi ≤ 0.6 cm^2/m^2 but an ELI > 0.6 cm^2/m^2. All-cause and cardiac mortality were studied.
Results In total, 148 patients (39%) were reclassified as moderate AS by ELI. Reclassification as moderate AS was independently associated with absence of coronary artery disease, decreased body surface area, normal flow status, and decreased left ventricular mass index (all $P < 0.05$). While reclassification as moderate AS by ELI was not associated with overall mortality during follow-up, reclassification as moderate AS by ELI was associated with a significant reduction of risk of cardiac mortality after adjustment for variables of prognostic interest including aortic valve replacement as a time-dependent covariable (adjusted HR 0.44 [95% CI, 0.21—0.91]; $P = 0.027$).
Conclusion In patients with low gradient severe AS and preserved LVEF, calculation of ELI permits to reclassify almost 40% of patients as having moderate AS. These reclassified patients have a considerable reduction of risk of cardiac mortality during follow-up. Calculation of ELI may be useful for decision making in patients with low gradient severe AS and preserved ejection fraction.
Disclosure of interest The authors declare that they have no competing interest.

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Poster n°15

Echocardiographic description of mitral annular disjunction in mitral valve prolapse and implication in arrhythmic risk stratification

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Introduction Mitral annular disjunction (MAD) is an anatomical variation of the mitral annulus, characterized by an atrial displacement of the leaflet's hinge points. It is associated with severe ventricular arrhythmias (VA) in mitral valve prolapse (MVP). The aim of this study was to assess MAD in MVP by echocardiography, analyze the reproducibility of measurements and evaluate its importance for arrhythmic risk stratification along with strain analysis of myocardial deformation.