

**Supplementary table 1: Factors comprising the logistic EuroSCORE assessment tool**

Factor	Weight
Patient-related	
Age >60 years	1 point per additional 5 years (or fraction of)
Female gender	1 point
Extracardiac arteriopathy	2 points
Neurological dysfunction severely affecting day-to-day function	2 points
Prior cardiac surgery	3 points
Serum creatinine >200 µmol/L	2 points
Active endocarditis	3 points
Critical preoperative state*	3 points
Cardiac-related	
Unstable angina	1 point
Moderate (30–50%) / poor (<30%) LVEF	1 / 3 points
MI within 90 days	2 points
Pulmonary hypertension (SPA >60 mmHg)	2 points
Operation-related factors	
Emergency setting	2 points
Concomitant cardiac procedure <sup>†</sup>	2 points
Surgery on thoracic aorta	3 points
Post-infarct septal rupture	4 points
German HIC classification:	
Log(total points) ≥20: high surgical mortality risk, eligible for TAVI reimbursement	
Log(total points) <20: low surgical mortality risk, ineligible for TAVI reimbursement	

Legend: LVEF, left ventricular ejection fraction; MI, myocardial infarction; SPA, systolic pulmonary artery pressure; HIC, health insurance company; TAVI, transcatheter aortic valve implantation. \*≥1 of the following: ventricular tachycardia/fibrillation, aborted sudden death, preoperative cardiac massage/ventilation/inotropic support/acute renal failure, and/or intraaortic balloon counterpulsation. <sup>†</sup> other than CABG.

**Supplementary table 2: Novel, TAVI-specific risk stratification tools**

Risk assessment tool	Time scale of risk prediction	Factors considered in the scoring system
SURTAVI [33]	30 days/1 year	Significant concurrent CAD requiring revascularisation; frailty; reduced LVEF; neurological dysfunction; COPD; PAD; renal disease; redo cardiac surgery; pulmonary hypertension; diabetes
OBSERVENT [32]	30 days	eGFR <45 mL/min; critical state; pulmonary hypertension; diabetes mellitus; NYHA class IV; prior BAV; LVEF <40%
STT score [31]	30 days/1 year	Prior stroke; inverse of renal clearance; peak SPA pressure >50 mmHg
FRANCE-2 [29]	30 days	Age ≥ 90; BMI <29.9 or <18.5; NYHA class IV; ≥2 pulmonary odemas in previous year; SPA pressure ≥ 60 mmHg; critical state; respiratory insufficiency; dialysis; TA access approach; access approach other than TA, TF and subclavian
TARIS [28]	1 year	Age; female gender; BMI; pulmonary hypertension; eGFR; haemoglobin; SPA pressure; LVEF
TAVI2-SCORE [30]	1 year	Age >85 years; male gender; porcelain aorta; recent MI; CrCl <30 ml/kg/min; haemoglobin < 10 g/dL; low LVEF; AV mean gradient ≥70 mmHg
German AV score [34]	In-hospital	Female gender; age (number of completed years); BMI <22 kg/m <sup>2</sup> or >39 kg/m <sup>2</sup> ; NYHA class IV; CCS class III or IV; cardiogenic shock <48 h; cardiopulmonary resuscitation within 48 h; absence of pulmonary hypertension; sinus rhythm; ASA class IV/V; LVEF < 30%; CAD (number of diseased vessels); infectious endocarditis/septic condition; diabetes mellitus; arterial vessel disease (other than coronary); preoperative haemodialysis or creatinine level >2.3 mg/dl; mechanical circulatory support (preoperative); redo surgery (heart/thoracic aorta)

*Legend:* CAD, coronary artery disease; LVEF, left ventricular ejection fraction; COPD, chronic obstructive pulmonary disease; PAD, peripheral artery disease; eGFR, glomerular filtration rate; NYHA, New York Heart Association; BAV, balloon aortic valvuloplasty; SPA, systolic pulmonary artery; BMI, body mass index; TA, transapical; TF, transfemoral; CrCl, creatinine clearance; Av, aortic valve; CCS, Canadian Cardiovascular Society; ASA, American Society of Anesthesiologists