

## ***Supplementary material***

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### **Supplementary material no. 1**

#### **Echocardiographic analysis**

Transthoracic echocardiography (TTE) was performed in all patients before and after the procedure and at the discharge. The exam was performed by two experienced echocardiographers according to the same protocol in compliance with echocardiographic recommendation on SA assessment, after 10–15 minutes of rest before the exam. Aortic valve parameters (aortic valve area, peak aortic velocity and gradient, and mean aortic valve gradient), as well as left ventricular ejection fraction, and estimated pulmonary artery systolic pressure (based on tricuspid regurgitant velocity) were evaluated.

### **Supplementary material no. 2**

Data were tested for normality with Shapiro-Wilks test. Continuous data were not normally distributed and were presented as medians and interquartile range (Q1-Q3) and compared with nonparametric Mann-Whitney test. Categorical variables were presented as counts and percentages and compared with chi-square test. Receiver operator characteristic (ROC) analysis was used to find the parameters that have the prognostic properties for presence of coronary artery disease. The cut-off point was denoted by Youden's index. A logistic regression was performed to find factors which predict coronary artery disease occurrence. Both univariable and multivariable analysis was performed. The multivariable logistic regression model with backward stepwise elimination method

was denoted and the results were presented as odds ratio and its 95% confidence interval. Statistical analysis was performed using MedCalc® Statistical Software version 20.027 (MedCalc/Software Ltd, Ostend, Belgium). The  $P < 0.05$  was considered statistically significant.

**Table S1.** Echocardiographic characteristics

Parameters	Whole group  N= 190	Group 1  SA  No = 85	Group 2  SA+CAD  No = 105	P  (Group 1 vs 2)
Preoperative:				
LV (mm) median (Q1-Q3)	45 (40 – 50)	43 (40 – 49)	46 (41 – 50)	0.97
LA (mm) median (Q1-Q3)	38 (36 – 42)	39 (36 – 42)	38 (35 – 41)	0.38
RV (mm) median (Q1-Q3)	29 (26-32)	30 (26-32)	29 (26-32)	0.41
LVEF (%) median (Q1-Q3)	60 (60 – 60)	60 (60 – 60)	60 (55 – 60)	0.88
IVS (mm) median (Q1-Q3)	15 (13-17)	15 (14-17)	15 (14-17)	0.70
Ao (mm) median (Q1-Q3)	29 (24.3-33)	30 (25-33.8)	(27 (23-33)	0.59
Aortic gradient max (mmHg) median (Q1-Q3)	90 (75 – 103)	94 (80 – 107)	85 (74 – 101)	0.012
Aortic gradient mean (mmHg) median (Q1-Q3)	55 (48-65)	58 (50 – 67)	54 (46 – 61)	0.005
AVA (cm2) median (Q1-Q3)	0.7 (0.6-0.8)	0.6 (0.6-0.75)	0.7 (0.6-0.8)	0.18
RVSP (mmHg) median (Q1-Q3)	30 (25-37.8)	25 (20-36)	35 (29-38)	0.07

Abbreviations: Ao – aortic diameter, CAD – coronary artery disease, IVS – intraventricular septum, LA – left atrium, LV – left ventricle, LVEF – left ventricle ejection fraction, RV – right ventricle, RVSP – right ventricle systolic pressure, SA – aortic stenosis.

**Table S2.** Demographical and clinical data

Parameters	Whole Group  N= 190	Group 1  SA  No = 85	Group 2  SA+CAD  No = 105	P  (Group 1 vs 2)
Demographical:				
Age (median [Q1-Q3] years)	68 (63-73)	66 (60-71)	69 (65-73)	0.002

Gender (M [%]/F [%])	126 (66%) / 64 (34%)	55 (65%) / 30 (35%)	71 (68%) / 34 (32%)	0.67
BMI (median [Q1-Q3])	28.1 (25.9-31.4)	29.1 (26-32.3)	27.8 (25.9-30.3)	0.31
Clinical:				
Arterial hypertension (n(%))	152 (80%)	67 (79%)	85(81%)	0.72
DM (n(%))	63 (33%)	18 (21%)	45 (43%)	0.002
COPD (n(%))	9 (5%)	5 (6%)	4 (5%)	0.50
PAD (n(%))	27 (15%)	11 (13%)	16 (19%)	0.65
Hypercholesterolemia (n(%))	101 (53%)	43 (51%)	58 (55%)	0.53
Atrial fibrillation (n(%))	34 (18%)	10 (12%)	24 (28%)	0.047

Abbreviations: BMI -body mass index, CAD – coronary artery disease, COPD – chronic obstructive pulmonary disease, DM – diabetes mellitus, F- females, M – males, n – number, PAD – peripheral artery disease, SA- aortic stenosis

**Table S3. Preoperative laboratory results**

Parameters	Whole Group N= 190	Group 1 SA No = 85	Group 2 SA+CAD No = 105	P (Group 1 vs 2)
Whole blood count analysis:				
WBC (K/uL) (median (Q1 – Q3))	7 (6.1-8.1)	6.9 (6.1-8.1)	7.1 (6-8.1)	0.70
Neutrophils (K/uL) (median (Q1 – Q3))	4.6 (3.8-5.8)	4.7 (3.5-5.9)	4.6 (3.9-5.6)	0.88
Lymphocytes (K/uL) (median (Q1 – Q3))	7 (6.1-8.1)	6.9 (6.1-8.1)	7.1 (6-8.1)	0.70
NLR (median (Q1 – Q3))	2.8 (2.2-3.7)	2.7 (2.2-3.9)	2.8 (2.3-3.6)	0.63
Monocytes (K/uL) (median (Q1 – Q3))	0.4 (0.3-0.5)	0.4 (0.3-0.5)	0.4 (0.4-0.5)	0.44
MLR (median (Q1 – Q3))	0.3 (0.2-0.4)	0.2 (0.2-0.3)	0.3 (0.2-0.4)	0.84
SII (median (Q1 – Q3))	579 (405-783)	548 (404-778)	581 (411-797)	0.79
AISI (median (Q1 – Q3))	233 (162-347)	235 (149-336)	231 (166-366)	0.85
SIRI (median (Q1 – Q3))	1.1 (0.9-1.8)	1.1 (0.8-1.8)	1.2 (1.2-1.7)	0.83
LUC (K/uL) (median (Q1 – Q3))	0.14 (0.1-0.17)	0.13 (0.1-0.16)	0.15 (0.1-0.18)	0.007
Eosinophils (K/uL) (median (Q1 – Q3))	0.1 (0.01-1.2)	0.1 (0.07 – 0.18)	0.1(0.07 – 0.2)	0.42
Basophils (K/uL) (median (Q1 – Q3))	0.04 (0.02 – 0.05)	0.04 (0.03 – 0.05)	0.04 (0.02 – 0.05)	0.43
Rbc (M/uL) (median (Q1 – Q3))	4.6 (4.3 – 4.8)	4.6 (4.3 – 4.8)	4.5 (4.2 – 4.8)	0.48
Hemoglobin (mmol/L) (median (Q1 – Q3))	8.7 (8.1 – 9.2)	8.8 (8.2-9.3)	8.6 (8.1-9.2)	0.59
Hematocrit (%) (median (Q1 – Q3))	41 (38-43)	42 (39-44)	40 (38-43)	0.27
Platelets (K/uL) (median (Q1 – Q3))	204 (170 – 242)	201 (165-233)	207 (176 -248)	0.28

MPV (fl) (median (Q1 – Q3))	8.7 (7.8-9.4)	8.8 (8.2-9.5)	8.4 (7.7-9.2)	0.91
Lipidogram:				
Total cholesterol (mmol/L) (median (Q1 – Q3))	4.2 (3.6 – 4.8)	4.4 (3.6 – 4.9)	4.1 (3.5 – 4.8)	0.46
HDL(mmol/L) (median (Q1 – Q3))	1.3 (1.1 – 1.6)	1.3 (1.1 – 1.6)	1.2 (1.0- 1.6)	0.58
LDL(mmol/L) (median (Q1 – Q3))	2.4 (1.9 – 3.0)	2.5 (2.0 – 3.1)	2.2 (1.8 – 2.8)	0.12
Monocyte/HDL (median (Q1 – Q3))	0.3 (0.2 – 0.4)	0.3 (0.2 – 0.4)	0.3 (0.2 – 0.4)	0.36
Kidney function:				
GFR (mL/min) (median (Q1-Q3))	79 (62 – 98)	85 (68 – 105)	74 (61 – 91)	0.47
Creatinine mmol/L (median (Q1-Q3))	83 (75 – 97)	80 (73-96)	85 (78 – 100)	0.09

Abbreviations: F- female sex, GFR – glomerular filtration rate, HDL – high density lipoprotein cholesterol, LDL – low density lipoprotein cholesterol, LUC – large unstained cells, MLR -monocyte to lymphocyte ratio, M – male sex, MPV – mean platelet volume, NLR – neutrophil to lymphocyte ratio, Rbc – red blood cells count, SII – systemic inflammatory index, SIRI – systemic inflammatory response index, WBC – white blood cells count