

Supplementary Table S1. Perioperative characteristics of patients in groups with composite endpoint-1 (significant perioperative complications + extended hospital stay after surgery) and without it.

Signs	Group 1 With combined endpoint n = 291	Group 2 Without combined endpoint n = 92	p
Anamnestic and clinical characteristics			
Men / women (n, %)	205/86 (70.5/29.5)	79/13(85.5/14.1)	0.003
Age (years, Me [LQ ; UQ])	60.0 [55.0; 60.0]	57.0 [51.0; 60.5]	<0.001
Any disorders of CMD (n, %)	156 (53.6)	36 (39.1)	0.015
Type 2 diabetes (n, %)	109 (37.5)	16 (17.4)	<0.001
Prediabetes (IFG, IGT) (n, %)	47 (16.2)	20 (21.7)	0.002
Normoglycemia (n, %)	135 (46.4)	56 (60.9)	0.002
BMI (kg/m ² , Me [LQ; UQ])	29.1 [25.9; 32.2]	27.0 [24.1; 30.0]	<0.001
Obesity (BMI ≥30 kg / m ² , n, %)	125 (42.9)	24 (26.1)	<0.001
Arterial hypertension (n, %)	264 (90.7)	79 (85.9)	0.185
Angina class III - IV (n, %)	113 (38.8)	34 (37.0)	0.591
Heart failure class NYHA III-IV (n, %)	84 (28.9)	18 (19.6)	0.172
Smoking (n, %)	86 (29.6)	42 (45.7)	0.004
Myocardial infarction history (n, %)	182 (62.5)	58 (63.0)	0.668
Stroke history (n, %)	21 (7.2)	6 (6.5)	0.820
Previous PCI (n, %)	26 (8.9)	11 (12.0)	0.392
Previous CABG (n, %)	82 (0.7)	2 (2.2)	0.797
Carotid surgery (n, %)	8 (2.8)	3 (3.3)	0.803
Limb arteries surgery or amputation (n, %)	2 (0.7)	1 (1.1)	0.704
EuroSCORE II (% , Me [LQ; UQ])	1.34 [1.23; 2.91]	1.32 [0.88; 2.10]	0.002
EuroSCORE II (points, Me [LQ; UQ])	2.0 [1.0; 3.0]	2.0 [1.0; 3.0]	<0.001
CABG characteristics			
Cardiopulmonary bypass (n, %)	268 (92.1)	78 (84.8)	0.038
Isolated coronary artery bypass grafting (n, %)	263 (90.4)	91 (98.9)	0.007
Combined surgery (n, %)	28 (9.6)	1 (1.1)	0.007
• Carotid endarterectomy (n, %)	8 (8.2)	0 (0)	0.108
• Ventriculoplasty (n, %)	13 (4.5)	1 (1.1)	0.132
• Radiofrequency ablation (n, %)	14 (4.8)	0 (0)	0.032
• Mitral valve (n, %)	1 (0.3)	0 (0)	0.573
• Aortic valve (n, %)	3 (1.0)	0 (0)	0.328
Cardiopulmonary bypass duration (minutes, Me [LQ; UQ])	98.0 [81.0; 116.0]	86.5 [73.0; 103.0]	0.002
Aortic clamping time (minutes, Me [LQ; UQ])	63.0 [50.0; 75.0]	60.0 [49.0; 72.0]	0.331
Total duration of surgery (minutes, Me [LQ; UQ])	246 [210.0; 298.0]	210.0 [195.0; 264.0]	0.006
Number of shunts (Me [LQ ; UQ])	3.0 [2.0; 3.0]	2.0 [2.0; 3.0]	0.352
Number of distal anastomoses (Me [LQ; UQ])	3.0 [2.0; 3.0]	2.0 [2.0; 3.0]	<0.001
Preoperative fasting blood laboratory parameters (Me [LQ; UQ]).			
GFR CKD-EPI (ml/min/1.73m ²)	80.4 [64.0; 98.6]	81.4[63.2; 98.6]	0.906
HDL cholesterol (mmol/l)	1.0 [0.8; 1.2]	1.0 [0.8; 1.2]	0.286

LDL cholesterol (mmol/l)	2.9 [2.2; 3.7]	3.0 [2.3; 3.9]	0.304
Triglycerides (mmol/l)	2.0 [1.4; 2.5]	1.6 [1.2; 2.2]	0.046
HbA1c (%)	5.5 [5.1; 7.1]	5.3 [5.0; 5.6]	0,009
Glucose, venous plasma (mmol/l)	5.8 [5.2; 6.9]	5.5 [5.1; 6.2]	0.031
Fructosamine (μ mol/l)	286.0 [252.0; 320.0]	264.5 [201.0; 298.0]	<0.001
1.5 anhydroglucitol (mcg/ml)	21,3 [16,5; 25,2]	20,5 [17,8; 26,0]	0,483
Preoperative echocardiogram (Me [LQ; UQ])			
LV end-diastolic volume (ml)	156.0 [132.0; 191.0]	150.0 [129.0; 172.0]	0.125
LV end-diastolic dimension (cm)	5.6 [5.2; 6.2]	5.5 [5.1; 6.0]	0.051
LV end-systolic volume (ml)	63.0 [47.0; 97.0]	62.2 [48.0; 96.5]	0.421
LV end-systolic dimension (cm)	3.8 [3.4; 4.7]	3.8 [3.3; 4.6]	0.467
Left atrium (cm)	4.3 [4.0; 4.5]	4.2 [3.8; 4.4]	<0.001
LV ejection fraction (%)	60.0 [50.0; 64.0]	61.0 [50.0; 64.0]	0.958
LV myocardial mass by Devereaux and Reichek (g)	304.3 [250.5; 375.0]	242.1 [276.0; 333.7]	0.010
LV myocardial mass index (g/m ²)	159.2 [133.5; 192.0]	150.3 [124.2; 175.0]	0.015
Coronary angiography data			
1-vessel disease *	64 (22.0)	16 (17.4)	0.343
2-vessel disease *	88 (30.2)	25 (27.2)	0.274
3-vessel disease *	121 (41.6)	45 (48.9)	0.216
Left Main Coronary Artery Stenosis >50%	61 (21.0)	24 (26.1)	0.302

Notes: Me [LQ; UQ] - median with upper and lower quartile, CMD - carbohydrate metabolism disorders, IFG - impaired fasting glucose, IGT - impaired glucose tolerance, BMI - body mass index, FC - functional class, NYHA - New York Heart Association, PCI - percutaneous coronary intervention, LOS - length of stay, CABG - coronary artery bypass grafting, EuroSCORE II – European System for Cardiac Operative Risk Evaluation, CMD - carbohydrate metabolism disorders, HDL - high-density lipoprotein, LDL - low-density lipoprotein, GFR - glomerular filtration rate, CKD-EPI - Chronic Kidney Disease Epidemiology Collaboration, LV- left ventricle.

Supplementary Table S2: Receiver operating characteristic curve analysis. Performance of carbohydrate metabolism preoperative parameters in discriminating the risk of the composite endpoint-1 development (significant perioperative complications + extended hospital stay after surgery) after CABG. Area under the curve

Test Result Variable(s)	Area	Std. Error ^a	Asymptotic Sig. ^b	Asymptotic 95% Confidence Interval	
				Lower Bound	Upper Bound
Fructosamine before surgery	0.629	0.035	0.001	0.560	0.698
Glucose before surgery	0.563	0.037	0.093	0.490	0.635
Disorders of carbohydrate metabolism	0.534	0.036	0.366	0.463	0.604
Diabetes mellitus	0.586	0.035	0.021	0.518	0.654
Impaired fasting glycemia	0.498	0.037	0.959	0.425	0.571

a. Under the nonparametric assumption

b. Null hypothesis: true area = 0.5