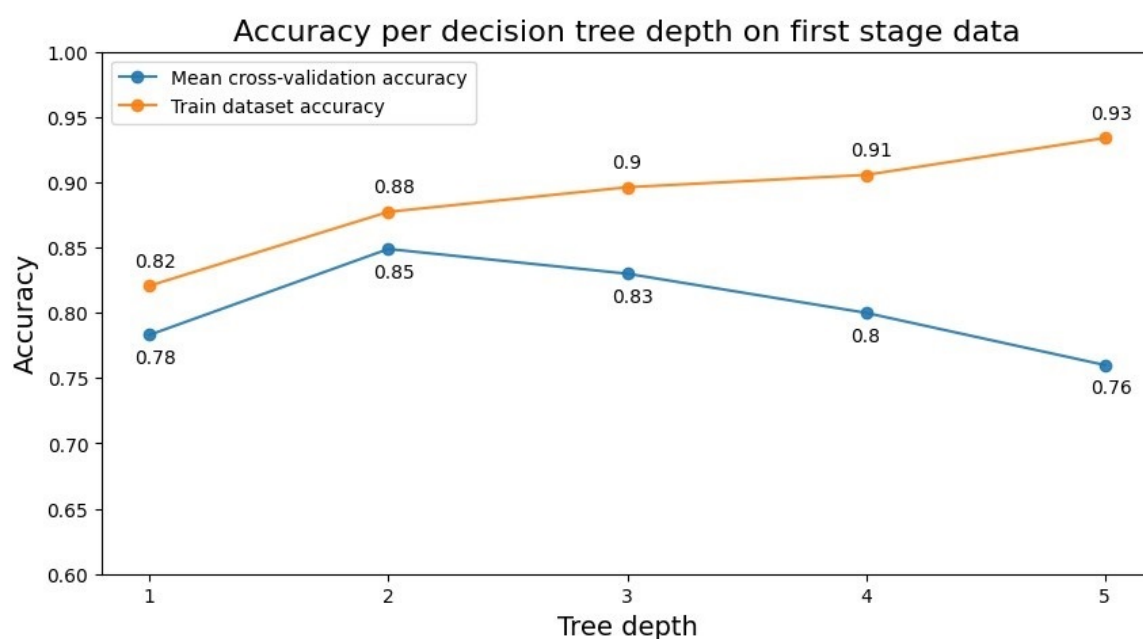**Figure S1.** Assessing the optimal tree depth using 5-fold cross validation

Table S1. Characteristics of the first study group — clinical and demographic data

Age, mean (SD)	69.42 (8.28)
Gender Men, n (%) Women, n (%)	 74 (69.8) 32 (30.2)
BMI, kg/m^2, mean (SD)	27.91 (4.44)
CCS scale	

I, n (%)	16 (15.1)
II, n (%)	47 (44.3)
III, n (%)	40 (37.8)
IV, n (%)	3 (2.8)
NYHA scale	
I, n (%)	13 (12.3)
II, n (%)	75 (70.7)
III, n (%)	17 (16.1)
IV, n (%)	1 (0.9)
HF, n (%)	56 (52.8)
HFpEF, n (% of HF)	43 (76.7)
HFmrEF, n (% of HF)	8 (14.3)
HFrEF, n (% of HF)	5 (9.0)
Smoking	
Never, n (%)	48 (45.3)
In the past, n (%)	38 (35.8)
Current, n (%)	20 (18.9)
Hypertension, n (%)	98 (92.5)
Diabetes mellitus	
Present diabetes mellitus, n (%)	38 (35.8)
Impaired fasting glucose, n (%)	3 (2.8)
Impaired glucose tolerance, n (%)	2 (2.0)
Alcohol abuse, n (%)	1 (0.9)
Dyslipidemia, n (%)	106 (100)
CKD, n (%)	20 (18.9)
COPD, n (%)	6 (5.7)

Abbreviations: BMI, body mass index; CCS, Canadian Cardiovascular Society angina grade; CKD, chronic kidney disease defined as GFR<60 ml/min/1,73m^2; COPD, chronic obstructive pulmonary disease; HF, heart failure; HFmrEF, HF with mildly reduced ejection fraction; HFpEF, HF with

Table S2. Characteristics of the first study group — biochemical parameters

Parameter	Median (1st quartile–3rd quartile)
Morphology	
RBC, mln/µl	4.51 (4.2–4.86)
WBC, thousand/µl	7.32 (6.09–8.52)
Hgb, g/dl	14.0 (12.8–14.78)
PLT, thousand/µl	213.0 (182.25–252.0)
Lipid profile	
Total cholesterol, mmol/l	4.15 (3.71–4.95)
HDL, mmol/l	1.21 (1.05–1.52)
LDL, mmol/l	2.26 (1.8–3.02)
TG, mmol/l	1.22 (0.93–1.85)
Others	
Sodium, mmol/l	139.7 (138.02–140.78)
Potassium, mmol/l	4.32 (4.12–4.56)
eGFR, ml/min./1.73 m^2	77.8 (62.32–89.78)
Creatine, µmol/l	81.75 (72.12–97.58)
TSH, µIU/ml	1.22 (0.73–2.1)
TnT, ng/L	12.5 (9.0–17.0)

CK-MB mass, ng/ml	2.8 (2.2–3.78)
NT-proBNP, pg/ml	250.0 (100.0–753.8)
Uric acid, µmol/l	360.5 (298.48–438.78)

Abbreviations: CK-MB, creatine kinase-myoglobin binding; eGFR, estimated glomerular filtration rate; HDL, high-density lipoprotein; Hgb, hemoglobin; LDL, low-density lipoprotein; NT-proBNP, N-terminal pro-B-type natriuretic peptide; PLT, platelet count; RBC, red blood cells; TG, triglycerides; TnT, troponin T; TSH, thyroid-stimulating hormone; WBC, white blood cells

Table S3. Factors affecting MACE — univariate logistic regression

	Odds ratio	–95% CI	+95% CI	*P*-value
Male gender	2.08	0.64	6.79	0.22
Age	1.42	0.88	2.29	0.14
Hyperglycemia	2.13	0.71	6.37	0.17
LDL level	0.89	0.54	1.46	0.65
Elevated LDL	0.71	0.17	2.89	0.63
HDL level	1.24	0.77	1.99	0.36
Decreased HDL	1.39	0.36	5.30	0.62
Total cholesterol	0.84	0.50	1.41	0.52
Elevated total cholesterol	0.95	0.31	2.91	0.93
TG level	**0.49**	**0.24**	**0.99**	**0.049**
Elevated TG level	**0.21**	**0.04**	**0.98**	**0.048**
Positive family history of CVD	0.69	0.24	1.98	0.49
Arterial hypertension	0.91	0.58	1.4286	0.70

Impaired fasting glucose	8.84	0.76	102.62	0.08
Type 2 DM treated with oral medicines	0.71	0.21	2.37	0.58
Type 2 DM treated with insulin	1.25	0.31	5.01	0.75
Presence of heart failure	**3.6**	**1.20**	**10.71**	**0.02**
Reduced EF	2.87	0.44	18.43	0.26
Mildly reduced EF	3.09	0.78	12.18	0.10
Preserved EF	**0.29**	**0.09**	**0.95**	**0.04**
BMI level	**0.55**	**0.32**	**0.94**	**0.03**
Overweight or obesity (BMI >25)	0.56	0.21	1.55	0.27
CRP	1.11	0.71	1.74	0.61
WBC	1.20	0.75	1.92	0.43
RBC	0.71	0.43	1.17	0.18
Hemoglobin	0.72	0.45	1.17	0.19
PLT	1.01	0.63	1.63	0.94
Creatinine	**2.81**	**1.23**	**6.37**	**0.01**
eGFR	**0.55**	**0.35**	**0.89**	**0.01**
TSH	1.36	0.82	2.24	0.22
TnT	**4.52**	**1.81**	**11.28**	**0.001**
CKMB-mass	1.48	0.94	2.30	0.08
NT-proBNP	**1.77**	**1.13**	**2.76**	**0.01**

Uric acid	1.42	0.88	2.28	0.14
Current smoking	0.66	0.17	2.52	0.55
History of COVID-19	**3.37**	**1.04**	**10.90**	**0.04**
History of MI	**6.85**	**2.12**	**22.13**	**0.001**
History of ischemic stroke	2.62	0.68	9.97	0.15
CKD	2.76	0.93	8.17	0.07
Peripheral thrombosis	2.21	0.72	6.76	0.16
COPD	4.55	0.84	24.43	0.07
Calcium score	1.01	0.63	1.62	0.95
LM significant narrowing in CCTA	**16.22**	**5.10**	**51.57**	**<0.001**
LAD significant narrowing in CCTA	**3.6**	**1.20**	**10.71**	**0.02**
LCx significant narrowing in CCTA	1.14	0.39	3.31	0.80
RCA significant narrowing in CCTA	1.24	0.47	3.27	0.66

Abbreviations: BMI, body mass index; CCTA, coronary computed tomography angiography; CI, confidence interval; CKD, chronic kidney disease; CK-MB, creatine kinase-myoglobin binding; COPD, chronic obstructive pulmonary disease; CRP, C-reactive protein; CVD, cardiovascular disease; DM, diabetes mellitus; EF, ejection fraction; eGFR, estimated glomerular filtration rate; HDL, high-density lipoprotein; LAD, left anterior descending artery; LCx, left circumflex coronary artery; LDL, low-density lipoprotein; LM, left main coronary artery; MI, myocardial infarction; NT-proBNP, N-terminal pro-B-type natriuretic peptide; PLT, platelet count; RBC, red blood cells; RCA, right coronary artery; TG, triglycerides; TnT, troponin T; TSH, thyroid-stimulating hormone; WBC, white blood cells