

Table S1 Predictors of MACE

Variable	Univariate analysis HR (95% CI)	P value	Multivariable analysis HR (95% CI)	P value
PCI strategy		0.872		0.834
ROTA+DCB	1.22 (0.51–2.94)		0.78 (0.30–2.01)	
ROTA+POBA	1.10 (0.63–1.91)		1.04 (0.58–1.84)	
ROTA+DES	1.00		1.00	
BMI	1.10 (1.02–1.20)	0.019		
Male sex	2.02 (1.20–3.38)	0.008		
Current smoker	0.73 (0.48–1.10)	0.128		
HD duration (m)	0.99 (0.99–1.00)	0.060		
Diabetes	1.02 (0.61–1.68)	0.952		
Statins used	0.96 (0.56–1.66)	0.964		
Insulin used	1.65 (0.85–3.21)	0.140		
Hypertension	2.74 (0.67–11.26)	0.161		
OMI	1.73 (1.03–2.89)	0.037		
Target vessel				
LAD	0.38 (0.21–0.71)	0.002	0.42 (0.22–0.80)	0.009
RCA	1.99 (1.20–3.30)	0.008		
Previous PCI	1.38 (0.77–2.48)	0.284		
LDL-C	0.99 (0.99–1.01)	0.853		
Hemoglobin	0.88 (0.75–1.03)	0.109		
HbA1c	1.24 (1.01–1.53)	0.044		
LVEF	0.98 (0.86–0.99)	0.040		
ISR	1.90 (1.15–3.15)	0.013	1.66 (0.94–2.95)	0.078
Contrast volume	0.99 (0.99–1.00)	0.093		
Reference vessel diameter	1.46 (1.02–2.09)	0.038		
Lesion length	0.99 (0.98–1.01)	0.44		
Immediate QCA				
%DS before PCI	1.03 (1.01–1.06)	0.006		
MLD after PCI	1.33 (0.83–2.14)	0.242		
Acute gain	1.71 (1.07–2.75)	0.026		
Maximum burr-to-artery ratio	0.29 (0.05–1.54)	0.146		
Maximum stent-to-artery ratio	0.91 (0.57–1.43)	0.674		

MACE, major adverse cardiovascular events; BMI, body mass index; HD, hemodialysis; OMI, old myocardial infarction; LAD, left anterior descending coronary; RCA, right coronary artery; PCI, percutaneous coronary intervention; LDL-C, low-density lipoprotein cholesterol; HbA1c, glycated hemoglobin; LVEF, left ventricular ejection fraction; ISR, in-stent restenosis; QCA, quantitative coronary angiography; DS, diameter stenosis; MLD, minimum lumen diameter; HR, hazard ratio; CI, confidence interval.

**Table S2** Predictors of TLR

Variables	Univariate analysis HR (95% CI)	P value	Multivariable analysis HR (95% CI)	P value
PCI strategy		0.313		0.250
ROTA+DCB	2.21 (0.79–6.13)		0.54 (0.14–2.07)	
ROTA+POBA	1.24 (0.56–2.73)		1.89 (0.69–5.16)	
ROTA+DES	1.00		1.00	
BMI	1.12 (0.99–1.25)	0.053		
Male sex	1.43 (0.68–3.05)	0.348		
Current smoker	0.91 (0.55–1.51)	0.712		
HD duration (m)	0.99 (0.99–1.00)	0.268		
Diabetes	1.41 (0.68–2.91)	0.352		
Statins used	1.64 (0.80–3.38)	0.180		
Insulin used	2.86 (1.26–6.49)	0.012		
Hypertension	23.38 (0.09–5989.25)	0.265		
OMI	2.20 (1.08–4.49)	0.030		
Target vessel				
LAD	0.25 (0.09–0.65)	0.004	0.38 (0.12–1.18)	0.094
RCA	4.27 (2.00–9.12)	<0.001		
Previous PCI	4.33 (1.31–14.27)	0.016		
LDL-C	1.00 (0.99–1.01)	0.437		
Hemoglobin	0.91 (0.72–1.14)	0.394		
HbA1c	1.40 (1.06–1.83)	0.016		
LVEF	0.99 (0.96–1.03)	0.898		
ISR	5.49 (2.45–12.33)	<0.001	4.02 (1.50–10.76)	0.002
Contrast volume	0.99 (0.98–0.99)	0.023		
Reference vessel diameter	1.80 (1.10–2.94)	0.019		
Lesion length	0.99 (0.97–1.02)	0.493		
Immediate QCA				
%DS before PCI	1.05 (1.01–1.08)	0.005		
MLD after PCI	3.08 (1.47–6.44)	0.003		
Acute gain	3.54 (1.98–6.35)	<0.001	2.81 (1.48–5.33)	0.017
Maximum burr-to-artery ratio	0.13 (0.01–1.80)	0.128		
Maximum stent-to-artery ratio	0.69 (0.36–1.32)	0.262		

TLR, target lesion revascularization; BMI, body mass index; HD, hemodialysis; OMI, old myocardial infarction; LAD, left anterior descending coronary; RCA, right coronary artery; PCI, percutaneous coronary intervention; LDL-C, low-density lipoprotein cholesterol; LVEF, left ventricular ejection fraction; ISR, in-stent restenosis; QCA, quantitative coronary angiography; DS, diameter stenosis; MLD, minimum lumen diameter; HR, hazard ratio; CI, confidence interval.

**Table S3** Predictors of MACE, stratified by category of ISR

Variables	De novo			ISR			
	Univariate analysis HR (95% CI)	P value	Multivariable analysis HR (95% CI)	P value	Univariate analysis HR (95% CI)	Multivariable analysis HR (95% CI)	P value
PCI strategy		0.521		0.462			0.802
ROTA+DCB	-				0.72 (0.26-1.98)	0.47 (0.14-1.60)	
ROTA+POBA	1.34 (0.54-3.30)		1.49 (0.51-4.40)		0.95 (0.43-2.10)	1.39 (0.55-3.72)	
ROTA+DES	1.00		1.00		1.00	1.00	
BMI	1.05 (0.93-1.19)	0.387			1.18 (1.03-1.35)		0.014
Male	2.56 (1.23-5.33)	0.012	3.84 (1.71-8.62)	0.001	1.78 (0.84-3.78)		0.133
Current smoker	0.71 (0.41-1.22)	0.218			1.37 (0.70-2.68)		0.353
HD duration (m)	0.99 (0.99-1.00)	0.212			0.99 (0.99-1.00)		0.086
Diabetes	0.51 (0.24-1.10)	0.082			2.09 (0.96-4.57)		0.058
Statins used	0.94 (0.42-2.13)	0.890			0.84 (0.41-1.77)		0.661
Insulin used	0.46 (0.06-3.36)	0.441			2.56 (1.13-5.76)		0.023
Hypertension	1.72 (0.41-7.25)	0.458			21.73 (0.01-75,101.27)		0.458
OMI	2.06 (0.98-4.32)	0.056			1.23 (0.60-2.51)		0.573
Target vessel							
LAD	0.27 (0.11-0.67)	0.005			0.80 (0.34-1.88)		0.612
RCA	2.42 (1.16-5.04)	0.018	2.48 (1.05-5.84)	0.037	1.25 (0.61-2.58)		0.541
Previous PCI	1.17 (0.56-2.46)	0.670			0.57 (0.17-1.93)		0.367
LDL-C	0.99 (0.98-1.01)	0.892			0.99 (0.98-1.01)		0.230
Hemoglobin	0.81 (0.62-1.06)	0.125			0.96 (0.79-1.16)		0.671
HbA1c	1.16 (0.78-1.73)	0.462			1.25 (0.96-1.62)		0.098
LVEF	0.96 (0.93-0.99)	0.019	0.95 (0.92-0.98)	0.006	0.99 (0.96-1.02)		0.680
Contrast volume	0.99 (0.99-1.00)	0.356			0.99 (0.99-1.00)		0.194
Reference vessel diameter	1.58 (0.94-2.65)	0.082			(-)		0.320
Lesion length	0.99 (0.97-1.02)	0.864			0.99 (0.97-1.03)		0.912
Immediate QCA							
%DS before PCI	1.01 (0.97-1.05)	0.522			1.05 (1.02-1.08)		0.004
MLD after PCI	1.27 (0.61-2.65)	0.522			1.21 (0.69-2.11)		0.498
Acute gain	1.59 (0.67-3.78)	0.292			1.47 (0.86-2.52)		0.155
Maximum burr-to-artery ratio	0.08 (0.01-1.20)	0.068			0.45 (0.09-2.25)		0.331
Maximum stent-to-artery ratio	1.33 (0.62-2.87)	0.463			1.08 (0.54-2.15)		0.819

ISR, in-stent restenosis; BMI, body mass index; HD, hemodialysis; OMI, old myocardial infarction; LAD, left anterior descending coronary; RCA, right coronary artery; PCI, percutaneous coronary intervention; LDL-C, low-density lipoprotein cholesterol; HbA1c, glycated hemoglobin; LVEF, left ventricular ejection fraction; QCA, quantitative coronary angiography; DS, diameter stenosis; MLD, minimum lumen diameter; HR, hazard ratio; CI, confidence interval.