

SUPPLEMENTAL MATERIAL

Table S1. Baseline Patient and Lesion Characteristics in a Subgroup of 179 Patients Treated with Drug-eluting Stents.

Variable	NA+ (n = 30)	NA- (n = 149)	<i>P</i>
Clinical characteristics at follow-up			
OCT			
Age (years)	70.7 ± 9.56	69.6 ± 9.77	0.567
Male	24 (80.0)	123 (82.6)	0.739
Duration between stent implantation and follow-up OCT (months)	50.3 ± 36.0	27.8 ± 26.2	< 0.001
Diabetes mellitus	18 (60.0)	68 (45.6)	0.151
Hypertension	22 (73.3)	119 (79.9)	0.425
Dyslipidemia	29 (96.7)	138 (92.6)	0.369
Smoking	16 (53.3)	80 (53.7)	0.971
Hemodialysis	1 (3.3)	4 (2.7)	0.605
Angina status			0.611
Stable angina pectoris	20 (66.7)	92 (61.7)	
Unstable angina pectoris or acute coronary syndrome	10 (33.3)	57 (38.3)	
Medication at follow-up OCT			
Dual anti-platelet therapy	18 (60.0)	109 (73.2)	0.148
Statin	29 (96.7)	138 (92.6)	0.369
ACE-I and/or ARB	23 (76.7)	95 (63.8)	0.174
Beta-blocker	18 (60.0)	87 (58.4)	0.870
EPA	5 (16.7)	13 (8.7)	0.160
Laboratory data at follow-up OCT			
hs CRP (mg/dL)	0.16 ± 0.14	0.07 ± 0.10	< 0.001
Creatinine (mg/dL)	1.14 ± 1.03	0.90 ± 0.19	0.056
HbA1c (%)	6.71 ± 1.30	6.22 ± 0.83	0.057
Total-cholesterol (mg/dL)	144.2 ± 29.6	148.7 ± 34.4	0.505
HDL-C (mg/dL)	44.4 ± 10.7	47.7 ± 13.2	0.213
LDL-C (mg/dL)	93.1 ± 20.9	83.8 ± 25.9	0.065

Triglyceride (mg/dL)	128.2 ± 69.6	135.2 ± 72.2	0.628
CUC (A.U.)	18.4 ± 4.16	24.5 ± 6.37	< 0.001
Lesion and stent characteristics at index procedure			
Lesion location			0.170
Left anterior descending artery	15 (50.0)	78 (52.3)	
Left circumflex artery	2 (6.7)	27 (18.1)	
Right coronary artery	13 (43.3)	44 (29.6)	
Type of stent			0.141
Sirolimus-eluting stent	6 (20.0)	13 (8.7)	
Paclitaxel-eluting stent	3 (10.0)	7 (4.7)	
Biolimus-eluting stent	4 (13.3)	28 (18.8)	
Everolimus-eluting stent	17 (56.7)	101 (67.8)	
Mean stent size (mm)	3.11 ± 0.31	3.07 ± 0.38	0.577
Total stent length (mm)	24.2 ± 8.86	23.9 ± 7.02	0.872

NA: neoatherosclerosis; OCT: optical coherence tomography; ACE-I: angiotensin converting enzyme-inhibitor; ARB: angiotensin II receptor blocker; EPA: eicosapentaenoic acid; hs CRP: high-sensitivity C-reactive protein; HDL-C: high-density lipoprotein-cholesterol; LDL-C: low-density lipoprotein-cholesterol; CUC: cholesterol-uptake capacity.

Values are presented as means ± SD or absolute numbers (%).

Table S2. OCT Findings in a Subgroup of 179 Patients Treated with Drug-eluting Stents.

Variable	NA+ (n = 30)	NA- (n = 149)	<i>P</i>
Minimum lumen area (mm ²)	4.32 ± 1.75	4.65 ± 1.76	0.411
Minimum stent area (mm ²)	6.20 ± 1.82	5.87 ± 1.92	0.422
Incomplete stent apposition	6 (20.0)	22 (14.8)	0.316
Thin-cap fibroatheroma	1 (3.3)	0 (0.0)	0.168
Macrophage accumulation	30 (100)	8 (5.4)	< 0.001
Thrombus	1 (3.3)	2 (1.3)	0.425
Peri-strut low-intensity area	2 (6.7)	25 (16.8)	0.125
Vasa vasorum	4 (13.3)	11 (7.4)	0.228

NA: neoatherosclerosis.

Values are presented as means ± SD or absolute numbers (%).

Table S3. Univariate and Multivariate Logistic Regression Analysis of Clinical Parameters for Neoatherosclerosis in a Subgroup of 179 Patients Treated with Drug-eluting Stents.

Variable	Univariate			Multivariate		
	OR	95% CI	<i>P</i>	OR	95% CI	<i>P</i>
Age	1.012	0.971–1.055	0.565	1.014	0.959–1.071	0.632
Male	0.846	0.314–2.275	0.740	0.464	0.134–1.604	0.225
Duration between stent implantation and follow-up OCT	1.022	1.010–1.034	< 0.001	1.033	1.017–1.050	< 0.001
hs CRP	1.062	1.023–1.102	< 0.001	1.046	1.010–1.083	0.012
LDL-C	1.013	0.999–1.029	0.076	1.020	0.999–1.041	0.067
CUC	0.820	0.749–0.896	< 0.001	0.781	0.699–0.873	< 0.001

OCT: optical coherence tomography; hs CRP: high-sensitivity C-reactive protein; LDL-C: low-density lipoprotein-cholesterol; CUC: cholesterol-uptake capacity; OR: odds ratio; CI: confidence interval.

Table S4. Univariate and Multivariate Logistic Regression Analysis of Patient Characteristics for Target-Lesion Revascularization in a Subgroup of 179 Patients Treated with Drug-eluting Stents.

Variable	Univariate			Multivariate		
	OR	95% CI	<i>P</i>	OR	95% CI	<i>P</i>
Age	0.981	0.935–1.029	0.436	0.959	0.907–1.014	0.139
Male	1.098	0.298–4.043	0.888	0.879	0.208–3.709	0.861
Duration between stent implantation and follow-up OCT	1.022	1.008–1.035	0.002	1.026	1.011–1.041	0.001
CUC	0.881	0.803–0.966	0.007	0.854	0.769–0.947	0.003
Everolimus-eluting stent	0.295	0.108–0.805	0.017	0.592	0.176–1.986	0.396

OCT: optical coherence tomography; CUC: cholesterol-uptake capacity; OR: odds ratio; CI: confidence interval.

Table S5. Univariate and Multivariate Logistic Regression Analysis of OCT Findings for Target-Lesion Revascularization in a Subgroup of 179 Patients Treated with Drug-eluting Stents.

Variable	Univariate			Multivariate		
	OR	95% CI	<i>P</i>	OR	95% CI	<i>P</i>
Minimum lumen area	0.695	0.446–1.083	0.108	0.596	0.305–1.164	0.129
Minimum stent area	0.974	0.735–1.292	0.857	1.288	0.677–2.450	0.441
Incomplete stent apposition	0.649	0.141–2.994	0.579	1.762	0.229–13.57	0.587
Neoatherosclerosis	22.02	6.992–69.37	< 0.001	27.05	6.434–113.7	< 0.001
Peri-strut low-intensity area	0.680	0.147–3.142	0.621	0.489	0.037–6.496	0.587
Vasa vasorum	2.483	0.630–9.793	0.194	2.247	0.226–22.31	0.489

OR: odds ratio; CI: confidence interval.

Table S6. Baseline Patient and Lesion Characteristics in a Subgroup of 97 Patients Whose Follow-up Period was Between 1 year and 5 Years After Stent Implantation.

Variable	NA+ (n = 16)	NA- (n = 81)	<i>P</i>
Clinical characteristics at follow-up			
OCT			
Age (years)	70.5 ± 9.70	69.5 ± 9.09	0.701
Male	14 (87.5)	65 (80.2)	0.390
Duration between stent implantation and follow-up OCT (months)	27.1 ± 10.9	27.0 ± 11.8	0.972
Diabetes mellitus	9 (56.3)	45 (55.6)	0.959
Hypertension	12 (75.0)	67 (82.7)	0.339
Dyslipidemia	16 (100)	74 (91.4)	0.271
Smoking	10 (62.5)	43 (53.1)	0.489
Hemodialysis	1 (6.3)	0 (0)	0.165
Angina status			0.226
Stable angina pectoris	13 (81.2)	55 (67.9)	
Unstable angina pectoris or acute coronary syndrome	3 (18.8)	26 (32.1)	
Medication at follow-up OCT			
Dual anti-platelet therapy	9 (56.3)	52 (64.2)	0.548
Statin	16 (100)	74 (91.4)	0.271
ACE-I and/or ARB	13 (81.3)	53 (65.4)	0.215
Beta-blocker	10 (62.5)	40 (49.4)	0.337
EPA	1 (6.3)	6 (7.4)	0.675
Laboratory data at follow-up OCT			
hs CRP (mg/dL)	0.16 ± 0.14	0.07 ± 0.05	< 0.001
Creatinine (mg/dL)	1.31 ± 1.39	0.92 ± 0.21	0.286
HbA1c (%)	6.49 ± 1.03	6.34 ± 0.87	0.534
Total-cholesterol (mg/dL)	139.4 ± 18.0	148.7 ± 31.4	0.259
HDL-C (mg/dL)	42.9 ± 9.45	48.4 ± 13.9	0.134
LDL-C (mg/dL)	87.5 ± 19.5	83.7 ± 22.5	0.534

Triglyceride (mg/dL)	122.9 ± 59.0	142.1 ± 80.3	0.367
CUC (A.U.)	16.9 ± 3.31	24.8 ± 6.58	< 0.001
Lesion and stent characteristics at index procedure			
Lesion location			0.031
Left anterior descending artery	5 (31.2)	47 (58.0)	
Left circumflex artery	1 (6.3)	11 (13.6)	
Right coronary artery	10 (62.5)	23 (28.4)	
Type of stent			0.782
Bare-metal stent	0 (0)	2 (2.5)	
Sirolimus-eluting stent	0 (0)	3 (3.7)	
Paclitaxel-eluting stent	1 (6.3)	2 (2.5)	
Biolimus-eluting stent	3 (18.7)	20 (24.7)	
Everolimus-eluting stent	12 (75.0)	54 (66.6)	
Mean stent size (mm)	3.15 ± 0.28	3.03 ± 0.38	0.163
Total stent length (mm)	23.7 ± 10.2	24.2 ± 7.55	0.582

NA: neoatherosclerosis; OCT: optical coherence tomography; ACE-I: angiotensin converting enzyme-inhibitor; ARB: angiotensin II receptor blocker; EPA: eicosapentaenoic acid; hs CRP: high-sensitivity C-reactive protein; HDL-C: high-density lipoprotein-cholesterol; LDL-C: low-density lipoprotein-cholesterol; CUC: cholesterol-uptake capacity.

Values are presented as means ± SD or absolute numbers (%).

Table S7. OCT Findings in a Subgroup of 97 Patients whose Follow-up Period was Between 1 year and 5 years after Stent Implantation.

Variable	NA+ (n = 16)	NA- (n = 81)	<i>P</i>
Minimum lumen area (mm ²)	4.76 ± 1.81	4.60 ± 1.73	0.761
Minimum stent area (mm ²)	6.37 ± 1.68	5.71 ± 2.06	0.159
Incomplete stent apposition	4 (25.0)	13 (16.0)	0.295
Macrophage accumulation	16 (100)	3 (3.7)	< 0.001
Thrombus	1 (6.3)	1 (1.2)	0.304
Peri-strut low-intensity area	2 (12.5)	11 (13.6)	0.635
Vasa vasorum	3 (18.8)	7 (8.6)	0.212

NA: neoatherosclerosis.

Values are presented as means ± SD or absolute numbers (%).

Table S8. Univariate and Multivariate Logistic Regression Analysis of Clinical Parameters for Neoatherosclerosis in a Subgroup of 97 Patients Whose Follow-up Period was Between 1 Year and 5 Years After Stent Implantation.

Variable	Univariate			Multivariate		
	OR	95% CI	<i>P</i>	OR	95% CI	<i>P</i>
Age	1.012	0.953–1.074	0.697	1.089	0.971–1.222	0.145
Male	1.723	0.355–8.360	0.500	1.032	0.121–8.826	0.977
Duration between stent implantation and follow-up OCT	1.001	0.956–1.048	0.971	1.012	0.878–1.167	0.867
hs CRP	1.136	1.048–1.232	0.002	1.163	1.038–1.303	0.009
LDL-C	1.008	0.983–1.033	0.529	1.017	0.981–1.054	0.364
CUC	0.745	0.639–0.870	< 0.001	0.742	0.631–0.873	< 0.001
Right coronary artery	1.200	0.394–3.651	0.748	3.544	0.074–169.7	0.521

OCT: optical coherence tomography; hs CRP: high-sensitivity C-reactive protein; LDL-C: low-density lipoprotein-cholesterol; CUC: cholesterol-uptake capacity; OR: odds ratio; CI: confidence interval.

Table S9. Univariate and Multivariate Logistic Regression Analysis of Patient Characteristics for Target-Lesion Revascularization in a Subgroup of 97 Patients Whose Follow-up Period was Between 1 Year and 5 Years After Stent Implantation.

Variable	Univariate			Multivariate		
	OR	95% CI	<i>P</i>	OR	95% CI	<i>P</i>
Age	0.945	0.874–1.022	0.159	0.955	0.877–1.040	0.293
Male	0.658	0.121–3.561	0.627	0.566	0.083–3.880	0.562
Duration between stent implantation and follow-up	0.993	0.931–1.059	0.841	1.014	0.949–1.083	0.685
OCT						
CUC	0.832	0.716–0.968	0.017	0.832	0.716–0.968	0.017
Everolimus-eluting stent	0.435	0.101–1.871	0.264	2.233	0.354–14.10	0.339

OCT: optical coherence tomography; CUC: cholesterol-uptake capacity; OR: odds ratio; CI: confidence interval.

Table S10. Univariate and Multivariate Logistic Regression Analysis of OCT Findings for Target-Lesion Revascularization in a Subgroup of 97 Patients Whose Follow-up Period was Between 1 Year and 5 Years After Stent Implantation.

Variable	Univariate			Multivariate		
	OR	95% CI	<i>P</i>	OR	95% CI	<i>P</i>
Minimum lumen area	0.851	0.532–1.360	0.499	1.061	0.378–2.976	0.910
Minimum stent area	0.874	0.574–1.329	0.528	0.893	0.325–2.449	0.826
Neoatherosclerosis	23.70	4.201–133.7	< 0.001	21.90	3.877–123.7	< 0.001
Peri-strut low-intensity area	4.740	0.981–22.90	0.053	2.482	0.386–15.98	0.399

OR: odds ratio; CI: confidence interval.