



**Supplementary table 1:** Baseline characteristics of global population (Including medical, surgical and percutaneous treatment).

SUPPLEMENTARY TABLE 1: BASELINE CHARACTERISTICS OF GLOBAL POPULATION (Including medical, surgical and percutaneous treatment)				
BASELINE CHARACTERISTICS	Total (n=667)	Ostial LCx (n=240)	Ostial LAD (n=427)	<i>p</i>
Age (years), mean±SD	69.1±12.2	71.4 ±10.8	67.8±12.8	<b>&lt;0.001</b>
Female, n (%)	165 (24.7)	65 (27.1)	100 (23.3)	0.277
BMI, mean±SD	27.1±4.9	27.7±4.8	26.9±4.9	<b>0.046</b>
CARDIOVASCULAR RISK FACTORS				
Hypertension, n(%)	461 (68.9)	182 (75.8)	279 (65.0)	<b>0.004</b>
Dyslipidemia, n(%)	355 (53.1)	137 (57.1)	218 (50.8)	0.119
Diabetes, n(%)	220 (32.9)	89 (37.1)	131 (30.5)	0.084
Smoking history, n(%)	333 (49.9)	111 (46.3)	222 (52.0)	0.155
PREVIOUS HISTORY				
Previous AMI, n(%)	302 (45.2)	139 (60.6)	163 (38.2)	<b>&lt;0.001</b>
Previous PCI, n(%)	132 (19.7)	64 (26.7)	68 (15.9)	<b>0.001</b>
Previous stroke, n(%)	57 (8.5)	22 (9.2)	35 (8.2)	0.654
Peripheral vascular disease, n(%)	72 (10.8)	26 (10.8)	46 (10.7)	0.965
CKD, n(%)	84 (12.6)	36 (15.0)	48 (11.2)	0.154
CLINICAL PRESENTATION AND ANGIOGRAPHIC CHARACTERISTICS				
Acute coronary syndrome, n(%)	436 (65.3)	144 (60.0)	292 (68.3)	<b>0.031</b>
Stable angina, n(%)	288 (43.2)	122 (50.8)	166 (38.9)	<b>0.005</b>
Severe multivessel disease, n(%)	328 (49.2)	139 (57.9)	189 (44.3)	<b>0.001</b>
LCx: left circumflex; LAD: left descending anterior; SD: standard deviation; BMI: body mass index; AMI: acute myocardial infarction; PCI: <b>percutaneous coronary intervention</b> ; CKD: chronic kidney disease. # Chi square test was performed to binary data, data expressed by absolute numbers and percentages; Fisher test was performed in cases with n<5 in some group. Student's t-test was performed to quantitative variables, data expressed by mean and standard deviation.				

**Supplementary table 2: standardized mean differences between groups Pre-matching.**

	<b>LAD (240)</b>	<b>LCx (47)</b>	<b>SMD</b>
<b>Dilated lesion (mean (SD))</b>	0.82 (0.39)	0.87(0.34)	0.146
<b>Sex (mean (SD))</b>	0.24 (0.43)	0.17(0.38)	0.181
<b>Age (mean (SD))</b>	66.46(13.57)	71.13 (12.60)	0.357
<b>Body mass index (mean (SD))</b>	26.00(4.93)	28.50(5.40)	0.483
<b>Prior CABG (mean (SD))</b>	0.02(0.14)	0.13 (0.34)	0.411
<b>Prior MI (mean (SD))</b>	0.21 (0.41)	0.47(0.50)	0.562
<b>Prior PCI (mean (SD))</b>	0.18 (0.38)	0.43(0.50)	0.560
<b>Arterial hypertension (mean (SD))</b>	0.60(0.49)	0.79(0.41)	0.420
<b>Hyperlipidaemia (mean (SD))</b>	0.46(0.50)	0.60(0.50)	0.268
<b>Diabetes mellitus (mean (SD))</b>	0.21(0.41)	0.32(0.47)	0.247
<b>Smoking (mean (SD))</b>	0.55(0.50)	0.53(0.50)	0.045
<b>Peripheral vascular disease (mean (SD))</b>	0.09(0.28)	0.11(0.31)	0.061
<b>Prior stroke (mean (SD))</b>	0.05(0.21)	0.04(0.20)	0.018
<b>CKD (mean (SD))</b>	0.08(0.28)	0.19(0.40)	0.313
<b>Acute coronary syndrome (mean (SD))</b>	0.79(0.41)	0.68(0.47)	0.237
<b>ACS type (mean (SD))</b>	1.06(0.70)	0.96(0.78)	0.137
<b>Prior PCI with stent (mean (SD))</b>	0.92(0.26)	0.87(0.34)	0.172
<b>Prior 1 lesion PCI (mean (SD))</b>	0.62(0.49)	0.49(0.51)	0.259
<b>Procedural success (mean (SD))</b>	0.95(0.22)	0.94(0.25)	0.057
<b>Prior stent (mean (SD))</b>	0.91(0.28)	0.96(0.20)	0.185
<i>LAD: left anterior descending, LCX: left circumflex, SMD: standardized mean differences, SD: standard deviation, CABG: coronary artery bypass grafting; MI: myocardial infarction; PCI: percutaneous coronary intervention, CKD: chronic kidney disease. ACS: acute coronary syndrome.</i>			

**Supplementary table 3: standardized mean differences post-matching.**

	Means LAD	Means LCx	Std. Mean Diff.	p-value (difference between groups)
<b>DISTANCE</b>	0.3409	0.278	0.2466	
<b>Dilated lesion (mean (SD))</b>	0.8723	0.9787	-0.3188	0.05158
<b>Sex (mean (SD))</b>	0.1702	0.1915	-0.0566	0.7914
<b>Age (mean (SD))</b>	71.1277	73.3404	-0.1756	0.3681
<b>Body mass index (mean (SD))</b>	28.5001	28.512	-0.0022	0.9899
<b>Prior CABG (mean (SD))</b>	0.1277	0.0851	0.1275	0.5087
<b>Prior MI (mean (SD))</b>	0.4681	0.383	0.1706	0.4095
<b>Prior PCI (mean (SD))</b>	0.4255	0.4255	0	>0.99
<b>Arterial hypertension (mean (SD))</b>	0.7872	0.8298	-0.104	0.6047
<b>Hyperlipidaemia (mean (SD))</b>	0.5957	0.5319	0.1301	0.5377
<b>Diabetes mellitus (mean (SD))</b>	0.3191	0.3404	-0.0456	0.8286
<b>Smoking (mean (SD))</b>	0.5319	0.5532	-0.0426	0.8381
<b>Peripheral vascular disease (mean (SD))</b>	0.1064	0.0638	0.138	0.4652
<b>Prior stroke (mean (SD))</b>	0.0426	0.0213	0.1054	0.5624
<b>CKD (mean (SD))</b>	0.1915	0.1489	0.1081	0.5878
<b>Acute coronary syndrome (mean (SD))</b>	0.6809	0.6809	0	>0.99
<b>ACS type (mean (SD))</b>	0.9574	0.8936	0.0819	0.6827
<b>Prior PCI with stent (mean (SD))</b>	0.8723	0.9149	-0.1275	0.5087
<b>Prior 1 lesion PCI (mean (SD))</b>	0.4894	0.5532	-0.1277	0.5407
<b>Procedural success (mean (SD))</b>	0.9362	0.9149	0.087	0.6982
<b>Prior stent (mean (SD))</b>	0.9574	0.9149	0.2108	0.4044

*LAD: left anterior descending, LCX: left circumflex, Std. Mean Diff.: standardized mean differences, SD: standard deviation, CABG: coronary artery bypass grafting; MI: myocardial infarction; PCI: percutaneous coronary intervention, CKD: chronic kidney disease. ACS: acute coronary syndrome.*

**Supplementary table 4: Differences in bifurcation angle with LMCA according to vessel (LAD vs. LCx)**

<b>Differences in bifurcation angle with LMCA according to vessel (LAD vs. LCx)</b>			
<b>P=0.002</b>			
	<b>n</b>	<b>Mean ± SD</b>	<b>CI95%</b>
<b>Angle LAD-LMCA (°)</b>	23	128.4 ±22.9	118.5-138.3
<b>Angle LCx-LMCA (°)</b>	34	107.5 ±23.5	99.3-115.7

*LMCA: left main coronary artery; LAD: left anterior descending; LCX: left circumflex; SD: standard deviation; CI: confidence interval.  
#Student's t-test, data expressed by mean and standard deviation.*