

Cath Lab and Interventional Survey (CLICS) 2024 - Emek report

Table 1: Patients characteristics

	Overall	Emek, n (%)
n	3226	185
Age (mean (SD))	67.59 (12.45)	63.90 (12.21)
Age group (%)		
50 <= Age < 70	1454 (45.2)	100 (54.1)
Age < 50	246 (7.6)	24 (13.0)
Age >= 70	1520 (47.2)	61 (33.0)
Gender = Male (%)	2299 (71.3)	129 (69.7)
Diabetes = Yes (%)	1131 (41.3)	75 (42.9)
COPD = Yes (%)	203 (7.4)	10 (5.7)
Chronic renal failure = Yes (%)	293 (10.7)	23 (13.1)
Chronic dialysis = Unknown (%)	293 (100.0)	23 (100.0)
Prior stroke or TIA = Yes (%)	199 (7.3)	16 (9.1)
Prior PCI = Yes (%)	1018 (37.2)	74 (42.3)
Prior CABG or valve surgery = Yes (%)	226 (8.3)	11 (6.3)
Heart failure (%)		
Yes	429 (15.7)	48 (27.6)
No	1925 (70.4)	92 (52.9)
Unknown	380 (13.9)	34 (19.5)
% LV ejection fraction (mean (SD))	50.58 (11.77)	52.17 (14.30)
Atrial fibrillation = Yes (%)	239 (8.7)	26 (14.9)

Table 2: Procedure type distribution

	Overall n (%)	Emek,n (%)
N	3226	185
Coronary	2765 (85.7)	175 (94.6)
Structural - Valvular	209 (6.5)	6 (3.2)
Structural - non valvular	38 (1.2)	2 (1.1)
Peripheral	18 (0.6)	4 (2.2)
Other	244 (7.6)	7 (3.8)

Table 3: Procedure type distribution among coronary procedure patients

Patient admission type	Overall	Emek
Elective (from home)	40% (1,110)	39% (69)
Hospitalized (including urgent admission from emergency department - primary PCI, unstable NSTEMI etc.)	60% (1,650)	61% (106)
NA	0% (5)	0% (0)
Total	100% (2,765)	100% (175)

Table 4: Time of procedure distribution

	Overall	Emek
Regular working hours	86.29% (2,386)	94.29% (165)
Off-working hours / weekend	13.38% (370)	5.71% (10)
Missing	0.33% (9)	0.00% (0)
Total	100.00% (2,765)	100.00% (175)

Table 5: Indication for coronary procedure distribution

Indication for procedure	Overall	Emek
Diagnostic cath before cardiac surgery	2% (52)	2% (4)
Diagnostic cath before structural percutaneous intervention (e.g. TAVI)	3% (95)	3% (6)
Heart failure symptoms	4% (101)	3% (5)
LBBB of unknown age	0% (1)	0% (0)
Non STEMI	24% (666)	28% (49)
Other	8% (218)	18% (31)
Out of hospital sudden death	0% (8)	0% (0)
Planned PCI (Staged PCI, after Heart-team discussion etc.)	6% (169)	6% (11)
Pre / Post organ transplant	1% (21)	1% (2)
Stable angina	20% (548)	14% (24)
STEMI	11% (317)	10% (18)
STEMI - Late arrival (>12 hrs)	1% (32)	0% (0)
Unstable angina (troponin negative ACS)	18% (511)	14% (25)
NA	1% (26)	0% (0)
Total	100% (2,765)	100% (175)

Table 6: Arterial access distribution among coronary procedure patient

	Overall	Emek
n	2765	175
Right radial artery	81.4% (2250)	81.7% (143)
Left radial artery	10.6% (292)	14.9% (26)
Femoral artery	7.8% (217)	2.9% (5)
Brachial artery	0.2% (6)	0.6% (1)
Planned dual arterial access	0.1% (3)	0.0% (0)
Other	1.0% (27)	0.0% (0)

Table 7: Type of coronary procedure

Type of coronary procedure	Overall	Emek
Diagnostic angiography only (no PCI done)	46.26% (1,279)	61.71% (108)
Percutaneous coronary intervention (PCI)	53.42% (1,477)	38.29% (67)
Coronary fistulae closure	0.11% (3)	0.00% (0)
NA	0.22% (6)	0.00% (0)
Total	100.00% (2,765)	100.00% (175)

Table 8: Clinical recommendation among stable angina patient

clinical recommendation	Overall	Emek
Cardiac surgery	7% (38)	4% (1)
Conservative/medical treatment	47% (257)	63% (15)
Heart team discussion	1% (6)	0% (0)
Immediate PCI	39% (214)	25% (6)
Immediate PCI with staged PCI procedure (Partial revascularization with planned additional PCI)	5% (25)	4% (1)
Other structural heart intervention	0% (0)	0% (0)
Planned PCI at future time	1% (4)	4% (1)
TAVI	1% (3)	0% (0)
NA	0% (1)	0% (0)
Total	100% (548)	100% (24)

Table 9: Clinical recommendation among *urgent patient

clinical recommendation	Overall	Emek
Cardiac surgery	7% (108)	9% (8)
Conservative/medical treatment	25% (385)	40% (37)
Heart team discussion	2% (30)	2% (2)
Immediate PCI	57% (881)	46% (42)
Immediate PCI with staged PCI procedure (Partial revascularization with planned additional PCI)	6% (99)	3% (3)
Other structural heart intervention	0% (4)	0% (0)
Planned PCI at future time	1% (17)	0% (0)
TAVI	0% (3)	0% (0)
NA	1% (8)	0% (0)
Total	100% (1,535)	100% (92)

Note:

*patients with one of the following indication: Unstable angina (troponin negative ACS)/ Non STEMI/ STEMI/ STEMI - Late arrival (>12 hrs)/ LBBB of unknown age/ Out of hospital sudden death

Table 10: Ischemia evaluation among patients with stable angina who underwent PCI

	Overall	Emek
N	245	7
Non invasive test ischemia = Yes (%)	178 (72.7)	4 (57.1)
Functional (e.g. Ergometry, stress echo, SPECT) = Yes (%)	156 (63.7)	3 (42.9)
Anatomical - Coronary CT angiography	30 (12.2)	1 (14.3)
FFR / IFR used = Yes (%)	12 (4.9)	0 (0.0)
IVUS used = Yes (%)	8 (3.3)	0 (0.0)
OCT used = Yes (%)	245 (100.0)	7 (100.0)

Table 11: Patients with stable angina who underwent PCI characteristics

	Overall, n (%)	Emek, n (%)
N	245	7
Multivessel pci = Yes	41 (16.7)	0 (0.0)
Number of lesions treated		
0	11 (4.5)	0 (0.0)
1	159 (64.9)	7 (100.0)
2	55 (22.4)	0 (0.0)
3	20 (8.2)	0 (0.0)
Native coronary = Yes	243 (99.2)	7 (100.0)
SVG = Yes	2 (0.8)	0 (0.0)
LIMA/RIMA = Yes	245 (100.0)	7 (100.0)
Other arterial conduit = Yes	1 (0.4)	0 (0.0)

Table 12: Device types used among patients with stable angina who underwent PCI

	Overall, n (%)	Emek, n (%)
N	1241	52
Drug eluting stent	1097 (88.4)	47 (90.4)
Bare metal stent	0 (0.0)	0 (0.0)
Biodergradable scaffold	0 (0.0)	0 (0.0)
Covered stent (stent graft)	1 (0.1)	0 (0.0)
Drug coated balloon	97 (7.8)	1 (1.9)
Cutting balloon	24 (1.9)	0 (0.0)
Scoring balloon	15 (1.2)	0 (0.0)
POBA	70 (5.6)	6 (11.5)
None	36 (2.9)	0 (0.0)

Note:

*it is possible to have more then one stend per patient

Table 13: Procedural complications

	All coronary procedurers		Diagnostic procedures		PCI procedures	
	Overall	Emek	Overall	Emek	Overall	Emek
n	2756	175	1279	108	1477	67
Coronary artery dissection (%)	17 (0.6)	2 (1.1)	3 (0.2)	0 (0.0)	14 (0.9)	2 (3.0)
Coronary artery perforation (%)	3 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	3 (0.2)	0 (0.0)
No reflow / distal embolization (%)	18 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	18 (1.2)	0 (0.0)
Significant (>1.5 mm) side branch occlusion (%)	4 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	4 (0.3)	0 (0.0)
Tamponade (%)	2 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	0 (0.0)
Ventricular arrhythmia (%)	6 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	6 (0.4)	0 (0.0)
Significant conduction abnormality requiriung pacing (%)	2 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	0 (0.0)
CPR (%)	6 (0.2)	1 (0.6)	0 (0.0)	0 (0.0)	6 (0.4)	1 (1.5)
Urgent cardiac surgery (%)	2 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	0 (0.0)