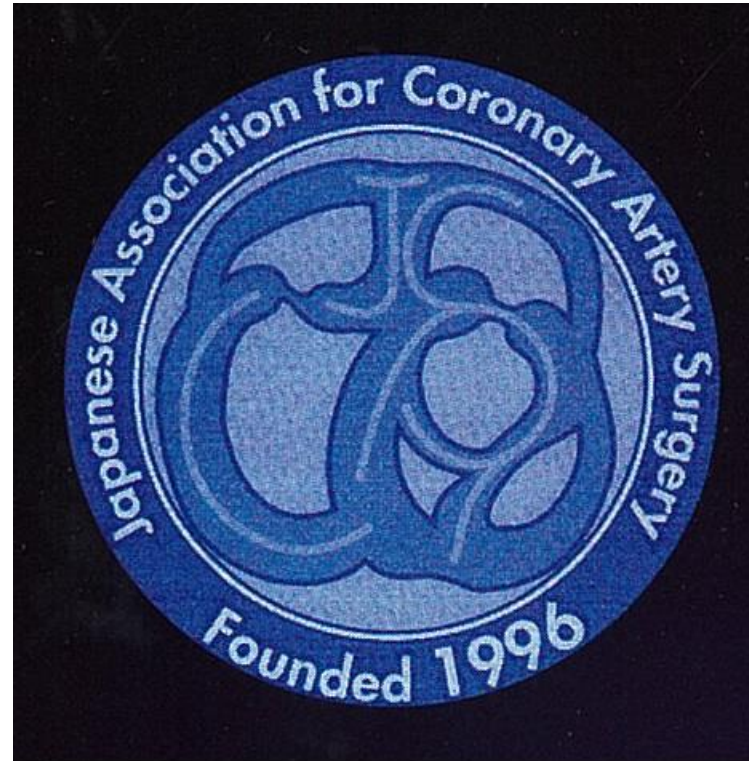


Coronary artery surgery results In 2019



**The Survey Committee of Japanese Association
for Coronary Artery Surgery (JACAS)**

冠動脈外科学会学術委員会 2020年ホームページ用
(2019年データ分)

Yearly number of CABG (by procedure- base)

		2019		2018
Yearly total number		19,594		20,271
Isolated CABG			Initial elective	Non-elective
		12556 (64%)	10163	2393
	OPCAB		5452 (54%)	1079 (45%)
	ONCAB		4711 (44%)	1314 (55%)
Concomitant CABG		7038 (36%)		6881(34%)

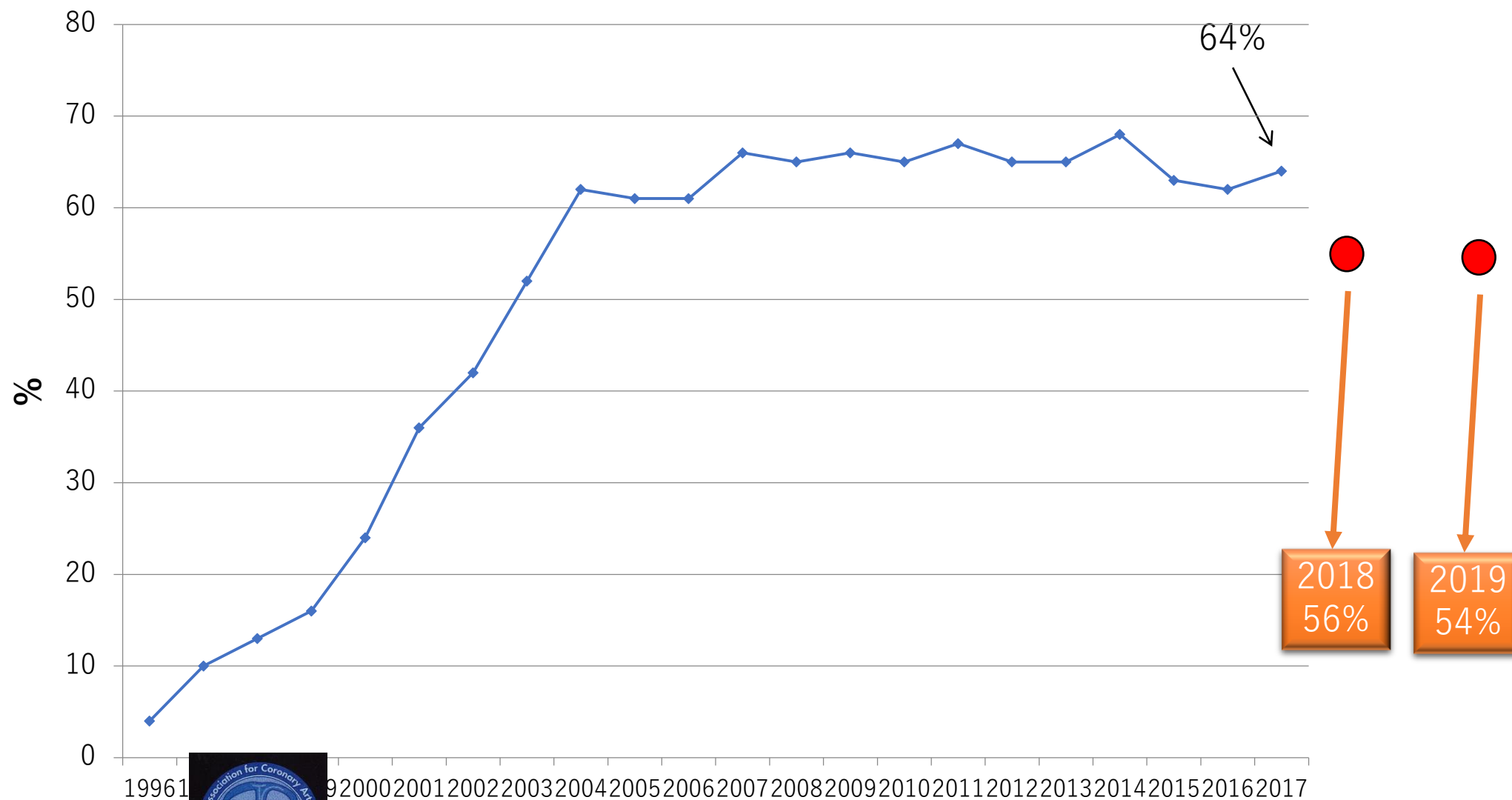


Yearly number of CABG (by procedure- base)

	2019 [前年比]			2018		
Yearly total number	19,594 [-3%]			20,271		
Isolated CABG		Initial elective	Non-elective		Initial elective	Non-elective
	12556 (64%) [-6%]	10163 [-7%]	2393 [-6%]	13390 (66%)	10874	2543
OPCAB		5452 (54%) [-11%]	1079 (45%) [-9%]		6069 (56%)	1178 (46%)
ONCAB		4711 (44%) [-2%]	1314 (55%) [-4%]		4778 (44%)	1365 (54%)
Concomitant CABG	7038 (36%) [+2%]			6881 (34%)		



Changes of off-pump CABG rate (Initial elective CABG)



Gender distribution 2019

	Female	Male	Total	%
< 50	90	546	636	5
50 – 59	181	1292	1473	12
60 – 69	578	2935	3513	28
70 – 79	1189	4031	5220	42
80 =<	520	1194	1714	14
Total	2558	9998	12556	100



Mortality: Isolated CABG 2019

	N	30-day mortality		Operative mortality	
Isolated cases	13390	209	1.6%	332	2.5%
Isolated, Initial, Elective	10847	82	0.8%	146	1.3%
Off-pump Intended					
Completed	5908	34	0.6%	55	0.9%
Converted	161	4	2.5%	7	4.3%
On-pump Intended					
Arrest	2247	20	0.9%	35	1.6%
Non-arrest, Vf	1622	18	1.1%	36	2.2%
No information	909	6	0.7%	13	1.4%



Mortality: Isolated CABG 2019

	N	30-day mortality		Operative mortality	
Isolated cases	13390	209	1.6%	332	2.5%
Isolated, Initial, Elective	10847	82	0.8%	146	1.3%
Off-pump Intended					
Completed	5908	34	0.6%	55	0.9%
Converted	161	4	2.5%	7	4.3%
On-pump Intended					
Arrest	2247	20	0.9%	35	1.6%
Non-arrest, Vf	1622	18	1.1%	36	2.2%
No information	909	6	0.7%	13	1.4%



Mortality: Isolated CABG 2019 [2018]

		N	30-day mortality		Operative mortality	
Isolated cases		12,556	216	1.7% [1.6]	348	2.8% [2.5]
Isolated, Initial, Elective		10,163	87	0.9% [0.8]	156	1.5% [1.3]
Off-pump Intended						
	Completed	5,316	30	0.6% [0.6]	55	1.0% [0.9]
	Converted	136	7	5.1% [2.5]	12	8.8% [4.3]
On-pump Intended						
	Arrest	2,048	22	1.1% [0.9]	36	1.8% [1.6]
	Non-arrest, Vf	1,675	23	1.4% [1.1]	43	2.6% [2.2]
	No information	988	5	0.5% [0.7]	10	1.0% [1.4]

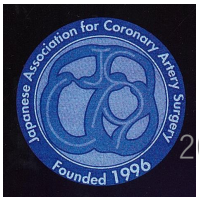
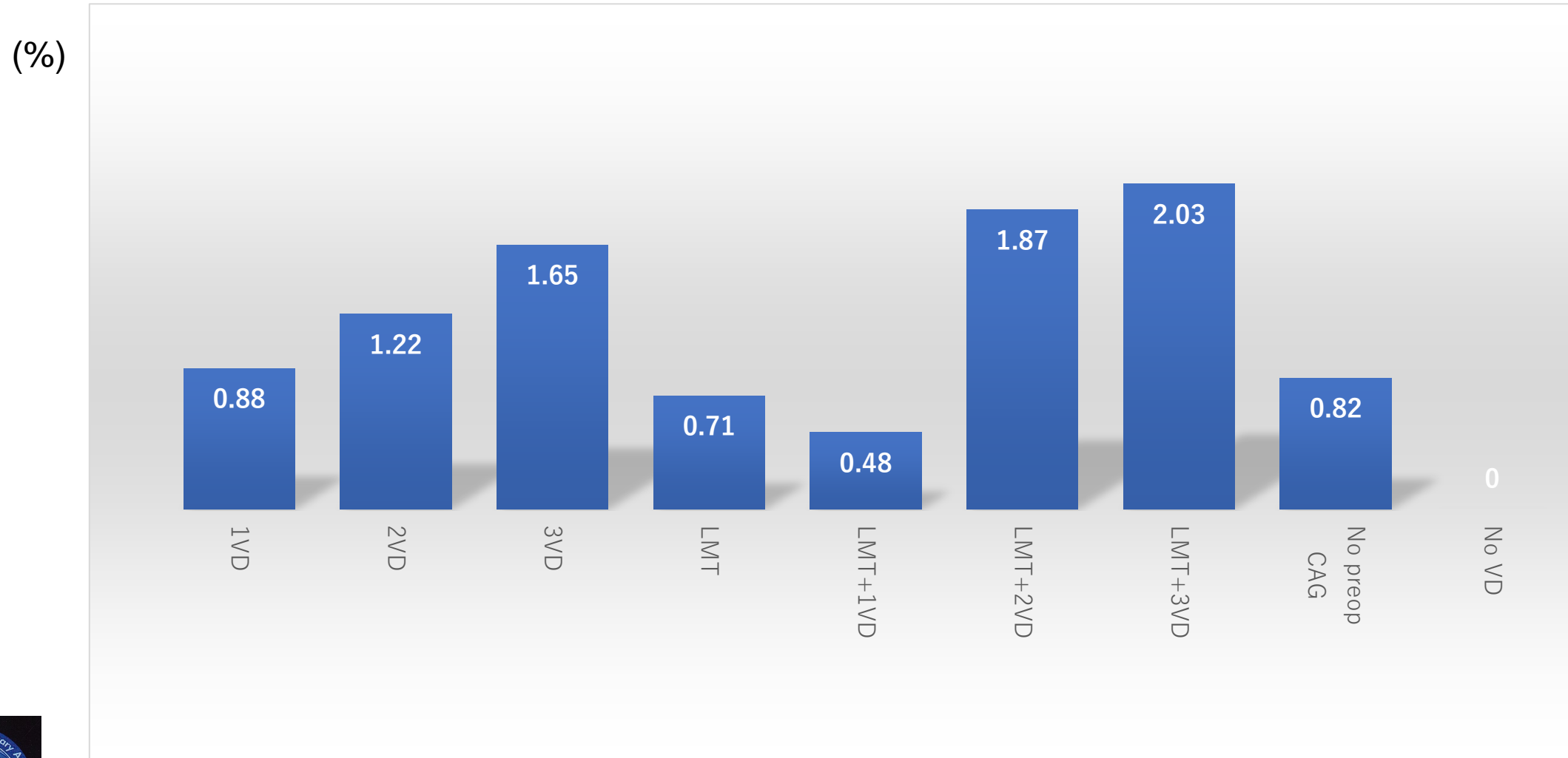


Mortality: Isolated CABG 2019 [2018]

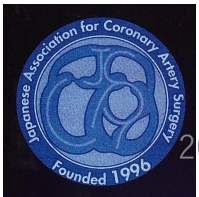
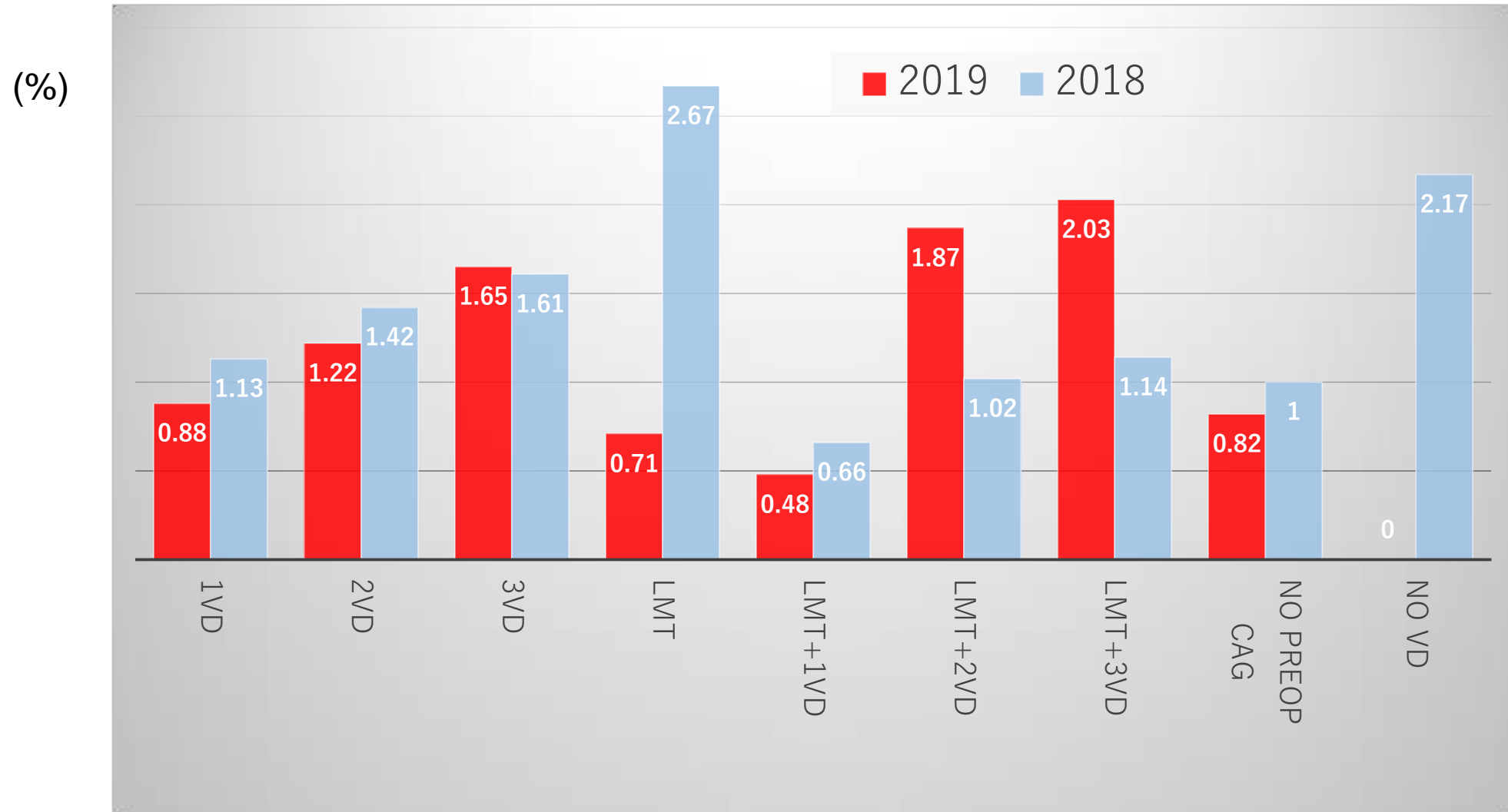
		N	30-day mortality		Operative mortality	
Isolated cases		12,556	216	1.7% (1.6)	348	2.8% (2.5)
Isolated, Initial, Elective		10,163	87	0.9% (0.8)	156	1.5% (1.3)
Off-pump Intended						
	Completed	5,316	30	0.6% (0.6)	55	1.0% (0.9)
	Converted	136	7	5.1% (2.5)	12	8.8% (4.3)
On-pump Intended						
	Arrest	2,048	22	1.1% (0.9)	36	1.8% (1.6)
	Non-arrest, Vf	1,675	23	1.4% (1.1)	43	2.6% (2.2)
	No information	988	5	0.5% (0.7)	10	1.0% (1.4)



Mortality by extent of CAD(%) 2019

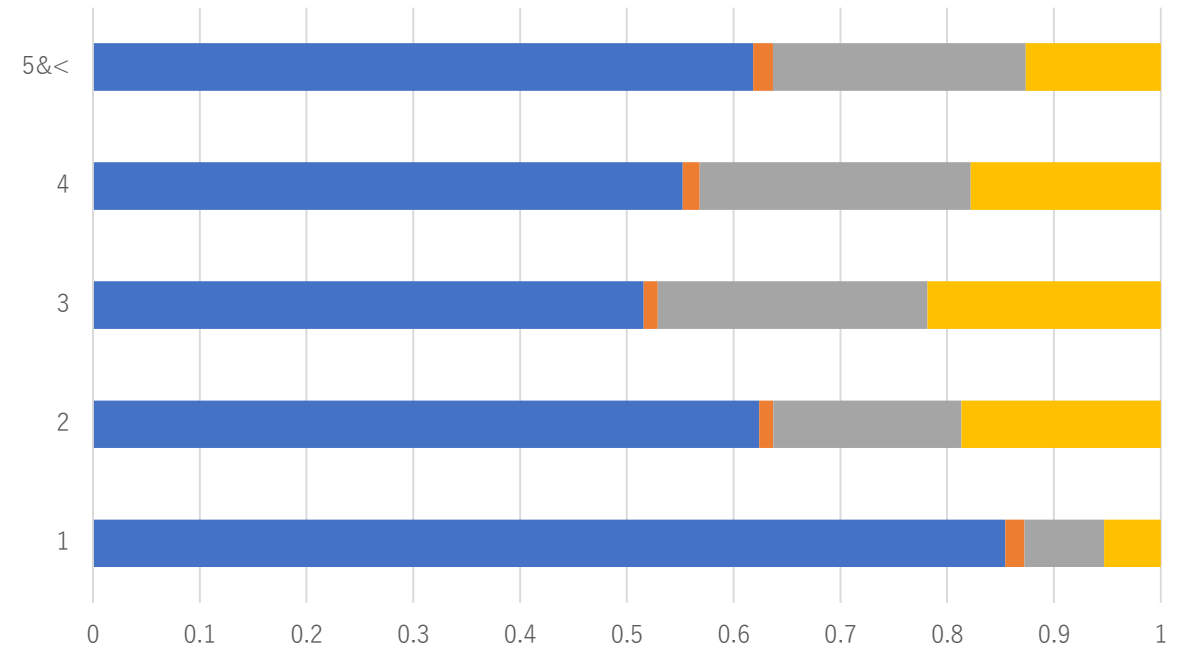


Mortality by extent of CAD(%) 2019, 2018

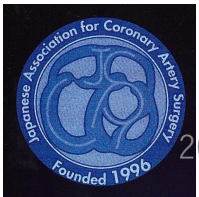


Number of anastomosis according to procedure (initial elective CABG) 2019

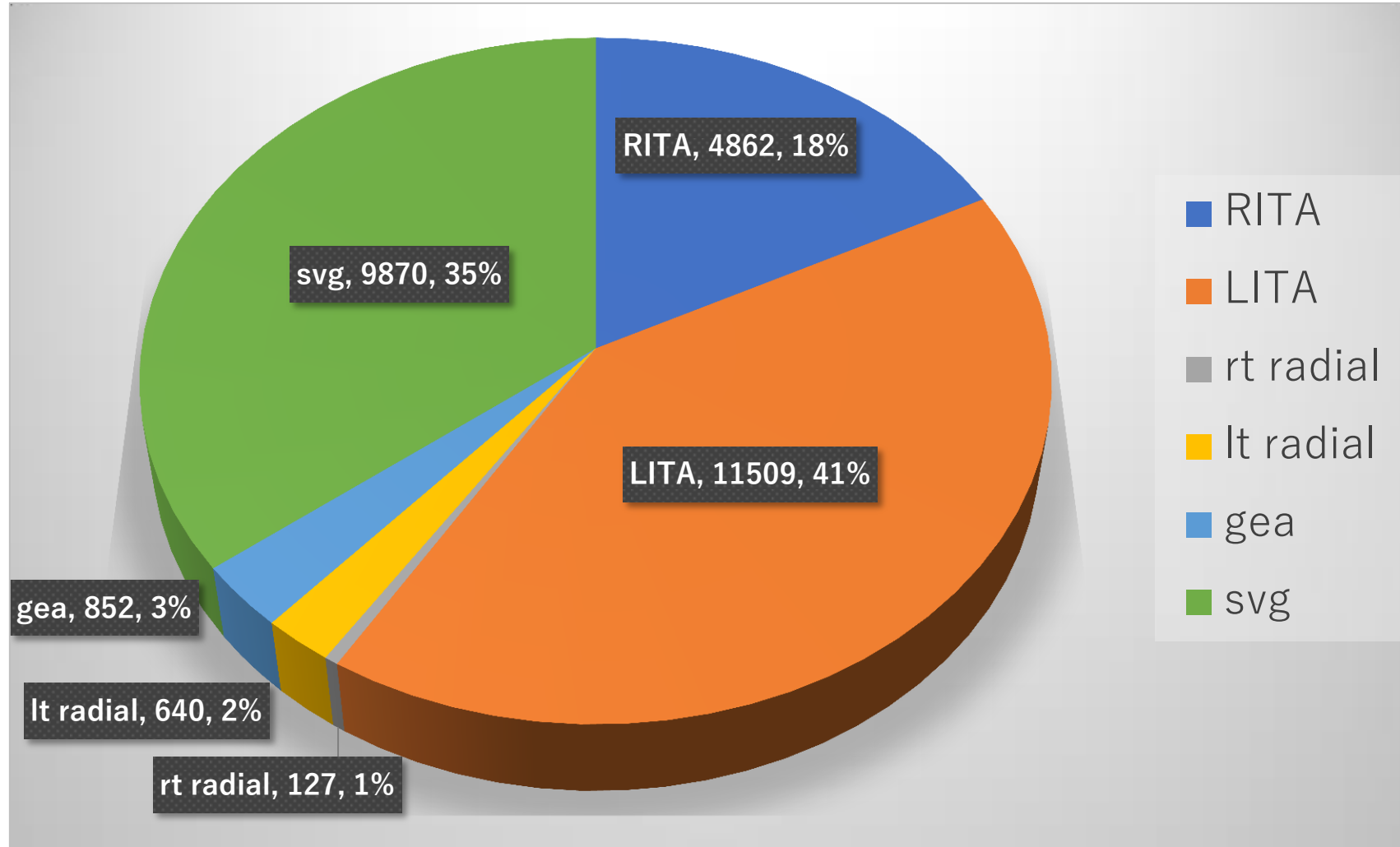
anastomosis	off-pump completed	off-pump converted	on-pump arrest	on-pump beating
1	516	11	45	32
2	1273	27	359	381
3	1819	47	891	770
4	1176	34	540	379
5=<	504	15	193	103



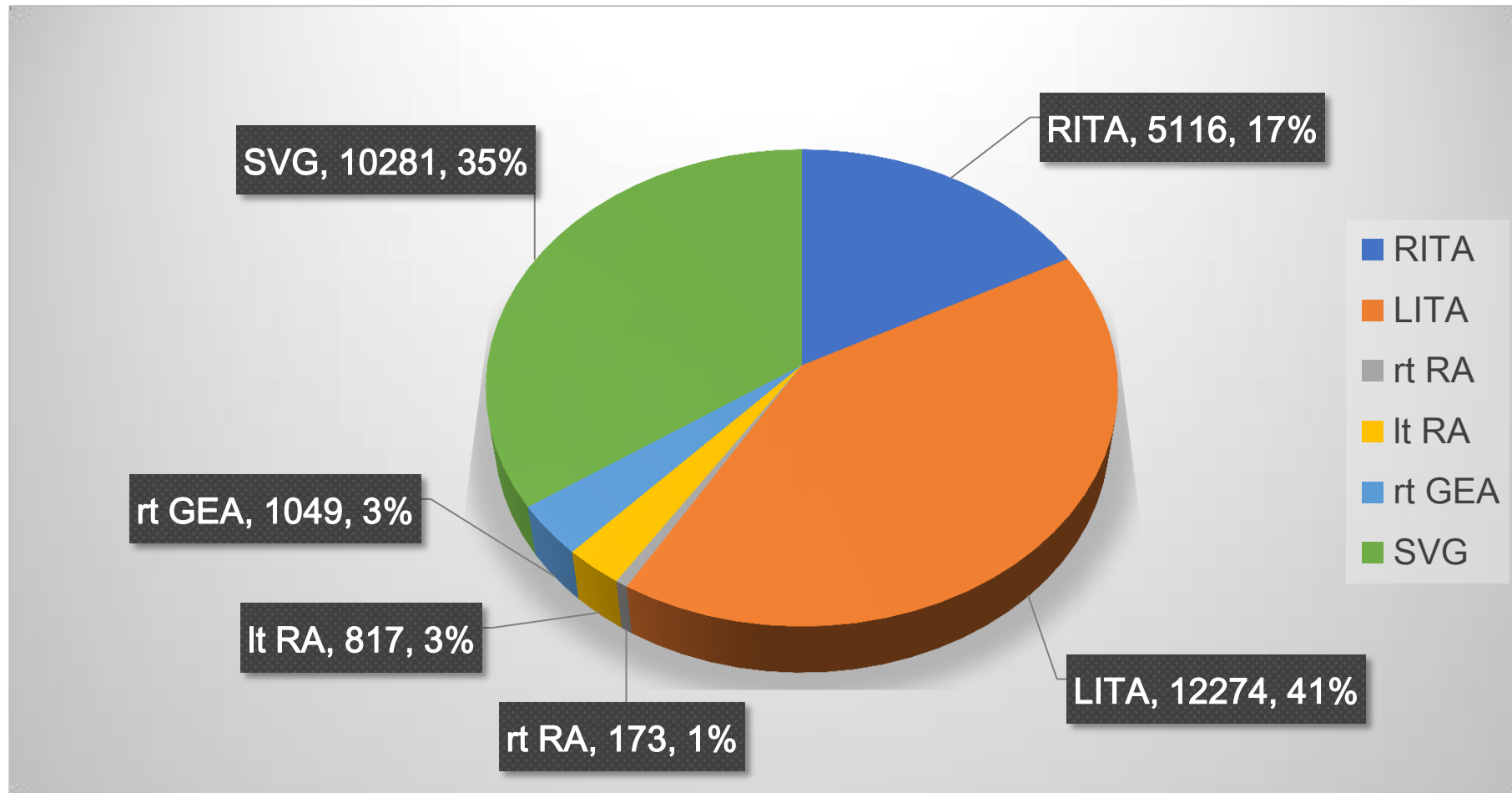
平均吻合数2019 [2018] : 3.1 [3.1]



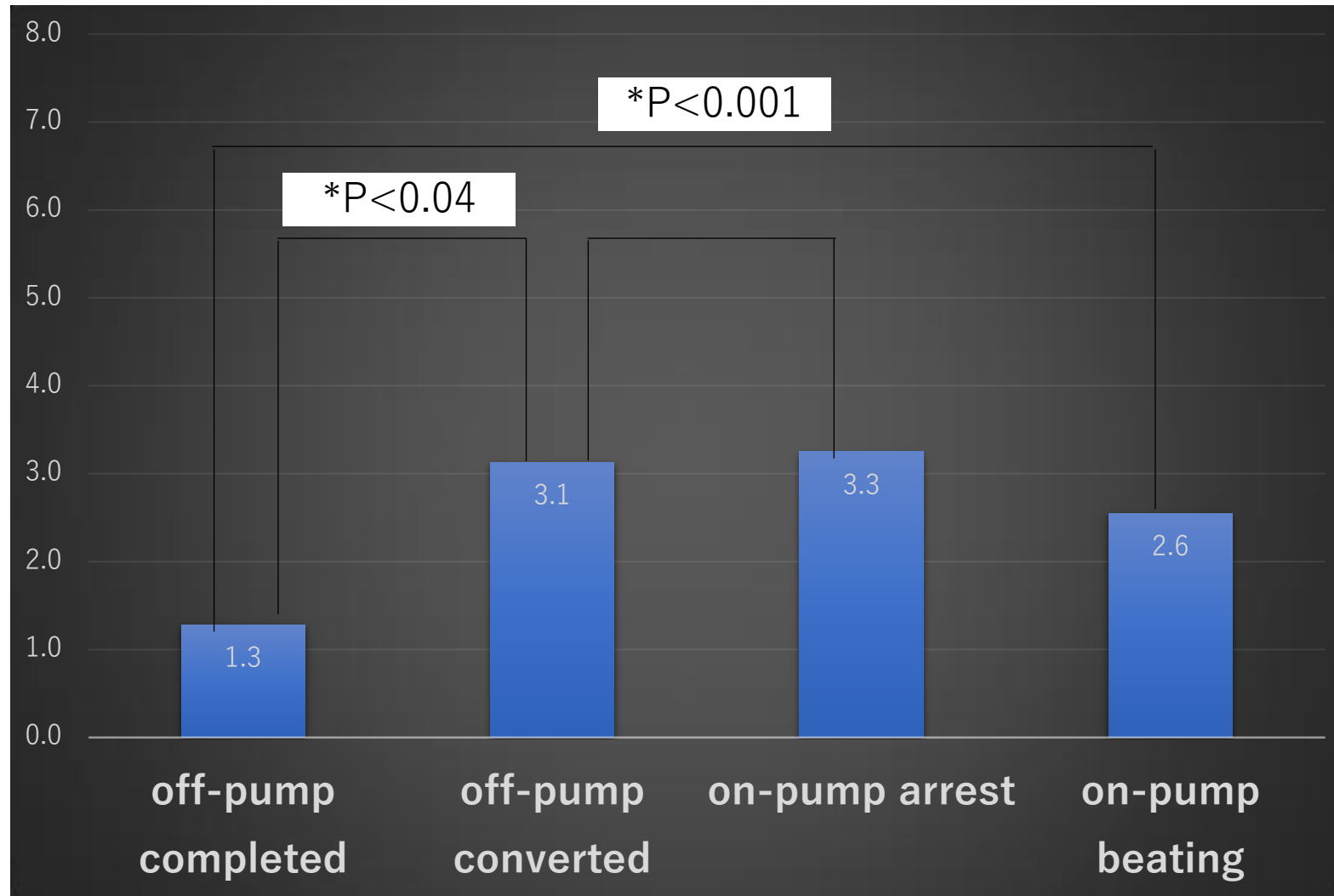
Graft selection 2019



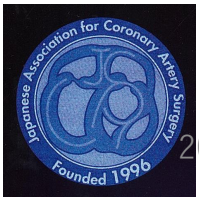
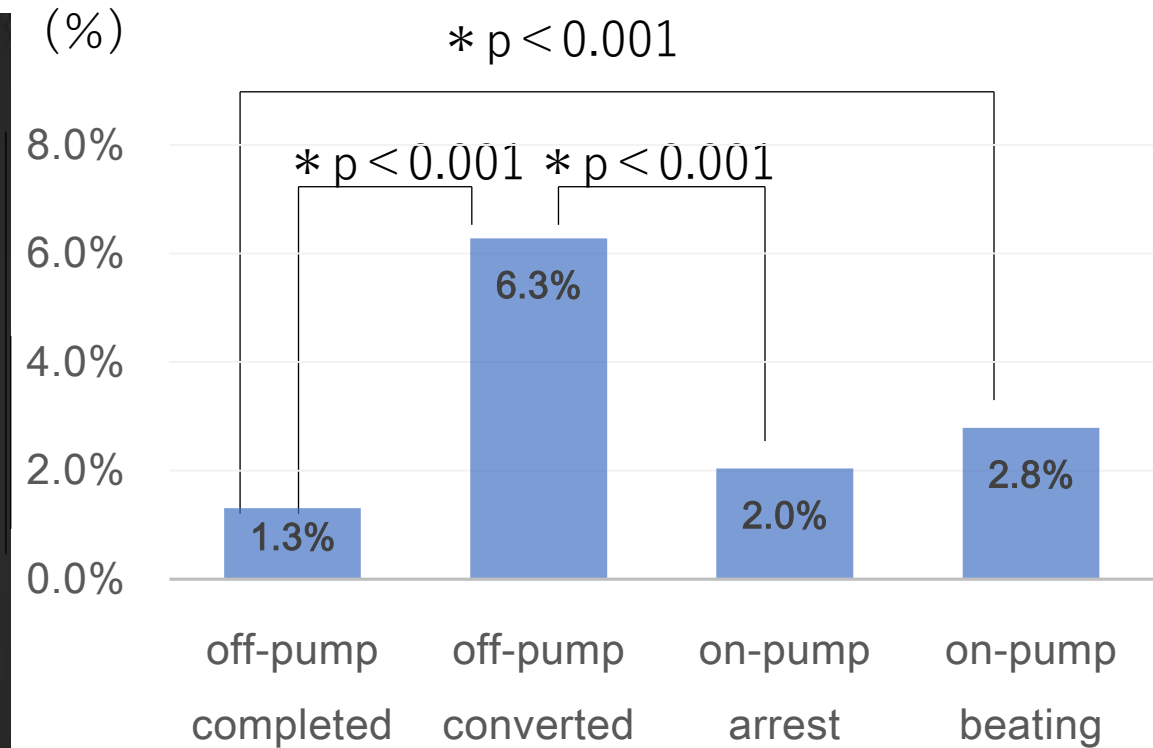
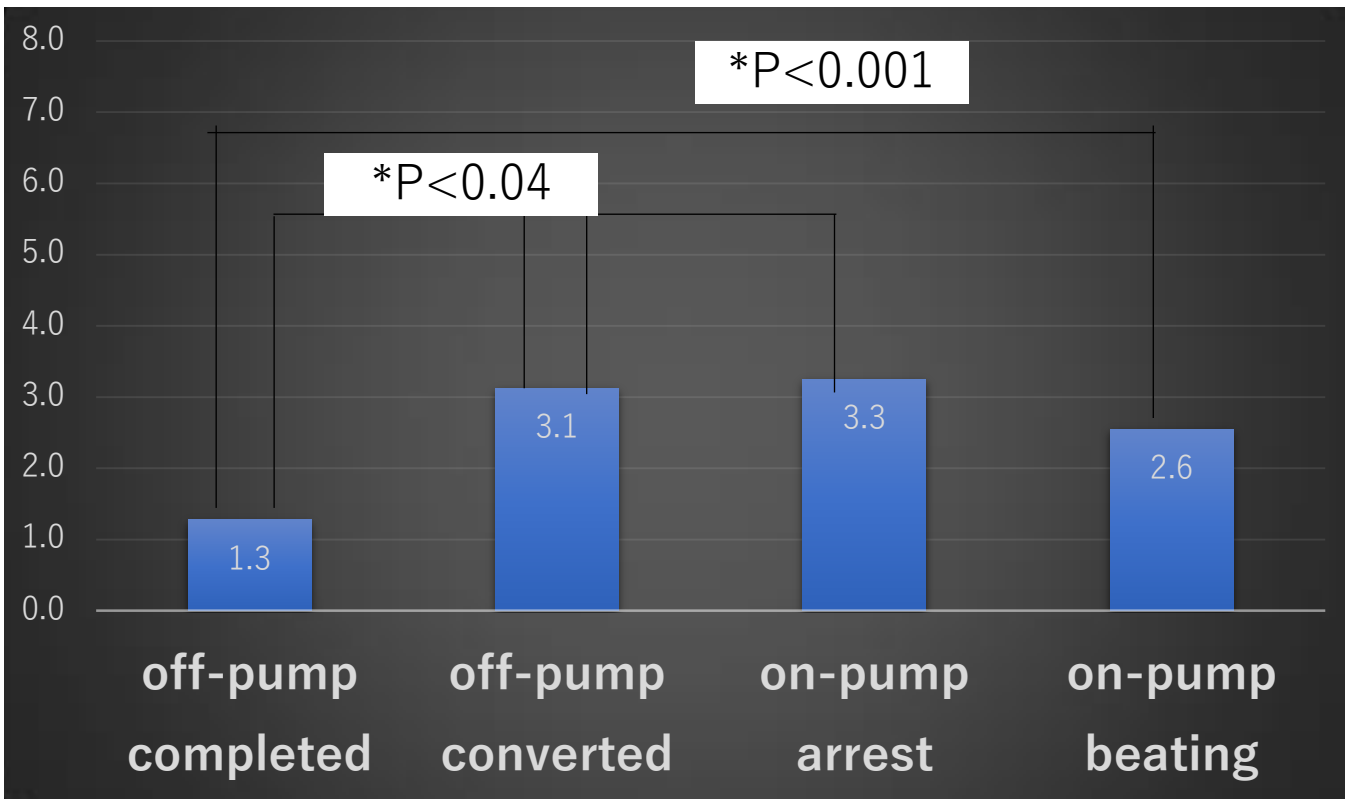
Graft selection 2018



Stroke rate according to procedures 2019



Stroke rate according to procedures 2019, 2018



LV failure due to AMI 2019 [2018]

	N	30-day mortality	Operative mortality
Papillary muscle rupture	62 [63]	17 (27%) [37%]	22 (36%) [38%]
LV free wall rupture	260 [241]		
Blow-out type	92 [83]	54 (59%) [53%]	60 (65%) [65%]
Oozing type	168 [158]	31 (19%) [20%]	40 (24%) [23%]
LV aneurysm	18 [23]	3 (17%) [9%]	3 (17%) [9%]

340 [327]



Procedures to ischemic MR 2019 [2018]

	N	30-day mortality	Operative mortality
Ischemic MR	420 [485]	34 (8.1%) [6.2]	49 (11.7%) [8.8]
Mitral valve plasty	254 [309]	14 (5.5%) [3.6]	23 (9.1%) [5.8]
+LV procedure	21 [26]	1 (4.8%) [4.8]	2 (9.5%) [3.8]
Mitral valve replacement	166 [176]	20 (12.0%) [10.8]	26 (15.7%) [13.6]
+LV procedure	9 [10]	0 (0%) [0]	0 (0%) [0]



Manuscript submit to ATCS (2018 data) under review process

Annual report for 2018 by the Japanese Association for Coronary Artery Surgery (JACAS)

Aya SAITO^{1,2}, Noboru MOTOMURA^{1,2}, Hiraku KUMAMARU³, Hiroaki MIYATA³, Hirokuni ARAI^{1,4}

Affiliations:

#1 Committee for Scientific Affairs, Japanese Association for Coronary Artery Surgery

#2 Department of Cardiovascular Surgery, Toho University Sakura Medical Center, Chiba, Japan

#3 Department of Cardiovascular Surgery, Tokyo Medical and Dental University Graduate School of Medical and Dental Sciences, Tokyo, Japan.

#4 Department of Cardiovascular Surgery, Tokyo Medical and Dental University, Tokyo, Japan