

冠動脈外科学会学術委員会

2023年レジストリー報告 (2022年分データ)

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JACAS、JCVSD

第27回冠動脈外科学会学術大会 名古屋コンベンションホール3階、メインホール
2023/07/13



The 27th Annual Meeting of the Japanese Association for Coronary Artery Surgery

Disclosure of COI

本村昇、齋藤綾、隈丸拓、西村志織、荒井裕国
JACAS学術委員会、JCVSD

There are no businesses, etc. related to COI that should be disclosed in regard to the subject presentation, except Kumamaru and Nishimura (members of HQA).

Yearly number of CABG (by procedure- base) 2022

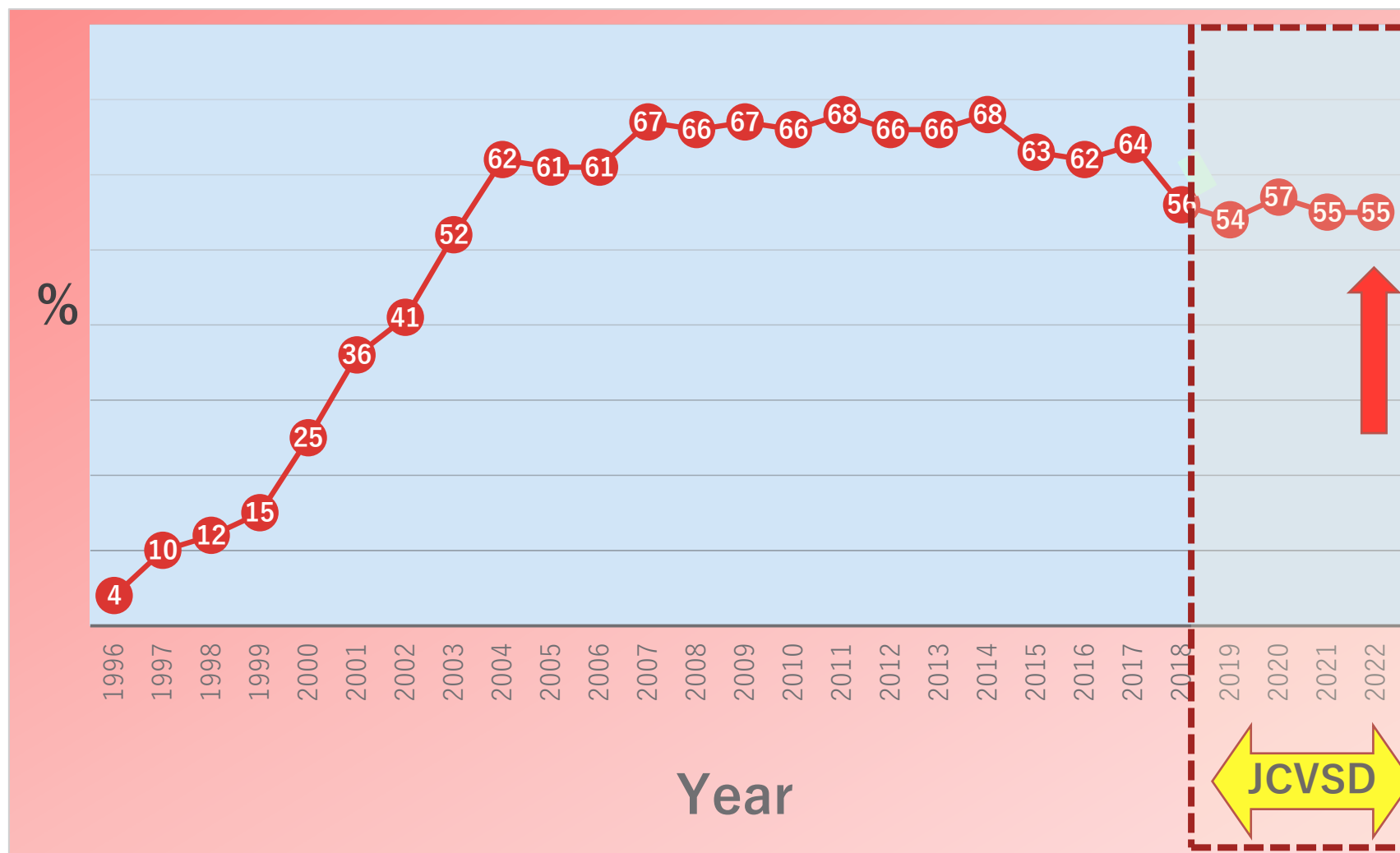
		2022		2021
Yearly total number		17,277		17,715
Isolated CABG			Initial elective	Non-elective
		11,159 (65%)	7,663	3,496
	OPCAB (intended)		4,232 55%	1,613 (48%)
	ONCAB (intended)		3,431 (45%)	1,883 (54%)
Concomitant CABG		6,118 (35%)		6,642 (37%)



Yearly number of CABG (by procedure- base)

		2022 [前年比]			2021		
Total Number		17,277 [-2.5%]			17,715		
Isolated CABG			Initial elective	Non-elective		Initial elective	Non-elective
		11,159 [+ 1%]	7,663 [+ 2.2%]	3,496 [- 2.3%]	11,073	7,496	3,577
	OPCAB (intended)		4,232 [+3%]	1,613 [-6%]		4,107	1,709
	ONCAB (intended)		3,431 [+1%]	1,883 [+1%]		3,389	1,868
Concomitant CABG		6,118 [-8%]			6642		

Changes of OPCAB rate (Initial elective CABG)



Gender distribution 2022

	Female	Male	Total	(2021)
< 50	87	448	535 ↓	541
50 – 59	186	1270	1456 ↑	1,406
60 – 69	409	2370	2779 ↓	2,843
70 – 79	990	3675	4665 ↓	4,677
80 =<	500	1224	1724 ↑	1,606
Total	2172	8987	11159 ↓	11,073



Operative mortality

= 30 day operative mortality

≠ in Hospital mortality

In-hospital mortality was defined as death at the institution where surgery was performed.

Operative mortality was defined as death during the same hospitalization as surgery or after discharge but within 30 days of the procedure

Mortality: Definition

Operative mortality : definition
in STS National Database / JCVSD

(1) all deaths, regardless of cause, occurring during the hospitalization in which the operation was performed, even if after 30 days (including patients transferred to other acute care facilities);

and
(2) all deaths, regardless of cause, occurring after discharge from the hospital, but before the end of postoperative day 30.

Mortality- isolated CABG cases 2022

		N	30-day mortality		Operative mortality	
Isolated cases		11,159	224	2.0%	334	3.0%
Isolated, Initial, Elective		7,663	57	0.7%	96	1.3%
	Off-pump Intended	4,222	31	0.7%	45	1.1%
	Completed	4,138	27	0.7%	40	1.0%
	Converted	84 2.0%	4	4.8%	5	6.0%
	On-pump Intended	3,431	26	0.8%	51	1.5%
	Arrest	1,559	9	0.6%	17	1.1%
	Non-arrest, Vf	1,185	11	0.9%	27	2.3%
	No information	687	6	0.9%	7	1.0%

2023/07 Operative mortality = 30 day operative mortality ≠ Hospital mortality

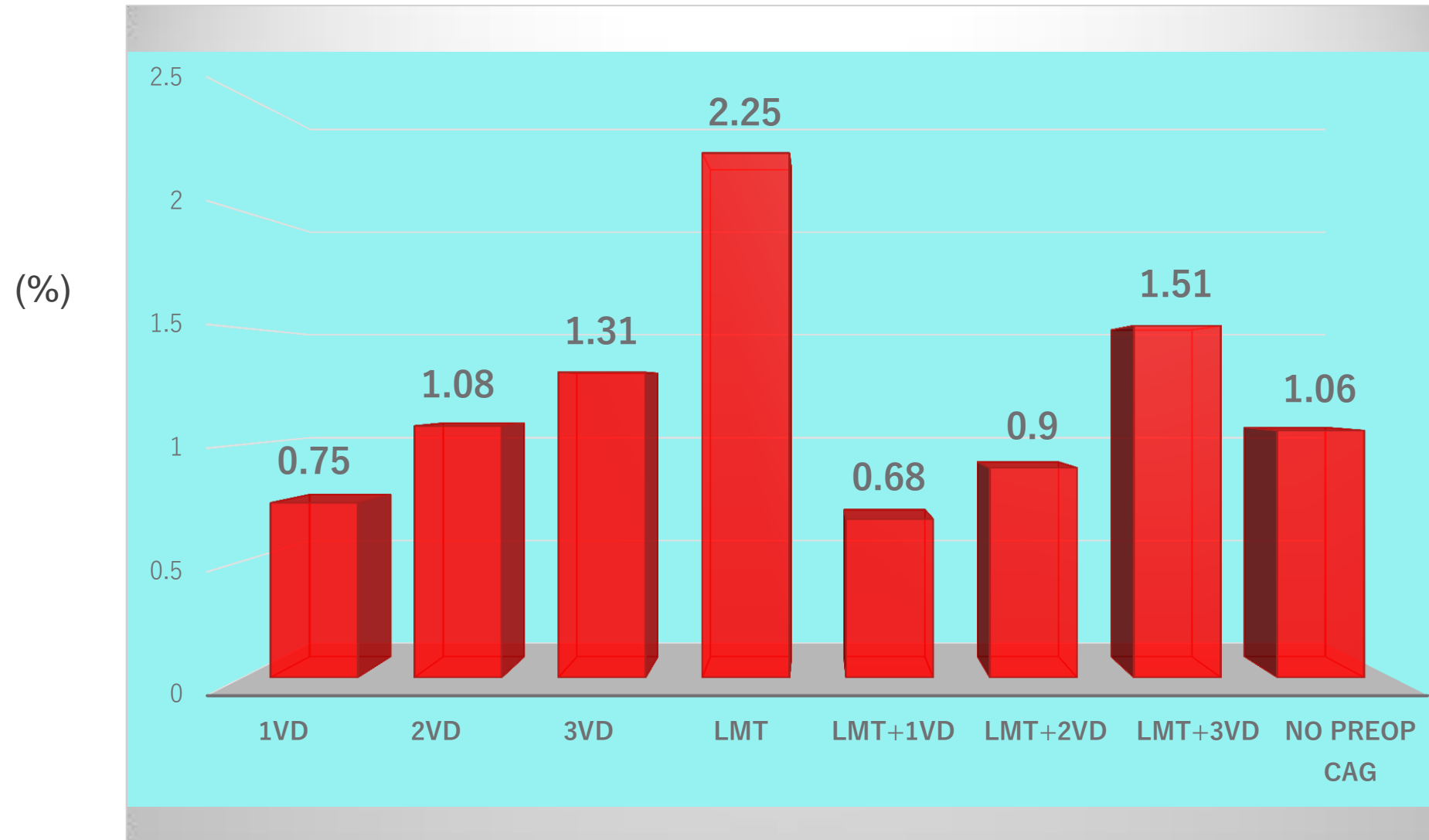


Mortality- isolated CABG cases 2022 [2021]

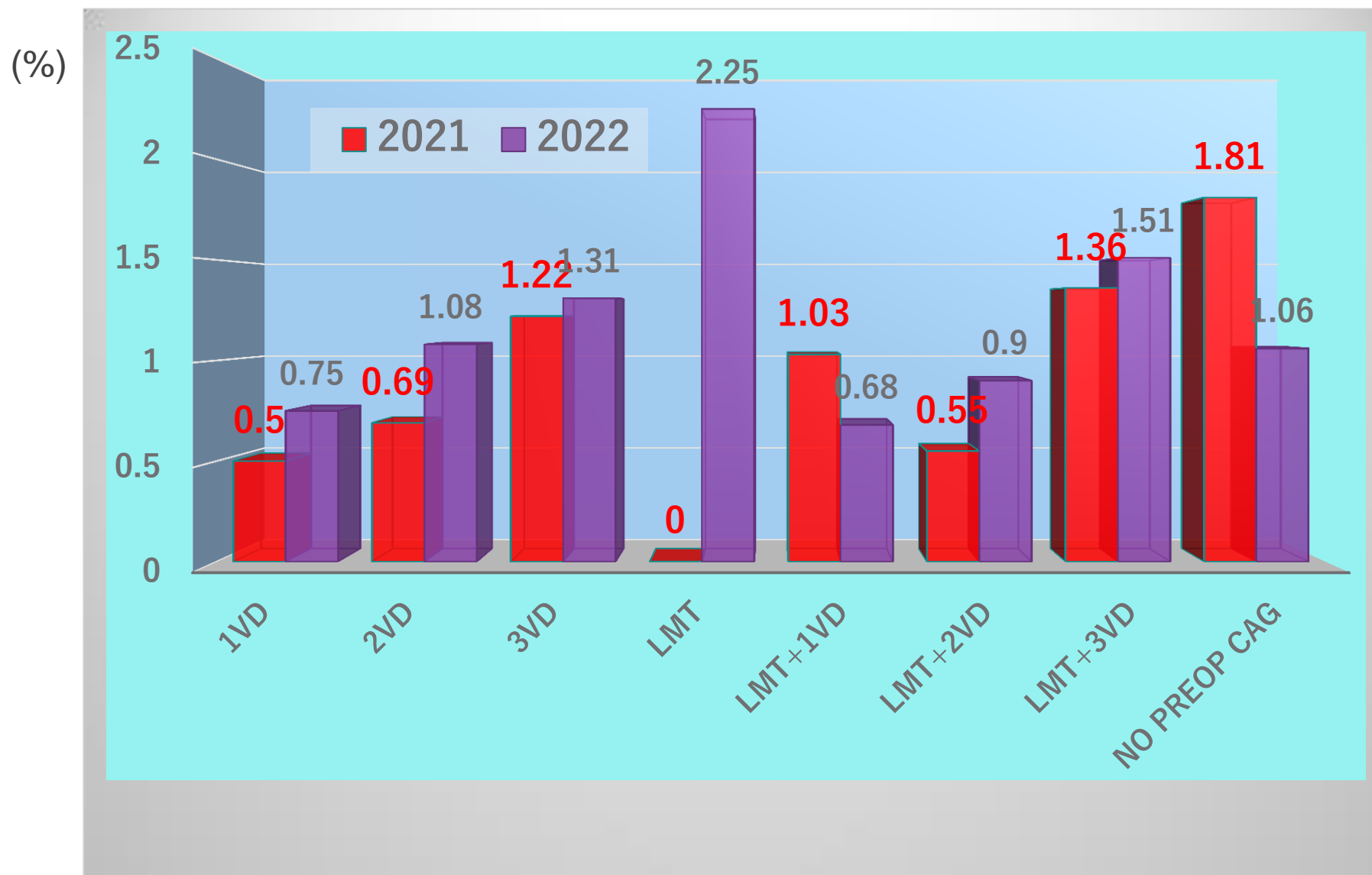
[5.4]		N	30-day mortality		Operative mortality	
Isolated cases		11,159	224	2.0% [1.8]	334	3.0% [2.9]
Isolated, Initial, Elective		7,663	57	0.7% [0.7]	96	1.3% [1.1]
	Off-pump Intended	4,222	31	0.7% [0.6]	45	1.1% [1.0]
	Completed	4,138	27	0.7% [0.5]	40	1.0% [0.9]
	Converted	84 2.0%	4	4.8% [4.5]	5	6.0% [5.4]
	On-pump Intended	3,431	26	0.8% [0.7]	51	1.5% [1.2]
	Arrest	1,559	9	0.6% [0.3]	17	1.1% [0.7]
	Non-arrest, Vf	1,185	11	0.9% [1.2]	27	2.3% [2.0]
	No information	687	6	0.9% [0.6]	7	1.0% [0.7]

2023/07 Operative mortality = 30 day operative mortality ≠ Hospital mortality

Hospital Mortality by extent of CAD(%) 2022



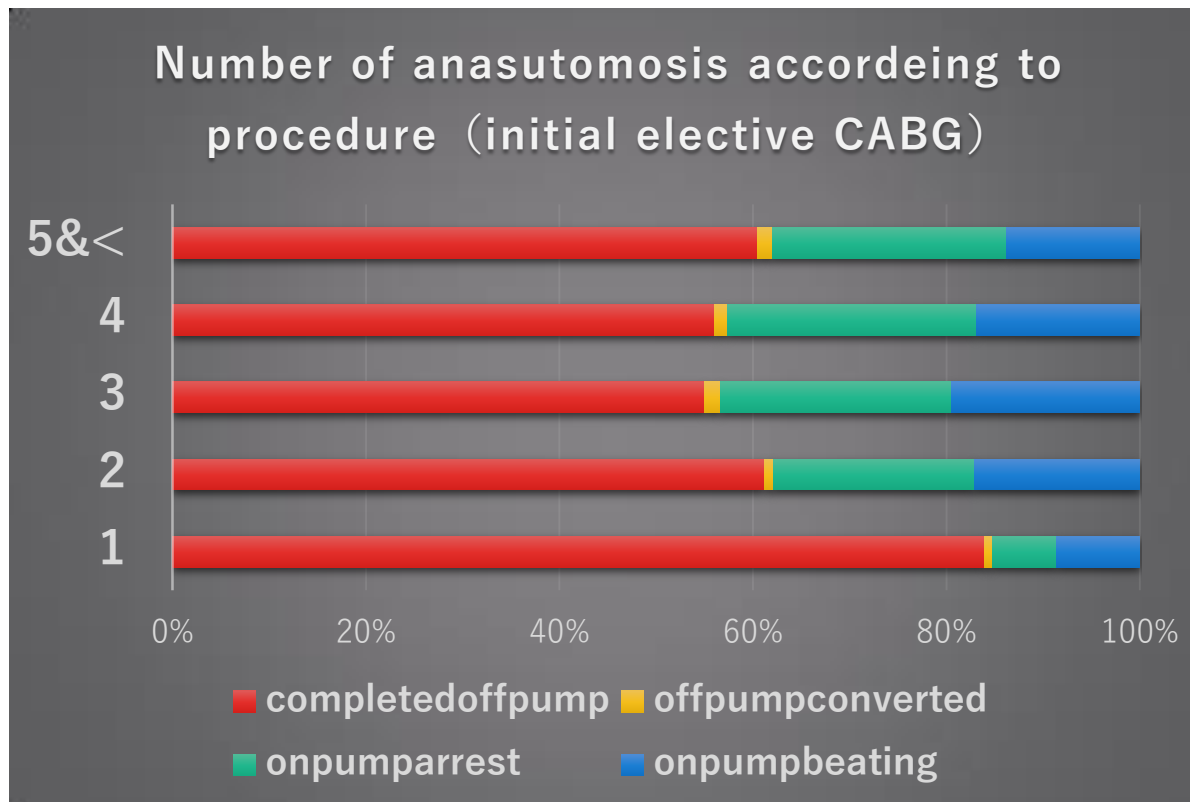
Hospital Mortality by extent of CAD(%) 2021, 2022



Number of anastomosis according to procedure 2022 (initial elective CABG)

詳細不明症例を除外

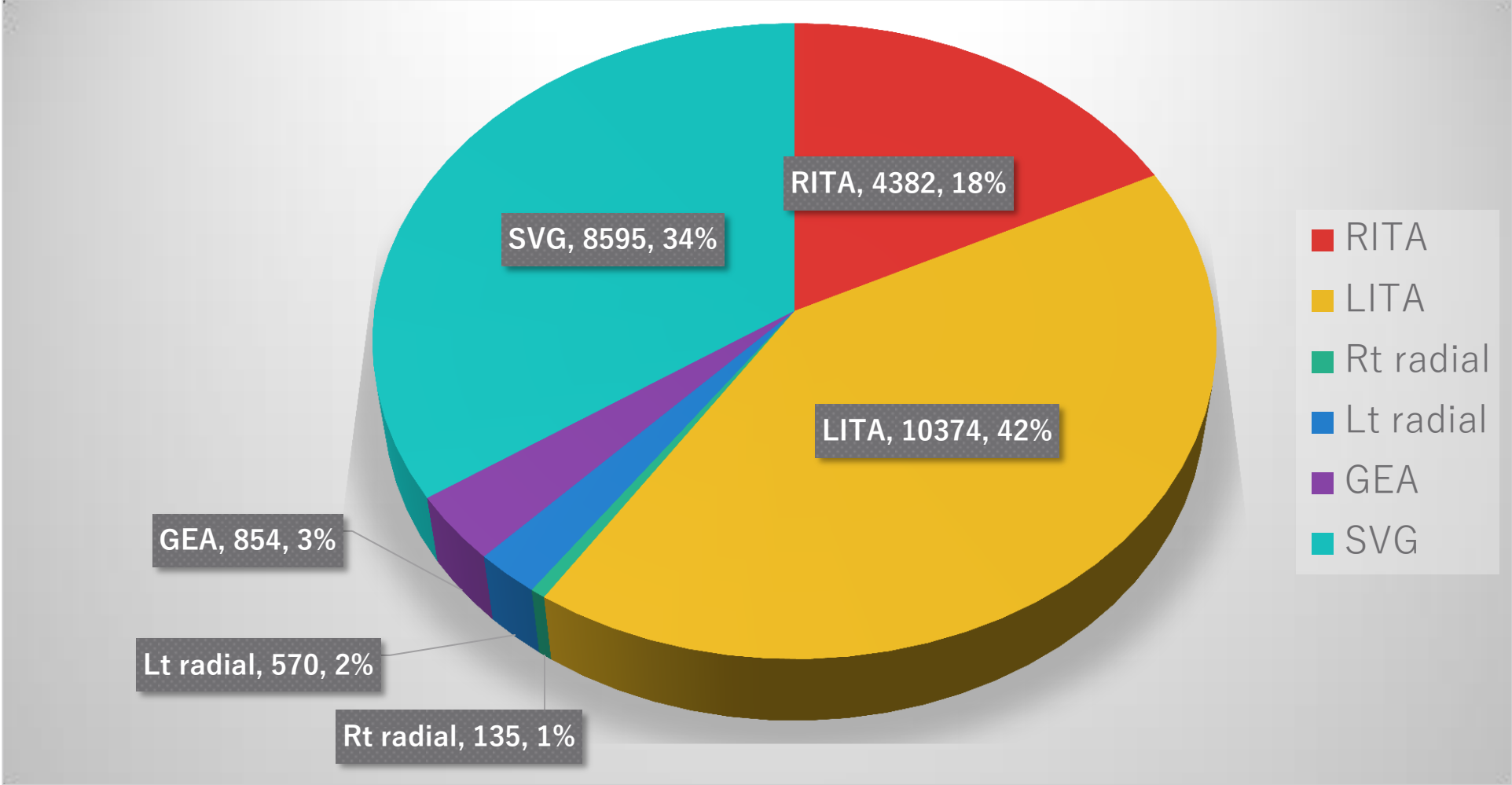
anastomosis	off-pump completed	off-pump converted	on-pump arrest	on-pump beating
1	440	4	35	45
2	933	15	316	261
3	1456	43	631	516
4	874	21	401	264
5=<	435	11	174	99



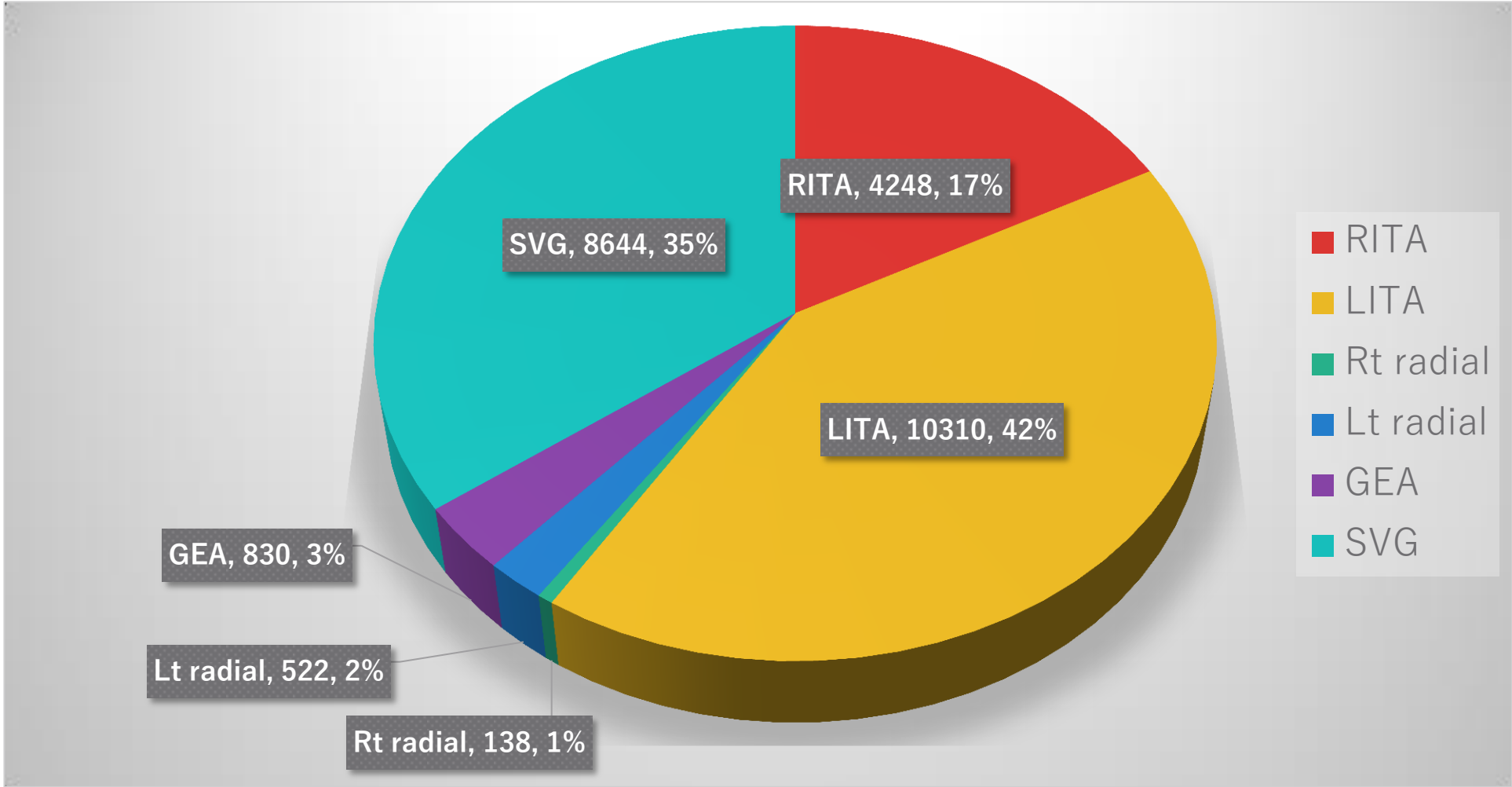
平均吻合数2022 [2021] : 3.1 [3.1]



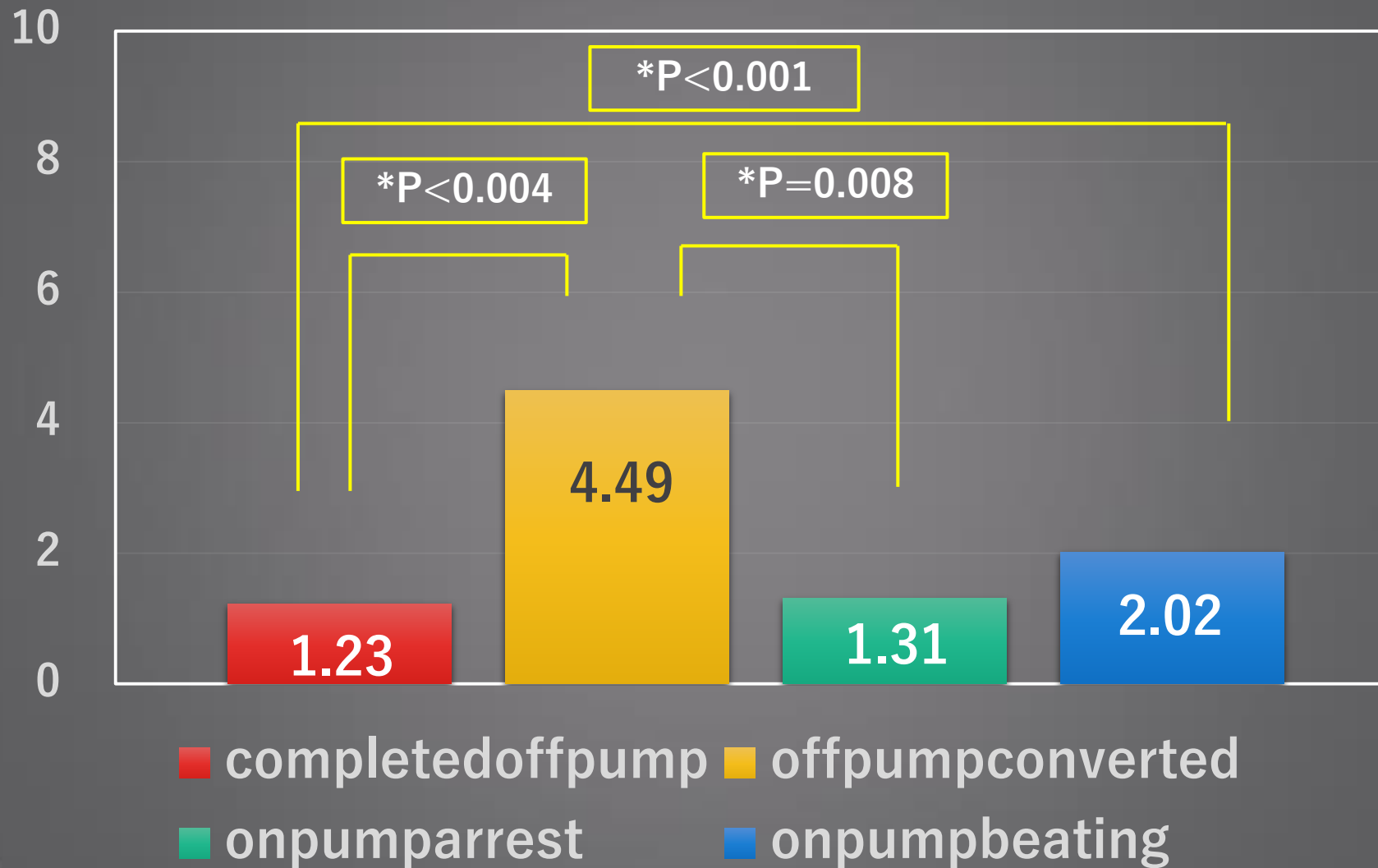
Graft use 2022



Graft use 2021



Stroke rate according to procedures 2022



LV procedure due to AMI 2022

	N	30-day mortality	Operative mortality
Papillary muscle rupture	71	13 (18.3%)	20 (28.2%)
LV free wall rupture	282		
Blow-out type	97	62 (63.9%)	64 (66.0%)
Oozing type	185	41 (22.2%)	52 (28.1%)
LV aneurysm	17	0 (0.0%)	0 (0.0%)



LV procedure due to AMI 2021

	N	30-day mortality	Operative mortality
Papillary muscle rupture	89	17 (19.1%)	24 (27.0%)
LV free wall rupture	270		
Blow-out type	92	38 (41.3%)	47 (51.1%)
Oozing type	175	34 (19.4%)	42 (24.0%)
LV aneurysm	17	0 (0.0%)	0 (0.0%)



Procedures to ischemic MR 2022

		N	30-day mortality		Operative mortality	
Ischemic MR		253	17	6.7%	25	9.9%
	Mitral valve plasty	158	8	5.1%	11	7.0%
	+LV procedure	9	0	0%	0	0%
	Mitral valve replacement	95	9	9.5%	14	14.7%
	+LV procedure	2	0	0%	0	0%

Procedures to ischemic MR 2021

		N	30-day mortality	Operative mortality
Ischemic MR		317	21 (6.6%)	30 (9.5%)
	Mitral valve plasty	201	13 (6.5%)	16 (8.0%)
	+LV procedure	17	1 (5.9%)	1 (5.9%)
	Mitral valve replacement	116	8 (6.9%)	14 (12.1%)
	+LV procedure	8	1 (12.5%)	1 (12.5%)



New Publication in ATCS2023

June 29, 2023

*Special
Report*

Annual Report for 2019 by the Japanese Association for Coronary Artery Surgery

doi: 10.5761/atcs.sr.23-00026

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and Hirokuni Arai^{1,5}

Purpose: Continuous annual reporting on coronary artery bypass grafting (CABG) surgical practice is key for quality control and improvement of clinical results. In this report, Japanese nationwide features and trends in the extent of coronary artery disease and the characteristics of those undergoing CABG procedures in 2019 are presented. Clinical results of related ischemic heart disease are also presented.

Methods and Results: The Japanese Cardiovascular Surgery Database (JCVSD) is a nationwide surgical case registry system. Data regarding CABG cases in the year 2019 (1 January–31 December) were captured with questionnaires regularly administered by the Japanese Association for Coronary Artery Surgery (JACAS). We analyzed trends in the number and types of grafts selected according to the number of diseased vessels in patients undergoing CABG. We also analyzed descriptive clinical results of those undergoing surgery for acute myocardial infarction or ischemic mitral regurgitation.

Conclusions: This is the second publication summarizing the results following the JACAS annual report based on JCVSD Registry data from the year 2019. Clinical outcomes and surgical strategy trends were relatively stable. Further accumulation of information with a similar data collection system is expected.

Keywords: coronary artery bypass grafting, annual report

ご清聴ありがとうございました。