

ICCK REGISTRY DATA PRESENTATION

Statewide Interventional Data

Celebrating Collective Achievement • Elevating Statewide Care

Interventional Cardiology Council of Kerala



"Everybody counts or nobody counts."

— Harry Bosch

*Harry Bosch is the famous detective protagonist created by bestselling crime novelist **Michael Connelly**. Bosch's foundational moral compass dictates that every single human life demands equal dignity and thorough attention.*

Our ICCK Registry Ethos: Whether a Cathlab logs 50 procedures or 5,000, every single patient, operator, and center is essential to depicting the complete health story of Kerala.



Heartfelt Appreciation to all centers



High-Volume Centers

Pioneering high-throughput care and dedicating operational bandwidth to log thousands of complex coronary and structural procedures.



Community Labs

Vital healthcare anchors ensuring rapid, life-saving interventional access across semi-urban and rural regions of the state.



Emerging & Single-Operator Labs

Courageous clinical teams taking the extra step to contribute every single case, completing our state's true healthcare story.

One State, One Collective Care Voice

-  **Unified Statewide Picture:** Our focus is on the total clinical impact across Kerala—not on comparative institutional rankings.
-  **Every Procedure Matters:** Whether a lab performs 10 or 1000 interventions, every recorded case reflects a life saved and enriches our scientific pool.
-  **Dignity & Confidentiality:** Data is aggregated to protect institution specifics while demonstrating our state's overall interventional excellence.



Building an Inclusive Data Culture



Quality Over Volume

A smaller procedure count in a regional lab is as vital as thousands in a tertiary hub. Higher numbers never guarantee better quality—clinical excellence and patient outcomes matter most.



No One-Upmanship

Registry data is a mirror for state-wide learning, not a scoreboard. We celebrate open participation and scientific truth over vanity metrics, fostering mutual respect across centers.



Empowering Young Voices

We encourage early-career cardiologists to present and speak openly. Never fear peer review—ICCK is a supportive community where constructive critique helps us all grow together.

Remember: Share without hesitation. Every single report strengthens Kerala's collective registry and elevates our state's voice on national and international stages.

Publishing Kerala's Data Globally

Inspiring Global Recognition

When 100% of our Cathlabs share their annual numbers, ICCK transforms from a regional registry into a world-class epidemiological powerhouse.

Complete data enables us to publish high-impact studies in renowned international cardiology journals, showcasing Kerala's unique STEMI interventions, structural heart care, and real-world outcomes.

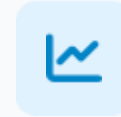
 **Goal: Authoritative publication representing 100% of state Cathlabs.**

The Path Forward: Seamless Monthly Logging



Zero Last-Minute Stress

Logging data monthly takes under 10 minutes, completely eliminating year-end audit panics and resource fatigue.



Real-Time Analytics

Monthly entries provide participating centers with continuous, dynamic insights into seasonal trends and volume growth.



Higher Data Integrity

Frequent updates reduce missing variables and recall bias, ensuring pristine data quality across all participating centers.



Always Publication-Ready

Keeps the ICCK Registry perpetually updated, allowing us to generate research abstracts and papers without delay.

Data Received from
88
Cath Labs



MONTHLY DATA RECEIVED FOR 2026

MONTH 2026	DATA RECEIVED
January	108
February	94
March	91
April	82
May	72
June	47
July	23



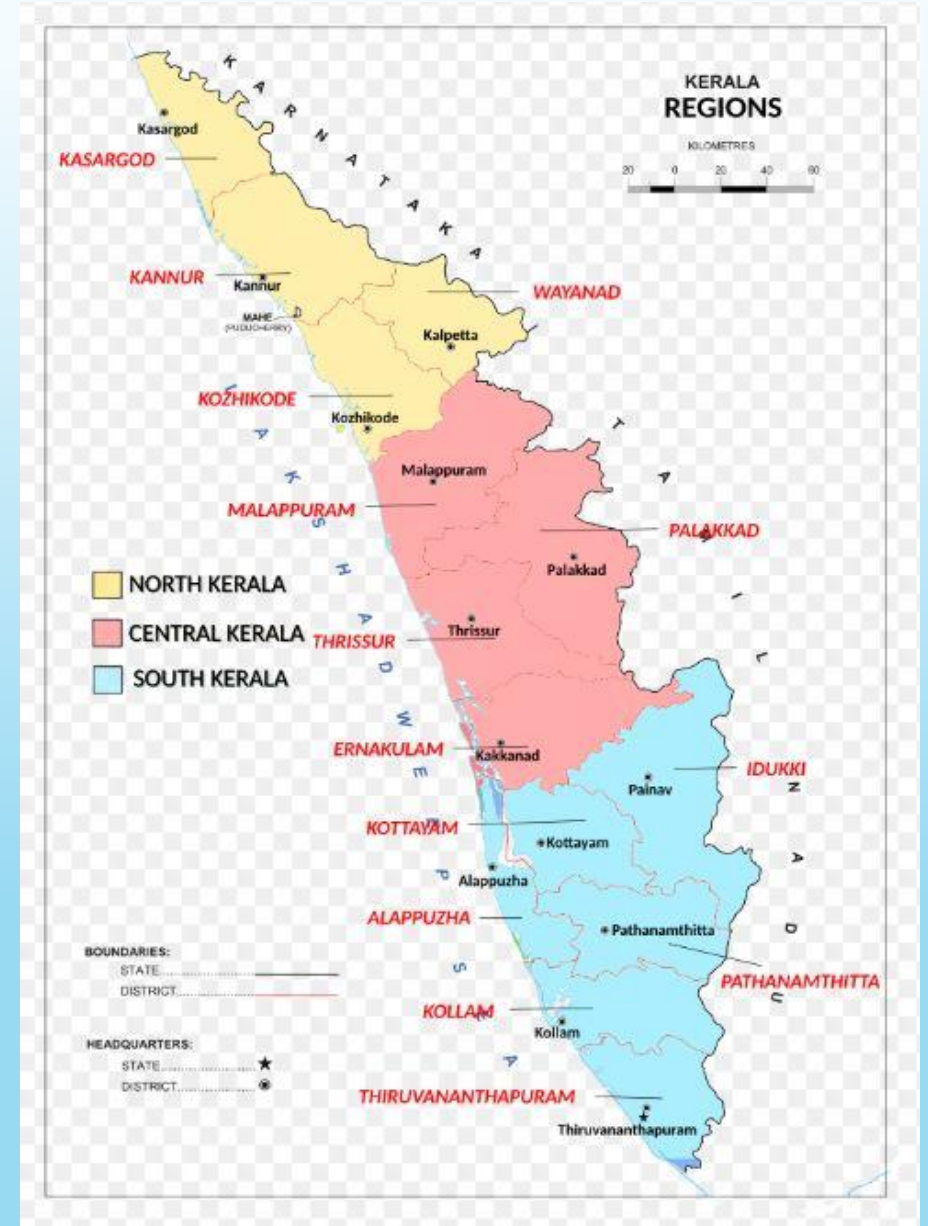
TOTAL CATH LABS

NORTH ZONE - 51

CENTRAL ZONE - 54

SOUTH ZONE - 45

HOSPITALS WITH MORE THAN ONE CATH LAB: 31





Total number of Interventional Cardiologists registered with ICCK - 378





Total Centers / Hospitals - **150**

Data Received from **88** Centres

Sites with Hybrid Cath labs - **12**



SUMMARY OF PROCEDURES 2025

☐ Total procedures performed in all center	-	149237
☐ Total Coronary Angiogram in all centres	-	74341
☐ Total Coronary Angioplasty (including Primary)	-	52671
☐ Total AMI patients admitted at the Centres	-	19914
☐ Total Primary PCI (including Rescue PCI)	-	14204
☐ Total Peripheral Angioplasty	-	2407



SUMMARY OF PROCEDURES 2025 (CONTINUED...)

☐ Total Valvuloplasty (BMV, BAV & BPV)	-	354
☐ Total TAVR/TAVI	-	374
☐ Total Adult Structural Devices (ASD, VSD & PDA)	-	706
☐ Total Septal Ablation for HOCM	-	24
☐ Total PFO Closures	-	58
☐ Total other interventions	-	6,511



TOP GOVERNMENT CENTRES PERFORMING ANGIOPLASTY

#	HOSPITAL NAME
1	GOVT MEDICAL COLLEGE, THIRUVANATHAPURAM
2	GOVT MEDICAL COLLEGE, KOZHIKODE
3	GOVT MEDICAL COLLEGE, KOTTAYAM
4	GENERAL HOSPITAL, ERNAKULAM
5	GOVT MEDICAL COLLEGE VANDANAM, ALAPUZHA
6	SREE CHITRA TIRUNAL INSTITUTE OF MEDICAL SCIENCE, THIRUVANATHAPURAM
7	GOVT MEDICAL COLLEGE, THRISSUR
8	GOVERNMENT MEDICAL COLLEGE MANJERI, MALAPPURAM
9	GOVT MEDICAL COLLEGE, WAYANAD

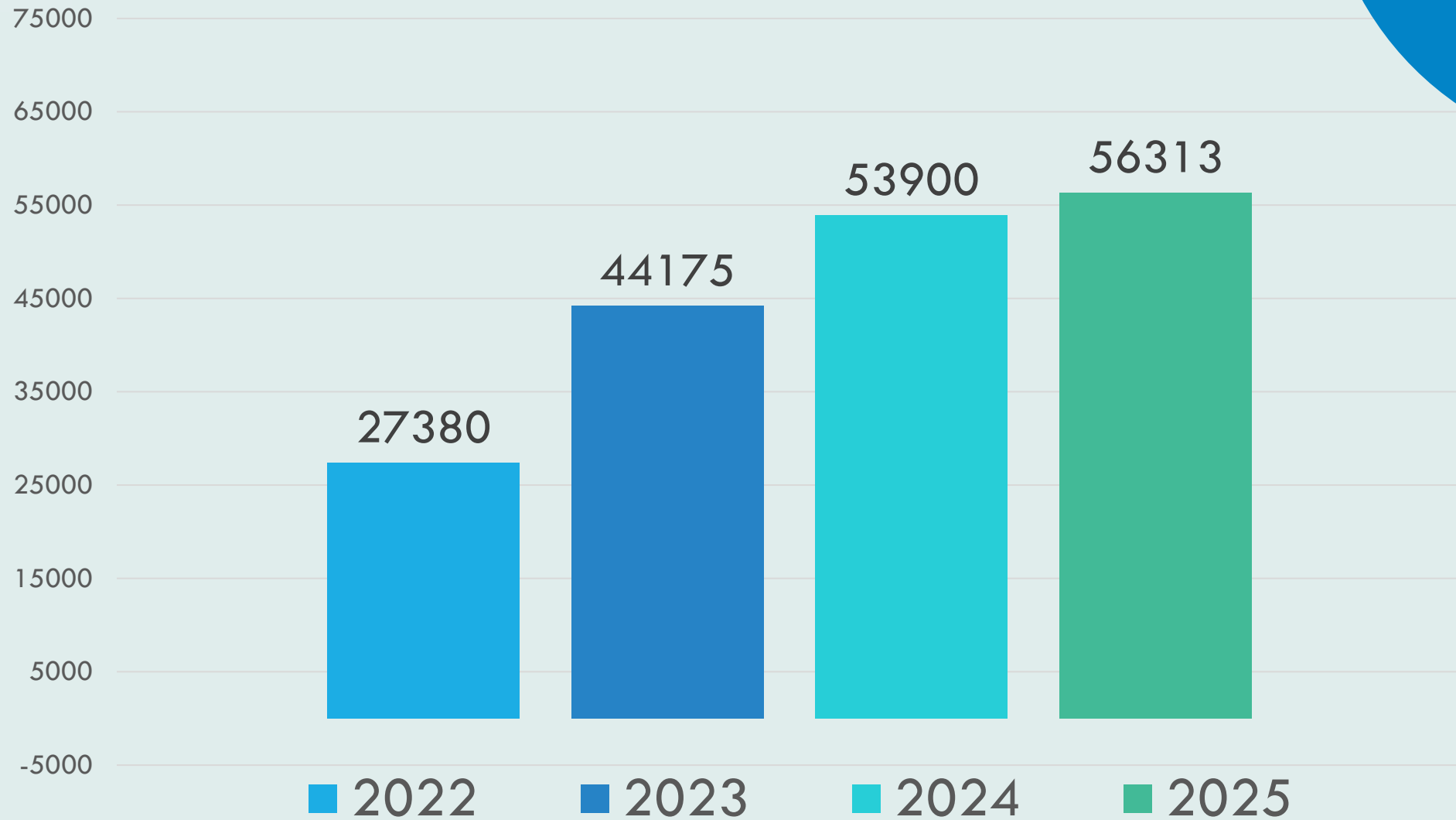


TOP 10 PRIVATE CENTRES PERFORMING ANGIOPLASTY

#	HOSPITAL NAME
1	CARITAS, KOTTAYAM
2	METROMED CARDIAC CENTRE, KOZHICODE
3	LISIE HOSPITAL, ERNAKULAM
4	ASTER MIMS - HEARTS MALABAR CARDIAC CENTRE, MALAPURAM
5	KIMS, THIRUVANATHAPURAM
6	ASTER MIMS, KANNUR
7	ASTER MIMS, KOZHICODE
8	NS HOSPITAL, KOLLAM
9	MOTHER CARE HOSPITAL, PALAKKAD
10	ASTER MEDCITY, ERNAKULAM

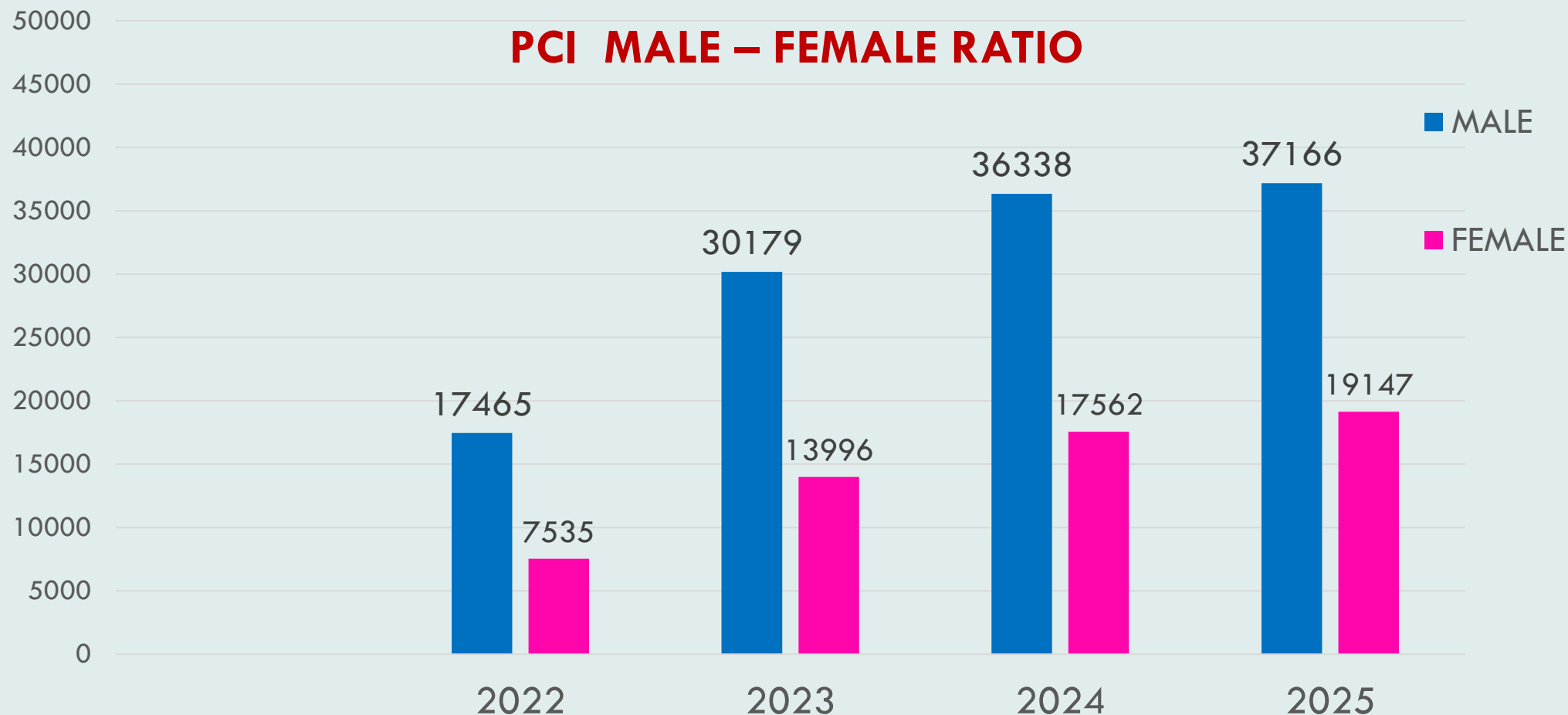


PCI – KERALA GROWTH



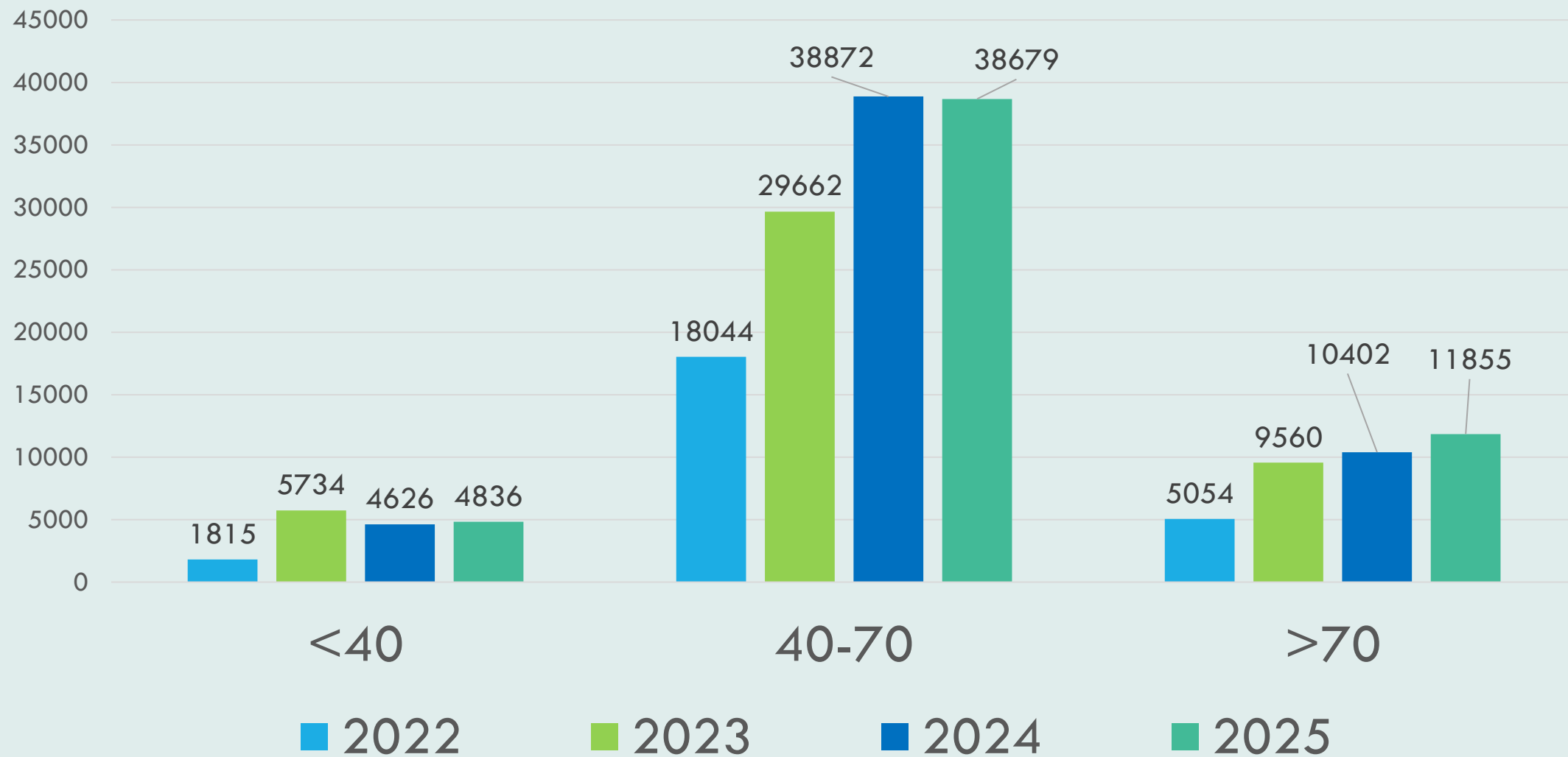


GROWTH DATA BASED ON GENDER





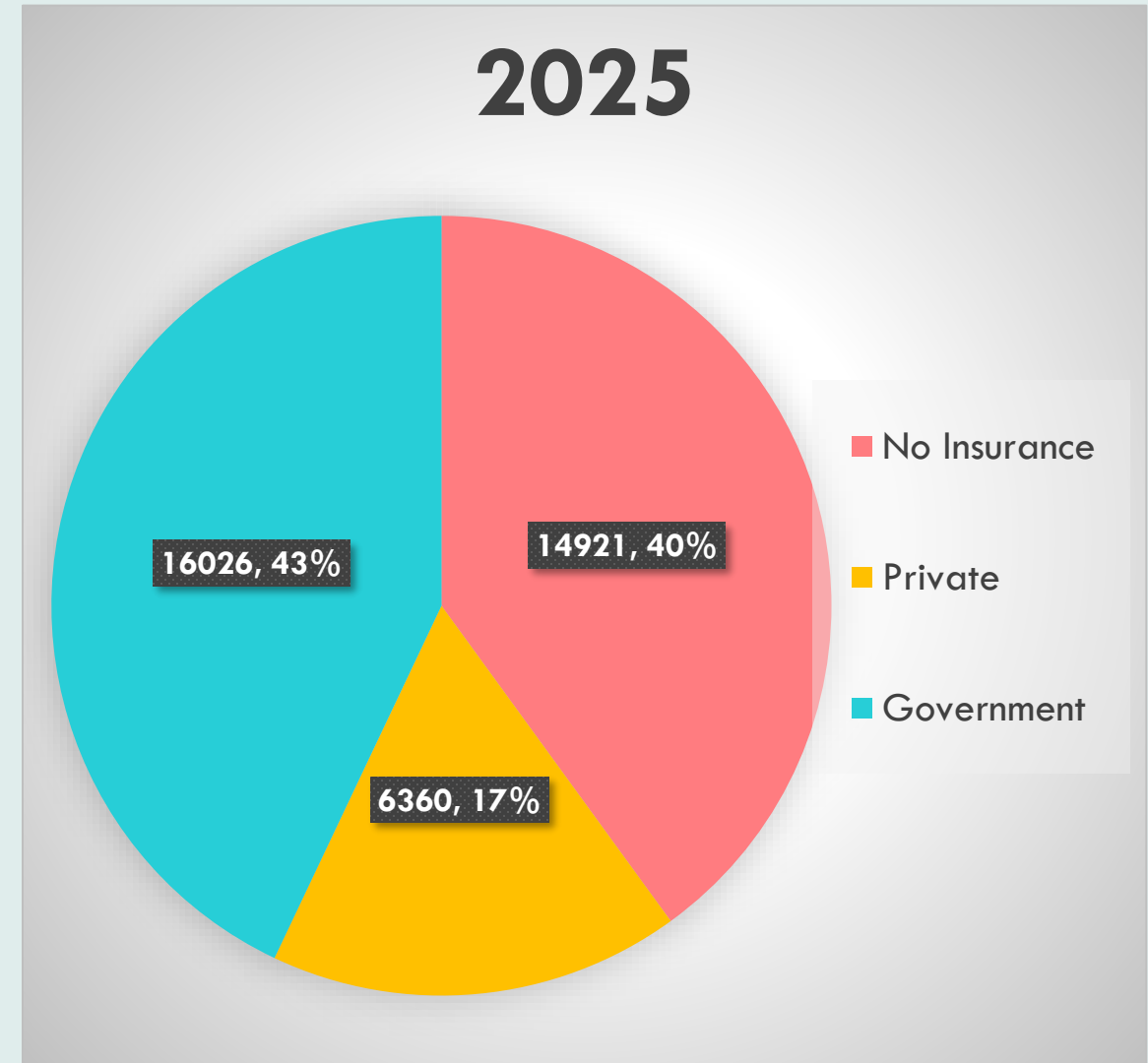
GROWTH DATA BASED ON AGE GROUP





INSURANCE

	Total Numbers	Percentage
No Insurance	14921	40%
Government	16026	43%
Private	6360	17%





HISTORY & RISK FACTORS (IN PATIENTS UNDERGOING PCI)

RISK FACTORS	NUMBERS
Hypertension	21748
Diabetes Mellitus	21431
Dyslipidaemia	17602
Family History of Premature CAD	7585
Prior MI	6341
Prior PCI	5658
Prior CABG	1212
Cerebrovascular Disease	1100
Peripheral Arterial Disease	2489
Chronic Lung Disease	2736
Smoking	7831



INDICATIONS FOR PCI

#	INDICATIONS FOR PCI	NUMBER
1	PCI for Primary PCI	12965
2	PCI for Post MI (after 24 hours of onset of chest pain)	4043
3	Rescue PCI	2128
4	PCI in NSTEMI	10027
5	PCI for Unstable Angina	7413
6	PCI for Cardiogenic Shock	1264
7	PCI for Chronic Stable Angina	6687
8	Of all PCI cases : Total needing Emergency CABG	325



CATH RESOURCE UTILIZATION

#	RESOURCE USED	TOTAL
1	DIAGNOSTIC Caths	36275
2	IVUS	4250
3	OCT	2276
4	ROTA	711
5	IVL	250
6	Orbital	225
7	ELCA	260
8	Thrombectomy device use in Primary PCI	3125
9	Distal Protection Device	69
10	Number of patients where FFR is performed	711
11	Number of patients where RFR is performed	366
12	Number of patients where IFR is performed	43
13	Number of patients where IABP used	167
14	Number of patients where ECMO used	10
15	Number of patients where IMPELLA used	49

Data from Industry Source
- IVUS 5500



INTERVENTIONAL PROCEDURES

#	PROCEDURES	NUMBER
1	Total number of Balloon only Procedures (POBA)	3331
2	Total number of procedures in which Drug eluting stents were used	119985
3	Total number of procedures in which Drug eluting balloons were used	5719
4	Total number of procedures where GP IIb/IIIa blockers were used	2310
5	A. Total number of procedures where Absicximab was used	20
6	B. Total number of procedures where Eptifibatide was used	123
7	C. Total number of procedures where Tirofiban was used	11943
8	Total number of procedures where Bivalirudin was used	0
9	Total number of procedures where Groin Closure Device was used	1294
10	Total number of procedures where Microcatheters were used	2559

Data from
industry
source



PTCA

#		NUMBER
1	Total number of Multivessel PCI	15371
	A. Elective	13492
	B. Primary	2902
2	Total number of PCI for LAD lesions	25576
3	Total number of PCI for RCA lesions	16788
4	Total number of PCI for LCX lesions	11008
5	Total number of PCI for CTO	2483
6	Total number of Bifurcation PCI	3726
7	Total number of Left Main PCI	3337
	A. Primary	363
	B. Elective	2811
8	Total number of SVG PCI	297
9	Total number of LIMA PCI	58
10	Total number of PCI for in-stent restenosis	1977
11	Total number of PCI for Ostial lesions	4890



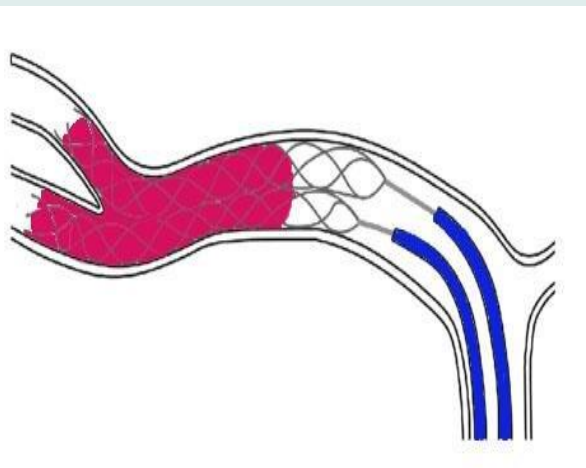
LMCA PCI

#	LMCA PCI	TOTAL
1	Total number of LMCA PCI	3120
2	Total number of LMCA where IVUS is used	1216
3	Total number of LMCA where OCT is used	477
4	Total number of LMCA where ROTABLATOR is used	138
5	Total number of LMCA where No Imaging used	1088
6	Total number of LMCA for Distal Bifurcation	1252
7	Total number of LMCA where 2 Stent Technique is used	592
8	Total number of LMCA for Ostial & Shaft Disease	581



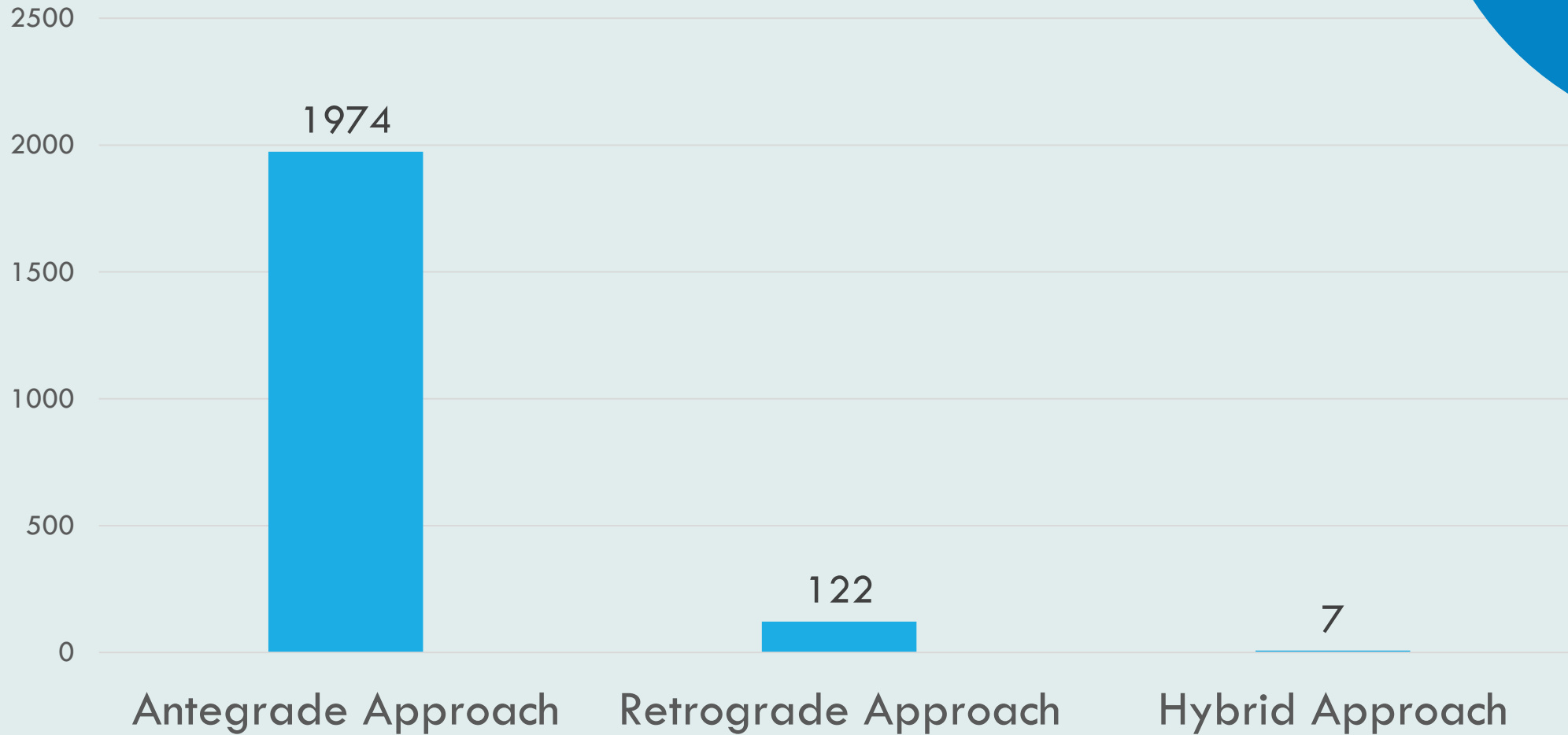
BIFURCATION PCI TECHNIQUE

Technique	Total Numbers
Provisional Stenting	3538
Bifurcation PCI with 2 Stent	831
DK Crush	367
Mini Crush	492
Culotte	192
T or TAP	360
SKS	519
Other Technique	64





CTO





CTO

(CONTINUED)

		TOTAL
1	Total No of CTO Procedures	2562
2	No. of procedures where CTO Imaging is done	271
3	Antegrade Approach – Total no. Wires in all cases together	2957
4	Antegrade Approach – Total no. of Microcatheters in all cases together	1335
5	Antegrade Approach – Success Percentage	92%
6	Retrograde Approach – Total no. Wires in all cases together	427
7	Retrograde Approach – Total no. of Microcatheters in all cases together	167
8	Retrograde Approach – Success Percentage	76%



CTO PROCEDURES - TOP CENTERS

#	CENTERS NAME
1	GOVT MEDICAL COLLEGE, KOZHICODE
2	GOVT MEDICAL COLLEGE VANDANAM, ALAPUZHA
3	LISIE HOSPITAL, ERNAKULAM

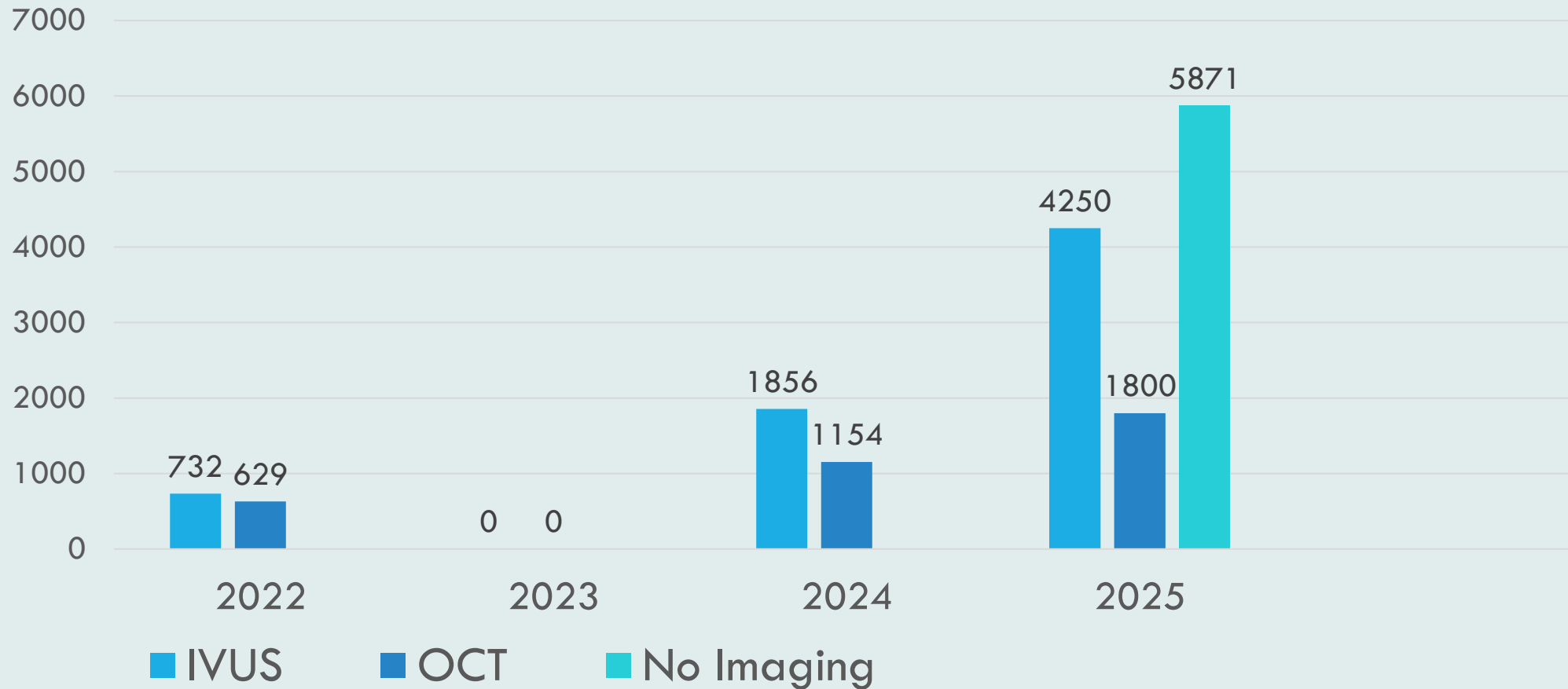


CALCIUM MANAGEMENT DEVICES

		TOTAL
1	Total number of Cutting Balloon used	2028
2	Total number of Scoring Balloon used	2628
3	Total number of OPN Balloon used	196
4	Total number of IVL used	250
5	Total number of Rotablator used	750
6	Total number of Laser used	266
7	Total number of Orbital Atherectomy used	181



GROWTH OF IVUS / OCT /NO IMAGING COMPARED TO PREVIOUS YEARS



Note: Imaging data is not available
for the years 2022 to 2024



DES USED

#	COMPANY NAME
1	Abbott
2	Purple micro port
3	Meril
4	Medtronic.
5	SMT.
6	Innvolution.
7	Veiva Scientific
8	Terumo
9	Boston.
10	Relisis
11	SLTL.
12	Biosensors.
13	Abluminus.



DRUG COATED BALLOON (DCB) USE -TOP 6

#	DCB	Nos
1	MAGIC TOUCH	1780
2	PREVAIL	1120
3	MOZEC	1061
4	AGENT	800
5	PROTEGE	558
6	SELUTION	400



INTRA & POST PROCEDURE EVENTS

		TOTAL
1	Total number of Death on table	97
	A. In Elective PCI	60
	B. In Primary PCI	156
2	Number of Acute Stent Thrombosis	138
3	Number of In-hospital MI	379
4	Number of In-hospital Deaths	291
5	Number of In-hospital Deaths in Primary PCI	202
6	Number of Acute Kidney Injury in Total PCI	132
7	Number of Post-Procedure Hemodialysis	88



INTRA & POST PROCEDURE EVENTS

(CONTINUED...)

#	PROCEDURE	TOTAL
8	Number of Repeat Target Vessel Revascularization	125
9	Number of Major Bleeding following PCI	61
	A. Access site Bleeding	240
	B. Other Bleeding Complication	76
10	Number of Coronary Perforation	40
	A. Number of patients required pericardiocentesis	117
	B. Death following Coronary Perforation	10



NON-CORONARY INTERVENTION

VALVE BALLOON-ONLY TREATMENT

Mitral Balloon Valvuloplasty – 224 Cases

Aortic Balloon Valvuloplasty – 31 Cases

Tricuspid Balloon Valvuloplasty – 2 Cases

Pulmonary Balloon Valvuloplasty – 105 Cases



TAVI

#	Tavi	Nos
1	Myval	218
2	Evolute	114
3	Hydra	34
4	Purple	4
5	Relisis	2
6	Edwards	2



CLOSURE DEVICE

#	CLOSURE DEVICE	Nos
1	ASD Closure	835
2	PFO Closure	30
3	PDA Closure	214
4	VSD Closure (Congenital)	57
5	Post Myocardial Infarction VSD Closure	8



OTHER INTERVENTIONS

Alcohol Septal Ablation for HOCM - 19

Left Atrial Appendage Occlusion Device
Implantation - 11



ARTERIAL PERIPHERAL INTERVENTIONS

#	PROCEDURE	Nos
1	No. of Peripheral Interventions done by Interventional Cardiologist	1209
2	No. of Peripheral Interventions done by Vascular Surgeons	301
3	No. of Peripheral Interventions done by Radiologist	1036
4	Total number of Carotid Interventions	340
5	Total number of Renal Interventions	98
6	% Intervention with balloon only for Renal Interventions	54%
7	Aortic Coarctation (or Re-Coarctation)	59
8	% Intervention with balloon only for Aortic Coarctation	46%



ARTERIAL PERIPHERAL INTERVENTIONS

(CONTINUED...)

#	PROCEDURE	Nos
9	Aortic Dilatation (other than Coarctation) – Takayasu Arteritis	0
10	Aortic Dilatation (other than Coarctation) – Atherosclerosis	18
11	Percutaneous graft for Aortic Aneurysm	63
12	Pulmonary Artery Dilatation	43
13	Iliac Interventions – CFA/SFA	926
14	Iliac Interventions – Popliteal	633
15	Iliac Interventions – Below Knee Intervention	937
16	Iliac Interventions – Catheter Directed Thrombolytic Therapy/Thrombectomy	79



VENUS PERIPHERAL INTERVENTIONS

#	INTERVENTIONS	Nos
1	DVT Interventions	37
2	EVLT for Varicose Veins	613
3	Interventions for Occluded Dialysis Access	579
4	Interventions for Pulmonary Embolism	34
5	IVC Filter	130



PERIPHERAL INTERVENTIONS WITH ABDOMINAL AORTIC ANEURYSM

Anatomical Location	Open Procedures	Endovascular Procedures	Procedures with Complications
Abdominal	2	56	1
Thoracic	1	21	0
Thoracic - Abdominal	3	13	1



OTHER PERIPHERAL INTERVENTIONS

1	CEREBRAL ANEURYSM COILING	4
2	CHOLECYSTOSTOMY	1
3	JET STREAM ROTATIONAL ATHERECTOMY	1
4	ORBITAL ATHERECTOMY	2
5	RADIAL FISTULO PLASTY FOR DIALYSIS PT	1
6	PTBD INSERTION	1
7	RDN	3
8	RPG (PEG INSERTION)	1
9	UTERINE ARTERY EMBOLISATION	2



SUMMARY OF PAEDIATRIC PROCEDURES

Angiography and Catheterizations - 483

Cath for Operability - 315



NEONATAL INTERVENTIONS

#	Neonatal Interventions	Numbers
1	BAS	15
2	AVBD	21
3	PVBD	46
4	CoA Dilatation	23
5	Pulmonary Valve Perforations	1
6	PDA Stenting	56



DEVICE THERAPIES

#	Device Therapies	Numbers
1	ASD	531
2	VSD Muscular	22
3	VSD Peri membranous	32
4	VSD Residual	0
5	PDA	224
6	RSOV	7
7	AP Window	1
8	Paravalvular Leak	3
9	BT Shunt	0
10	Large Collaterals	7
11	Coronary cameral fistula device closure	1



BALLOON THERAPIES

#	Balloon Therapies	Numbers
1	AVBD (BAV)	43
2	PVBD (BPV)	126
3	PV Perforation – PVBD	3
4	PTMC (BMV)	22
5	CoA Dilatation	35
6	PTA	481
7	Renal Angioplasty in Children	0
8	Coronary Interventions in Children	0
9	Obstructed TAPVC	0
10	Bas in infants and older children	7



STENTS IN CHILDREN

#	Stents in Children	Numbers
1	CoA Stenting	12
2	Covered Stents for CoA	2
3	PDA Stenting	45
4	Aortic Stents (Non CoA)	3
5	Renal and Peripheral	1
6	Coronary Interventions in Children	0
7	Vertical Vein Stenting	0
8	Collateral Stenting	1
9	Pulmonary Artery Stenting	22
10	Atrial Septal Stenting	4



CARDIAC DEVICE IMPLANTATION

#	SUMMARY OF PROCEDURES	NUMBERS
1	Single Chamber Pacemaker	481
2	Dual Chamber Pacemaker	1923
3	Hisbundle Pacing	29
4	Leftbundle Pacing	302
5	CRT-P	126
6	CRT-D	163
7	ICD	349
8	Lead Extraction	24
9	Pulse Generator Replacements	372
10	Implantable Loop Recorders	2
11	Upgradation from Pacemaker to CRT	14
12	Upgradation from Single Chamber to Dual Chamber Pacemaker	10

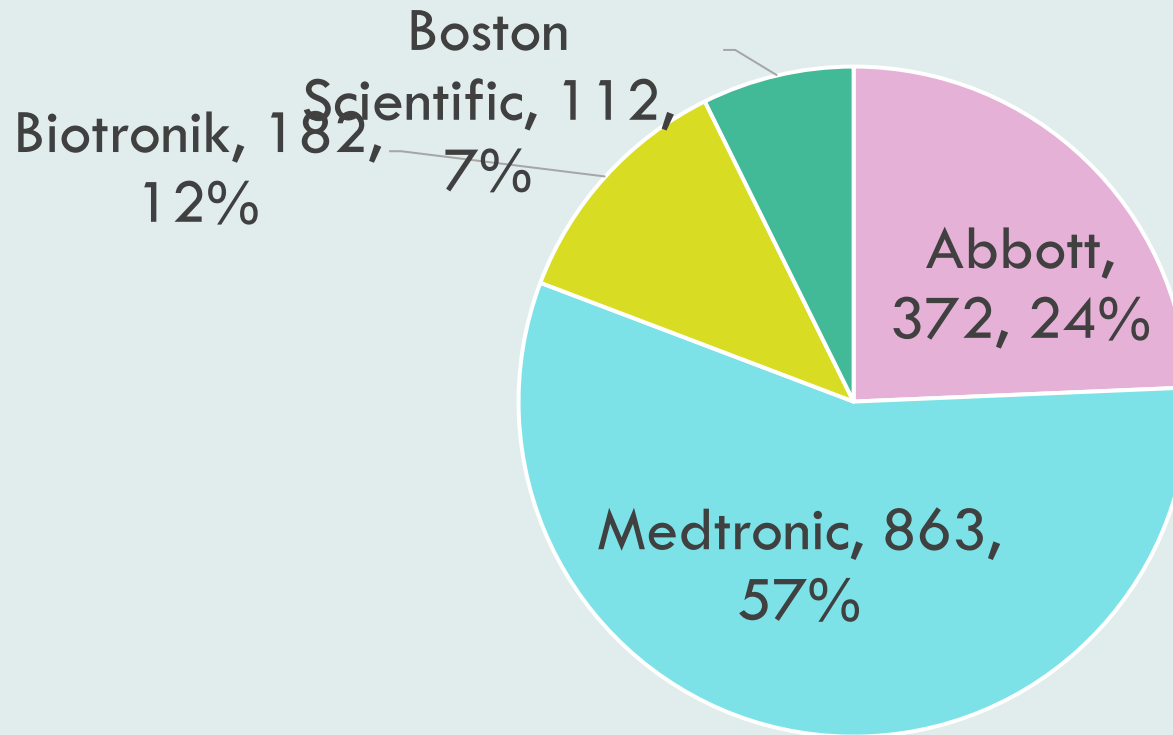


INDICATIONS FOR DEVICE IMPLANTS

#		Numbers
1	Sclerodygenerative CHB	391
2	CHB – Post OP	155
3	Sick Sinus Syndrome	345
4	AF with Bradycardia	68
5	Cardio Neurogenic Syncope	19
6	Congenital CHB	16
7	Others for Pacemaker implant	117
8	ICD implant in Primary Prevention	75
9	ICD implant in Secondary Prevention	36



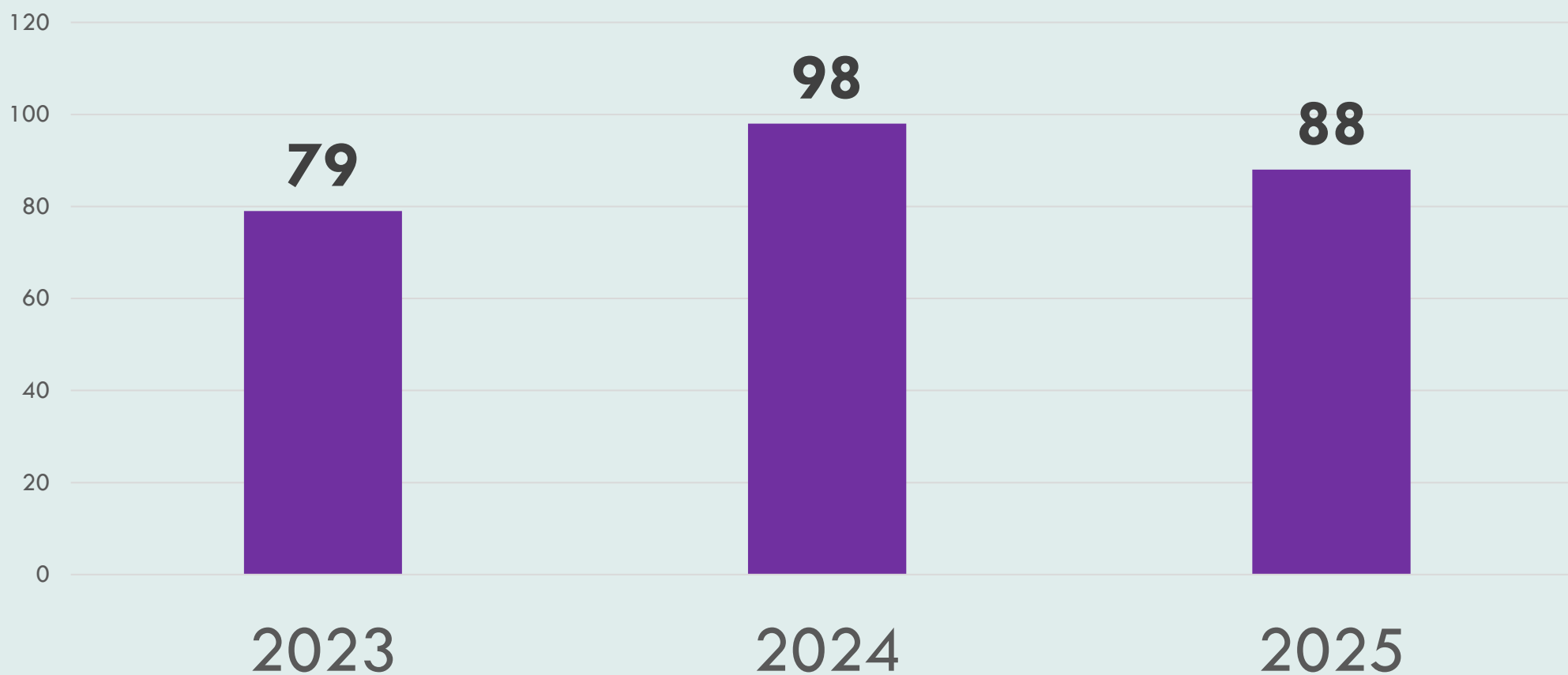
NUMBER OF DEVICE / COMPANY



■ Abbott ■ Medtronic ■ Biotronik ■ Boston Scientific



NUMBER OF CENTRES CONTRIBUTING TO DATA COLLECTION





TOP PERFORMING 10 CENTRES 2025

(BASED ON TOTAL PROCEDURES PERFORMED IN THE CENTRE)

#	CENTRE NAMES
1	CARITAS HOSPITAL, KOTTAYAM
2	LISIE HOSPITAL, ERNAKULAM
3	GOVT MEDICAL COLLEGE , KOTTAYAM
4	GOVT MEDICAL COLLEGE, THIRUVANATHAPURAM
5	GOVT MEDICAL COLLEGE, KOZHICODE
6	GOVERNMENT HOSPITAL, ERNAKULAM
7	ASTER MIMS - HEARTS MALABAR CARDIAC CENTRE, MALAPURAM
8	ASTER MEDCITY , ERNAKULAM
9	METROMED CARDIAC CENTRE, KOZHIKODE
10	ASTER MIMS, KANNUR



THANKS TO.....

All Centres for sending data.