Annual Report of Cardiovascular Surgery 2011
Nagasaki University

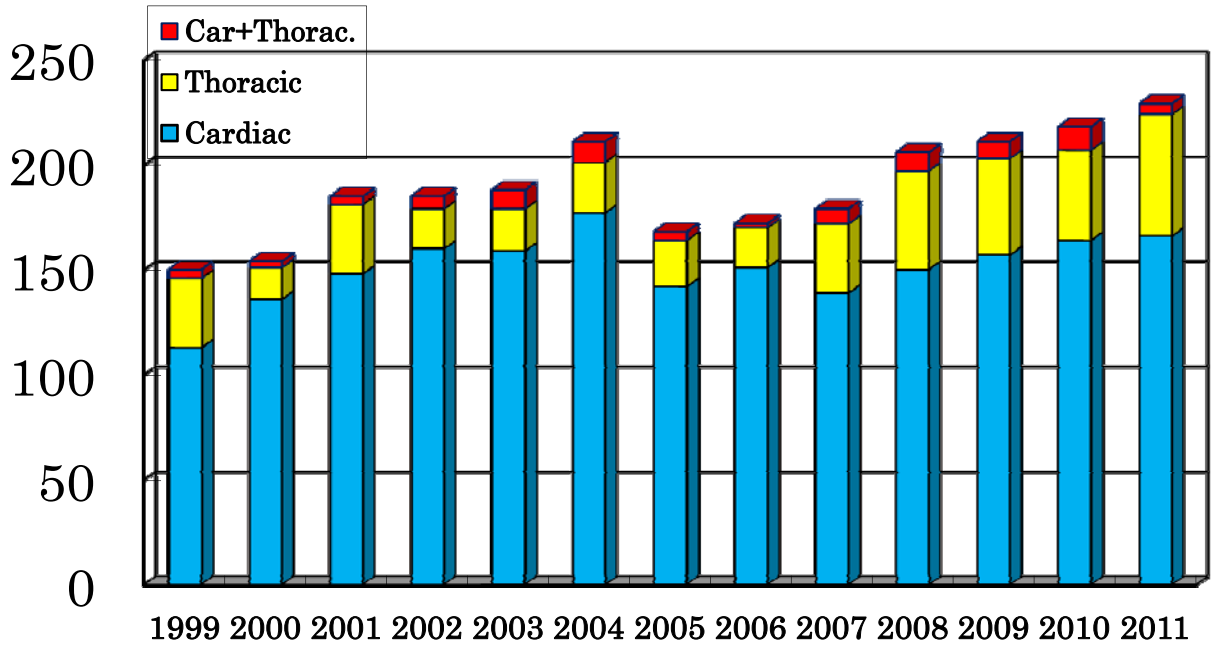
2011.1～2011.12

～Overall～

Ⅰ. Number of Operations and Surgical mortality

Division	No. Cases	No. OP.	OP. mortality (%)	Hosp. mortality (%)
Cardiac Thoracic	165 58	166 58	2 (1.2) 5 (8.6)	4 (2.4) 5 (8.6)
Car. + Thoracic	5	5	0	0
Total	228	229	7 (3.0)	9 (3.9)
Abdominal aorta Periphearal artery	58 40	58 40	0 0	1 (1.7) 0

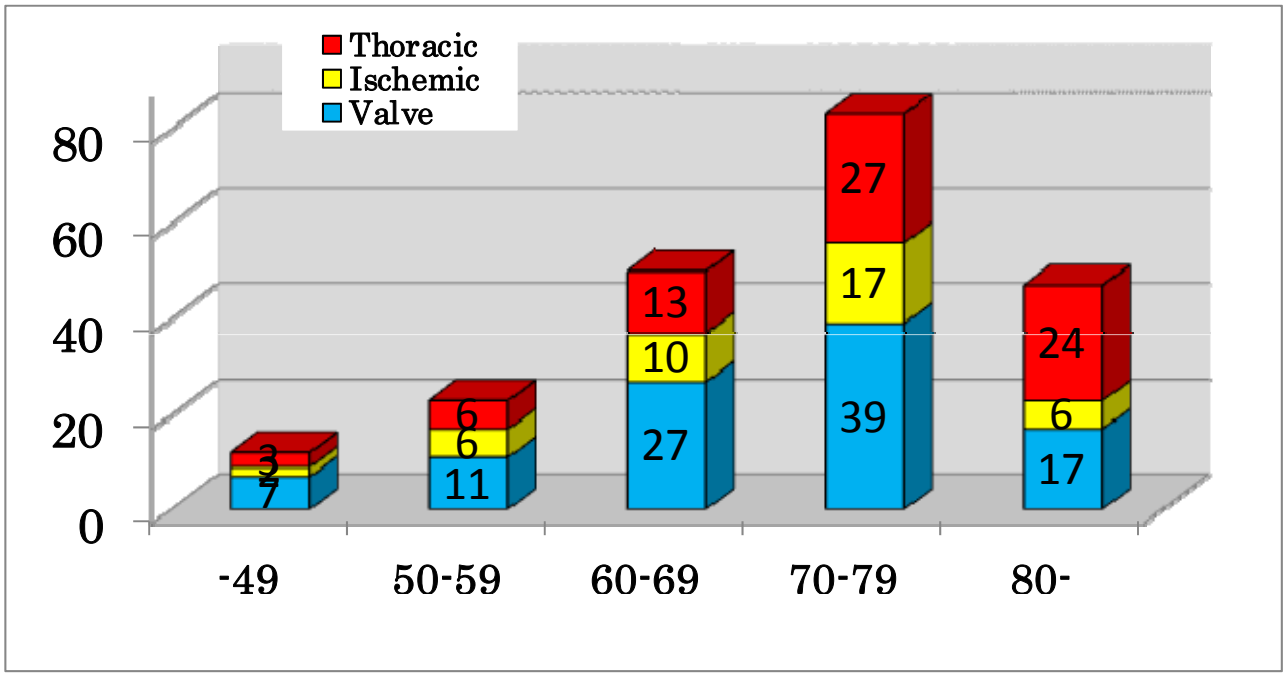
Operations



Ⅱ. Mode of Operation

	total	Scheduled (%)	Urgent (%)	Emergent (%)
Ischemic	41	32 (78.0)	5 (12.2)	4 (9.8)
Valvular	101	94 (93.1)	5 (5.0)	2 (1.9)
Congenital	9	9 (100)	0	0
Others	15	7 (46.7)	2 (13.3)	6 (40.0)
Thoracic aorta	63	34 (54.0)	5 (7.9)	24 (38.1)
Abdominal aorta	58	53 (91.3)	0	5 (8.7)
Peripheral artery	42	16 (38.1)	2 (4.8)	24 (57.1)
Total	329	245 (74.5%)	19 (5.8%)	65 (19.7%)

Ⅲ. Age Distribution



～Summary of Cardio-Vascular Division～

Ⅰ. Number of Operations and Surgical Mortality

	No. Cases	No. OP.	OP. mortality (%)	Hosp. mortality (%)
Cardiac				
Valvular	107	108	1 (1.0)	3 (2.8)
(redo)	(11)			
Ischemic	62	62	1 (1.6)	1 (1.6)
Congenital	11	11	0	1 (10.0)
Others	16	16	0	0
Vascular				
Thoracic aorta	63	63	5 (7.9)	5 (7.9)
(redo)	(10)			
(Stent graft)	(19)			
Abdominal aorta	58	58	0	1 (1.7)
(Stent graft)	(20)			
Peripheral artery	42	42	0	0

Concomitant Procedure
Valvular(only): 81 cases
CABG(only): 41 cases
Congenital(only): 9 cases
Others : 15 cases
Thoracic aorta(only): 58 cases
Valvular + CABG: 17 cases
Valvular + Thoracic aorta: 3 cases
Valvular + Congenital: 5 cases
Valvular + Others: 1 cases
CABG + Thoracic aorta: 2 cases
Valvular + CABG + Congenital: 1 case

Ⅱ. Valvular Heart Disease

	No. Cases	No. OP	OP mortality (%)	Hosp. mortality (%)
Aortic *	50	50	0	1 (2.0)
Mitral	37	38	0	0
Tricuspid	3	3	1 (33.3)	1 (33.3)
Pulmonary	1	1	0	1 (100)
Combined				
A+M	4	4	0	0
A+T	2	2	0	0
M+T	8	8	0	0
A+M+T	2	2	0	0
Total	107	108	1 (0.9)	3 (2.7)

*** Bentall ope 2 cases**

a) Mitral valve disease

Diagnosis

MR	MSr	MsR	MS	MSR	Total		MVR (%)	Repair (%)
44	0	0	4	3	51		11 (21.6%)	40 (78.4%)

b) Mitral valve repair

Etiology

Congenital	Infectious	Degenerative	Dilation	Ischemic	DCM
1	2	28	5	3	1

Post ope. follow up

Jet area	No. Ope	Post ope. (discharge)	Follow (～12M)
non to trivial (0-2cm2)	40	35	23
mild (2-4cm2)	0	4	6
mild to moderate (4-8cm2)	0	0	2
moderate to severe (8cm2-)	0	1	0

c) Valve Substitutes implanted 74 Prostheses

	Mechanical	Tissue	Total
AVR MVR TVR PVR	24 7 1 0	34 4 3 1	58 11 4 1
Total	32 (43.2%)	42 (56.8%)	74

d) 右小開胸下心臓手術 (MICS)

Procedure	Case
MP	14
MVR	2
ASD	1
LA Myxoma	1

Ⅲ. Ischemic Heart Disease

	Total	Isolated CABG	OP. mortality(%)	Hosp. mortality(%)
SVD	9	2	0	0
DVD	12	6	0	0
TVD	24	17	1 (4.2)	1 (4.2)
LMT	17	16	0	0
Total	62	41	1 (1.6)	1 (1.6)

Off pump CABG : 7 cases　　On pump beating CABG : 13 cases

a) Conduit　　150 (2.4 / patient)

	Artery	SVG	Cases
SVD	5	4	9
DVD	10	11	12
TVD	38	35	24
LMT	24	23	17
Total	77 (51.3%)	73 (48.7%)	62

b) Anastomoses　　160 (2.6 patient)

No. Anastomoses	No. Cases (%)
1	13
2	13
3	24
4	11
5	1
6	0
Total	62
Total anast.	160

b') Anastomoses by OPCAB
12 (1.7 / patient)

No. Anastomoses	No. Cases
1	3 (3)
2	3 (10)
3	1 (7)
4	0
5	0
Total	7 (20)
Total anast.	12 (44)

c) Anastomoses

No. Anastomoses	1	2	3	4	5	No. OP
SVD	9	0	0	0	0	9
DVD	3	9	0	0	0	12
TVD	1	2	14	6	1	24
LMT	0	2	10	5	0	17
Total	13	13	24	11	1	62
Total anast.	13	26	72	44	5	160

d) Graft patency

	Anastomoses	Examined	Patent	Rate**	Stenosis*	Rate***
SVG	83	46	44	95.6	1	93.5
Artery	77	38	37	97.4	0	97.4
LITA	52	26	25	96.2	0	96.2
RITA	22	11	11	100	0	100
GEA	3	1	1	100	0	100
Total	160	84 (52.5%)	81	96.4 (%)	1	96.2 (%)

Intervention : 2 case

*Stenosis : ≧90%
**patency rate (excl.stenosis)
*** patency rate (incl.stenosis)

Ⅳ. Congenital Heart Disease

	No. Cases	No. OP.	OP. mortality (%)	Hosp. mortality (%)
ASD	6	6	0	0
VSD	2	1	0	0
TOF(conduit)	1	1	0	1 (100)
PDA	1	1	0	0
VSA(Valsalva)	1	1	0	0
Total	11	11	0	1

Ⅴ. Others

	No. Cases	No. OP.	OP. mortality (%)	Hosp. mortality (%)
Cardiac tumor	5	5	0	0
Constrictive pericarditis	2	2	0	0
LV aneurysm/rupture	2	2	0	0
VAS implantation	1	1	0	0
Pulmonary embolism	1	1	0	0
LA thrombus	2	2	0	0
Others	3	3	0	0
Total	16	16	0	0

Ⅵ. Maze operation

	No. Cases	Sinus recovery	(%)
Cryoablation	11	6	66.7%

Ⅶ. Vascular Disease

a) Replacement site

	No. Cases	No. OP.	OP. mortality (%)	Hosp. mortality (%)
Thoracic				
Ascending aorta	4	4	0	0
Hemiarch	16	16	2 (12.5)	2 (12.5)
Total arch	14	14	1 (7.1)	1 (7.1)
Descending aorta	24	24	1 (4.2)	1 (4.2)
(Stent graft)	(19)	(19)	(1)	(1)
Thoracoabdominal Ao.	5	5	1 (20.0)	1 (20.0)
Total	63	63	5 (7.9)	5 (7.9)

	No. Cases	No. OP.	OP. mortality (%)	Hosp. mortality (%)
Abdominal aorta	58	58	0	1 (17.2)
(Stent graft)	(20)	(20)	0	(1)
Peripheral artery	42	42	0	0
Total	100	100	0	1 (1.0)

b) Classification of Thoracic aorta

	No. Cases	Hosp. mortality (%)	Operation method	
Dissecting	27	3 (11.1)		
Acute	20	3 (15.0)	Total arch replacement	2
Ⅰ	14	2 (14.3)	Hemiarch replacement (+CABG)	14
Ⅱ	2	0	Descending aorta replacement	1
ⅢA	1	0	Stent Graft	3
ⅢB	3	1 (33.3)		
Chronic	7	0	Total arch replacement	3
Ⅰ	2	0	Hemiarch replacement	1
Ⅱ	2	0	Ascending aorta replacment	1
ⅢA	1	0	Descending aorta replacement	1
ⅢB	2	0	Stent graft	1
True/False	36	2 (5.5)	Total arch replacement(+CABG)	9
Ascending	3	0	Bentall	2
Arch	10	1 (10.0)	Hemiarch replacement	1
Descending	18	0	Descending aorta replacement	3
Thoracoabdominal	5	1 (20.0)	Stent graft	15
			Thoracoabdominal Ao. replace.	5

c) Classification of Abdominal aorta, peripheral artery

	No. Cases	Hosp. mortality (%)	Operation method	
Abdominal aorta	58	1 (1.7)	Graft replacement	26
AAA	56	1 (1.8)	Stent Graft	20
Non-ruptured	51	1 (2.0)	Aorto-bifemoral bypass	2
Ruptured	5	0		
ASO	2	0		
Peripheral artery	42	0	Thrombectomy	11
ASO	18	0	Bypass (FP/FF/others)	18
Acute arterial occlusion	11	0	Plasty	7
Aneurysm	5	0	Graft replacment	5
Traumatic	7	0	Others	1
Others	1	0		