

Table 36) Cases of esophagectomy (esophageal reconstruction)

Reconstruction route	Cases (%)	Organs for esophageal replacement	Cases (%)
(-)	4 (0.4%)	(-)	4 (0.4%)
Antethoracic	114 (10.5%)	Whole stomach	79 (7.3%)
Retrosternal	324 (29.9%)	Gastric tube*	799 (73.8%)
Posterior mediastinal	311 (28.7%)	Jejunum	48 (4.4%)
High intrathoracic*	132 (12.2%)	Free jejunum**	25 (2.3%)
Low intrathoracic**	71 (6.6%)	Colon	55 (5.1%)
Transhiatal	17 (1.6%)	Free colon	2 (0.2%)
Cervical	18 (1.7%)	Skin graft	0
Others	1 (0.1%)	Others	3 (0.3%)
Unknown	91 (8.4%)	Unknown	68 (6.3%)
Total	1083 (100%)	Total	1083 (100%)

* with upper mediastinal anastomosis

** with middle/lower mediastinal anastomosis

* : Free jejunum+gastric tube (2 cases), Gastric tube+other (1 case)
***: Free jejunum+colon (1 case)

Table 37) Cases of intrathoracic esophagectomy (location of the tumor and reconstruction route)

Location	Upper thoracic	Middle thoracic	Lower thoracic	Total thoracic
Reconstruction route	Cases (%)	Cases (%)	Cases (%)	Cases (%)
(-)	0	2 (0.4%)	2 (0.8%)	4 (0.5%)
Antethoracic	10 (8.4%)	73 (15.2%)	27 (10.3%)	110 (12.8%)
Retrosternal	43 (36.1%)	179 (37.4%)	76 (28.9%)	298 (34.6%)
Posterior mediastinal	53 (44.5%)	133 (27.8%)	80 (30.4%)	266 (30.9%)
High intrathoracic*	8 (6.7%)	61 (12.7%)	49 (18.6%)	118 (13.7%)
Low intrathoracic**	0	16 (3.3%)	22 (8.4%)	38 (4.4%)
Transhiatal	0	1 (0.2%)	3 (1.1%)	4 (0.5%)
Cervical	0	1 (0.2%)	0	1 (0.1%)
Others	0	0	0	0
Unknown	5 (4.2%)	13 (2.7%)	4 (1.5%)	22 (2.6%)
Total	119 (100%)	479 (100%)	263 (100%)	861 (100%)

Table 38) Cases of esophagectomy for external lesion of the thorax (location of the tumor and reconstruction route)

Location	Pharynx	Cervical esophagus	Abdominal esophagus	EGJ/Cardia
Reconstruction route	Cases (%)	Cases (%)	Cases (%)	Cases (%)
(-)	0	0	0	0
Antethoracic	0	1 (2.4%)	2 (2.9%)	1 (3.8%)
Retrosternal	1 (12.5%)	3 (7.3%)	11 (16.2%)	3 (11.5%)
Posterior mediastinal	5 (62.5%)	20 (48.8%)	14 (20.6%)	5 (19.2%)
High intrathoracic*	0	0	12 (17.6%)	1 (3.8%)
Low intrathoracic**	0	0	22 (32.4%)	9 (34.6%)
Transhiatal	0	0	7 (10.3%)	6 (23.1%)
Cervical	2 (25.0%)	15 (36.6%)	0	0
Others	0	0	0	1 (3.8%)
Unknown	0	2 (4.9%)	0	0
Total	8 (100%)	41 (100%)	68 (100%)	26 * (100%)

* E=G:22cases, G:4 cases

Table 42) Cases of esophagectomy (operative findings of cT and combined resected organs)

Macroscopic T-category (cT)	Cases (%)	Organs*	Cases (%)
T0	62 (5.7%)	(-)	61 (28.6%)
T1	242 (22.3%)	Larynx	14 (6.6%)
T2	195 (18.0%)	Trachea	11 (5.2%)
T3	388 (35.8%)	Aorta	2 (0.9%)
T4	121 (11.2%)	Lung	15 (7.0%)
Unkown	75 (6.9%)	Pericardium	11 (5.2%)
Total	1083 (100%)	Diaphragm	15 (7.0%)
		Stomach	11 (5.2%)
		Pancreas+spleen	10 (4.7%)
		Thoracic duct	19 (8.9%)
		Recurrent nerve	8 (3.8%)
		Recurrent nerve (main trunk)	2 (0.9%)
		Others	32 (15.0%)
		Unknown	2 (0.9%)
		Total of resected organs	213 (100%)
		Total of cT4 cases	121

cT4 by lymphatic metastasis	Cases (%)
(-)	931 (86.0%)
N1(T4)	27 (2.5%)
N2(T4)	15 (1.4%)
N3(T4)	10 (0.9%)
N4(T4)	15 (1.4%)
Nx(T4)	2 (0.2%)
Unkown	83 (7.7%)
Total	1083 (100%)

*: Organs resected in addition to the esophagus

Table 43) Cases of esophagectomy (operative findings of the tumor feature and size)

Macroscopic type	Cases (%)	Size of tumor (mm)	Cases (%)
0-Ip	18 (1.7%)	- 9	12 (1.1%)
0-Ipl	41 (3.8%)	10 - 19	62 (5.7%)
0-Isep	18 (1.7%)	20 - 29	134 (12.4%)
0-IIa	64 (5.9%)	30 - 39	117 (10.8%)
0-IIb	28 (2.6%)	40 - 49	187 (17.3%)
0-IIc	131 (12.1%)	50 - 59	185 (17.1%)
0-III	8 (0.7%)	60 - 69	110 (10.2%)
0-V	14 (1.3%)	70 - 79	74 (6.8%)
1p	18 (1.7%)	80 - 89	57 (5.3%)
1c	10 (0.9%)	90 - 99	33 (3.1%)
1pl	30 (2.8%)	100 - 109	23 (2.1%)
1sep	0	110 - 119	11 (1.0%)
2	290 (26.8%)	120 - 129	5 (0.5%)
3	261 (24.1%)	130 - 139	1 (0.1%)
4s	23 (2.1%)	140 - 149	1 (0.1%)
4ns	3 (0.3%)	150 -	4 (0.4%)
5c	7 (0.6%)	Unknown	67 (6.2%)
5s	2 (0.2%)	Total	1083 (100%)
5u	49 (4.5%)		
Unknown	68 (6.3%)		
Total	1083 (100%)		

Table 44) Histologic types of resected specimen and multiple primary cancers

Histologic types		Cases (%)	Multiple primary cancer	Cases (%)
Not examined		2 (0.2%)	(-)	863 (79.7%)
SCC	SCC	45 (4.2%)	(+)	132 (12.2%)
	Well diff.	239 (22.1%)	Unknown	88 (8.1%)
	Moderately diff.	485 (44.8%)	Total	1083 (100%)
	Poorly diff.	171 (15.8%)		
Adenocarcinoma		32 (3.0%)		
Barrett's adenocarcinoma		14 (1.3%)		
Adenosquamous cell carcinoma		7 (0.6%)		
Epidermoid carcinoma		0		
Adenoid cystic carcinoma		0		
Basaloid carcinoma		10 (0.9%)		
Undiff. carcinoma (small cell)		8 (0.7%)		
Undiff. carcinoma		1 (0.1%)		
Sarcoma		0		
So-called carcinosarcoma		11 (1.0%)		
Pseudosarcoma		1 (0.1%)		
True carcinosarcoma		0		
Malignant melanoma		0		
Dysplasia		1 (0.1%)		
Other		7 (0.6%)		
Unknown		49 (4.5%)		
Total		1083 (100%)		

Table 45) Pathological findings of resected specimen (residual cancer, intraepithelial spread, and infiltrative growth pattern)

Residual cancer cells at the transected stump

proximal (p)/distal (d)	Cases (%)
p / d (-)	956 (88.3%)
p / d (+)	41 (3.8%)
Unknown	86 (7.9%)
Total	1083 (100%)

Residual cancer cell in the cut surface of the esophageal wall (ew) of the resected specimen

ew	Cases (%)
ew(-)	889 (82.1%)
ew(+)	99 (9.1%)
Unknown	95 (8.8%)
Total	1083 (100%)

Intraepithelial spread (ie)

ie	Cases (%)
ie(-)	568 (52.4%)
ie(+)	423 (39.1%)
ie(++)(superficial)	28 (2.6%)
Unknown	64 (5.9%)
Total	1083 (100%)

Infiltrative growth pattern (inf)

inf	Cases (%)
inf α	207 (19.1%)
inf β	591 (54.6%)
inf γ	120 (11.1%)
Unknown	165 (15.2%)
Total	1083 (100%)

Table 46) Pathological findings of resected specimen (vessel invasion and skip metastasis)

Lymphatic vessel invasion (ly)		Cases (%)	Blood vessel invasion (v)		Cases (%)
ly0		312 (28.8%)	v0		484 (44.7%)
ly(+)	ly(+)	32 (3.0%)	v(+)	v(+)	25 (2.3%)
	ly1	299 (27.6%)		v1	271 (25.0%)
	ly2-3	379 (35.0%)		v2-3	239 (22.1%)
Unknown		61 (5.6%)	Unknown		64 (5.9%)
Total		1083 (100%)	Total		1083 (100%)

Skip metastasis in the esophageal wall (im-e)		Cases (%)	Skip metastasis in the stomach wall (im-st)		Cases (%)
im-e (-)		900 (83.0%)	im-st (-)		958 (88.5%)
im-e (+)		88 (8.1%)	im-st (+)		28 (2.6%)
Unknown		95 (8.8%)	Unknown		97 (9.0%)
Total		1083 (100%)	Total		1083 (100%)

Table 47) Pathological findings of resected specimen (pT)

Depth of tumor invasion		Cases (%)	Subclassification of superficial carcinoma		Cases (%)
pT-category			Subclassification		
Not examined		4 (0.4%)	m1 (pTis)*		14 (4.4%)
pT0		9 (0.8%)	m2 (pT1a)**		22 (6.9%)
pTis		14 (1.3%)	m3 (pT1a)***		59 (18.6%)
pT1a		81 (7.5%)	sm1 (pT1b)		29 (9.1%)
pT1b		222 (20.5%)	sm2 (pT1b)		69 (21.8%)
pT2		141 (13.0%)	sm3 (pT1b)		86 (27.1%)
pT3		469 (43.3%)	Unknown		38 (12.0%)
pT4		93 (8.6%)	Total		317 (100%)
Unknown		50 (4.6%)			
Total		1083 (100%)			

* ep = epithel
** ipm = lamina propria mucosa
*** mm = muscularis mucosa

Table 48) Pathological findings of resected specimen (pN)

Lymph node metastasis		Cases (%)	Number of lymph node metastases		Cases (%)
n(-)		419 (38.7%)	0		419 (38.7%)
n1(+)		129 (11.9%)	1-3		338 (31.2%)
n2(+)		271 (25.0%)	4-7		149 (13.8%)
n3(+)		124 (11.5%)	8~		129 (11.9%)
n4(+)		84 (7.8%)	Unknown		48 (4.4%)
Unknown		56 (5.2%)	Total		1083 (100%)
Total		1083 (100%)			

Table 49) Pathological findings of resected specimen (grade of lymph node metastasis corrected using number of metastases and fields of lymph node metastasis)

Grade of lymph node metastasis (corrected using number of metastases)		Fields of lymph node metastasis	
Grade of metastasis	Cases (%)	Field of metastasis	Cases (%)
gN0	419 (38.7%)	n(-)	419 (38.7%)
gN1(n1a)	113 (10.4%)	C	37 (3.4%)
gN2(n1b)	12 (1.1%)	A+C	11 (1.0%)
gN2(n2a)	163 (15.1%)	A+B+C	73 (4.5%)
gN3(n1c)	3 (0.3%)	C+B	54 (1.4%)
gN3(n2b)	75 (6.9%)	A	136 (12.6%)
gN3(n3a)	44 (4.1%)	A+B	164 (15.1%)
gN4(n2c)	32 (3.0%)	B	135 (12.5%)
gN4(n3b)	35 (3.2%)	Unknown	54 (5.0%)
gN4(n3c)	43 (4.0%)		
gN4(n4a)	10 (0.9%)		
gN4(n4b)	25 (2.3%)		
gN4(n4c)	48 (4.4%)		
Unknown	61 (5.6%)		
Total	1083 (100%)	Total	1083 (100%)

A: mediastinal lymph nodes
B: abdominal lymph nodes
C: cervical lymph nodes

Number of lymph node metastases

a : 1~3 nodes positive

b : 4~7 nodes positive

c : 8~ nodes positive

Table 50) Pathological findings of resected specimen (distant metastasis, stage, grade of dissection, and curability)

Distant metastasis (pM)	Cases (%)	Pathological stage	Cases (%)
pM0	981 (90.6%)	0	94 (8.7%)
pM1	23 (2.1%)	I	128 (11.8%)
Unknown	79 (7.3%)	II	242 (22.3%)
		III	279 (25.8%)
		IVa	205 (18.9%)
		IVb	23 (2.1%)
		Unknown	112 (10.3%)
Total	1083 (100%)	Total	1083 (100%)

Grade of dissection (D)	Cases (%)	Curability (pathological)	Cases (%)
D0	61 (5.6%)	Absolutely curative	626 (57.8%)
DI	136 (12.6%)	Relatively curative	286 (26.4%)
DII	352 (32.5%)	Absolutely non-curative	102 (9.4%)
DIII	430 (39.7%)	Unknown	69 (6.4%)
Unknown	104 (9.6%)		
Total	1083 (100%)	Total	1083 (100%)

Table 51) Pathological findings of resected specimen (residual tumor, multiple cancers, and multiple lesions)

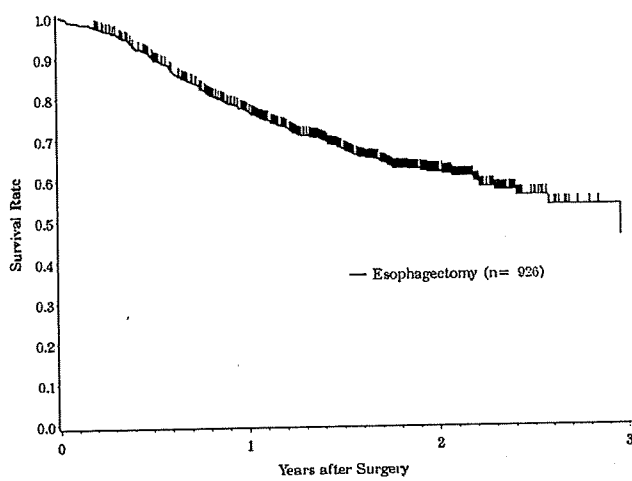
Residual tumor (R)	Cases (%)	Primary multiple cancers	Cases (%)
R0	841 (77.7%)	(-)	863 (79.7%)
R1	68 (6.3%)	(+)	132 (12.2%)
R2	65 (6.0%)	Unknown	88 (8.1%)
Rx	109 (10.1%)	Total	1083 (100%)
Total	1083 (100%)		

Multiple malignant lesions	Cases (%)	Number of malignant lesions	Cases (%)
(-)	816 (75.3%)	0	816 (75.3%)
(+)	172 (15.9%)	1	67 (6.2%)
Unknown	95 (8.8%)	2	68 (6.3%)
Total	1083 (100%)	3	17 (1.6%)
		4	4 (0.4%)
		5~	5 (0.5%)
		Unknown	106 (9.8%)
		Total	1083 (100%)

Table 52) Adjuvant therapy for cases of esophagectomy

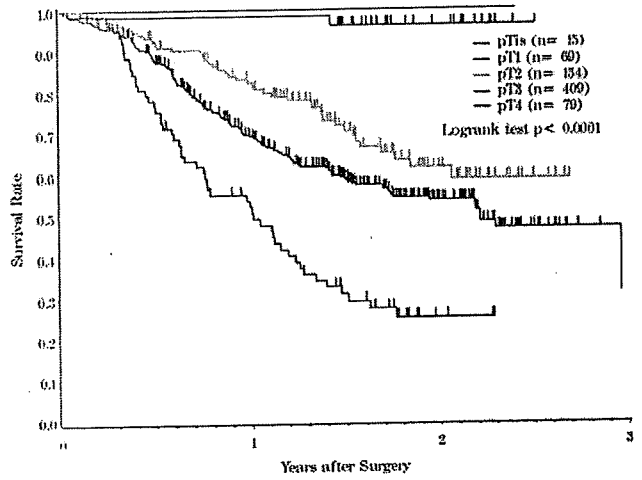
Radiotherapy	Cases (%)	Doses of irradiation (Gy)	Cases (%)
(-)	753 (69.5%)	0	753 (69.5%)
Preoperative	109 (10.1%)	1~ 19	24 (2.2%)
Pre+intraoperative (IOR)	4 (0.4%)	20~ 39	64 (5.9%)
Pre+postoperative	12 (1.1%)	40~ 59	131 (12.1%)
IOR	22 (2.0%)	60~ 79	75 (6.9%)
IOR+postoperative	11 (1.0%)	80~ 99	4 (0.4%)
Postoperative	126 (11.6%)	100~	1 (0.1%)
Time to recurrence	45 (4.2%)	Unknown	31 (2.9%)
Unknown	1 (0.1%)	Total	1083 (100%)
Total	1083 (100%)		

Chemotherapy	Cases (%)	Type of chemotherapy	Cases (%)
(-)	651 (60.1%)	(-)	651 (60.1%)
Preoperative	150 (13.9%)	Chemotherapy alone	226 (20.9%)
Pre+intraoperative (IOR)	0	Concurrent chemoradiotherapy	162 (15.0%)
Pre+postoperative	31 (2.9%)	Sequential chemoradiotherapy	43 (4.0%)
Intraoperative (IOR)	5 (0.5%)	Others	0
IOR+postoperative	0	Unknown	1 (0.1%)
Postoperative	214 (19.8%)	Total	1083 (100%)
Time to recurrence	31 (2.9%)		
Unknown	1 (0.1%)		
Total	1083 (100%)		



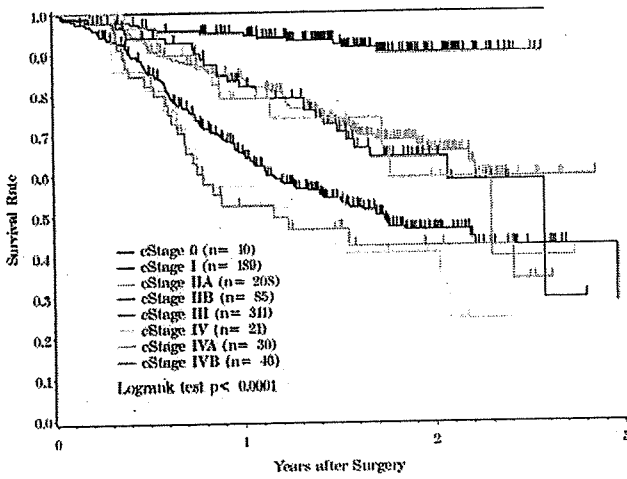
	Years after Surgery		
	1	2	3
Esophagectomy	76.8%	61.6%	45.6%

Figure 5 Survival of patients treated by esophagectomy



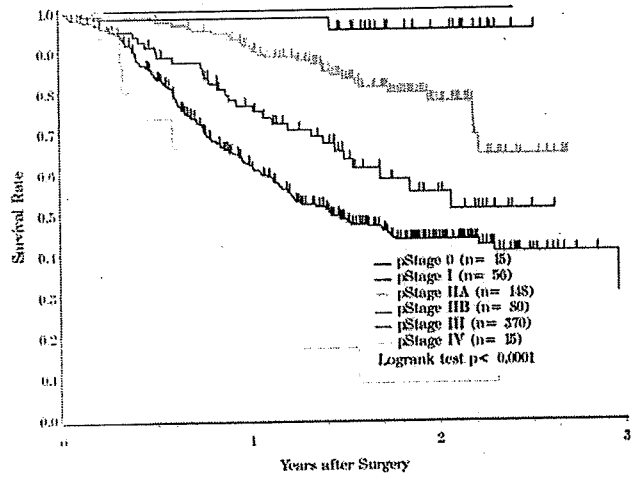
	Years after Surgery		
	1	2	3
pTis	100.0%	100.0%	-
pT1	98.4%	96.1%	96.1%
pT2	82.4%	61.5%	-
pT3	69.2%	53.6%	31.1%
pT4	52.2%	25.1%	25.1%

Figure 7 Survival of patients treated by esophagectomy in relation to the depth of tumor invasion (pT)



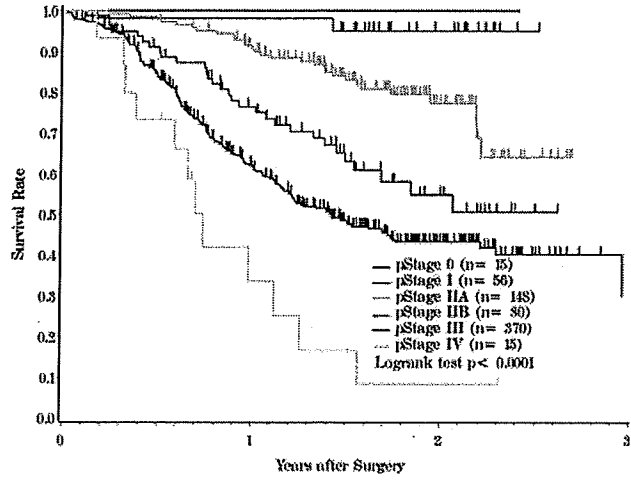
	Years after Surgery		
	1	2	3
cStage 0	100.0%	100.0%	100.0%
cStage I	95.0%	90.0%	90.0%
cStage IIA	83.8%	65.5%	59.2%
cStage IIB	81.8%	64.2%	-
cStage III	65.2%	46.1%	28.2%
cStage IV	57.1%	40.4%	-
cStage IVA	78.7%	59.1%	39.4%
cStage IVB	52.3%	42.2%	-

Figure 6 Survival of patients treated by esophagectomy in relation to clinical stage (cStage)



	Years after Surgery		
	1	2	3
pStage 0	100.0%	100.0%	-
pStage I	98.1%	95.1%	95.1%
pStage IIA	90.7%	77.4%	-
pStage IIB	76.5%	54.9%	-
pStage III	61.9%	43.3%	30.2%
pStage IV	33.5%	8.4%	-

Figure 8 Survival of patients treated by esophagectomy in relation to lymph node metastasis (pN)



	Years after Surgery		
	1	2	3
pStage 0	100.0%	100.0%	-
pStage I	98.1%	95.1%	95.1%
pStage IIA	90.7%	77.4%	-
pStage IIB	76.5%	54.9%	-
pStage III	61.9%	43.3%	30.2%
pStage IV	33.5%	8.4%	-

Figure 9 Survival of patients treated by esophagectomy in relation to pathological stage (pStage)

SPECIAL ARTICLE

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Comprehensive Registry of Esophageal Cancer in Japan, 2001

Preface

The Registration Committee for Esophageal Cancer of the Japan Esophageal Society, has registered cases of esophageal cancer since 1976 and published the first issue of the Comprehensive Registry of Esophageal Cancer in Japan in 1979. The Act for the Protection of Personal Information was promulgated in 2003, and began to be enforced in 2005. The purpose of this Act is to protect the rights and interests of individuals while taking into consideration the usefulness of personal information, keeping in mind the remarkable increase in the use of personal information arising from the development of today's advanced information and communications society. The Registry of Esophageal Cancer Cases has required some adjustments to comply with these Acts. The new registration system has been considered for several years and was finally completed in 2008. The most important point was achieving unlinkable anonymity through hash function encryption. Finally, the registry resumed registering cases of esophageal cancer that had been treated in 2001.

A brief summary follows: a total of 3940 cases were registered from 241 institutions in Japan. As for the histologic type of cancer according to biopsy specimens, squamous cell carcinoma and adenocarcinoma accounted for 91.7% and 2.3%, respectively. The 5-year survival rates of patients treated using endoscopic mucosal resection, concurrent chemoradiotherapy, radiotherapy alone, chemotherapy alone, or esophagectomy were 88.5%, 19.3%, 19.6%, 4.0%, and 42.6%, respectively. Regarding the approach used to perform esophagectomy, 14.3% of the cases were performed endoscopically, that is, thoracoscopically, laparoscopically, or mediastinoscopically. The percentage of operative deaths occurring within 30 days or less after operation and the percentage of postoperative hospital deaths occurring 31 days or more after operation were 2.8% and 3.2%, respectively.

We hope that this Comprehensive Registry of Esophageal Cancer in Japan for 2001 helps to improve all aspects of the diagnosis and treatment of esophageal cancer.

These data were first issued on 12 March, 2009, as the *Comprehensive Registry of Esophageal Cancer in 2001*. Not all pages are reprinted here; however, the original tables and figure numbers have been kept. The authors were at the time members of the Registration Committee for Esophageal Cancer, the Japan Esophageal Society, and made great efforts and contributions in preparing this material.

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Reference

N-category in: The Japanese Classification of Esophageal Cancer, 9th edition, Japan Esophageal Society

I. Clinical Factors of Esophageal Cancer Patients Treated in 2001

1. Institution-registered cases in 2001

Institutions	Institutions
Aichi Cancer Center	Kawakita General Hospital
Akashi Municipal Hospital	Kawasaki Medical School Hospital
Akita University Hospital	Kawasaki Municipal Hospital
Arao Municipal Hospital	Keio University Hospital
Asahikawa Medical College Hospital	Keiyukai Sappori Hospital
Chiba Cancer Center	Kikuna Memorial Hospital
Chiba Cardiovascular Center	Kin-ikyo Chuo Hospital
Chiba University Hospital	Kin-ikyo Sapporo Nishi-ku Hospital
Dokkyo Medical University Hospital	Kinki Central Hospital
Foundation for Detection of Early Gastric Carcinoma	Kinki University Hospital
Fuchu Hospital	Kinki University Nara Hospital
Fujioka General Hospital	Kinki University Sakai Hospital
Fujita Health University	Kiryu Kosei General Hospital
Fujita Health University Banbuntane Hotokukai Hospital	Kitabaraki Municipal Hospital
Fukaya Red Cross Hospital	Kitakyushu Municipal Medical Center
Fukuoka University Hospital	Kitasato University Hospital
Fukushima Medical University Hospital	Kitasato University Kitasato Institute Medical Center Hospital
Fukuyama Hospital	Kobe City Medical Center General Hospital
Gifu Prefectural General Medical Center	Kobe University Hospital
Gunma Central General Hospital	Kochi Health Science Center
Gunma University Hospital	Kumamoto University Hospital
Hachinohe City Hospital	Kurashiki Central Hospital
Hachioji Digestive Disease Hospital	Kurume Daiichi Social Insurance Hospital
Hakodate Goryokaku Hospital	Kurume University Hospital
Hamamatsu University School of Medicine, University Hospital	Kuwana City Hospital
Handa City Hospital	Kyorin University Hospital
Hannan Chuo Hospital	Kyoto Prefectural University of Medicine
Health Insurance Naruto Hospital	Kyoto University Hospital
Higashiosaka City General Hospital	Kyushu Central Hospital
Hino Memorial Hospital	Kyushu University Hospital
Hiratsuka City Hospital	Kyushu University Hospital at Beppu
Hiratsuka Kyosai Hospital	Matsuda Hospital
Hirosaki University Hospital	Matsudo City Hospital
Hiroshima City Asa Hospital	Matsushita Memorial Hospital
Hiroshima City Hospital	Matsuyama Red Cross Hospital
Hiroshima University Hospital	Mie University Hospital
Hiroshima University Research Institute for Radiation Biology Medicine	Mito Red Cross Hospital
Hofu Institute of Gastroenterology	Miyazaki Social Insurance Hospital
Hokkaido University Hospital	Murakami General Hospital
Hyogo Prefectural Nishinomiya Hospital	Mutsu General Hospital
Ibaraki Prefectural Central Hospital	Nagahama City Hospital
Ibaraki Prefectural Central Hospital and Cancer Center	Nagano Prefectural Kiso Hospital
Ishikawa Prefectural Central Hospital	Nagano Red Cross Hospital
Ishinomaki Red Cross Hospital	Nagaoka Chuo General Hospital
Iwakuni Medical Center	Nagayoshi General Hospital
Iwate Medical University Hospital	Nagoya City University Hospital
Iwate Prefectural Isawa Hospital	Nagoya Tokushukai General Hospital
JFE Kenpo Kawatetsu Chiba Hospital	Nagoya University Hospital
Jiai Hospital	Nanpuh Hospital
Jichi Medical University Hospital	Nara Medical University Hospital
Juntendo University Hospital	National Cancer Center Hospital
Juntendo University Shizuoka Hospital	National Cancer Center Hospital East
Junwakai Memorial Hospital	National Defense Medical College Hospital
Kagawa Prefectural Central Hospital	National Hospital Organization Osaka National Hospital
Kagawa University Hospital	National Hospital Organization Chiba Medical Center
Kagoshima University Hospital	National Hospital Organization Chiba-Higashi Hospital
Kagoshima University Medical and Dental Hospital	National Hospital Organization Higashi-Saitama Hospital
Kanagawa Cancer Center	National Hospital Organization Kanmon Medical Center
Kanazawa University Hospital	National Hospital Organization Kasumigaura Medical Center
Kansai Medical University Hirakata Hospital	National Hospital Organization Kyushu Cancer Center
Kansai Rosai Hospital	National Hospital Organization Matsumoto National Hospital
Kashima Rosai Hospital	National Hospital Organization Nagano Medical Center
Katta Public General Hospital	National Hospital Organization Nagasaki Medical Center

Institutions	Institutions
<p>National Hospital Organization Tochigi National Hospital National Hospital Organization Tokyo Medical Center Nihon University Itabashi Hospital Niigata Cancer Center Hospital Niigata City General Hospital Niigata Prefectural Shibata Hospital Niigata University Medical and Dental Hospital Nikko Memorial Hospital Nippon Medical School Chiba Hokusoh Hospital Nippon Medical School Hospital Nippon Medical School Musashi Kosugi Hospital Nippon Medical School Tama Nagayama Hospital Nishiki Hospital Nishi-Kobe Medical Center Nishinomiya Municipal Central Hospital NTT West Osaka Hospital Numazu City Hospital Obitsusankei Hospital Ohta General Hospital Foundation Ohta Nishinouchi Hospital Ohtawara Red Cross Hospital Oita Red Cross Hospital Oizumi Gastrointestinal Medical Clinic Okayama Saiseikai General Hospital Okayama University Hospital Okitama Public General Hospital Onomichi Municipal Hospital Osaka City University Hospital Osaka Koseinenkin Hospital Osaka Medical Center for Cancer and Cardiovascular Diseases Osaka Medical College Hospital Osaka Prefectural Hospital Organization Osaka General Medical Center Osaka University Hospital Otsu Municipal Hospital Otsu Red Cross Hospital Saiseikai Fukuoka General Hospital Saiseikai Fukushima General Hospital Saiseikai Kyoto Hospital Saiseikai Maebashi Hospital Saiseikai Utsunomiya Hospital Saitama City Hospital Saitama Medical Center Saitama Medical University Hospital Saitama Medical University International Medical Center Saitama Red Cross Hospital Saitama Social Insurance Hospital Sakai Municipal Hospital Saku Central Hospital Sanno Hospital Sato Clinic Self Defense Forces Sendai Hospital Sendai City Hospital Sendai Medical Center Shiga University of Medical Science Hospital Shikoku Cancer Center Shimada Hospital Shimane University Hospital Shimura Hospital Shinbeppu Hospital Shinshiro Municipal Hospital Shinshu University Hospital Shizuoka City Shimizu Hospital Showa Inan General Hospital Showa University Fujioka Hospital</p>	<p>Showa University Hospital Shozankai Saiki Hospital Social Insurance Omuta Tenryo Hospital Social Insurance Tagawa Hospital Social Insurance Yokohama Central Hospital Sonoda Daiichi Hospital Southern Region Hospital St. Luke's International Hospital St. Therese Hospital Sugita Genpaku Memorial Obama Municipal Hospital Suita Municipal Hospital Tachikawa Hospital Takaoka Hospital Takasago Municipal Hospital Teikyo University School of Medicine Hospital, Mizonokuchi The University of Tokyo Hospital Toho University Omori Medical Center Tohoku University Hospital Tokai University Hospital Tokai University Tokyo Hospital Tokushima University Hospital Tokyo Dental College Ichikawa General Hospital Tokyo Medical and Dental University Hospital Tokyo Medical University Hospital Tokyo Medical University Kasumigaura Hospital Tokyo Metropolitan Cancer and Infectious Center Komagome Hospital Tokyo Women's Medical University Hospital Tokyo Women's Medical University Medical Center East Tonan Hospital Toranomon Hospital Tottori Prefectural Central Hospital Tottori University Hospital Toyama Hospital, International Medical Center of Japan Toyama Prefectural Central Hospital Toyama University Hospital Tsuchiura Kyodo Hospital Tsukuba University Hospital Tsuruoka Municipal Shonai Hospital University of Fukui Hospital University of Miyazaki Hospital University of Occupational and Environmental Health University of the Ryukyus Hospital Wakayama Medical University Hospital Yamagata Prefectural Central Hospital Yamaguchi University Hospital Yamanashi Prefectural Central Hospital Yamanashi University Hospital Yao Municipal Hospital Yokohama City University Hospital Yokohama City University Medical Center Yokohama Rosai Hospital Yuri General Hospital</p>

(Total 241 institutions)

2. Patient Background

Table 1 Age and gender

* Excluding 18 cases of unknown gender

Age	Male	Female	Unknown	Cases (%)
~29	3	1	0	4 (0.1%)
30~39	6	3	0	9 (0.2%)
40~49	112	34	0	146 (3.8%)
50~59	813	113	0	926 (24.2%)
60~69	1379	167	2	1548 (40.4%)
70~79	897	139	0	1036 (27.0%)
80~89	119	36	0	155 (4.0%)
90~	4	2	0	6 (0.2%)
Total	3333	495	2	3830
Missing	72	20	0	92

A missing case was defined as a case when no option was selected.

An unknown case was defined as a case when the option named "Unknown" was selected.

Table 12 Tumor location

* Excluding 291 treatment unknown, missing cases concerning treatment type

Location of tumor	Endoscopic treatment (%)	Chemotherapy and/or radiotherapy (%)	Surgery		Total (%)
			Palliative operation (%)	Esophagectomy (%)	
Cervical	8 (2.0%)	68 (6.7%)	2 (2.4%)	87 (4.1%)	165 (4.6%)
Upper thoracic	43 (10.6%)	173 (17.0%)	11 (13.4%)	240 (11.4%)	467 (12.9%)
Middle thoracic	249 (61.2%)	508 (50.0%)	43 (52.4%)	1019 (48.3%)	1819 (50.3%)
Lower thoracic	74 (18.2%)	216 (21.3%)	17 (20.7%)	591 (28.0%)	898 (24.9%)
Abdominal	8 (2.0%)	18 (1.8%)	8 (9.8%)	129 (6.1%)	163 (4.5%)
EG	1 (0.2%)	3 (0.3%)	1 (1.2%)	12 (0.6%)	17 (0.5%)
EG-junction(E=G)	0	0	0	19 (0.9%)	19 (0.5%)
Cardia (G)	0	0	0	0	0
Others	0	0	0	0	0
Unknown	24 (5.9%)	30 (3.0%)	0	11 (0.5%)	65 (1.8%)
Total	407	1016	82	2108	3613
Missing	8	5	0	9	22

EG: esophago-gastric

Table 15 Histologic types of cancer according to biopsy specimens

* Excluding 291 treatment unknown, missing cases concerning treatment type

Histologic types	Endoscopic treatment (%)	Chemotherapy and/or radiotherapy (%)	Surgery		Total (%)
			Palliative operation (%)	Esophagectomy (%)	
Not examined	24 (5.9%)	29 (2.9%)	0	8 (0.4%)	61 (1.7%)
SCC	353 (86.7%)	926 (91.1%)	77 (93.9%)	1963 (92.8%)	3319 (91.7%)
Well diff.	22 (5.4%)	68 (6.7%)	12 (14.6%)	218 (10.3%)	320 (8.8%)
Moderately diff.	42 (10.3%)	282 (27.7%)	14 (17.1%)	534 (25.2%)	872 (24.1%)
Poorly diff.	7 (1.7%)	103 (10.1%)	4 (4.9%)	189 (8.9%)	303 (8.4%)
Adenocarcinoma	13 (3.2%)	7 (0.7%)	2 (2.4%)	61 (2.9%)	83 (2.3%)
Undifferentiated	1 (0.2%)	8 (0.8%)	0	6 (0.3%)	15 (0.4%)
Carcinosarcoma	0	0	1 (1.2%)	7 (0.3%)	8 (0.2%)
Malignant melanoma	0	2 (0.2%)	0	6 (0.3%)	8 (0.2%)
Other tumors	1 (0.2%)	4 (0.4%)	0	14 (0.7%)	19 (0.5%)
Dysplasia	0	0	0	0	0
Unknown	15 (3.7%)	41 (4.0%)	2 (2.4%)	50 (2.4%)	108 (3.0%)
Total	407	1017	82	2115	3621
Missing	10	7	0	11	28

SCC: Squamous cell carcinoma

Table 19 Organs with metastasis in cM1 case (clinical TNM-classification)

* Excluding 291 treatment unknown, missing cases concerning treatment type

Metastatic organs	Endoscopic treatment (%)	Chemotherapy and/or radiotherapy (%)	Surgery		Total (%)
			Palliative operation (%)	Esophagectomy (%)	
PUL	6 (27.3%)	46 (17.3%)	0	7 (3.6%)	59 (12.1%)
OSS	2 (9.1%)	12 (4.5%)	0	2 (1.0%)	16 (3.3%)
HEP	4 (18.2%)	40 (15.0%)	0	17 (8.7%)	61 (12.5%)
BRA	0	1 (0.4%)	0	0	1 (0.2%)
LYM	9 (40.9%)	146 (54.9%)	3 (75.0%)	160 (81.6%)	318 (65.2%)
MAR	0	1 (0.4%)	0	0	1 (0.2%)
PLE	1 (4.5%)	2 (0.8%)	0	1 (0.5%)	4 (0.8%)
PER	0	1 (0.4%)	0	1 (0.5%)	2 (0.4%)
SKI	0	4 (1.5%)	0	0	4 (0.8%)
OTH	0	2 (0.8%)	1 (25.0%)	5 (2.6%)	8 (1.6%)
Unknown	0	11 (4.1%)	0	3 (1.5%)	14 (2.9%)
Lesions	22	266	4	196	488
Missing	0	0	0	0	0
1 organ	22 (95.7%)	266 (82.9%)	4 (100.0%)	196 (97.5%)	488 (88.9%)
2 organs	1 (4.3%)	41 (12.8%)	0	4 (2.0%)	46 (8.4%)
3 organs	0	13 (4.0%)	0	1 (0.5%)	14 (2.6%)
4 organs~	0	0	0	0	0
Unknown	0	1 (0.3%)	0	0	1 (0.2%)
Total cases	23	321	4	201	549
Missing	4	9	4	9	22

PUL: lung, OSS: bone, HEP: liver, BRA: brain, LYM: lymph node, MAR: marrow,

PLE: pleural membrane, PER:peritoneal membrane, SKI: skin, OTH: others

Table 20 Clinical Stage (clinical TNM-classification)

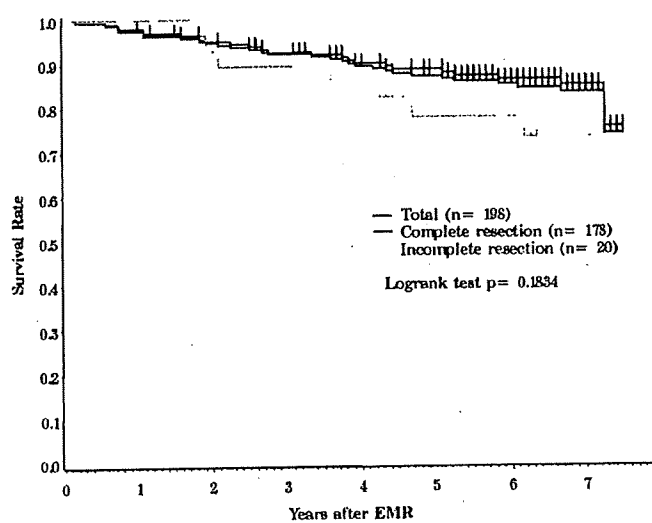
* Excluding 291 treatment unknown, missing cases concerning treatment type

cStage	Endoscopic treatment (%)	Chemotherapy and/or radiotherapy (%)	Surgery		Total (%)
			Palliative operation (%)	Esophagectomy (%)	
0	74 (18.3%)	6 (0.6%)	0	10 (0.5%)	90 (2.5%)
I	245 (60.6%)	99 (9.7%)	18 (22.0%)	460 (21.7%)	822 (22.7%)
IIA	4 (1.0%)	108 (10.6%)	13 (15.9%)	403 (19.0%)	528 (14.6%)
IIB	2 (0.5%)	49 (4.8%)	14 (17.1%)	264 (12.4%)	329 (9.1%)
III	19 (4.7%)	366 (36.0%)	27 (32.9%)	732 (34.5%)	1144 (31.6%)
IV	7 (1.7%)	70 (6.9%)	1 (1.2%)	32 (1.5%)	110 (3.0%)
IVA	3 (0.7%)	58 (5.7%)	0 (0.0%)	78 (3.7%)	139 (3.8%)
IVB	14 (3.5%)	175 (17.2%)	3 (3.7%)	100 (4.7%)	292 (8.1%)
Unknown	36 (8.9%)	85 (8.4%)	6 (7.3%)	42 (2.0%)	169 (4.7%)
Total	404	1016	82	2121	3623
Missing	13	8	0	5	26

II. Clinical Results in Patient Treated Endoscopically in 2001

Table 21 Treatment modalities in patients receiving endoscopy

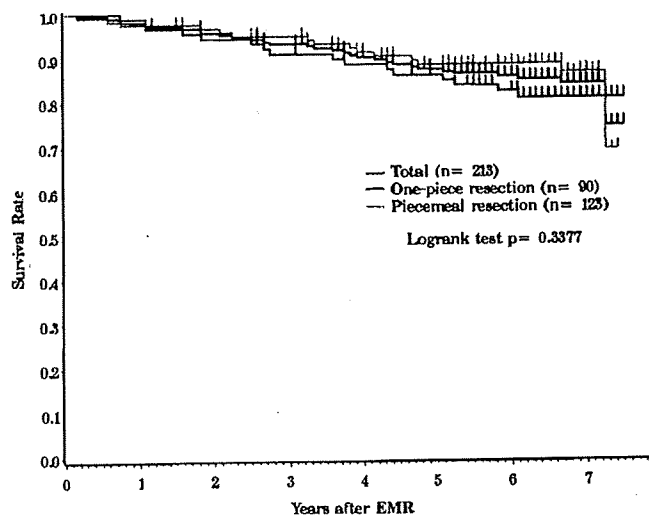
Treatment modalities	Cases (%)
Endoscopic treatment only	341 (81.8%)
Endoscopic treatment + radiotherapy	21 (5.0%)
Endoscopic treatment + chemotherapy	16 (3.8%)
Endoscopic treatment + chemoradiotherapy	36 (8.6%)
Endoscopic treatment + chemoradiotherapy + others	1 (0.2%)
Endoscopic treatment + others	2 (0.5%)
Total	417
Missing	0



	Years after EMR						
	1	2	3	4	5	6	7
Total	97.9%	94.8%	92.1%	89.2%	86.9%	84.9%	83.0%
Complete resection	97.6%	95.1%	92.6%	89.9%	88.5%	86.2%	84.8%
Incomplete resection	100.0%	92.9%	89.3%	85.7%	77.7%	77.7%	73.1%

EMR: Endoscopic mucosal resection

Figure 1 Survival of patients treated by EMR



	Years after EMR						
	1	2	3	4	5	6	7
Total	98.1%	95.6%	93.2%	90.1%	87.3%	85.6%	83.8%
One-piece resection	98.9%	94.4%	90.9%	88.5%	86.0%	82.1%	82.1%
Piecemeal resection	97.5%	96.6%	94.9%	91.3%	88.3%	88.3%	86.4%

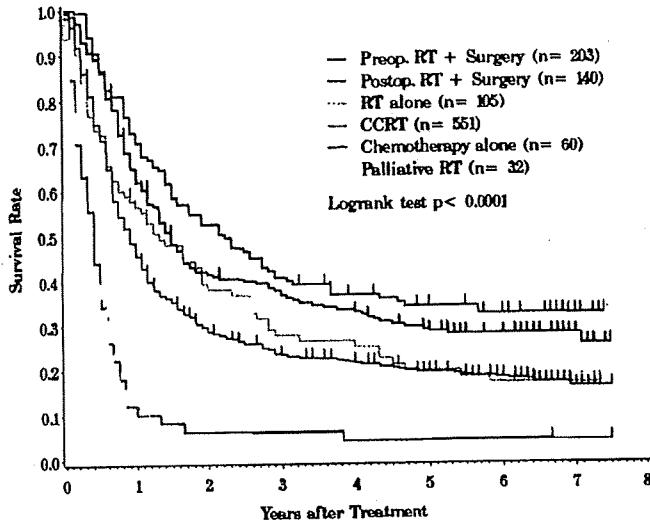
Figure 2 Survival of patients in relation to type of EMR

III. Clinical Results in Patients Treated with Chemotherapy and / or Radiotherapy in 2001

Table 34 Dose of irradiation with or without chemotherapy (non-surgically treated and curative cases)

Dose of irradiation (Gy)	Chemotherapy		Preop RT (%)	Postop RT (%)
	with (%)	without (%)		
0	0	0	0	0
-29	6 (1.6%)	0	10 (3.9%)	7 (3.8%)
30-39	14 (3.7%)	4 (4.0%)	97 (38.0%)	8 (4.4%)
40-49	16 (4.2%)	5 (5.0%)	118 (46.3%)	73 (40.1%)
50-59	36 (9.5%)	6 (6.0%)	9 (3.5%)	47 (25.8%)
60-69	248 (65.8%)	68 (68.0%)	18 (7.1%)	45 (24.7%)
70-	57 (15.1%)	17 (17.0%)	3 (1.2%)	2 (1.1%)
Total	377	100	255	182
Median (min - max)	60 (2 - 115.4)	64 (30 - 84)	40 (2 - 71.2)	50 (2 - 70)
Missing	6	0	12	22

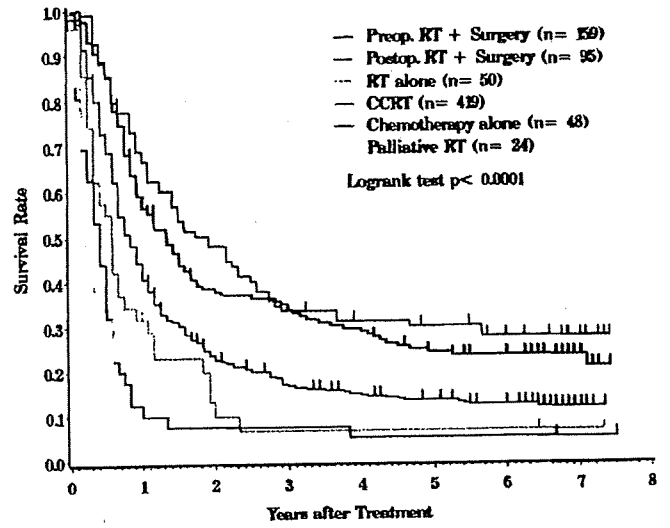
RT: radiotherapy



	Years after Treatment						
	1	2	3	4	5	6	7
Preop. RT + Surgery	61.9%	41.5%	37.7%	33.4%	28.4%	27.8%	27.8%
Postop. RT + Surgery	70.6%	52.6%	40.6%	36.7%	34.2%	32.4%	32.4%
RT alone	56.6%	38.0%	27.5%	26.2%	19.6%	16.7%	16.7%
CCRT	45.6%	28.6%	23.4%	21.6%	19.3%	18.0%	15.9%
Chemotherapy alone	10.1%	6.0%	6.0%	4.0%	4.0%	4.0%	4.0%
Palliative RT	11.9%	4.0%	-	-	-	-	-

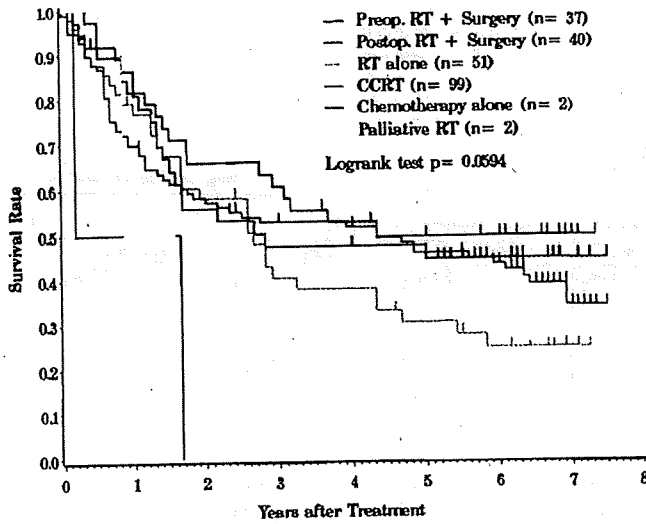
RT: radiotherapy
CCRT: concurrent chemoradiotherapy

Figure 3 Survival of patients treated by chemotherapy and / or radiotherapy



	Years after Treatment						
	1	2	3	4	5	6	7
Preop. RT + Surgery	56.5%	37.6%	34.9%	29.4%	23.8%	23.1%	23.1%
Postop. RT + Surgery	66.6%	47.8%	33.3%	31.0%	29.9%	27.3%	27.3%
RT alone	31.6%	9.7%	6.5%	6.5%	6.5%	6.5%	6.5%
CCRT	40.8%	22.2%	16.9%	14.8%	13.2%	12.1%	12.1%
Chemotherapy alone	9.8%	7.4%	7.4%	4.9%	4.9%	4.9%	4.9%
Palliative RT	5.6%	-	-	-	-	-	-

Figure 5 Survival of patients treated by chemotherapy and / or radiotherapy (cStage IIB-IVB)



	Years after Treatment						
	1	2	3	4	5	6	7
Preop. RT + Surgery	80.8%	55.7%	47.3%	47.3%	44.4%	44.4%	44.4%
Postop. RT + Surgery	81.6%	65.8%	60.5%	52.5%	49.4%	49.4%	49.4%
RT alone	76.7%	58.0%	40.3%	37.8%	30.0%	24.3%	24.3%
CCRT	69.9%	57.0%	52.7%	51.5%	45.7%	43.1%	33.7%
Chemotherapy alone	50.0%	-	-	-	-	-	-
Palliative RT	50.0%	-	-	-	-	-	-

Figure 4 Survival of patients treated by chemotherapy and / or radiotherapy (cStage I-IIA)

IV. Clinical Results in Patients Treated by Esophagectomy in 2001

Table 45 Tumor locations

Locations	Cases (%)
Cervical	87 (4.1%)
Upper thoracic	240 (11.3%)
Middle thoracic	1019 (48.1%)
Lower thoracic	591 (27.9%)
Abdominal	129 (6.1%)
EG	12 (0.6%)
EG-Junction (E=G)	19 (0.9%)
Unknown	11 (0.5%)
Total lesions	2108
Total cases	2108
Missing	18

Table 46 Approaches to tumor resection

Approaches	Cases (%)
Cervical approach	94 (4.4%)
Right thoracotomy	1691 (79.9%)
Left thoracotomy	49 (2.3%)
Left thoracoabdominal approach	47 (2.2%)
Laparotomy	65 (3.1%)
Transhiatal (without blunt dissection)	12 (0.6%)
Transhiatal (with blunt dissection)	83 (3.9%)
Sternotomy	15 (0.7%)
Others	52 (2.5%)
Unknown	8 (0.4%)
Total	2116
Missing	10

EG: esophago-gastric

Table 47 Endoscopic surgery

Endoscopic surgery	Cases (%)
None	1796 (85.1%)
Thoracoscopy-assisted	175 (8.3%)
Laparoscopy-assisted	76 (3.6%)
Thoracoscopy + Laparoscopy-assisted	35 (1.7%)
Mediastinoscopy-assisted	15 (0.7%)
Laparoscopy + Mediastinoscopy-assisted	1 (0.05%)
Others	3 (0.1%)
Unknown	10 (0.5%)
Total	2111
Missing	15

Table 48 Fields of lymph node dissection according to the location of the tumor

* Excluding missing 29 cases concerning location

Locations	Cervical	Upper thoracic	Middle thoracic	Lower thoracic	Abdominal	EGJ	Total
Region of lymphadenectomy	Cases (%)	Cases (%)	Cases (%)	Cases (%)	Cases (%)	Cases (%)	Cases (%)
None	3 (3.4%)	10 (4.2%)	40 (3.9%)	14 (2.4%)	2 (1.6%)	1 (3.2%)	70 (3.4%)
C	36 (41.4%)	10 (4.2%)	52 (5.1%)	18 (3.1%)	1 (0.8%)	0	117 (5.6%)
C+UM	21 (24.1%)	4 (1.7%)	0	0	0	0	25 (1.2%)
C+UM+MLM	2 (2.3%)	10 (4.2%)	18 (1.8%)	5 (0.8%)	1 (0.8%)	0	36 (1.7%)
C+UM+MLM+A	14 (16.1%)	132 (55.7%)	383 (37.7%)	146 (24.7%)	12 (9.3%)	0	687 (32.9%)
C+UM+A	5 (5.7%)	5 (2.1%)	1 (0.1%)	1 (0.2%)	0	0	12 (0.6%)
C+MLM	1 (1.1%)	0	1 (0.1%)	0	0	0	2 (0.1%)
C+MLM+A	0	0	3 (0.3%)	1 (0.2%)	0	0	4 (0.2%)
C+A	2 (2.3%)	1 (0.4%)	2 (0.2%)	0	0	0	5 (0.2%)
UM	0	0	5 (0.5%)	7 (1.2%)	1 (0.8%)	0	13 (0.6%)
UM+MLM	0	5 (2.1%)	22 (2.2%)	3 (0.5%)	1 (0.8%)	0	31 (1.5%)
UM+MLM+A	1 (1.1%)	46 (19.4%)	397 (39.1%)	265 (44.9%)	43 (33.3%)	5 (16.1%)	757 (36.2%)
UM+A	0	1 (0.4%)	1 (0.1%)	2 (0.3%)	1 (0.8%)	0	5 (0.2%)
MLM	1 (1.1%)	1 (0.4%)	7 (0.7%)	7 (1.2%)	0	0	16 (0.8%)
MLM+A	0	4 (1.7%)	52 (5.1%)	97 (16.4%)	49 (38.0%)	16 (51.6%)	218 (10.4%)
A	0	6 (2.5%)	23 (2.3%)	20 (3.4%)	17 (13.2%)	9 (29.0%)	75 (3.6%)
Unknown	1 (1.1%)	2 (0.8%)	9 (0.9%)	4 (0.7%)	1 (0.8%)	0	17 (0.8%)
Total	87	237	1016	590	129	31	2090
Missing	0	3	3	1	0	0	7

C: bilateral cervical nodes

UM: upper mediastinal nodes

MLM: middle-lower mediastinal nodes

A: abdominal nodes

Table 49 Extent of lymph node dissection

Grade of dissection (D)	Cases (%)
DX	32 (1.5%)
D0	141 (6.7%)
DJ	265 (12.5%)
DII	948 (44.9%)
DIII	726 (34.4%)
Total	2112
Missing	14

Table 50 Reconstruction route

Reconstruction route	Cases (%)
None	31 (1.5%)
Antethoracic	238 (11.2%)
Retrosternal	746 (35.3%)
Intrathoracic	267 (12.6%)
Posterior mediastinal	778 (36.8%)
Others	17 (0.8%)
Unknown	39 (1.8%)
Total	2116
Missing	10

Table 51 Organs used for reconstruction

Organs used for reconstruction	Cases (%)
None	29 (1.3%)
Whole stomach	120 (5.4%)
Gastric tube	1731 (77.9%)
Jejunum	81 (3.6%)
Free jejunum	49 (2.2%)
Colon	104 (4.7%)
Free colon	14 (0.6%)
Skin graft	0
Others	86 (3.9%)
Unknown	7 (0.3%)
Total lesions	2221
Total cases	2118
Missing	8

Table 58 Histological classification

Histological classification	Cases (%)
Not examined	5 (0.2%)
SCC	1894 (90.5%)
SCC	219 (10.5%)
Well diff.	452 (21.6%)
Moderately diff.	856 (40.9%)
Poorly diff.	367 (17.5%)
Adenocarcinoma	40 (1.9%)
Barrett's adenocarcinoma	18 (0.9%)
Adenosquamous cell carcinoma (Co-existing)	15 (0.7%)
(Mucoepidermoid carcinoma)	6 (0.3%)
Adenoid cystic carcinoma	2 (0.1%)
Basaloid carcinoma	2 (0.1%)
Undiff. carcinoma (small cell)	21 (1.0%)
Undiff. carcinoma	9 (0.4%)
Other carcinoma	3 (0.1%)
Sarcoma	0
Carcinosarcoma	1 (0.0%)
Malignant melanoma	14 (0.7%)
Dysplasia	2 (0.1%)
Other	27 (1.3%)
Unkown	27 (1.3%)
Total	2093
Missing	33

SCC: Squamous cell carcinoma

Table 59 Depth of tumor invasion

pT-category	Cases (%)
pTX	17 (0.8%)
pT0	27 (1.3%)
pTis	25 (1.2%)
pT1a	171 (8.2%)
pT1b	472 (22.6%)
pT2	271 (13.0%)
pT3	911 (43.6%)
pT4	169 (8.1%)
Other	0
Unknown	27 (1.3%)
Total	2090
Missing	36

Table 60 Subclassification of superficial carcinoma

Subclassification	Cases (%)
Not superficial carcinoma	1369 (66.4%)
m1 (ep)	62 (3.0%)
m2 (lpm)	59 (2.9%)
m3 (mm)	93 (4.5%)
sm1	77 (3.7%)
sm2	113 (5.5%)
sm3	175 (8.5%)
Unknown	115 (5.6%)
Total	2063
Missing	63

ep: epithelium

lpm: lamina propria muosa

mm: muscularis mucosa

Table 61 Pathological grading of lymph node metastasis

Lymph node metastasis	Cases (%)
n (-)	818 (39.9%)
n1 (+)	302 (14.7%)
n2 (+)	536 (26.2%)
n3 (+)	197 (9.6%)
n4 (+)	149 (7.3%)
Unknown	46 (2.2%)
Total	2048
Missing	78

Table 62 Numbers of metastatic nodes

Numbers of lymph node metastasis	Cases (%)
0	907 (42.7%)
1-3	629 (29.6%)
4-7	275 (12.9%)
8-	215 (10.1%)
Unknown	100 (4.7%)
Total	2126
Missing	0

Table 63 Pathological findings of distant organ metastasis

Distant metastasis (M)	Cases (%)
MX	36 (1.7%)
M0	2026 (95.7%)
M1	55 (2.6%)
Total	2117
Missing	9

Table 64 Residual tumor

Residual tumor (R)	Cases (%)
RX	112 (5.4%)
R0	1681 (81.0%)
R1	133 (6.4%)
R2	149 (7.2%)
Total	2075
Missing	51

Table 75 Causes of death

* As of August 19, 2008

Cause of death	Cases (%)
Death due to recurrence	791 (72.8%)
Death due to other cancer	41 (3.8%)
Death due to other disease (rec+)	24 (2.2%)
Death due to other disease (rec-)	138 (12.7%)
Death due to other disease (rec?)	9 (0.8%)
Operative death*	30 (2.8%)
Postoperative hospital death**	35 (3.2%)
Unknown	18 (1.7%)
Total of death cases	1086
Missing	5

rec: recurrence

* Death in 30 days or less, **Death after 30 days

Follow-up period (years)	
Median (min - max)	2.41 (0.00 - 7.58)

Table 76 Initial recurrent lesion

Initial recurrence lesion of death cases	Cases (%)
None	975 (40.1%)
Lymph node	483 (19.9%)
Lung	184 (7.6%)
Liver	176 (7.2%)
Bone	115 (4.7%)
Brain	29 (1.2%)
Primary lesion	138 (5.7%)
Dissemination	74 (3.0%)
Anastomotic region	10 (0.4%)
Others	69 (2.8%)
Unknown	179 (7.4%)
Total of recurrence lesion	2432
Total	2028
Missing	98