

Multi-Institutional Registry of Large Bowel Cancer in Japan

Vol. 34

Cases treated in 2008

Japan Society for Cancer of the Colon and Rectum

全国登録委員会

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まえがき

全国大腸癌登録調査報告書第 34 号 (Multi-Institutional Registry of Large Bowel Cancer in Japan, Vol. 34) をお届けします。本号は 2008 年に大腸癌研究会の会員施設において初回治療された大腸悪性腫瘍 6987 例の調査報告書です。臨床病理学的事項は、本号より大腸癌取扱い規約第 7 版に従って記載されております。前号よりこれまでの紙媒体での発刊を中止し、オンラインのみでの公開となり、これまでの部位別の検討を一部省略する一方で、数値のみでなく生存曲線も掲載しています。これに伴い、生存分析は従来は生命表法で集計していましたが、Kaplan-Meier 法で集計しています。

全国がん登録や院内がん登録、National Clinical Database (NCD) など、様々な registry が本邦で行われていますが、大腸癌研究会が行ってきました大腸癌全国登録、いわゆる臓器がん登録の重要性は今後益々大きくなっていくものと考えます。本邦の質の高い大腸癌の治療は、大腸癌取扱い規約や大腸癌治療ガイドラインに支えられている面があります。これら大腸癌取扱い規約や大腸癌治療ガイドラインの作成や改訂において、本全国登録で得られた高質なデータの果たす役割は重要です。

会員施設に勤務されている先生方におかれましては、本登録の意義をご理解いただきまして、引き続き登録へのご協力をお願い申し上げます。また、登録いただいた会員施設の先生方には、全国登録データ利用の門戸が広く開かれております。是非積極的にご活用いただきますようお願い申し上げます。

2020 年 10 月

大腸癌研究会

会長 杉原 健一

全国大腸癌登録委員会

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CONTENTS

Preface (in Japanese)

ALL PATIENTS

Data-flow chart, Treatment-----6

ENDOSCOPIC EXCISION

Gender, Age-----7

Tumor location, Procedure-----8

Macroscopic type, Tumor size-----9

Histologic type, Depth of tumor invasion, Distance of submucosal invasion-----10

Lymphovascular invasion, Horizontal margin-----11

Vertical margin, Curability-----12

SURGERY AFTER ENDOSCOPIC EXCISION

Gender, Age-----13

Tumor location, Endoscopic procedure-----14

Macroscopic type, Tumor size-----15

Histologic type-----16

Depth of tumor invasion, Distance of submucosal invasion, Lymphatic invasion--17

Vascular invasion, Horizontal and Vertical margin-----18

Endoscopic curability, Operative procedure-----19

Type of anastomosis, Lymph node dissection-----20

Histologic type (after surgery), Depth of tumor invasion (after surgery)-----21

Lymph node metastasis-----22

Liver, peritoneal and lung metastasis-----23

Distant metastasis, Curability, Recurrence-----24

Treatment for recurrence-----25

Survival analysis-----26

SURGERY

Gender, Age-----28

Tumor location, serum CEA level-----29

Multiple cancers-----30

Operative procedure, Operative approach -----31

Type of anastomosis, Lymph node dissection-----32

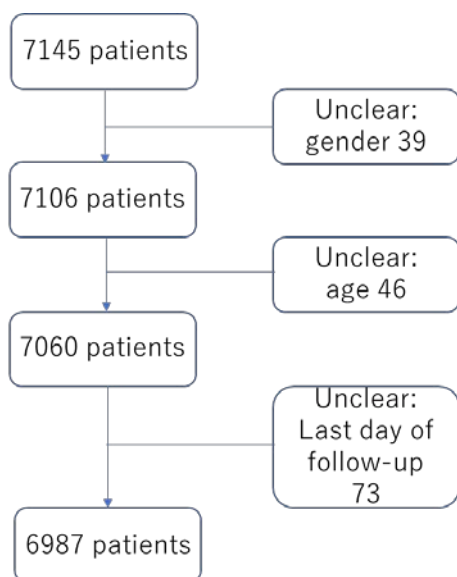
Tumor size, Histologic type-----33

Depth of tumor invasion-----34

Number of invaded organs, lymphovascular invasion-----36

Interstitium, Infiltrative growth pattern, Proximal margin-----37

Distal and circumferential resection margin, lymph node metastasis-----	37
Liver metastasis, Peritoneal metastasis-----	48
Distant metastasis, Lung metastasis, curability-----	49
Recurrence-----	50
Treatment for recurrence-----	51
Overall survival (colorectal)-----	52
Overall survival (colon)-----	53
Overall survival (rectum)-----	54
Overall survival (liver metastasis)-----	55
Overall survival (peritoneal metastasis)-----	56
Overall survival (lung metastasis)-----	57
Overall survival (distant metastasis other than liver)-----	58
Overall survival (curability)-----	59
Participating institutions-----	60

Data-flow chart (Algorithm of data cleaning)

Analyses were basically performed including the patients who had some missing data, because the percentage of missing data would be helpful to interpret the data more precisely.

Table 1-Treatment

Treatment	Number	Percentage
Endoscopic excision	390	5.6
Surgery after endoscopic excision	288	4.1
Surgery	6286	90
Non-surgery	23	0.3
Total	6987	100

Table 2-1 Endoscopic excision-Gender

Gender	Number	Percentage
Male	251	64.4
Female	139	35.6
Total	390	100

Table 2-2 Endoscopic excision-Age

Age (median)	67 (36-90)
Age (mean)	66.3 ± 11

Table 2-3 Endoscopic excision-Age classification

Age classification	Number	Percentage
20-29	0	0
30-39	5	1.3
40-49	22	5.6
50-59	72	18.5
60-69	126	32.3
70-79	118	30.3
80-89	46	11.8
90= \leq	1	0.3
Total	390	100

Table 2-4 Endoscopic excision-Tumor location

Tumor location	Number	Percentage
Cecum	11	2.8
Ascending	61	15.6
Transverse	33	8.5
Descending	18	4.6
Sigmoid	136	34.9
Rectosigmoid	52	13.3
Upper rectum	30	7.7
Lower rectum	46	11.8
Unknown	3	0.8
Total	390	100

Table 2-5 Endoscopic excision-Procedure

Procedure	Number	Percentage
Polypectomy	43	11.0
EMR	305	78.2
ESD	38	9.7
Unknown	4	1.0
Total	390	100

Table 2-6 Endoscopic excision-En bloc or piecemeal

Resection type	Number	Percentage
En bloc	323	82.8
Piecemeal	55	14.1
Unknown	12	3.1
Total	390	100

Table 2-7 Endoscopic excision-Macroscopic type

Macroscopic type	Number	Percentage
Ip	108	27.7
Isp	117	30
Is	41	10.5
Ila	51	13.1
Ilb	0	0
Ilc	7	1.8
Ila+Ilc	10	2.6
Ilc+Ila	2	0.5
Others	27	6.9
Unknown	27	6.9
Total	390	100

Table 2-8 Endoscopic excision-Tumor size

Median	14 (4-60) mm
Mean	16.4 ± 10 mm

Table 2-9 Endoscopic excision-Tumor size 2

Tumor size	Number	Percentage
≤5 mm	20	5.1
6-10 mm	104	26.7
11-15 mm	109	27.9
16-20 mm	44	11.3
21-30 mm	44	11.3
31-40 mm	20	5.1
>40 mm	9	2.3
Unknown	40	10.3
Total	390	100

Table 2-10 Endoscopic excision-Histologic type

Histologic type	Number	Percentage
Well differentiated	336	90.5
Moderately differentiated	21	5.4
Poorly differentiated	0	0
Neuroendocrine tumor	8	2.1
Others	3	0.8
Unknown	5	1.3
Total	390	100

Table 2-11 Endoscopic excision-Depth of tumor invasion

Depth of tumor invasion	Number	Percentage
pM	285	73.1
pSM	90	23.1
Unknown	15	3.8
Total	390	100

Table 2-12 Endoscopic excision-Distance of submucosal invasion

Distance of submucosal invasion	Number	Percentage
<1000 μ m	23	25.6
\geq 1000 μ m	28	31.1
Unknown	39	43.3
Total	90	100

Table 2-13 Endoscopic excision-Lymphatic invasion

Lymphatic invasion	Number	Percentage
ly0	343	87.9
ly1	7	1.8
ly2	0	0
ly3	1	0.3
Unknown	39	10
Total	390	100

Table 2-14 Endoscopic excision-Venous invasion

Venous invasion	Number	Percentage
v0	344	88.2
v1	6	1.5
v2	1	0.3
v3	0	0
Unknown	39	10
Total	390	100

Table 2-15 Endoscopic excision-Horizontal margin

Horizontal margin	Number	Percentage
HM0	320	82.1
HM1	14	3.6
Unknown	56	14.4
Total	390	100

Table 2-16 Endoscopic excision-Vertical margin

Vertical margin	Number	Percentage
VM0	339	86.9
VM1	7	1.8
Unknown	44	11.3
Total	390	100

Table 2-17 Endoscopic excision-Curability

Curability	Number	Percentage
cur EA	335	85.9
cur EC	17	4.4
Unknown	38	9.7
Total	390	100

Table 3-1 Surgery after endoscopic excision-Gender

Gender	Number	Percentage
Male	168	58.3
Female	120	41.7
Total	288	100

Table 3-2 Surgery after endoscopic excision-Age

Age (median)	64 (22-86)
Age (mean)	63.2 ± 10.5

Table 3-3 Surgery after endoscopic excision-Age classification

Age classification	Number	Percentage
20-29	2	0.7
30-39	2	0.7
40-49	23	8.0
50-59	68	23.6
60-69	110	38.2
70-79	71	24.7
80-89	12	4.2
90=<	0	0
Total	288	100

Table 3-4 Surgery after endoscopic excision-Tumor location

Tumor location	Number	Percentage
Cecum	7	2.4
Ascending	27	9.4
Transverse	13	4.5
Descending	15	5.2
Sigmoid	118	41
Rectosigmoid	29	10.1
Upper rectum	26	9
Lower rectum	50	17.4
Proctos	1	0.3
Unknown	2	0.7
Total	288	100

Table 3-5 Surgery after endoscopic excision-Endoscopic procedure

Procedure	Number	Percentage
Polypectomy	22	7.6
EMR	216	75.0
ESD	29	10.1
Others	6	2.1
Unknown	15	5.2
Total	288	100

Table 3-6 Surgery after endoscopic excision-En bloc or piecemeal

Resection	Number	Percentage
En bloc	188	65.3
Piecemeal	47	16.3
Unknown	53	18.4
Total	288	100

Table 3-7 Surgery after endoscopic excision-Macroscopic type

Macroscopic type	Number	Percentage
Ip	40	13.9
Isp	96	33.3
Is	30	10.4
Ila	29	10.1
Ilb	0	0
Ilc	5	1.7
Ila+Ilc	12	4.2
Ilc+Ila	1	0.3
Others	13	4.5
Unknown	62	21.5
Total	288	100

Table 3-8 Surgery after endoscopic excision-Tumor size

Median	15 (5-80) mm
Mean	18.9 ± 11.8 mm

Table 3-9 Surgery after endoscopic excision-Tumor size 2

Tumor size	Number	Percentage
<=5 mm	5	1.7
6-10 mm	46	16
11-15 mm	53	18.4
16-20 mm	51	17.7
21-30 mm	28	9.7
31-40 mm	9	3.1
>40 mm	11	3.8
Unknown	85	29.5
Total	288	100

Table 3-10 Surgery after endoscopic excision-Histologic type

Histologic type	Number	Percentage
Well differentiated	180	62.5
Moderately differentiated	66	22.9
Poorly differentiated	1	0.3
Mucinous	0	0
Signet ring cell	0	0
Neuroendocrine tumor	9	3.1
Others	0	0
Unknown	32	11.1
Total	288	100

Table 3-11 Surgery after endoscopic excision-Depth of tumor invasion (endoscopic)

Depth of tumor invasion	Number	Percentage
pM	20	6.9
pSM	236	81.9
pMP	2	0.7
pSS	1	0.3
pSE	1	0.3
pSI	0	0
Unknown	28	9.7
Total	288	100

Table 3-12 Surgery after endoscopic excision-Distance of submucosal invasion

Distance of submucosal invasion	Number	Percentage
<1000 μ m	12	5.1
\geq 1000 μ m	127	53.8
Unknown	97	41.1
Total	236	100

Table 3-13 Surgery after endoscopic excision-Lymphatic invasion

Lymphatic invasion	Number	Percentage
ly0	174	60.4
ly1	65	22.6
ly2	4	1.4
ly3	1	0.3
Unknown	44	15.3
Total	288	100

Table 3-14 Surgery after endoscopic excision-Venous invasion

Venous invasion	Number	Percentage
v0	183	63.5
v1	55	19.1
v2	6	2.1
v3	0	0
Unknown	44	15.3
Total	288	100

Table 3-15 Surgery after endoscopic excision-Horizontal margin

Horizontal margin	Number	Percentage
HM0	170	59
HM1	21	7.3
Unknown	97	33.7
Total	288	100

Table 3-16 Surgery after endoscopic excision-Vertical margin

Vertical margin	Number	Percentage
VM0	155	53.8
VM1	39	13.5
Unknown	94	32.6
Total	288	100

Table 3-17 Surgery after endoscopic excision-Endoscopic curability

Endoscopic curability	Number	Percentage
cur EA	137	47.6
cur EC	107	37.2
Unknown	44	15.3
Total	288	100

Table 3-18 Surgery after endoscopic excision-Operative approach

Operative approach	Number	Percentage
Open	87	30.2
Laparoscopic	192	66.7
Transanal	7	2.4
Unknown	2	0.7
Total	288	100

Table 3-19 Surgery after endoscopic excision-Type of anastomosis

Type of anastomosis	Number	Percentage
End-to-end	172	59.7
Side-to-end	7	2.4
End-to-side	4	1.4
Side-to-side	3	1
Functional end-to-end	42	14.6
Unknown	60	20.8
Total	288	100

Table 3-20 Surgery after endoscopic excision-Type of anastomosis 2

Type of anastomosis	Number	Percentage
Handsewn	49	17
Stapling	196	68.1
Unknown	43	14.9
Total	288	100

Table 3-21 Surgery after endoscopic excision-Lymph node dissection

Type of anastomosis	Number	Percentage
D0	6	2.1
D1	23	8.0
D2	204	70.8
D3	43	14.9
Unknown	12	4.2
Total	288	100

Table 3-22 Surgery after endoscopic excision-Histologic type after surgery

Histologic type	Number	Percentage
Well differentiated	133	46.2
Moderately differentiated	54	18.8
Poorly differentiated	3	1.0
Mucinous	0	0
Signet ring cell	0	0
Neuroendocrine tumor	7	2.4
Others	0	0
Unknown	91	31.6
Total	288	100

Table 3-23 Surgery after endoscopic excision-Depth of tumor invasion after surgery

Depth of tumor invasion	Number	Percentage
pM	15	5.2
pSM	178	61.8
pMP	10	3.5
pSS	12	4.2
pSE	3	1.0
pSI	0	0
pA	3	1.0
pAI	0	0
Unknown	57	23.2
Total	288	100

Table 3-24 Surgery after endoscopic excision-Lymph node metastasis

Lymph node metastasis	Number	Percentage
pN0	243	84.4
pN1	29	10.1
pN2	2	0.7
pN3	0	0
Unknown	14	4.9
Total	288	100

Table 3-25 Surgery after endoscopic excision-Number of lymph node retrieved

Number of lymph node retrieved (median)	12 (0-58)
Number of lymph node retrieved (mean)	13.2 ± 8.5

Table 3-26 Surgery after endoscopic excision-Number of positive lymph node

Number of positive node (median)	0 (0-8)
Number of positive node (mean)	0.2 ± 0.7

Table 3-27 Surgery after endoscopic excision-Liver metastasis

Liver metastasis	Number	Percentage
H0	283	98.2
H1	2	0.7
H2	0	0
H3	1	0.3
Unknown	2	0.7
Total	288	100

Table 3-28 Surgery after endoscopic excision-Peritoneal metastasis

Peritoneal metastasis	Number	Percentage
P0	284	98.6
P1	0	0
P2	1	0.3
P3	1	0.3
Unknown	2	0.7
Total	288	100

Table 3-29 Surgery after endoscopic excision-Pulmonary metastasis

Peritoneal metastasis	Number	Percentage
LM0	243	84.3
LM1	0	0
LM2	0	0
LM3	2	0.7
Unknown	43	14.9
Total	288	100

Table 3-30 Surgery after endoscopic excision-Distant metastasis other than liver

Distant metastasis	Number	Percentage
M0	274	95.1
M1	0	0
Unknown	14	4.9
Total	288	100

Table 3-31 Surgery after endoscopic excision-Curability after surgery

Curability	Number	Percentage
Cur A	275	95.5
Cur B	3	1.0
Cur C	3	1.0
Unknown	7	2.4
Total	288	100

Table 3-32 Surgery after endoscopic excision-Recurrence after surgery

Recurrence	Number	Percentage
Absent	252	87.5
Present	11	3.8
Unknown	25	8.7
Total	288	100

Table 3-33 Surgery after endoscopic excision-Recurrence site after surgery

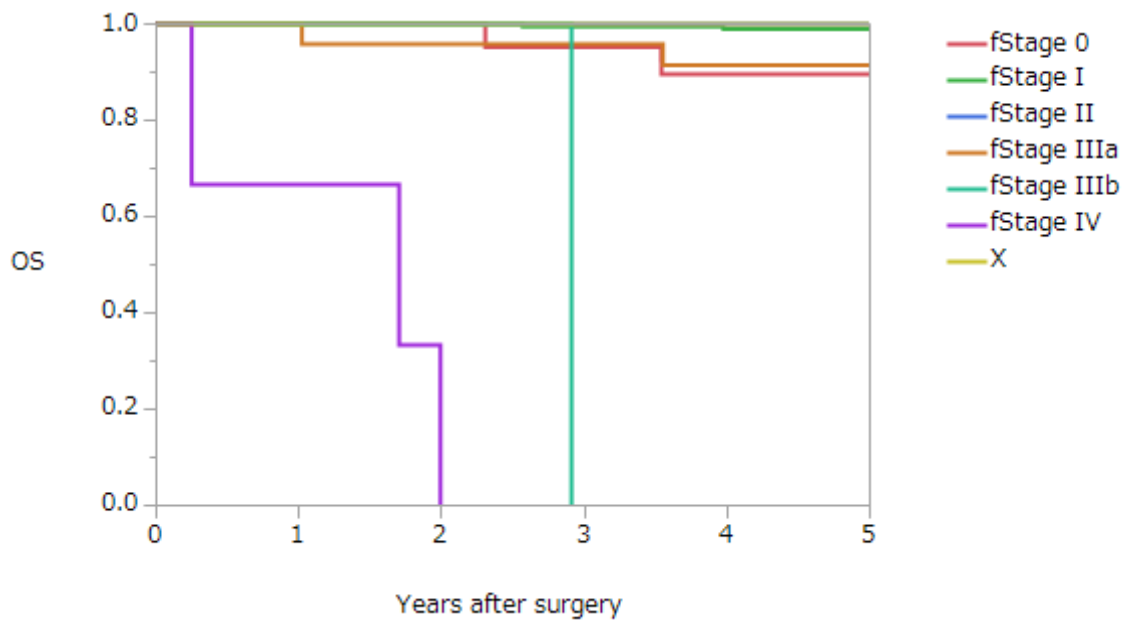
First recurrence site	Number
Anastomosis	2
Regional lymph node	2
Local	1
Lymph node (not regional)	0
Liver	5
Lung	0
Peritoneum	0
Bone	0
Brain	0
Adrenal gland	0
Skin	0
Others	0
(overlapping+)	

Table 3-34 Surgery after endoscopic excision-Treatment after recurrence

Treatment for recurrence	Number
None	0
Curative surgery	7
Palliative surgery	0
Radiotherapy	1
Chemotherapy	1
Unknown	2
Total	11

Table3-35 Surgery after endoscopic excision-Overall survival rates after surgery (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
Stage 0	22	100	100	95.0	89.4	89.4
Stage I	223	100	100	99.5	99.0	99.0
Stage II	11	100	100	100	100	100
Stage IIIa	25	100	95.8	95.8	91.5	91.5
Stage IIIb	2	100	0	0	0	0
Stage IV	3	66.7	0	0	0	0
Unknown	2					
All	288	99.6	98.5	97.4	96.2	96.2



Overall survival of all patients with surgery after endoscopic excision

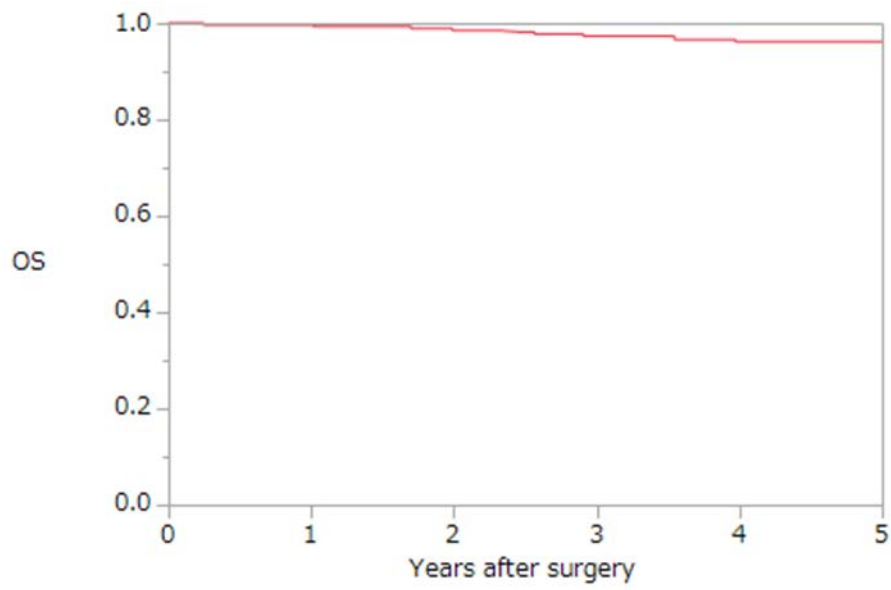


Table 4-1 Surgery-Gender

Gender	Number	Percentage
Male	3655	58.1
Female	2631	41.9
Total	6286	100

Table 4-2 Surgery-Age

Age (median)	68 (20-100)
Age (mean)	66.8 ± 11.6

Table 4-3 Surgery-Age classification

Age classification	Number	Percentage
<20	0	0
20-29	19	0.3
30-39	120	1.9
40-49	337	5.4
50-59	1065	16.9
60-69	1952	31.1
70-79	1973	31.4
80-89	770	12.2
90= \leq	50	0.8
Total	6286	100

Table 4-4 Surgery-Tumor location

Tumor location	Number	Percentage
Processus vermiformis	23	0.4
Cecum	474	7.5
Ascending	850	13.5
Transverse	577	9.2
Descending	279	4.4
Sigmoid	1555	24.7
Rectosigmoid	781	12.4
Upper rectum	672	10.7
Lower rectum	872	13.9
Proctos (anal canal)	71	1.1
Unknown	132	2.1
Total	6286	100

Table 4-5 Surgery-Preoperative serum CEA value

Preoperative serum CEA value	Number	Percentage
Normal	3539	56.3
<2 x ULN	965	15.4
<4 x ULN	513	8.2
<8 x UNL	326	5.2
>=8 x UNL	544	8.7
Unknown	399	6.3
Total	6286	100

Table 4-6 Surgery-Multiple primary cancers

Multiple primary cancers	Number	Percentage
Absent	6493	84.9
Synchronous	320	4.2
Metachronous	692	9.1
Synchronous and metachronous	39	0.5
Unknown	100	1.3
Total	7644	100

Table 4-7 Surgery-Synchronous multiple colorectal cancers

Synchronous multiple CRC	Number	Percentage
Absent	4667	74.2
Present	340	5.4
Unknown	1279	20.3
Total	6286	100

Table 4-8 Surgery-Metachronous multiple colorectal cancers

Metachronous multiple CRC	Number	Percentage
Absent	4806	76.5
Present	145	2.3
Unknown	1335	21.2
Total	6286	100

Table 4-9 Operative procedure

Operative procedure	Number	Percentage
Polypectomy	2	0.03
Tumorectomy	43	0.7
Local excision	19	0.3
Appendectomy	2	0.03
Ileocecal resection	419	6.7
Partial colectomy	586	9.3
Right hemicolectomy	952	15.1
Left hemicolectomy	171	2.7
Sigmoidectomy	1249	19.9
Subtotal colectomy	20	0.3
Total colectomy	12	0.2
Total proctocolectomy	19	0.3
High anterior resection	570	9.1
Low anterior resection	1229	19.6
Hartmann's operation	256	4.1
Abdominoperineal resection	360	5.7
Others	113	1.8
Unknown	264	4.2
Total	6286	100

Table 4-10 Surgery-Operative approach

Operative approach	Number	Percentage
Open	4548	72.4
Laparoscopic	1502	23.9
Transanal	63	1.0
Others	7	0.1
Unknown	166	2.6
Total	6286	100

Table 4-11 Surgery-Type of anastomosis

Type of anastomosis	Number	Percentage
End-to-end	3062	48.7
Side-to-end	185	2.9
End-to-side	190	2
Side-to-side	51	0.8
Functional end-to-end	995	15.8
Unknown	1803	28.7
Total	6286	100

Table 4-12 Surgery-Type of anastomosis 2

Type of anastomosis	Number	Percentage
Handsewn	1191	18.9
Stapling	3654	58.1
Unknown	1441	22.9
Total	6286	100

Table 4-13 Surgery- Lymph node dissection

Lymph node dissection	Number	Percentage
D0	187	3.0
D1	417	6.6
D2	2211	35.2
D3	3054	48.6
Unknown	417	6.6
Total	6286	100

Table 4-14 Surgery-Tumor size

Tumor size	Number	Percentage
<=20 mm	798	12.7
21-40 mm	1916	30.5
41-60 mm	1636	26
61-80 mm	774	12.3
81-100 mm	239	3.8
>100 mm	120	1.9
Unknown	803	12.8
Total	6286	100

Table 4-15 Surgery-Histologic type

Histologic type	Number	Percentage
Well differentiated	2557	40.7
Moderately differentiated	2957	47.0
Poorly differentiated	216	3.4
Mucinous	217	3.5
Signet ring cell	6	0.1
Neuroendocrine tumor	22	0.4
Others	54	0.9
Unknown	257	4.1
Total	6286	100

Table 4-16 Surgery-Histologic type 2

Histologic type	Number	Percentage
adenocarcinoma	5953	94.7
other malignancies	76	1.2
Unknown	257	4.1
Total	6286	100

Table 4-17 Surgery-Depth of tumor invasion

Depth of tumor invasion	Number	Percentage
pTis	267	4.2
pM	697	11.1
pSM	814	12.9
pMP	2175	34.6
pSS	1129	18.0
pSI	308	4.9
pA	543	8.6
pAI	72	1.1
Unknown	281	4.5
Total	6286	100

Table 4-18 Surgery-Number of invaded organs

Number of invaded organs	Number	Percentage
0	1707	27.2
1	497	7.9
2	112	1.8
3 or more	39	0.6
Unknown	3931	62.5
Total	6286	100

Table 4-19 Surgery-Lymphatic invasion

Lymphatic invasion	Number	Percentage
ly0	2563	40.8
ly1	2229	35.5
ly2	849	13.5
ly3	323	5.1
Unknown	322	5.1
Total	6286	100

Table 4-20 Surgery-Venous invasion

Venous invasion	Number	Percentage
v0	2045	32.5
v1	2206	35.1
v2	1240	19.7
v3	466	7.4
Unknown	329	5.2
Total	6286	100

Table 4-21 Surgery-Interstitium

Interstitium	Number	Percentage
Medullary pattern	480	7.6
Intermediate pattern	3273	52.1
Scirrhous pattern	52	0.8
Unknown	2481	39.5
Total	6286	100

Table 4-22 Surgery-Infiltrative growth pattern

Infiltrative growth pattern	Number	Percentage
inf α	549	8.7
inf β	3850	61.2
inf γ	233	3.7
Unknown	1654	26.3
Total	6286	100

Table 4-23 Surgery-Proximal margin

Proximal margin	Number	Percentage
PM0	5766	91.7
PM1	5	0.1
Unknown	515	8.2
Total	6286	100

Table 4-24 Surgery-Distal margin

Distal margin	Number	Percentage
DM0	5748	91.4
DM1	17	0.3
Unknown	521	8.3
Total	6286	100

Table 4-25 Surgery-Circumferential resection margin

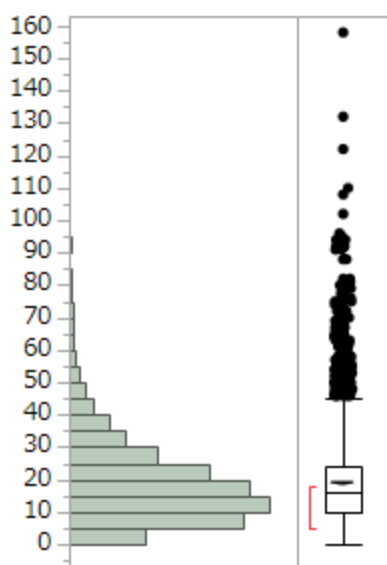
Circumferential resection margin	Number	Percentage
RM0	4971	79.1
RM1	230	3.7
Unknown	1085	17.3
Total	6286	100

Table 4-26 Surgery-lymph node metastasis

Lymph node metastasis	Number	Percentage
pN0	3420	54.4
pN1	1565	24.9
pN2	610	9.7
pN3	211	3.4
Unknown	480	7.6
Total	6286	100

Table 4-27 Surgery-number of lymph node retrieved (N = 5067)

Number of lymph node retrieved (median)	16 (0-158)
Number of lymph node retrieved (mean)	18.9 ± 13.6



* 外れ値検出のある箱ひげ図には次のものが表示されます。

- IQR = 第 3 四分位点- 第 1 四分位点
- 箱の端から $1.5 \times \text{IQR}$ までの範囲にある一番遠くの点までのひげ
- 外れ値の可能性のある点
- 半分のオブザベーションが含まれる最も短い範囲を示す赤い括弧

Table 4-28 Surgery-number of positive lymph node (N = 5229)

Number of positive node (median)	0 (0-55)
Number of positive node (mean)	1.5 ± 3.1

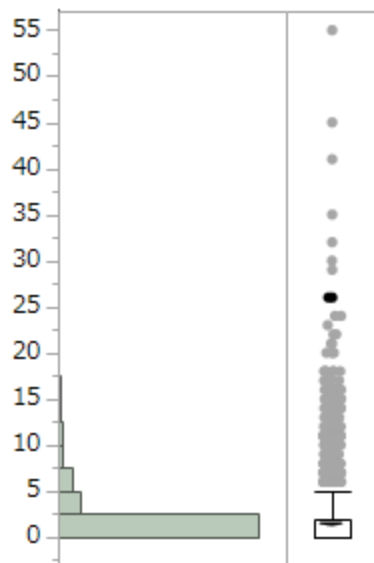


Table 4-29 Surgery-number of paracolic lymph node retrieved (N = 5022)

Number of lymph node retrieved (median)	9 (0-114)
Number of lymph node retrieved (mean)	11.2 ± 8.6

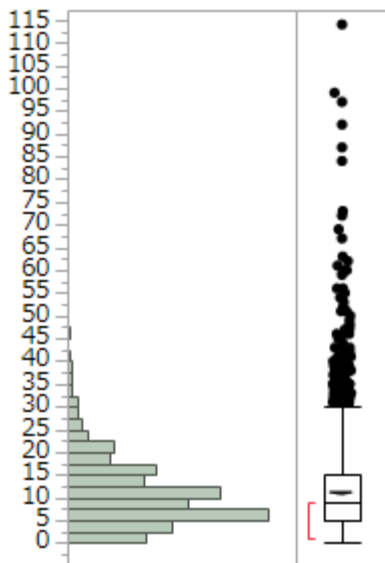


Table 4-30 Surgery-number of positive paracolic lymph node (N = 5179)

Number of positive node (median)	0 (0-36)
Number of positive node (mean)	1.2 ± 2.4

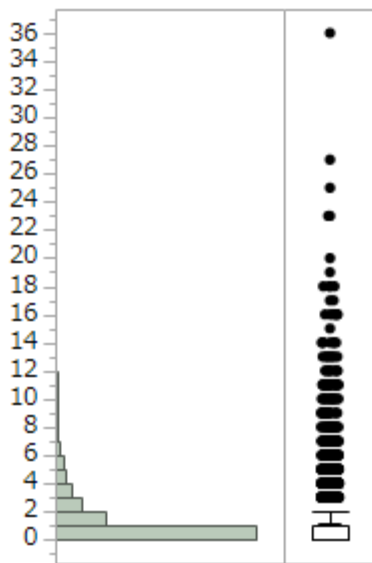


Table 4-31 Surgery-number of intermediate lymph node retrieved (N = 4694)

Number of lymph node retrieved (median)	4 (0-49)
Number of lymph node retrieved (mean)	5.4 ± 4.3

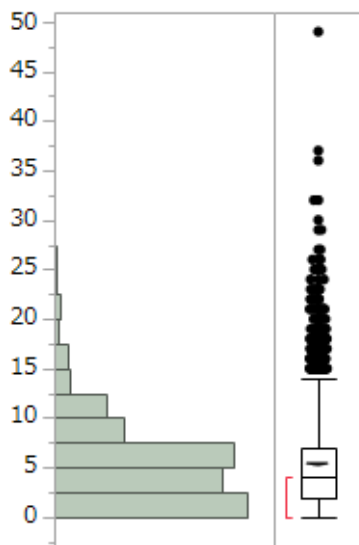


Table 4-32 Surgery-number of positive intermediate lymph node (N = 4821)

Number of positive node (median)	0 (0-14)
Number of positive node (mean)	0.3 ± 0.9

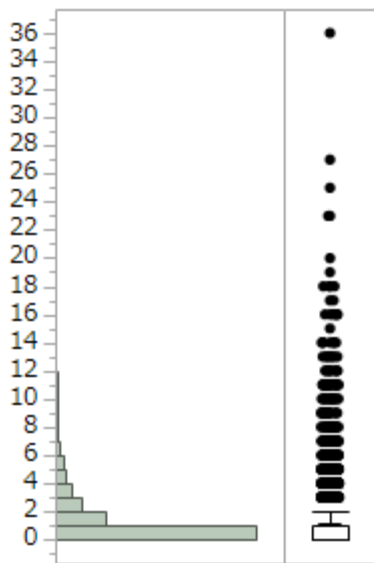


Table 4-33 Surgery-number of main lymph node retrieved (N = 3085)

Number of lymph node retrieved (median)	2 (0-61)
Number of lymph node retrieved (mean)	3.2 ± 3.5

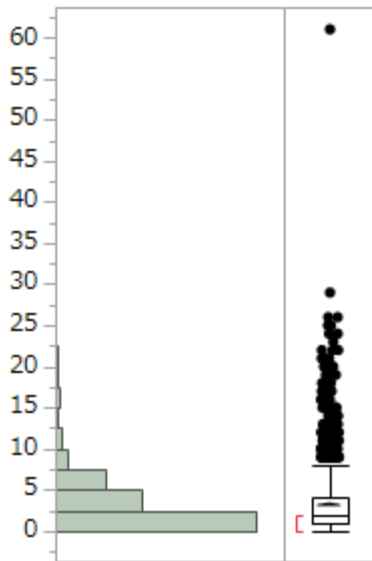


Table 4-34 Surgery-number of positive main lymph node (N = 3174)

Number of positive node (median)	0 (0-10)
Number of positive node (mean)	0.1 ± 0.5

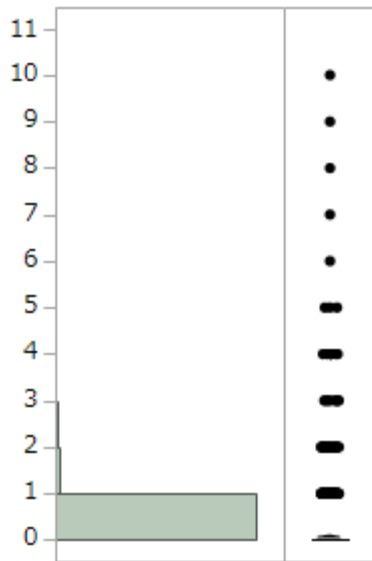


Table 4-35 Surgery-number of lateral pelvic lymph node retrieved (N = 406)

Number of lymph node retrieved (median)	10 (0-60)
Number of lymph node retrieved (mean)	11.3 ± 10.5

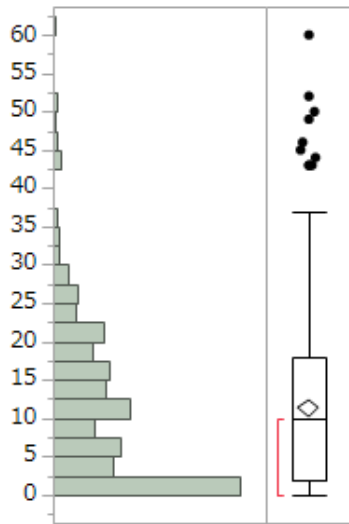


Table 4-36 Surgery-number of positive lateral pelvic lymph node (N = 415)

Number of positive node (median)	0 (0-19)
Number of positive node (mean)	0.5 ± 1.7

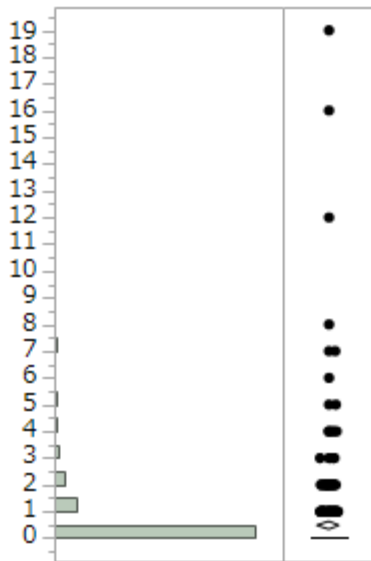


Table 4-37 Surgery-liver metastasis

Liver metastasis	Number	Percentage
H0	5517	87.8
H1	295	4.7
H2	184	2.9
H3	234	3.7
Unknown	56	0.9
Total	6286	100

Table 4-38 Surgery-Peritoneal metastasis

Peritoneal metastasis	Number	Percentage
P0	5907	94.0
P1	159	2.5
P2	56	0.9
P3	78	1.2
Unknown	86	1.4
Total	6286	100

Table 4-39 Surgery-Distant metastasis other than liver

Distant metastasis	Number	Percentage
M0	5196	82.7
M1	398	6.3
Unknown	692	11.0
Total	6286	100

Table 4-40 Surgery-Lung metastasis

Lung metastasis	Number	Percentage
LM0	5506	87.6
LM1	117	1.9
LM2	26	0.4
LM3	75	1.2
Unknown	562	8.9
Total	6286	100

Table 4-41 Surgery-Curability after surgery

Curability	Number	Percentage
Cur A	4476	71.2
Cur B	381	6.1
Cur C	788	12.5
Unknown	641	10.2
Total	6286	100

Table 4-42 Surgery-Recurrence after surgery

recurrence	Number	Percentage
Absent	4180	66.5
Present	1259	20
Unknown	847	13.5
Total	6286	100

Table 4-43 Surgery-Recurrence rate according to stage

	Stage 0	Stage I	Stage II	Stage IIIa	Stage IIIb	Stage IV	Unknown
Absent	246 (89.5)	1053 (84.7)	1423 (75.9)	810 (68.9)	301 (49.5)	320 (31.1)	27 (34.6)
Present	5 (1.8)	73 (5.9)	297 (15.8)	280 (23.8)	253 (41.6)	338 (32.8)	13 (16.7)
Unknown	24 (8.7)	118 (9.5)	156 (8.3)	85 (7.2)	54 (8.9)	372 (36.1)	38 (48.7)
Total	275	1244	1876	1175	608	1030	78

Table 4-44 Surgery-Recurrence site after surgery

First recurrence site	Number
Anastomosis	47
Regional lymph node	193
Local	99
Lymph node (not regional)	141
Liver	434
Lung	392
Peritoneum	156
Bone	50
Brain	13
Adrenal gland	12
Skin	6
Others	35
(overlapping+)	

Table 4-45 Surgery-Treatment after recurrence

Treatment for recurrence	Number	Percentage
None	265	21.0
Curative surgery	349	27.7
Palliative surgery	22	1.7
Radiation	64	5.1
Chemotherapy	479	38.0
Others	20	1.6
Unknown	60	4.8
Total	1259	100

Table 4-46 Surgery-Overall survival rates after surgery (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
Stage 0	275	98.1	96.8	95.9	95.9	94.3
Stage I	2244	99.0	97.4	96.1	93.0	91.6
Stage II	1876	97.0	94.3	90.3	87.6	83.6
Stage IIIa	1175	96.2	93.5	88.6	84.0	80.7
Stage IIIb	608	94.3	87.4	78.3	70.3	65.1
Stage IV	1030	76.8	54.0	36.9	27.5	20.6
Unknown	78					
All	6286	93.7	87.6	81.4	76.8	72.9

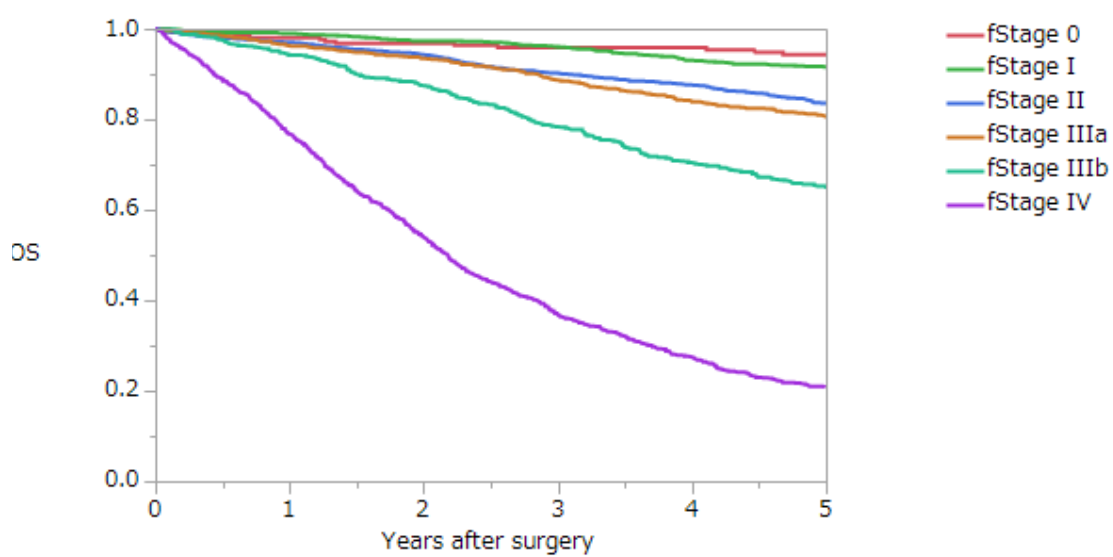


Table 4-47 Surgery-Overall survival rates after surgery (colon) (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
Stage 0	198	98.4	96.6	95.4	96.0	93.7
Stage I	696	98.8	97.0	95.7	93.4	92.5
Stage II	1227	97.0	94.1	90.0	87.5	84.0
Stage IIIa	703	95.3	92.4	87.6	83.2	79.2
Stage IIIb	301	93.8	86.1	78.1	70.6	67.1
Stage IV	615	77.9	53.4	35.6	27.3	20.4
All	3740	93.7	87.1	81.0	77.0	73.4

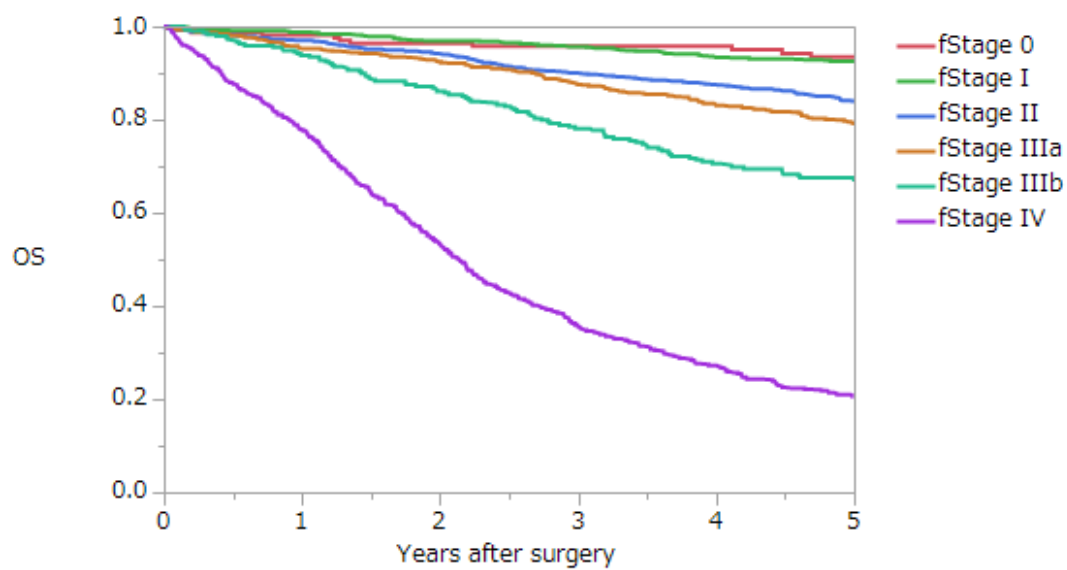


Table 4-48 Surgery-Overall survival rates after surgery (rectum) (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
Stage 0	72	97.1	97.1	95.4	95.4	95.4
Stage I	529	99.4	98.0	96.7	92.4	90.4
Stage II	630	97.4	94.9	91.1	88.3	83.2
Stage IIIa	452	97.5	94.9	89.7	85.1	82.5
Stage IIIb	296	94.8	89.2	79.4	70.6	63.7
Stage IV	397	75.0	54.7	38.6	27.5	20.8
All	2376	93.8	88.3	82.2	76.7	72.4

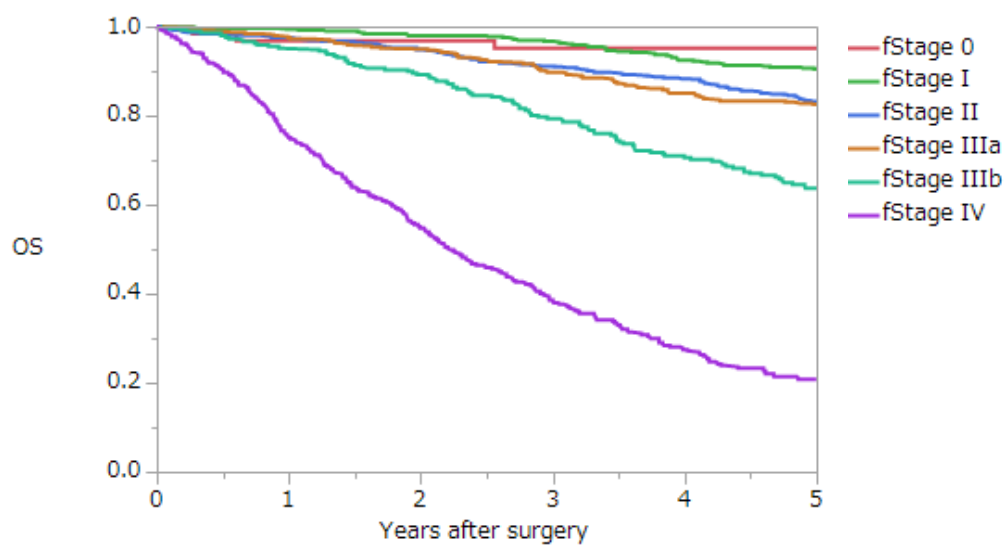


Table 4-49 Surgery-Overall survival rates according to liver metastasis (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
H0	5517	95.8	91.8	87.2	83.0	79.5
H1	295	88.7	69.1	48.6	37.1	28.8
H2	184	79.1	52.9	35.5	27.0	19.8
H3	234	62.0	36.5	19.5	14.9	10.1
Unknown	56					
All	6286	93.7	87.5	81.4	76.7	72.9

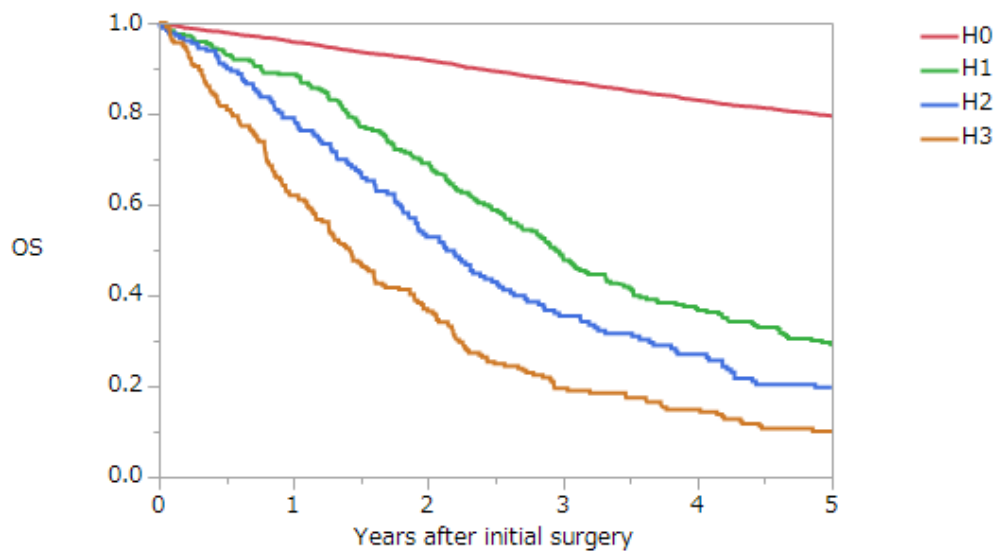


Table 4-50 Surgery-Overall survival rates according to peritoneal metastasis (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
P0	5907	94.8	89.6	83.9	79.5	75.8
P1	159	75.7	49.1	37.8	27.7	17.3
P2	56	73.1	42.7	25.1	20.1	10.1
P3	78	61.6	31.5	11.0	6.8	0.0
Unknown	86					
All	6286	93.7	87.5	81.4	76.8	72.9

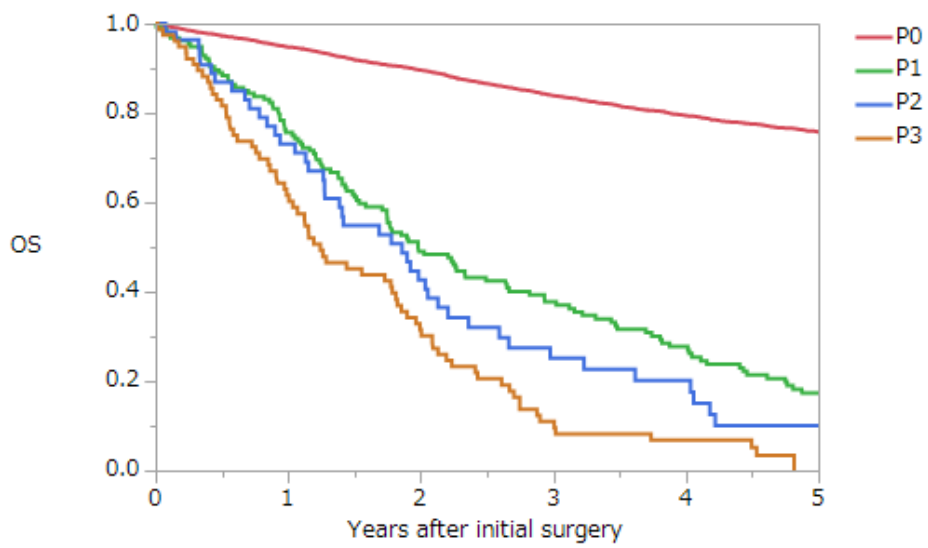


Table 4-51 Surgery-Overall survival rates according to lung metastasis (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
LM0	5506	94.3	88.8	83.2	78.9	75.0
LM1	117	76.2	57.9	36.7	28.0	20.0
LM2	26	92.3	50.0	34.6	23.1	11.5
LM3	75	67.2	38.0	25.7	13.7	7.8
Unknown	562					
All	6286	93.6	87.3	81.3	76.7	72.7

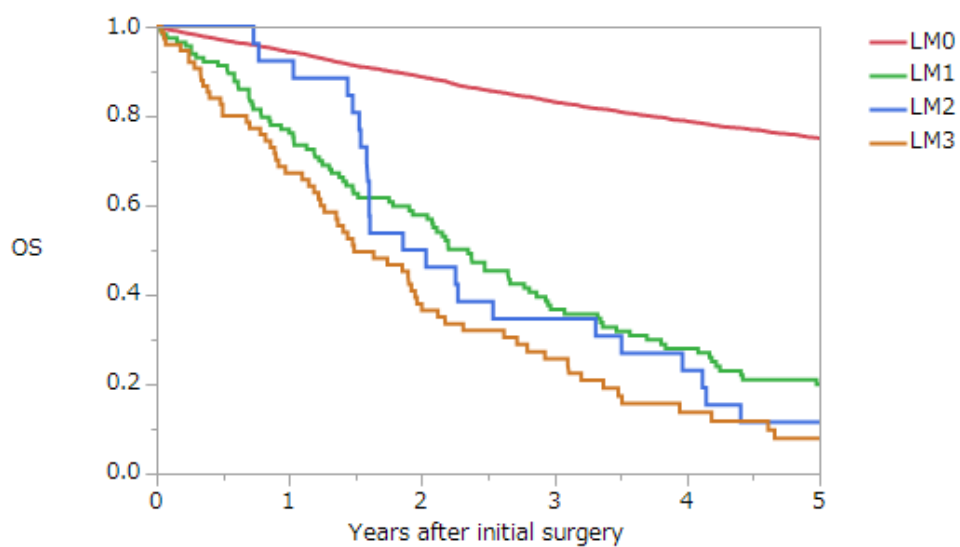


Table 4-52 Surgery-Overall survival rates according to distant metastasis other than liver metastasis (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
M0	5196	95.4	90.7	85.5	81.1	77.3
M1	398	73.2	48.4	32.6	24.6	18.9
Unknown	692					
All	6286	93.8	87.7	81.8	77.1	73.2

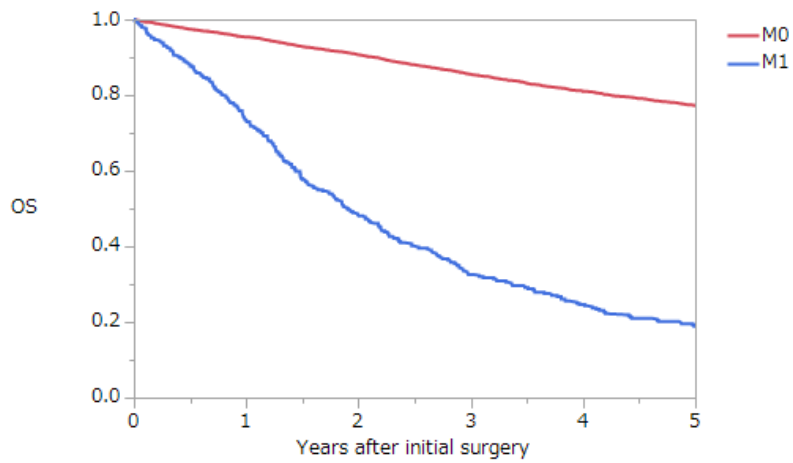
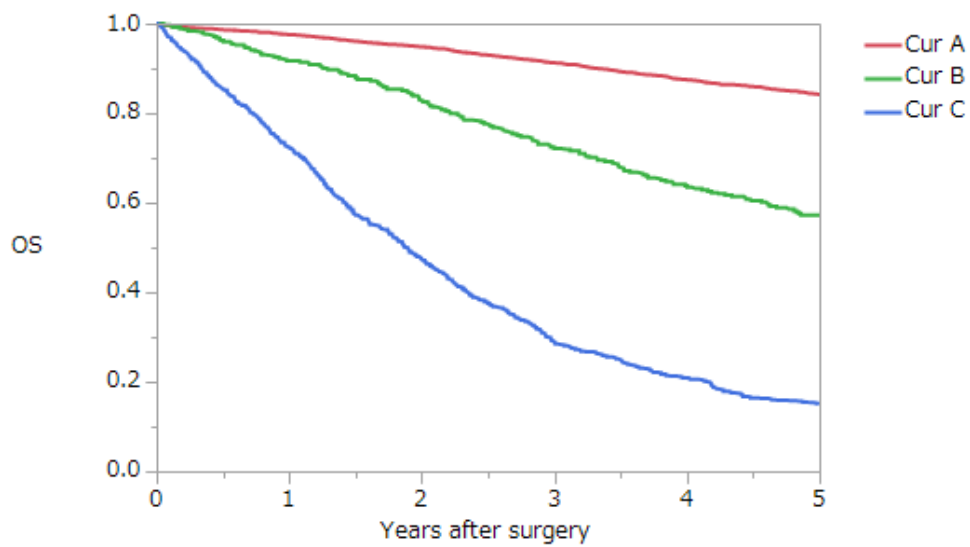


Table 4-53 Surgery-Overall survival rates according to curability (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
Cur A	4476	97.5	94.9	91.3	87.5	84.2
Cur B	381	91.7	82.8	72.2	63.8	57.3
Cur C	788	72.4	47.4	29.0	20.9	14.8
Unknown	641					
All	6286	93.7	87.6	81.6	76.9	73.1



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大分赤十字病院 外科
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