

Multi-Institutional Registry of Large Bowel Cancer in Japan

Vol. 37

Cases treated in 2011

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 37 号 (Multi-Institutional Registry of Large Bowel Cancer in Japan, Vol. 37) をお届けします。本号は 2011 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 6470 例の調査報告書です。臨床病理学的事項は、大腸癌取り扱い規約第 7 版に従って記載されております。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ました。それに伴い、従来は生命表法で集計していた生存分析は、Kaplan-Meier 法で集計しました。

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、大腸癌取り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。これら大腸癌取り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、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います。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。

2022 年 1 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

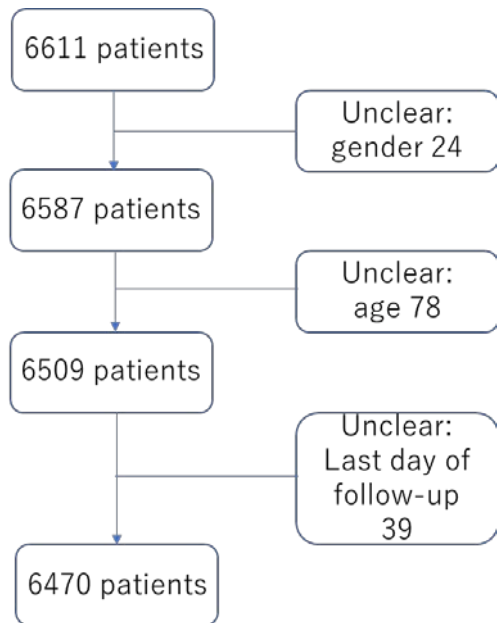
Tumor size, Histologic type-----33

Depth of tumor invasion-----34

Number of invaded organs, lymphovascular invasion-----35

Interstitium, Infiltrative growth pattern, Proximal margin-----36

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	340	5.3
Surgery after endoscopic excision	250	3.9
Surgery	5848	90.4
Non-surgery	32	0.5
Total	6470	100

Table 2-1 Endoscopic excision-Gender

Gender	Number	Percentage
Male	210	61.8
Female	130	38.2
Total	340	100

Table 2-2 Endoscopic excision-Age

Age (median)	66 (32-95)
Age (mean)	65.6 ± 10.7

Table 2-3 Endoscopic excision-Age classification

Age classification	Number	Percentage
20-29	0	0
30-39	5	1.5
40-49	16	4.7
50-59	70	20.6
60-69	127	37.4
70-79	88	25.9
80-89	33	9.7
90=<	1	0.3
Total	340	100

Table 2-4 Endoscopic excision-Tumor location

Tumor location	Number	Percentage
Cecum	13	3.8
Ascending	30	8.8
Transverse	38	11.2
Descending	22	6.5
Sigmoid	129	37.9
Rectosigmoid	28	8.2
Upper rectum	27	7.9
Lower rectum	44	12.9
Unknown	9	2.6
Total	340	100

Table 2-5 Endoscopic excision-Procedure

Procedure	Number	Percentage
Polypectomy	65	19.1
EMR	224	65.9
ESD	46	13.5
Unknown	5	1.5
Total	340	100

Table 2-6 Endoscopic excision-En bloc or piecemeal

Resection type	Number	Percentage
En bloc	262	77.1
Piecemeal	23	6.8
Unknown	55	16.2
Total	340	100

Table 2-7 Endoscopic excision-Macroscopic type

Macroscopic type	Number	Percentage
Ip	67	19.7
Isp	107	31.5
Is	21	6.2
Ila	38	11.2
IIb	1	0.3
IIc	3	0.9
Ila+IIc	9	2.6
IIc+Ila	0	0
Others	41	12.1
Unknown	53	15.6
Total	340	100

Table 2-8 Endoscopic excision-Tumor size

Median	15 (4-118) mm
Mean	18.5 ± 13.9 mm

Table 2-9 Endoscopic excision-Tumor size 2

Tumor size	Number	Percentage
≤5 mm	15	4.4
6-10 mm	69	20.3
11-15 mm	54	15.9
16-20 mm	60	17.6
21-30 mm	38	11.2
31-40 mm	8	2.4
>40 mm	16	4.7
Unknown	80	23.5
Total	340	100

Table 2-10 Endoscopic excision-Histologic type

Histologic type	Number	Percentage
Well differentiated	311	91.5
Moderately differentiated	16	4.7
Poorly differentiated	0	0
Neuroendocrine tumor	6	1.8
Others	1	0.3
Unknown	6	1.8
Total	340	100

Table 2-11 Endoscopic excision-Depth of tumor invasion

Depth of tumor invasion	Number	Percentage
pM	279	82.1
pSM	49	14.4
Unknown	12	3.5
Total	340	100

Table 2-12 Endoscopic excision-Distance of submucosal invasion

Distance of submucosal invasion	Number	Percentage
<1000 μ m	9	18.4
\geq 1000 μ m	23	46.9
Unknown	17	34.7
Total	49	100

Table 2-13 Endoscopic excision-Lymphatic invasion

Lymphatic invasion	Number	Percentage
ly0	303	89.1
ly1	3	0.9
ly2	0	0
ly3	0	0
Unknown	34	10
Total	340	100

Table 2-14 Endoscopic excision-Venous invasion

Venous invasion	Number	Percentage
v0	302	88.8
v1	3	0.9
v2	1	0.3
v3	0	0
Unknown	34	10
Total	340	100

Table 2-15 Endoscopic excision-Horizontal margin

Horizontal margin	Number	Percentage
HM0	292	85.9
HM1	10	2.9
Unknown	38	11.2
Total	340	100

Table 2-16 Endoscopic excision-Vertical margin

Vertical margin	Number	Percentage
VM0	299	87.9
VM1	1	0.3
Unknown	40	11.8
Total	340	100

Table 2-17 Endoscopic excision-Curability

Curability	Number	Percentage
cur EA	318	93.5
cur EC	8	2.4
Unknown	14	4.1
Total	340	100

Table 3-1 Surgery after endoscopic excision-Gender

Gender	Number	Percentage
Male	152	60.8
Female	98	39.2
Total	250	100

Table 3-2 Surgery after endoscopic excision-Age

Age (median)	66 (36-86)
Age (mean)	64.5 ± 10.1

Table 3-3 Surgery after endoscopic excision-Age classification

Age classification	Number	Percentage
20-29	0	0.3
30-39	5	2.0
40-49	17	6.8
50-59	43	17.2
60-69	91	36.4
70-79	84	33.6
80-89	10	4.0
90=<	0	0
Total	250	100

Table 3-4 Surgery after endoscopic excision-Tumor location

Tumor location	Number	Percentage
Cecum	12	4.8
Ascending	24	9.6
Transverse	18	7.2
Descending	11	4.4
Sigmoid	69	27.6
Rectosigmoid	29	11.6
Upper rectum	25	10
Lower rectum	34	13.6
Proctos	2	0.8
Unknown	26	10.4
Total	250	100

Table 3-5 Surgery after endoscopic excision-Endoscopic procedure

Procedure	Number	Percentage
Polypectomy	21	8.4
EMR	154	61.6
ESD	47	18.8
Others	3	1.2
Unknown	25	10.0
Total	250	100

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

Resection	Number	Percentage
En bloc	155	62
Piecemeal	35	14
Unknown	60	24
Total	250	100

Table 3-7 Surgery after endoscopic excision-Macroscopic type

Macroscopic type	Number	Percentage
Ip	37	14.8
Isp	69	27.6
Is	25	10
Ila	30	12
Ilb	1	0.4
Ilc	3	1.2
Ila+Ilc	11	4.4
Ilc+Ila	1	0.4
Others	19	7.6
Unknown	54	21.6
Total	250	100

Table 3-8 Surgery after endoscopic excision-Tumor size

Median	15 (4-77) mm
Mean	18.5 ± 12.4 mm

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

Tumor size	Number	Percentage
<=5 mm	8	3.2
6-10 mm	42	16.8
11-15 mm	41	16.4
16-20 mm	38	15.2
21-30 mm	24	9.6
31-40 mm	10	4
>40 mm	9	3.6
Unknown	78	31.2
Total	250	100

Table 3-10 Surgery after endoscopic excision-Histologic type

Histologic type	Number	Percentage
Well differentiated	154	61.6
Moderately differentiated	51	20.4
Poorly differentiated	2	0.8
Mucinous	1	0.4
Signet ring cell	0	0
Neuroendocrine tumor	7	2.8
Others	2	0.8
Unknown	33	13.2
Total	250	100

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

Depth of tumor invasion	Number	Percentage
pM	7	2.8
pSM	201	80.4
pMP	4	1.6
pSS	1	0.4
Unknown	37	14.8
Total	250	100

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

Distance of submucosal invasion	Number	Percentage
<1000 μ m	21	10.4
\geq 1000 μ m	130	64.7
Unknown	50	24.9
Total	201	100

Table 3-13 Surgery after endoscopic excision-Lymphatic invasion

Lymphatic invasion	Number	Percentage
ly0	136	54.4
ly1	57	22.8
ly2	4	1.6
ly3	2	0.8
Unknown	51	20.4
Total	250	100

Table 3-14 Surgery after endoscopic excision-Venous invasion

Venous invasion	Number	Percentage
v0	132	52.8
v1	59	23.6
v2	5	2
v3	0	0
Unknown	54	21.6
Total	250	100

Table 3-15 Surgery after endoscopic excision-Horizontal margin

Horizontal margin	Number	Percentage
HM0	140	56
HM1	28	11.2
Unknown	82	32.8
Total	250	100

Table 3-16 Surgery after endoscopic excision-Vertical margin

Vertical margin	Number	Percentage
VM0	125	50
VM1	45	18
Unknown	80	32.0
Total	250	100

Table 3-17 Surgery after endoscopic excision-Endoscopic curability

Endoscopic curability	Number	Percentage
cur EA	109	43.6
cur EC	70	28
Unknown	71	28.4
Total	250	100

Table 3-18 Surgery after endoscopic excision-Operative approach

Operative approach	Number	Percentage
Transanal	2	0.8
Laparoscopic	194	77.6
Open	53	21.2
Unknown	1	0.4
Total	250	100

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

Type of anastomosis	Number	Percentage
End-to-end	118	47.2
Side-to-end	22	8.8
End-to-side	3	2.4
Side-to-side	5	2
Functional end-to-end	47	18.8
Unknown	52	20.8
Total	250	100

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

Type of anastomosis	Number	Percentage
Handsewn	37	14.8
Stapling	181	72.4
Unknown	32	12.8
Total	250	100

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

Type of anastomosis	Number	Percentage
D0	3	1.2
D1	14	5.6
D2	177	70.8
D3	41	16.4
Unknown	15	6
Total	250	100

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

Histologic type	Number	Percentage
Well differentiated	106	42.4
Moderately differentiated	54	21.6
Poorly differentiated	1	0.4
Mucinous	1	0.4
Signet ring cell	0	0
Neuroendocrine tumor	7	2.8
Others	3	1.2
Unknown	78	31.2
Total	250	100

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

Depth of tumor invasion	Number	Percentage
pM	6	2.4
pSM	153	61.2
pMP	9	3.6
pSS	8	3.2
pSE	3	1.2
pA	3	1.2
Unknown	68	27.2
Total	250	100

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

Lymph node metastasis	Number	Percentage
pN0	221	88.4
pN1	19	7.6
pN2	2	8
pN3	1	0.4
Unknown	7	2.8
Total	250	100

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

Number of lymph node retrieved (median)	12 (0-92)
Number of lymph node retrieved (mean)	14.8 ± 12.4

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

Number of positive node (median)	0 (0-11)
Number of positive node (mean)	0.2 ± 1.0

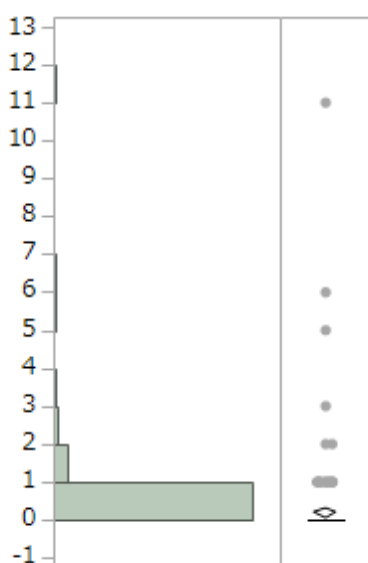


Table 3-27 Surgery after endoscopic excision-Liver metastasis

Liver metastasis	Number	Percentage
H0	244	97.6
H1	0	0
H2	0	0
H3	1	0.4
Unknown	5	2
Total	250	100

Table 3-28 Surgery after endoscopic excision-Peritoneal metastasis

Peritoneal metastasis	Number	Percentage
P0	244	97.6
P1	1	0.4
P2	0	0
P3	0	0
Unknown	5	2
Total	250	100

Table 3-29 Surgery after endoscopic excision-Pulmonary metastasis

Peritoneal metastasis	Number	Percentage
LM0	241	96.4
LM1	0	0
LM2	0	0
LM3	0	0
Unknown	9	3.6
Total	250	100

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

Distant metastasis	Number	Percentage
M0	234	93.6
M1	1	0.4
Unknown	15	6.0
Total	250	100

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

Curability	Number	Percentage
Cur A	242	96.8
Cur B	0	0.0
Cur C	2	0.8
Unknown	6	2.4
Total	250	100

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

Recurrence	Number	Percentage
Absent	234	93.6
Present	6	2.4
Unknown	10	4
Total	250	100

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

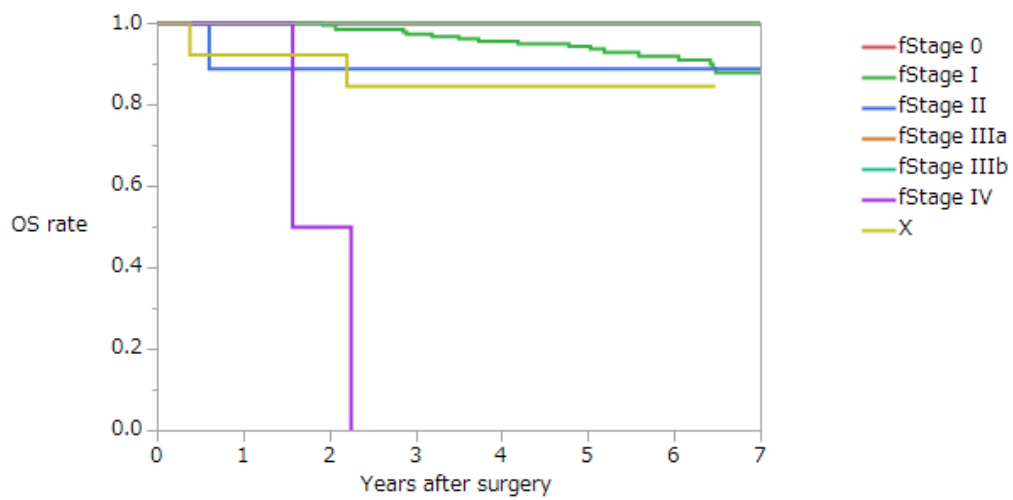
Fisrt recurrence site	Number
Anastomosis	1
Regional lymph node	6
Local	0
Lymph node (not regional)	0
Liver	2
Lung	2
Peritoneum	0
Bone	0
Brain	0
Adrenal gland	0
Skin	0
Others	0
(overlapping+)	

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

Treatment for recurr	Number
None	1
Curative surgery	5
Palliative surgery	0
Radiotherapy	0
Chemotherapy	0
Unknown	0
Total	6

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	10	100	100	100	100	100
Stage I	195	100	99.5	97.2	95.5	94.3
Stage II	9	88.9	88.9	88.9	88.9	88.9
Stage IIIa	18	100	100	100	100	100
Stage IIIb	3	100	100	100	100	100
Stage IV	2	100	50	0	0	0
Unknown	13					
All	250	99.2	98.3	95.7	94.4	93.5



Overall survival of all patients with surgery after endoscopic excision

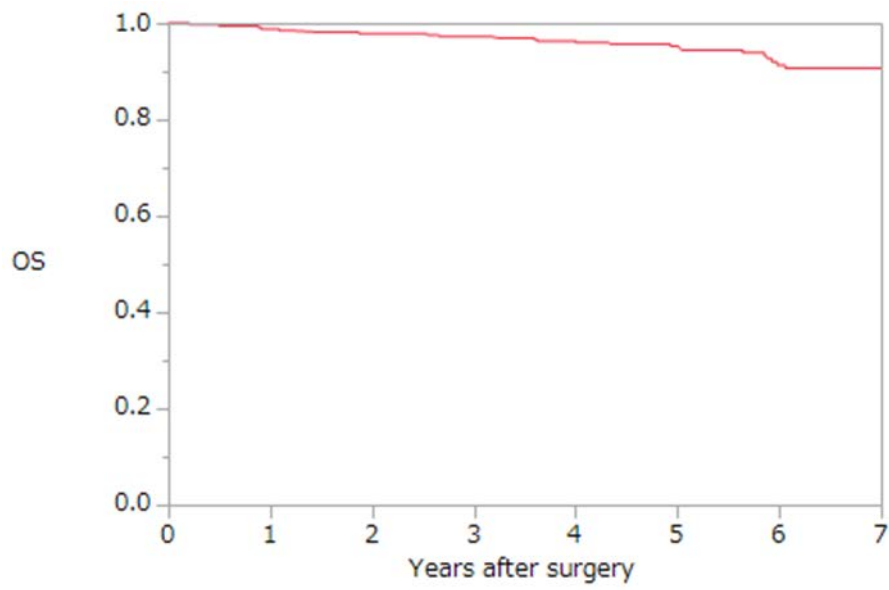


Table 4-1 Surgery-Gender

Gender	Number	Percentage
Male	3400	58.1
Female	2448	41.9
Total	5848	100

Table 4-2 Surgery-Age

Age (median)	68 (15-99)
Age (mean)	67.5 ± 11.6

Table 4-3 Surgery-Age classification

Age classification	Number	Percentage
<20	2	0.03
20-29	17	0.3
30-39	100	1.7
40-49	306	5.2
50-59	853	14.6
60-69	1885	32.2
70-79	1808	30.9
80-89	814	13.9
90=<	63	1.1
Total	5848	100

Table 4-4 Surgery-Tumor location

Tumor location	Number	Percentage
Processus vermiformis	23	0.40
Cecum	431	7.4
Ascending	848	14.5
Transverse	513	8.8
Descending	253	4.3
Sigmoid	1451	24.8
Rectosigmoid	646	11
Upper rectum	745	12.7
Lower rectum	786	13.4
Proctos (anal canal)	45	0.80
Unknown	107	1.8
Total	5848	100

Table 4-5 Surgery-Preoperative serum CEA value

Preoperative serum CEA value	Number	Percentage
Normal	3338	57.1
<2 x ULN	891	15.2
<4 x ULN	457	7.8
<8 x UNL	293	5.0
>=8 x UNL	507	8.7
Unknown	362	6.2
Total	5848	100

Table 4-6 Surgery-Multiple primary cancers

Multiple primary cancers	Number	Percentage
Absent	4721	80.7
Synchronous	299	5.1
Metachronous	549	9.4
Synchronous and metachronous	23	0.4
Unknown	253	4.3
Total	5848	100

Table 4-7 Surgery-Synchronous multiple colorectal cancers

Synchronous multiple CRC	Number	Percentage
Absent	3927	57.2
Present	321	5.5
Unknown	1600	27.4
Total	5848	100

Table 4-7 Surgery-Synchronous multiple colorectal cancers

Synchronous multiple CRC	Number	Percentage
Absent	3927	57.2
Present	321	5.5
Unknown	1600	27.4
Total	5848	100

Table 4-9 Operative procedure

Operative procedure	Number	Percentage
Polypectomy	31	0.50
Tumorectomy	55	0.9
Local excision	19	0.3
Appendectomy	34	0.60
Ileocecal resection	509	8.7
Partial colectomy	434	7.4
Right hemicolectomy	860	14.7
Left hemicolectomy	180	3.1
Sigmoidectomy	1117	19.1
Subtotal colectomy	49	0.8
Total colectomy	8	0.1
Total proctocolectomy	24	0.4
High anterior resection	548	9.4
Low anterior resection	1125	19.2
Hartmann's operation	236	4.0
Abdominoperineal resection	301	5.1
Others	109	1.9
Unknown	209	3.6
Total	5848	100

Table 4-10 Surgery-Operative approach

Operative approach	Number	Percentage
Transanal	60	1.0
Laparoscopic	2457	42.0
Open	3243	55.5
Others	9	0.2
Unknown	79	1.4
Total	5848	100

Table 4-11 Surgery-Type of anastomosis

Type of anastomosis	Number	Percentage
End-to-end	2562	43.8
Side-to-end	253	4.3
End-to-side	124	2.1
Side-to-side	173	3
Functional end-to-end	985	16.8
Unknown	1751	29.9
Total	5848	100

Table 4-12 Surgery-Type of anastomosis 2

Type of anastomosis	Number	Percentage
Handsewn	839	14.3
Stapling	3423	58.5
Unknown	1586	27.1
Total	5848	100

Table 4-13 Surgery- Lymph node dissection

Lymph node dissection	Number	Percentage
D0	132	2.3
D1	235	4.0
D2	1635	28.0
D3	3232	55.3
Unknown	614	10.5
Total	5848	100

Table 4-14 Surgery-Tumor size

Tumor size	Number	Percentage
<=20 mm	852	14.6
21-40 mm	1835	31.4
41-60 mm	1514	25.9
61-80 mm	599	10.2
81-100 mm	231	4.0
>100 mm	99	1.7
Unknown	718	12.3
Total	5848	100

Table 4-15 Surgery-Histologic type

Histologic type	Number	Percentage
Well differentiated	2227	38.1
Moderately differentiated	2870	49.1
Poorly differentiated	216	3.7
Mucinous	217	3.7
Signet ring cell	8	0.1
Neuroendocrine tumor	18	0.3
Others	26	0.4
Unknown	266	4.5
Total	5848	100

Table 4-16 Surgery-Histologic type 2

Histologic type	Number	Percentage
Adenocarcinoma	5313	90.9
Other malignancies	269	4.6
Unknown	266	4.5
Total	5848	100

Table 4-17 Surgery-Depth of tumor invasion

Depth of tumor invasion	Number	Percentage
pTis	188	3.2
pM	703	12.0
pSM	777	13.3
pMP	2182	37.3
pSS	866	14.8
pSI	337	5.8
pA	426	7.3
pAI	57	1.0
Unknown	312	5.3
Total	5848	100

Table 4-18 Surgery-Number of invaded organs during surgery

Number of invaded organs	Number	Percentage
0	2034	34.8
1	434	7.4
2	87	1.5
3 or more	35	0.6
Unknown	3258	55.7
Total	5848	100

Table 4-19 Surgery-Lymphatic invasion

Lymphatic invasion	Number	Percentage
ly0	2521	43.1
ly1	2107	36.0
ly2	645	11.0
ly3	212	3.6
Unknown	363	6.2
Total	5848	100

Table 4-20 Surgery-Venous invasion

Venous invasion	Number	Percentage
v0	1914	32.7
v1	2080	35.6
v2	1059	18.1
v3	443	7.6
Unknown	352	6
Total	5848	100

Table 4-21 Surgery-Interstitium

Interstitium	Number	Percentage
Medullary pattern	279	4.8
Intermediate pattern	2801	47.9
Scirrhous pattern	50	0.9
Unknown	2718	46.5
Total	5848	100

Table 4-22 Surgery-Infiltrative growth pattern

Infiltrative growth pattern	Number	Percentage
INF α	454	7.8
INF β	4258	72.8
INF γ	253	4.3
Unknown	883	15.1
Total	5848	100

Table 4-23 Surgery-Proximal margin

Proximal margin	Number	Percentage
PM0	5349	91.5
PM1	5	0.09
Unknown	494	8.4
Total	6042	100

Table 4-24 Surgery-Distal margin

Distal margin	Number	Percentage
DM0	5341	91.3
DM1	11	0.2
Unknown	496	8.5
Total	5848	100

Table 4-25 Surgery-Circumferential resection margin

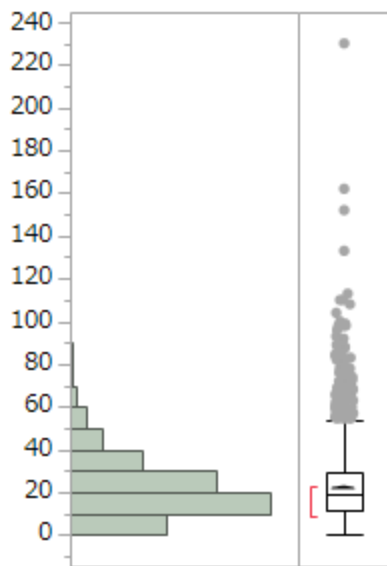
Circumferential resection margin	Number	Percentage
RM0	4754	81.3
RM1	144	2.5
Unknown	950	16.2
Total	5848	100

Table 4-26 Surgery-lymph node metastasis

Lymph node metastasis	Number	Percentage
pN0	3352	57.3
pN1	1475	25.2
pN2	630	10.8
pN3	259	4.4
Unknown	132	2.3
Total	5848	100

Table 4-27 Surgery-number of lymph node retrieved (N = 4852)

Number of lymph node retrieved (median)	19 (0-230)
Number of lymph node retrieved (mean)	22.0 ± 15.0



* 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 = 4904)

Number of positive node (median)	0 (0-140)
Number of positive node (mean)	1.6 ± 3.9

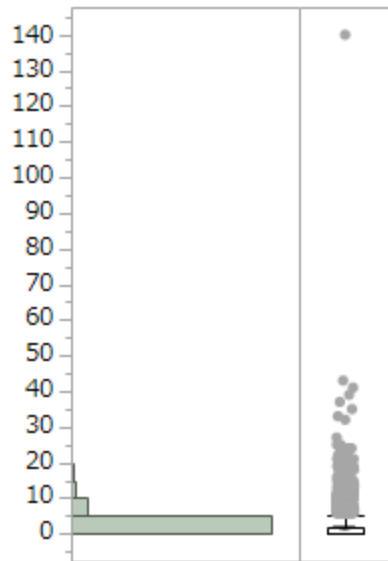


Table 4-29 Surgery-number of paracolic lymph node retrieved (N = 4456)

Number of lymph node retrieved (median)	10 (0-143)
Number of lymph node retrieved (mean)	12.4 ± 9.4

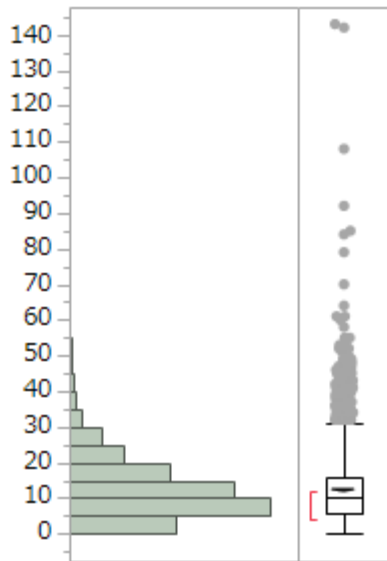


Table 4-30 Surgery-number of positive paracolic lymph node (N = 4508)

Number of positive node (median)	0 (0-133)
Number of positive node (mean)	1.2 ± 3.2

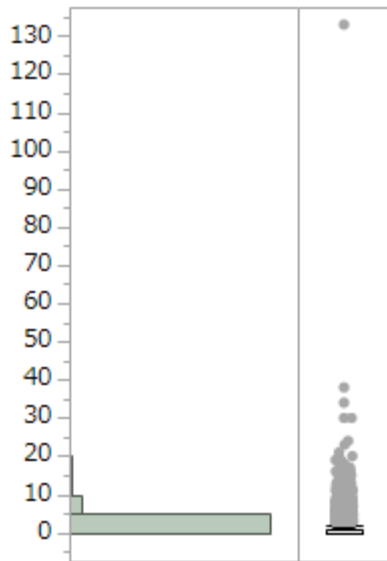


Table 4-31 Surgery-number of intermediate lymph node retrieved (N = 4264)

Number of lymph node retrieved (median)	5 (0-42)
Number of lymph node retrieved (mean)	5.8 ± 4.5

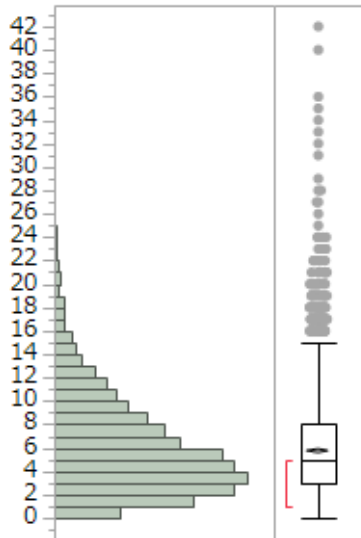


Table 4-32 Surgery-number of positive intermediate lymph node (N = 4289)

Number of positive node (median)	0 (0-11)
Number of positive node (mean)	0.3 ± 0.9

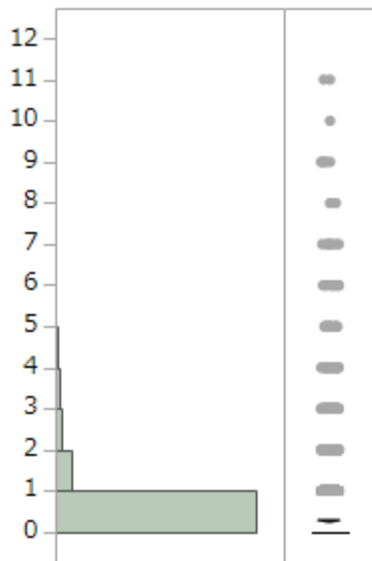


Table 4-33 Surgery-number of main lymph node retrieved (N = 3394)

Number of lymph node retrieved (median)	2 (0-39)
Number of lymph node retrieved (mean)	3.3 ± 3.5

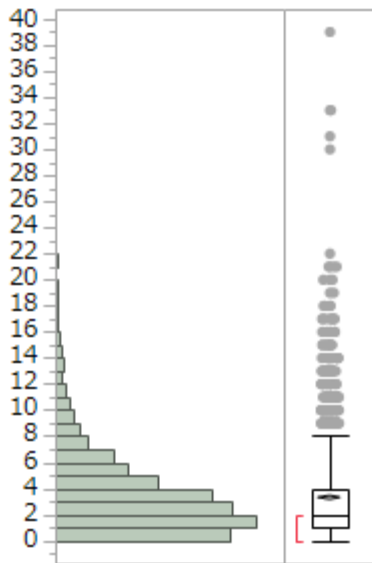


Table 4-34 Surgery-number of positive main lymph node (N = 3407)

Number of positive node (median)	0 (0-12)
Number of positive node (mean)	0.1 ± 0.5

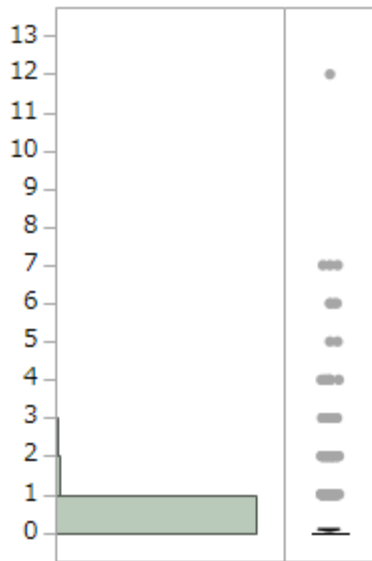


Table 4-35 Surgery-number of lateral pelvic lymph node retrieved (N = 820)

Number of lymph node retrieved (median)	0 (0-70)
Number of lymph node retrieved (mean)	5.9 ± 10.2

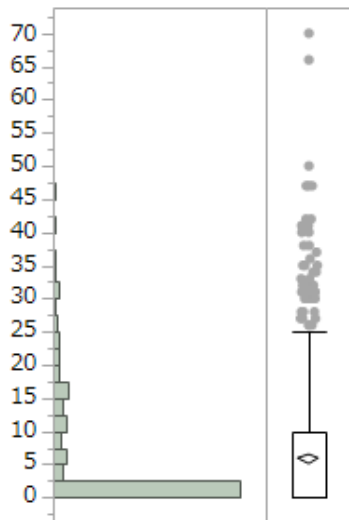


Table 4-36 Surgery-number of positive lateral pelvic lymph node (N = 821)

Number of positive node (median)	0 (0-26)
Number of positive node (mean)	0.3 ± 1.5

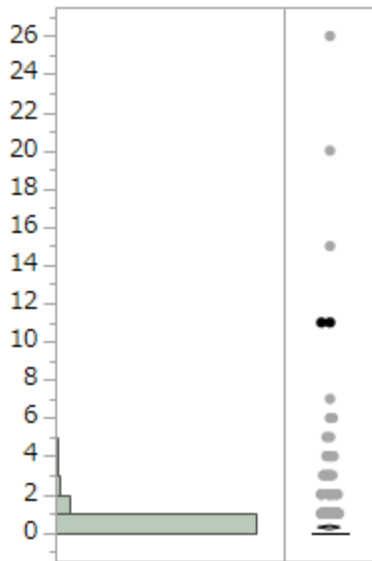


Table 4-37 Surgery-liver metastasis

Liver metastasis	Number	Percentage
H0	5118	87.5
H1	245	4.2
H2	189	3.2
H3	197	3.4
Unknown	99	1.7
Total	5848	100

Table 4-38 Surgery-Peritoneal metastasis

Peritoneal metastasis	Number	Percentage
P0	5467	93.5
P1	134	2.3
P2	51	0.9
P3	77	1.3
Unknown	119	2.0
Total	5848	100

Table 4-39 Surgery-Distant metastasis other than liver

Distant metastasis	Number	Percentage
M0	5143	87.9
M1	402	6.9
Unknown	303	5.2
Total	5848	100

Table 4-40 Surgery-Lung metastasis

Lung metastasis	Number	Percentage
LM0	5195	88.8
LM1	124	2.1
LM2	24	0.4
LM3	82	1.4
Unknown	423	7.2
Total	5848	100

Table 4-41 Surgery-Curability after surgery

Curability	Number	Percentage
Cur A	4698	80.3
Cur B	238	4.1
Cur C	678	11.6
Unknown	234	4.0
Total	5848	100

Table 4-42 Surgery-Recurrence after surgery

recurrence	Number	Percentage
Absent	4174	71.4
Present	986	16.9
Unknown	688	11.8
Total	5848	100

Table 4-43 Surgery-Recurrence rate according to stage

	Stage 0	Stage I	Stage II	Stage IIIa	Stage IIIb	Stage IV	Unknown
Absent	207 (91.2)	1081 (88.1)	1352 (80.0)	779 (72.7)	333 (54.2)	366 (39.6)	56 (60.9)
Present	4(1.8)	67 (5.5)	210 (12.4)	224 (20.9)	205 (33.3)	264 (28.6)	12 (13.0)
Unknown	16 (7.1)	79 (6.4)	129 (7.6)	69 (6.4)	77 (12.5)	294 (31.8)	24 (26.1)
Total	227	1227	1691	1072	615	924	92

Table 4-44 Surgery-Recurrence site after surgery

First recurrence site	Number
Anastomosis	46
Regional lymph node	70
Local	87
Lymph node (not regional)	104
Liver	363
Lung	293
Peritoneum	134
Bone	22
Brain	17
Adrenal gland	3
Skin	3
Others	50
(overlapping+)	

Table 4-45 Surgery-Treatment after recurrence

Treatment for recurrence	Number	Percentage
None	148	15.0
Curative surgery	312	31.6
Palliative surgery	26	2.6
Radiation	32	3.2
Chemotherapy	356	36.1
Others	16	1.6
Unknown	96	9.7
Total	986	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	225	98.6	96.1	94.0	90.7	89.5
Stage I	1221	98.6	97.7	95.7	94.2	91.9
Stage II	1685	96.7	92.6	90.1	86.8	83.6
Stage IIIa	1067	97.0	92.9	88.3	84.3	80.3
Stage IIIb	610	93.8	86.3	78.1	72.6	67.8
Stage IV	922	76.5	56.3	43.4	33.5	26.8
Unknown	118					
All	5848	93.7	87.6	82.6	78.4	74.7

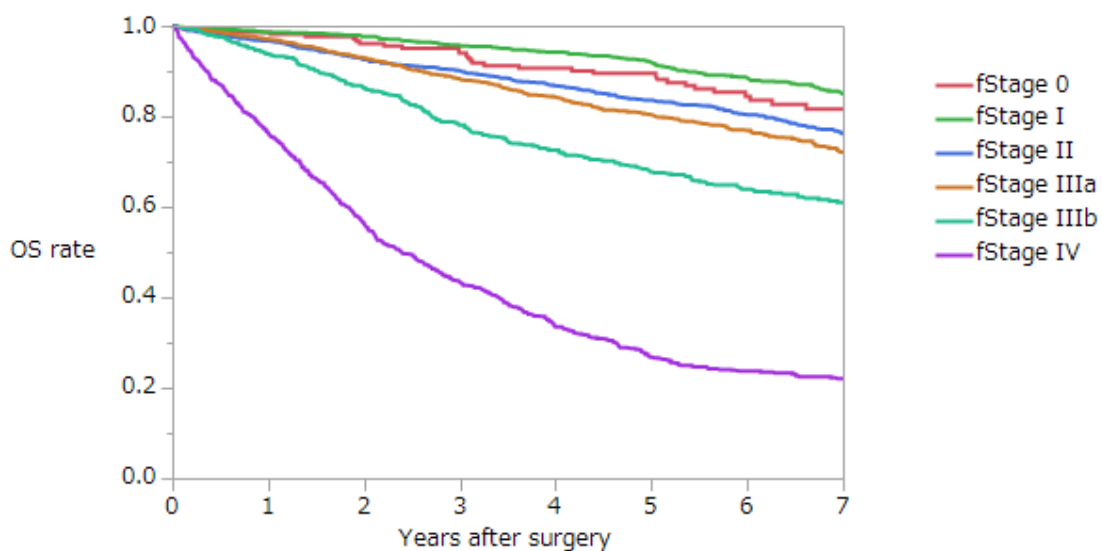


Table 4-47 Surgery-Overall survival rates after surgery (colon) (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
Stage 0	154	98.0	95.8	92.7	89.5	88.6
Stage I	655	98.0	97.2	95.8	94.5	92.1
Stage II	1126	96.4	92.6	90.3	87.2	82.2
Stage IIIa	625	95.9	91.2	85.8	83.1	79.0
Stage IIIb	322	94.0	85.2	75.2	71.4	67.9
Stage IV	578	73.1	53.7	40.8	31.4	25.4
All	3460	92.6	86.3	81.2	77.5	74.0

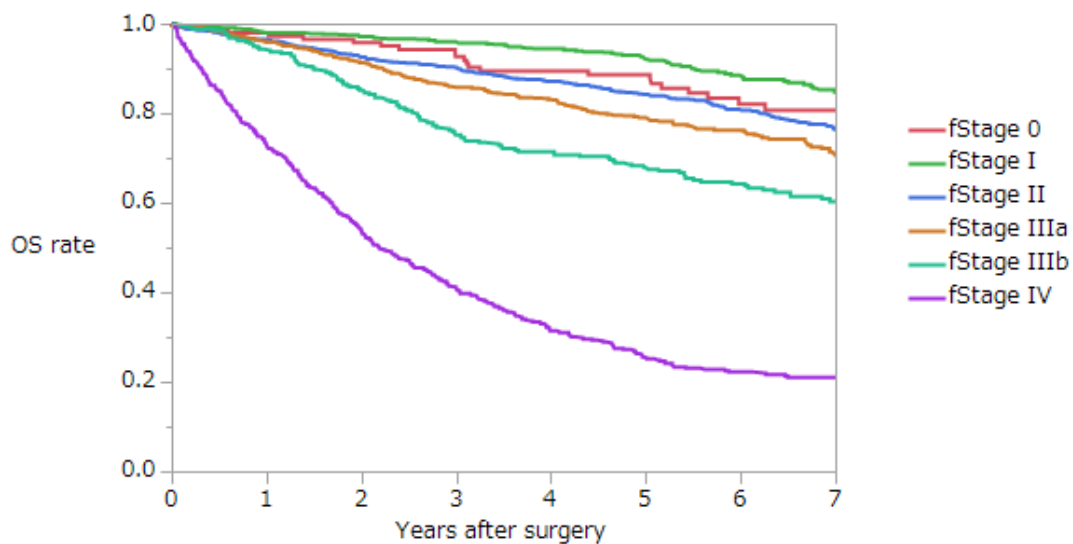


Table 4-48 Surgery-Overall survival rates after surgery (rectum) (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
Stage 0	65	100.0	96.5	96.5	92.6	90.4
Stage I	556	99.3	98.3	95.4	94.0	91.9
Stage II	540	97.3	92.7	89.8	86.0	82.3
Stage IIIa	429	98.8	95.6	92.4	86.5	83.2
Stage IIIb	283	93.9	88.2	81.9	74.2	67.9
Stage IV	323	83.1	61.6	48.8	38.4	30.0
All	2196	95.7	89.8	85.2	80.2	76.1

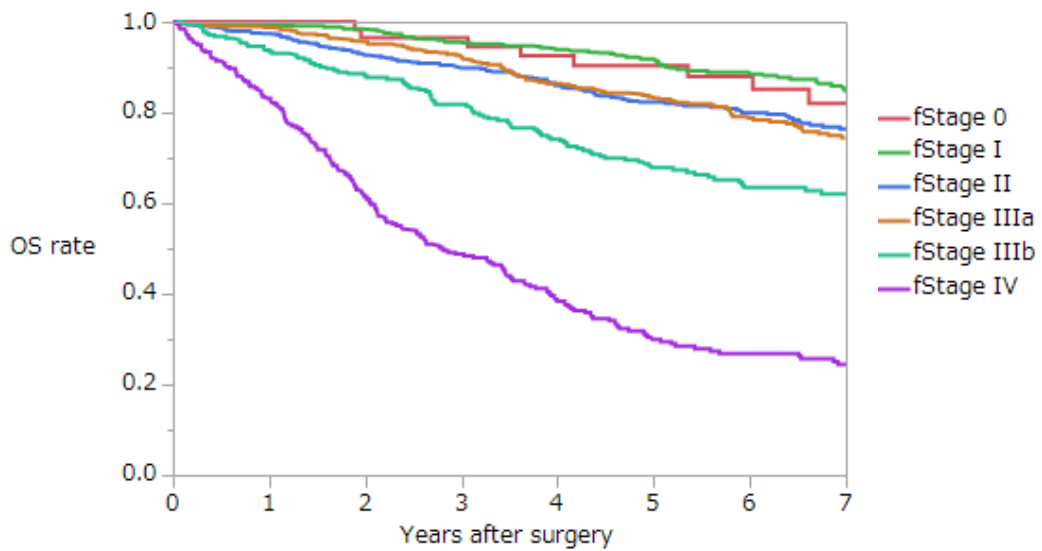


Table 4-49 Surgery-Overall survival rates according to liver metastasis (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
H0	5118	96.1	91.7	87.7	84.1	80.7
H1	245	84.1	67.6	53.2	45.1	38.0
H2	189	76.6	58.8	47.3	33.4	23.7
H3	197	59.9	30.8	17.4	10.9	6.6
Unknown	99					
All except for unknown	5749	93.8	87.7	82.8	78.6	74.9

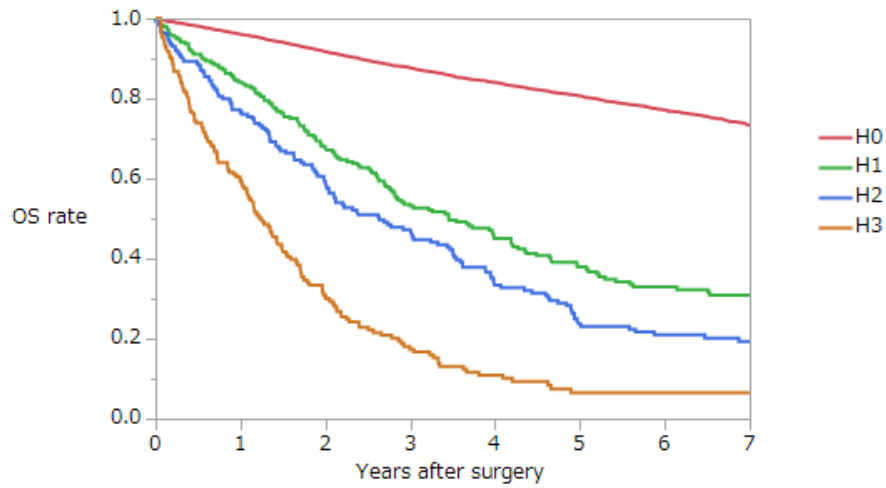


Table 4-50 Surgery-Overall survival rates according to peritoneal metastasis (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
P0	5467	95.2	89.9	85.3	81.4	77.5
P1	134	79.6	54.8	37.5	27.9	24.9
P2	51	67.1	45.6	34.7	25.5	22.9
P3	77	50.1	27.1	19.1	10.3	10.3
Unknown	119					
All except for unknown	5729	94	87.9	83.0	78.8	75.1

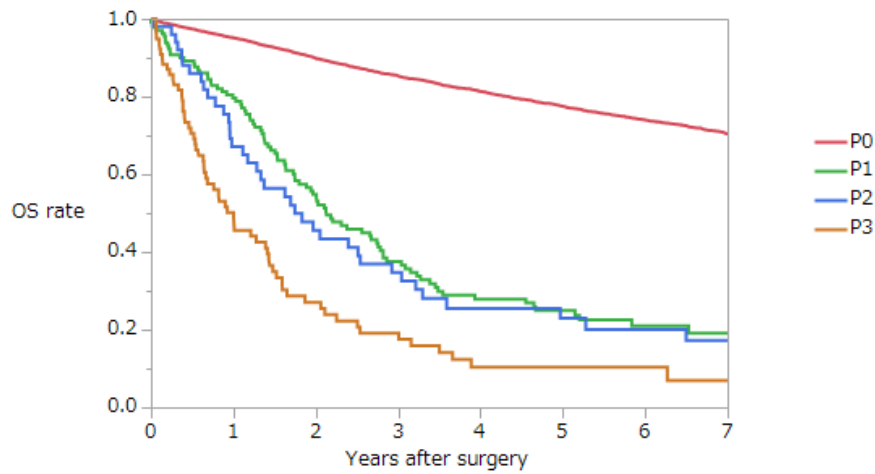


Table 4-51 Surgery-Overall survival rates according to lung metastasis (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
LM0	5195	95.0	89.9	85.1	81.3	78.1
LM1	124	73.9	58.0	49.5	37.5	28.2
LM2	24	74.2	56.8	39.3	28.7	15.3
LM3	82	77.0	46.7	39.0	22.8	12.7
Unknown	423					
All except for unknown	5425	94.1	88.4	83.4	79.3	75.8

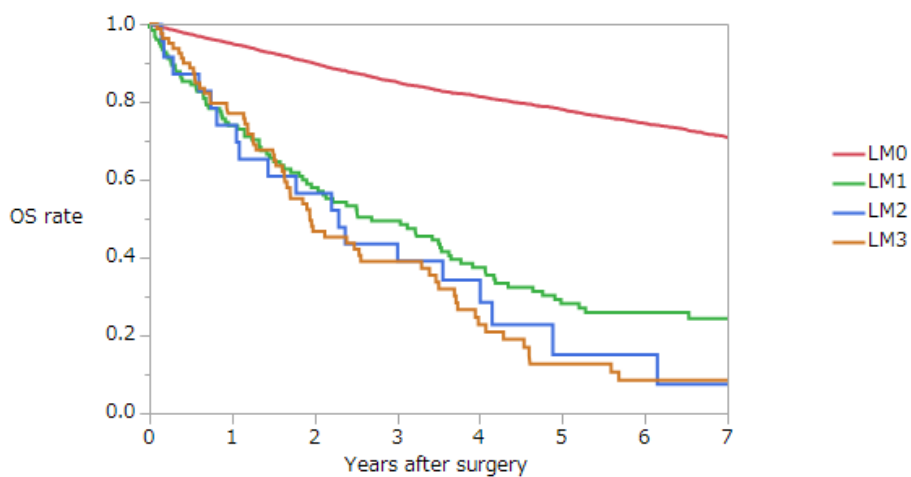


Table 4-52 Surgery-Overall survival rates according to distant metastasis other than liver metastasis (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
M0	5143	95.8	90.9	86.4	82.7	79.3
M1	402	72.2	50.3	40.0	30.5	23.7
Unknown	303					
All except for unknown	5545	94.1	88.1	83.2	79.1	75.4

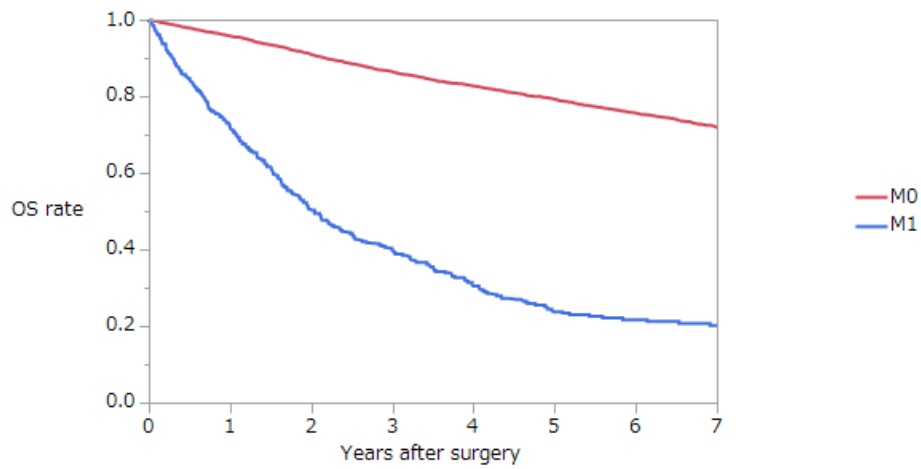
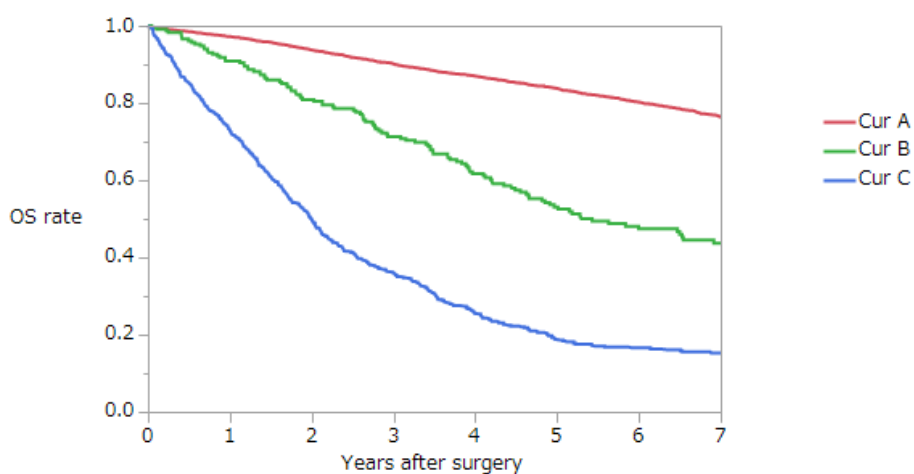


Table 4-53 Surgery-Overall survival rates according to curability (%)

Group	Number of patients	1 year	2 years	3 years	4 years	5 years
Cur A	4698	97.2	93.7	90.2	87.0	83.8
Cur B	238	90.9	80.9	71.3	61.7	53.1
Cur C	678	73.1	49.8	36.0	25.3	18.6
Unknown	234					
All except for unknown	5614	94.1	88.2	83.3	79.1	75.3



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大分大学 消化器・小児外科学講座
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