

II. 診断 Diagnosis

a. 主訴 Chief complaint

表 6.2.a.1 訪医理由 Reason to visit clinic

	人数 Cases	%
1. 健康診断 Health check	122	15.9
2. 症状あり With symptom	390	50.8
3. 糖尿病の増悪 Deterioration of diabetes mellitus	44	5.7
4. 集団検診後の精検 Mass screening	81	10.5
5. その他 Other	108	14.1
9. 不明 Unknown	23	3.0
Total	768	100.0

表 6.2.a.2 初発症状 Initial symptoms

	人数 Cases	%
00. なし No symptom	283	36.8
01. 腹痛 Abdominal pain	207	27.0
02. 体重減少 Body weight loss	28	3.6
03. 嘔吐 Vomiting	8	1.0
04. 食慾不振 Appetite loss	26	3.4
05. 黄疸 Jaundice	49	6.4
06. 全身倦怠 General fatigue	26	3.4
07. 腫瘍 Abdominal tumor	8	1.0
08. 腰背部痛 Back pain	38	4.9
09. 糖尿病の増悪 Deterioration of diabetes mellitus	48	6.3
10. その他 Other	31	4.0
99. 不明 Unknown	16	2.1
Total	768	100.0

b. 画像診断 Imaging diagnosis

表 6.2.b.1 最初の原発巣診断に用いられた診断法 Initial method of diagnosis for primary tumor detection.

	人数 Cases	%
01. 臨床所見 Clinical signs	4	0.5
02. 消化管造影 Barium meal	4	0.5
03. DIC	0	0.0
04. ERCP	56	7.3
05. Angiography	2	0.3
06. CT	304	39.6
07. US	277	36.1
08. PTCD	2	0.3
09. MRI	11	1.4
10. 内視鏡 Endoscopic findings	3	0.4
11. 腹腔鏡 Laparoscopic findings	0	0.0
12. 臓シンチ Scintigraphy	4	0.5
13. SPIO-MRI	0	0.0
14. CTAP	0	0.0
15. EUS	2	0.3
16. IDUS	1	0.1
17. PET	0	0.0
18. その他 Other	7	0.9
99. 不明 Unknown	91	11.8
Total	768	100.0

c. 生化学検査 Biochemical examination
表 6.2.c.1 血中膵酵素濃度 Serum pancreatic enzymes

	異常値を有した症例数/有効回答数 Cases with abnormal values/ Informative cases	有効回答数に対する% % of informative cases
アミラーゼ Serum amylase	195 / 741	26.3
リパーゼ Serum lipase	94 / 303	31.0
エラスターゼ I Serum elastase I	88 / 264	33.3
Total	768	100.0

表 6.2.c.2 膵機能試験 Pancreatic function

	異常値を有した症例数/有効回答数 Cases with abnormal values/ Informative cases	有効回答数に対する% % of informative cases
PS テスト Pancreatic secretin test	10 / 20	50.0
PFD Pancreatic functional diagnosis test	69 / 140	49.3
Total	768	100.0

d. 腫瘍マーカー Tumor markers

略語 Abbreviations

- IPMA-MH: 03a. 膵管内乳頭腺腫_粘液高産生性 Intraductal papillary mucinous adenoma with mucin hypersecretion
 IPMA-noM: 03b. 膵管内乳頭腺腫_粘液非高産生性 Intraductal papillary mucinous adenoma without mucin hypersecretion
 IPMC-MH: 03c. 膵管内乳頭腺癌_粘液高産生性 Intraductal papillary mucinous adenocarcinoma with mucin hypersecretion
 IPMC-noM: 03d. 膵管内乳頭腺癌_粘液非高産生性 Intraductal papillary mucinous adenocarcinoma without mucin hypersecretion
 ITA: 04a. 膵管内管状腺腫 Intraductal tubular adenoma
 ITC: 04b. 膵管内管状腺癌 Intraductal tubular adenocarcinoma
 AH-CIS: 05. 異型過形成および上皮内癌 Atypical hyperplasia and carcinoma in situ
 INV-IT: 15. 膵管内乳頭腺癌由来の浸潤癌 Invasive carcinoma originating in an intraductal tumor

表 6.2.d.1 腫瘍マーカーの異常値頻度 Frequency of abnormal values in tumor markers

	異常値を有した症例数/有効回答数 Cases with abnormal values/ Informative cases	有効回答数に対する% % of informative cases
CA19-9	225 / 655	34.4
CEA	135 / 658	20.5
DUPAN2	40 / 220	18.2
SPAN1	52 / 150	34.7
Total	768	100.0

図 6.2.d.2 CEA と CA19-9 との相関 Correlation of CEA with CA19-9

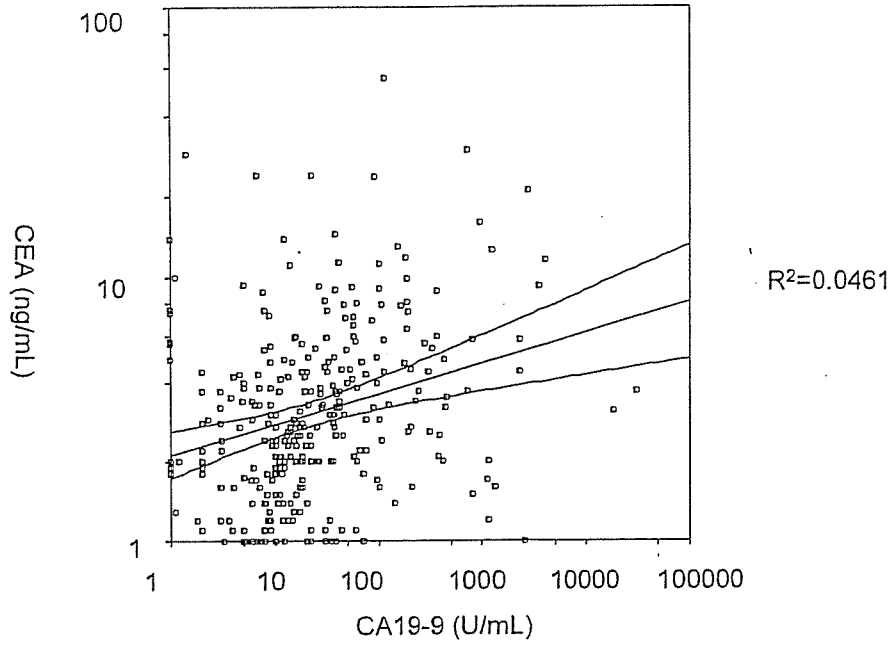


図 6.2.d.3 DUPAN2 と CA19-9 との相関 Correlation of DUPAN2 with CA19-9

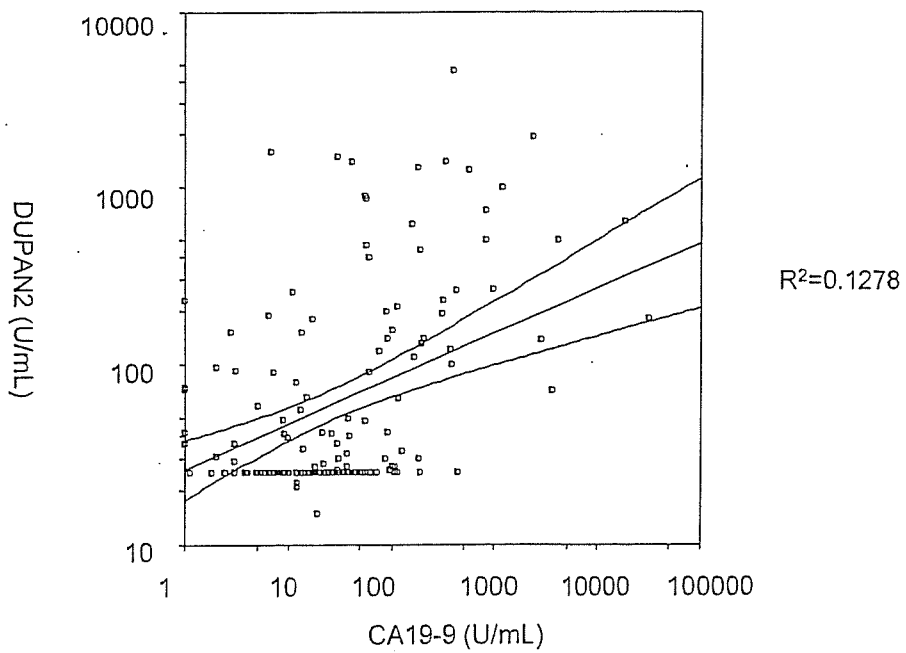


図 6.2.d.4 SPAN1 と CA19-9 との相関 Correlation of SPAN1 with CA19-9

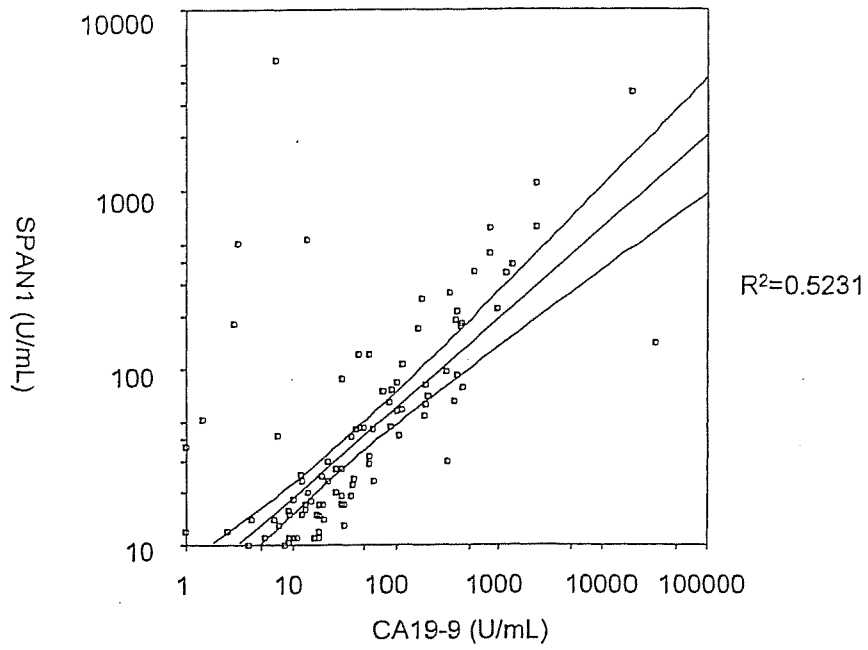


図 6.2.d.5 CA19-9 と膵管内腫瘍組織型分類の相関 Correlation of CA19-9 and histological classification of intraductal tumors

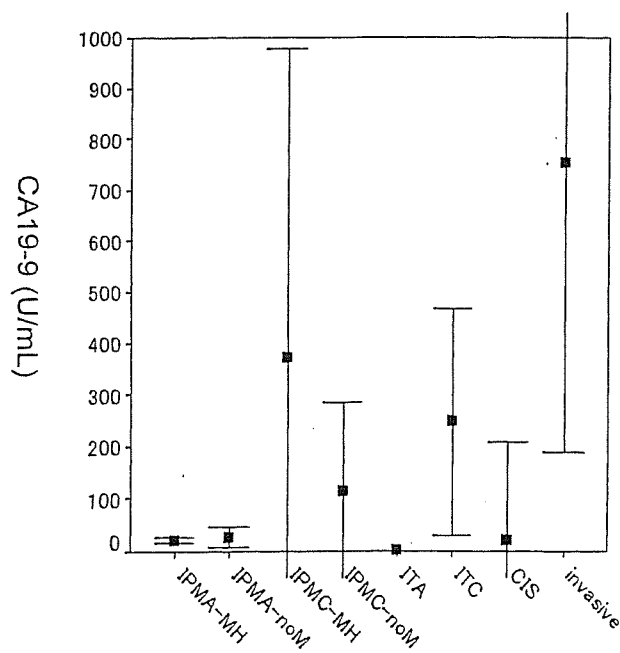


図 6.2.d.6 CEA と膵管内腫瘍組織型分類の相関 Correlation of CEA and histological classification of intraductal tumors

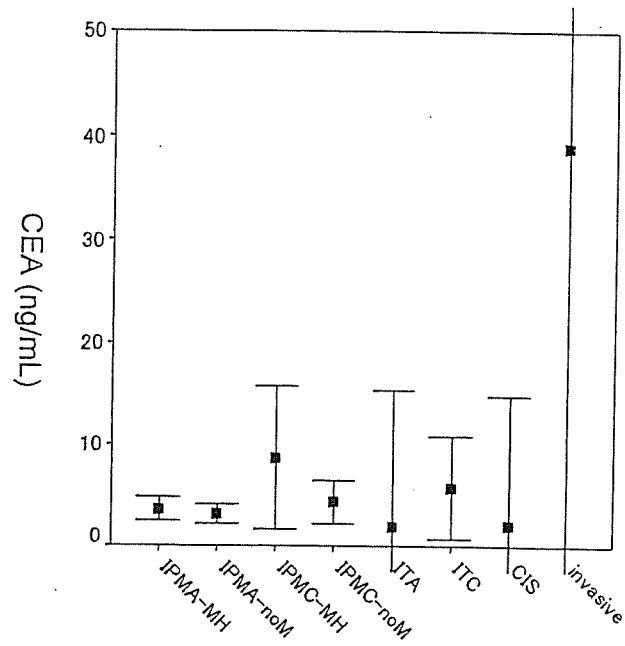


図 6.2.d.7 DUPAN2 と膵管内腫瘍組織型分類の相関 Correlation of DUPAN2 and histological classification of intraductal tumors

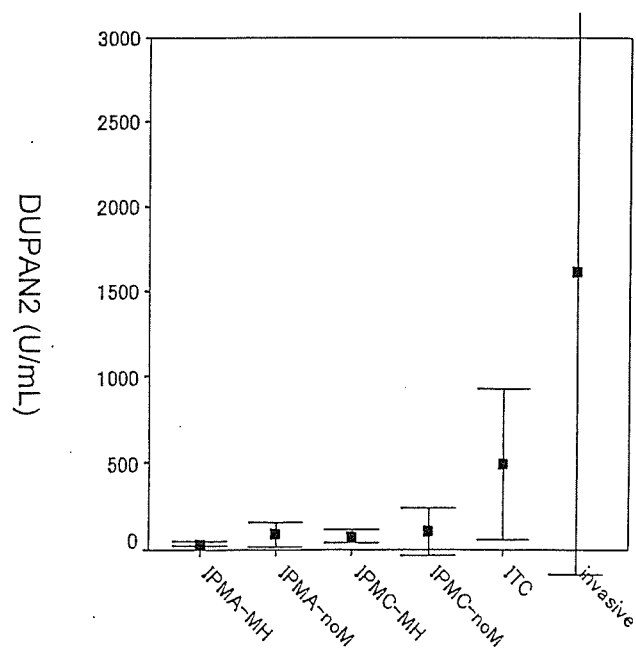
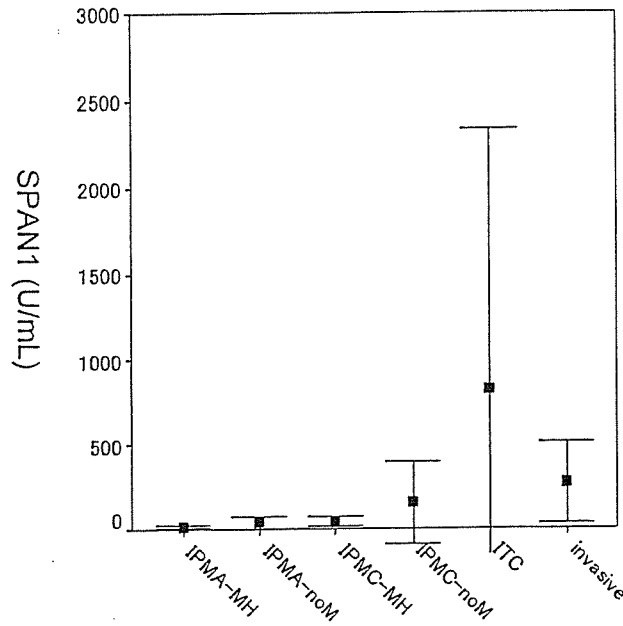


図 6.2.d.8 SPAN1 と膵管内腫瘍組織型分類の相関 Correlation of SPAN1 and histological classification of intraductal tumors



III. 進展度 Extend of the tumor

a. 病巣の数と占拠部位 Number and locus of the primary tumor

略語 Abbreviations

- IPMA-MH: 03a. 膵管内乳頭腺腫_粘液高産生性 Intraductal papillary mucinous adenoma with mucin hypersecretion
- IPMA-noM: 03b. 膵管内乳頭腺腫_粘液非高産生性 Intraductal papillary mucinous adenoma without mucin hypersecretion
- IPMC-MH: 03c. 膵管内乳頭腺癌_粘液高産生性 Intraductal papillary mucinous adenocarcinoma with mucin hypersecretion
- IPMC-noM: 03d. 膵管内乳頭腺癌_粘液非高産生性 Intraductal papillary mucinous adenocarcinoma without mucin hypersecretion
- ITA: 04a. 膵管内管状腺腫 Intraductal tubular adenoma
- ITC: 04b. 膵管内管状腺癌 Intraductal tubular adenocarcinoma
- AH-CIS: 05. 異型過形成および上皮内癌 Atypical hyperplasia and carcinoma in situ
- INV-IT: 15. 膵管内乳頭腺癌由来の浸潤癌 Invasive carcinoma originating in an intraductal tumor

表 6.3.a.1 病巣の数 Number of the primary tumor

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
1. 単発 Single lesion	104 (88.9%)	43 (82.7%)	312 (93.4%)	31 (96.9%)	7 (100.0%)	15 (93.8%)	12 (92.3%)	144 (97.3%)	668 (92.9%)
2. 多発 Multiple lesions	13 (11.1%)	9 (17.3%)	22 (6.6%)	1 (3.1%)	0 (0.0%)	1 (6.3%)	1 (7.7%)	4 (2.7%)	51 (7.1%)
Total	117 (100.0%)	52 (100.0%)	334 (100.0%)	32 (100.0%)	7 (100.0%)	16 (100.0%)	13 (100.0%)	148 (100.0%)	719 (100.0%)

表 6.3.a.2 腫瘍の占拠部位 Locus of the main tumor

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
膵頭部 Pancreatic head	78 (62.4%)	35 (63.6%)	214 (61.0%)	21 (61.8%)	5 (50.0%)	9 (52.9%)	12 (63.2%)	92 (60.5%)	466 (61.1%)
膵体尾部 Body and tail	34 (27.2%)	15 (27.3%)	81 (23.1%)	9 (26.5%)	3 (30.0%)	6 (35.3%)	6 (31.6%)	32 (21.1%)	186 (24.4%)
2 区域以上 Two areas	12 (9.6%)	4 (7.3%)	44 (12.5%)	1 (2.9%)	2 (20.0%)	0 (0.0%)	1 (5.3%)	17 (11.2%)	81 (10.6%)
膵全体 Whole pancreas	1 (0.8%)	1 (1.8%)	12 (3.4%)	3 (8.8%)	0 (0.0%)	2 (11.8%)	0 (0.0%)	11 (7.2%)	30 (3.9%)
Total	125 (100.0%)	55 (100.0%)	351 (100.0%)	34 (100.0%)	10 (100.0%)	17 (100.0%)	19 (100.0%)	152 (100.0%)	763 (100.0%)

b. 局所進展度 Local extent

略語 Abbreviations

- IPMA-MH: 03a. 膵管内乳頭腺腫、粘液高産生性 Intraductal papillary mucinous adenoma with mucin hypersecretion
 IPMA-noM: 03b. 膵管内乳頭腺腫、粘液非高産生性 Intraductal papillary mucinous adenoma without mucin hypersecretion
 IPMC-MH: 03c. 膵管内乳頭腺癌、粘液高産生性 Intraductal papillary mucinous adenocarcinoma with mucin hypersecretion
 IPMC-noM: 03d. 膵管内乳頭腺癌、粘液非高産生性 Intraductal papillary mucinous adenocarcinoma without mucin hypersecretion
 ITA: 04a. 膵管内管状腺腫 Intraductal tubular adenoma
 ITC: 04b. 膵管内管状腺癌 Intraductal tubular adenocarcinoma
 AH-CIS: 05. 異型過形成および上皮内癌 Atypical hyperplasia and carcinoma in situ
 INV-IT: 15. 膵管内乳頭腺癌由来の浸潤癌 Invasive carcinoma originating in an intraductal tumor

表 6.3.b.1 深達度 Depth of infiltration

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
1. 上皮内 In situ carcinoma	71 (89.9%)	28 (87.5%)	143 (55.9%)	16 (47.1%)	6 (100%)	7 (41.2%)	19 (100%)	1 (0.6%)	291 (48.7%)
2. 微小浸潤あり Microscopic invasion	6 (7.6%)	1 (3.1%)	91 (35.5%)	12 (35.3%)	0 (0.0%)	3 (17.6%)	0 (0.0%)	5 (3.2%)	118 (19.8%)
3. 浸潤癌 Invasive cancer	2 (2.5%)	3 (9.4%)	22 (8.6%)	6 (17.6%)	0 (0.0%)	7 (41.2%)	0 (0.0%)	148 (96.1%)	188 (31.5%)
Total	79 (100%)	32 (100%)	256 (100%)	34 (100%)	6 (100%)	17 (100%)	19 (100%)	154 (100%)	597 (100%)

表 6.3.b.2 腫瘍の大きさ Size of the primary tumor

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
1. TS1 (≦2.0 cm)	46 (45.1%)	20 (43.5%)	110 (34.2%)	8 (25.0%)	3 (37.5%)	5 (31.3%)	8 (72.7%)	22 (16.1%)	222 (32.9%)
2. TS2 (2.1-4.0 cm)	38 (37.3%)	21 (45.7%)	123 (38.2%)	12 (37.5%)	5 (62.5%)	7 (43.8%)	2 (18.2%)	49 (35.8%)	257 (38.1%)
3. TS3 (4.1-6.0 cm)	12 (11.8%)	5 (10.9%)	55 (17.1%)	10 (31.3%)	0 (0.0%)	2 (12.5%)	1 (9.1%)	35 (25.5%)	120 (17.8%)
4. TS4 (>6.0 cm)	6 (5.9%)	0 (0.0%)	34 (10.6%)	2 (6.3%)	0 (0.0%)	2 (12.5%)	0 (0.0%)	31 (22.6%)	75 (11.1%)
Total	102 (100%)	46 (100%)	322 (100%)	32 (100%)	8 (100%)	16 (100%)	11 (100%)	137 (100%)	674 (100%)

表 6.3.b.3 嚢胞の大きさ Size of the cystic lesion

Cyst size	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0.1-1.0 cm	13 (13.5%)	6 (13.0%)	6 (6.0%)	6 (25.0%)	2 (25.0%)	0 (0.0%)	0 (0.0%)	2 (8.0%)	35 (11.5%)
1.1-2.0 cm	33 (34.4%)	15 (32.6%)	25 (25.0%)	3 (12.5%)	1 (12.5%)	0 (0.0%)	2 (100%)	5 (20.0%)	84 (27.5%)
2.1-3.0 cm	22 (22.9%)	15 (32.6%)	19 (19.0%)	9 (37.5%)	3 (37.5%)	1 (25.0%)	0 (0.0%)	7 (28.0%)	76 (24.9%)
3.1-4.0 cm	12 (12.5%)	6 (13.0%)	21 (21.0%)	2 (8.3%)	0 (0.0%)	1 (25.0%)	0 (0.0%)	3 (12.0%)	45 (14.8%)
4.1-5.0 cm	8 (8.3%)	4 (8.7%)	10 (10.0%)	1 (4.2%)	0 (0.0%)	2 (50.0%)	0 (0.0%)	3 (12.0%)	28 (9.2%)
5.1-6.0 cm	3 (3.1%)	0 (0.0%)	9 (9.0%)	2 (8.3%)	2 (25.0%)	0 (0.0%)	0 (0.0%)	2 (8.0%)	18 (5.9%)
>6.0 cm	5 (5.2%)	0 (0.0%)	10 (10.0%)	1 (4.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (12.0%)	19 (6.2%)
Total	96 (100%)	46 (100%)	100 (100%)	24 (100%)	8 (100%)	4 (100%)	2 (100%)	25 (100%)	305 (100%)

図 6.3.b.4 嚢胞の大きさ分布 Distribution of size of the cystic lesion

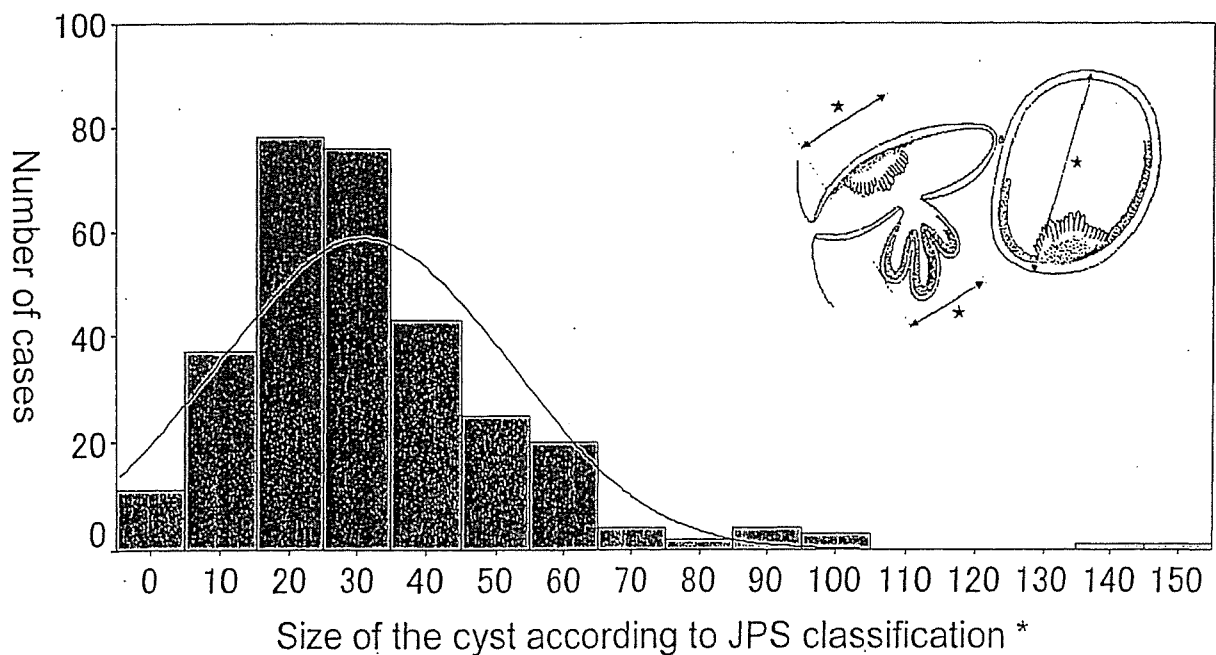


表 6.3.b.5 腫瘍の肉眼的形態 Macroscopic appearance of the primary tumor

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
1. 潜在型 Masked	3 (2.7%)	1 (1.9%)	16 (4.8%)	2 (6.3%)	0 (0.0%)	1 (6.7%)	10 (58.8%)	2 (1.4%)	35 (4.9%)
2. 結節型 Nodular	1 (0.9%)	2 (3.8%)	36 (10.8%)	4 (12.5%)	0 (0.0%)	5 (33.3%)	2 (11.8%)	24 (16.8%)	74 (10.4%)
3. 浸潤型 Invasive	0 (0.0%)	0 (0.0%)	10 (3.0%)	2 (6.3%)	0 (0.0%)	1 (6.7%)	1 (5.9%)	33 (23.1%)	47 (6.6%)
4. 嚢胞型 Cystic	78 (70.3%)	41 (78.8%)	116 (34.7%)	14 (43.8%)	9 (90.0%)	4 (26.7%)	2 (11.8%)	35 (24.5%)	299 (41.9%)
5. 膵管拡張型 Ductectatic	26 (23.4%)	8 (15.4%)	140 (41.9%)	10 (31.3%)	1 (10.0%)	4 (26.7%)	2 (11.8%)	32 (22.4%)	223 (31.2%)
6. 混合型 Mixed	3 (2.7%)	0 (0.0%)	16 (4.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	17 (11.9%)	36 (5.0%)
7. 分類不能 Unclassified	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	111 (100%)	52 (100%)	33 (100%)	32 (100%)	10 (100%)	15 (100%)	17 (100%)	143 (100%)	714 (100%)

表 6.3.b.6 膵内胆管浸潤 Bile duct infiltration

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. CH(-) Without invasion	117 (100%)	51 (98.1%)	317 (92.4%)	31 (91.2%)	10 (100%)	12 (70.6%)	19 (100%)	90 (61.2%)	647 (87.6%)
1. CH(+) With invasion	0 (0.0%)	1 (1.9%)	26 (7.6%)	3 (8.8%)	0 (0.0%)	5 (29.4%)	0 (0.0%)	57 (38.8%)	92 (12.4%)
Total	117 (100%)	52 (100%)	343 (100%)	34 (100%)	10 (100%)	17 (100%)	19 (100%)	147 (100%)	739 (100%)

表 6.3.b.7 十二指腸浸潤 Duodenal infiltration

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. DU(-) Without invasion	118 (100%)	52 (100%)	323 (93.6%)	33 (97.1%)	10 (100%)	16 (94.1%)	19 (100%)	97 (66.4%)	668 (90.1%)
1. DU(+) With invasion	0 (0.0%)	0 (0.0%)	22 (6.4%)	1 (2.9%)	0 (0.0%)	1 (5.9%)	0 (0.0%)	49 (33.6%)	73 (9.9%)
Total	118 (100%)	52 (100%)	345 (100%)	34 (100%)	10 (100%)	17 (100%)	19 (100%)	146 (100%)	741 (100%)

表 6.3.b.8 膵前面被膜浸潤 Serosal infiltration

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. S(-) Without invasion	117 (99.2%)	51 (98.1%)	326 (94.5%)	31 (93.9%)	9 (90.0%)	16 (94.1%)	19 (100%)	96 (65.3%)	665 (89.7%)
1. S(+) With invasion	1 (0.8%)	1 (1.9%)	19 (5.5%)	2 (6.1%)	1 (10.0%)	1 (5.9%)	0 (0.0%)	51 (34.7%)	76 (10.3%)
Total	118 (100%)	52 (100%)	345 (100%)	33 (100%)	10 (100%)	17 (100%)	19 (100%)	147 (100%)	741 (100%)

表 6.3.b.9 膵後方組織浸潤 Retroperitoneal infiltration

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. RP(-) Without invasion	118 (100%)	51 (98.1%)	332 (96.2%)	32 (94.1%)	10 (100%)	14 (82.4%)	19 (100%)	90 (60.8%)	666 (89.6%)
1. RP(+) With invasion	0 (0.0%)	1 (1.9%)	13 (3.8%)	2 (5.9%)	0 (0.0%)	3 (17.6%)	0 (0.0%)	58 (39.2%)	77 (10.4%)
Total	118 (100%)	52 (100%)	345 (100%)	34 (100%)	10 (100%)	17 (100%)	19 (100%)	148 (100%)	743 (100%)

表 6.3.b.10 門脈系静脈浸潤 Portal venous system infiltration

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. PV(-) Without invasion	118 (100%)	51 (98.1%)	332 (95.7%)	30 (88.2%)	10 (100%)	13 (76.5%)	19 (100%)	109 (73.2%)	682 (91.4%)
1. PV(+) With invasion	0 (0.0%)	1 (1.9%)	15 (4.3%)	4 (11.8%)	0 (0.0%)	4 (23.5%)	0 (0.0%)	40 (26.8%)	64 (8.6%)
Total	118 (100%)	52 (100%)	347 (100%)	34 (100%)	10 (100%)	17 (100%)	19 (100%)	149 (100%)	746 (100%)

表 6.3.b.11 動脈浸潤 Arterial infiltration

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. A(-) Without invasion	117 (99.2%)	51 (98.1%)	340 (98.6%)	31 (91.2%)	10 (100%)	16 (94.1%)	19 (100%)	128 (86.5%)	712 (95.8%)
1. A(+) With invasion	1 (0.8%)	1 (1.9%)	5 (1.4%)	3 (8.8%)	0 (0.0%)	1 (5.9%)	0 (0.0%)	20 (13.5%)	31 (4.2%)
Total	118 (100%)	52 (100%)	345 (100%)	34 (100%)	10 (100%)	17 (100%)	19 (100%)	148 (100%)	743 (100%)

表 6.3.b.12 神経叢浸潤 Plexus infiltration

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. PL(-) Without invasion	118 (100%)	51 (98.1%)	333 (97.7%)	31 (93.9%)	10 (100%)	13 (76.5%)	19 (100%)	116 (81.1%)	691 (94.3%)
1. PL(+) With invasion	0 (0.0%)	1 (1.9%)	8 (2.3%)	2 (6.1%)	0 (0.0%)	4 (23.5%)	0 (0.0%)	27 (18.9%)	42 (5.7%)
Total	118 (100%)	52 (100%)	341 (100%)	33 (100%)	10 (100%)	17 (100%)	19 (100%)	143 (100%)	733 (100%)

表 6.3.b.13 他臓器浸潤 Infiltration to the other organs

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. OO(-) Without invasion	118 (100%)	52 (100%)	345 (99.4%)	33 (100%)	10 (100%)	17 (100%)	19 (100%)	134 (89.9%)	728 (97.7%)
1. OO(+) With invasion	0 (0.0%)	0 (0.0%)	2 (0.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	15 (10.1%)	17 (2.3%)
Total	118 (100%)	52 (100%)	347 (100%)	33 (100%)	10 (100%)	17 (100%)	19 (100%)	149 (100%)	745 (100%)

表 6.3.b.14 JPS T 因子 JPS T factor

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
JPS-Tis	69 (59.0%)	28 (53.8%)	133 (39.3%)	16 (48.5%)	5 (50.0%)	7 (41.2%)	19 (100%)	1 (0.7%)	278 (37.9%)
JPS-T1	13 (11.1%)	8 (15.4%)	58 (17.2%)	2 (6.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	11 (7.5%)	92 (12.6%)
JPS-T2	34 (29.1%)	15 (28.8%)	99 (29.3%)	9 (27.3%)	4 (40.0%)	3 (17.6%)	0 (0.0%)	27 (18.4%)	191 (26.1%)
JPS-T3	0 (0.0%)	0 (0.0%)	31 (9.2%)	2 (6.1%)	1 (10.0%)	2 (11.8%)	0 (0.0%)	53 (36.1%)	89 (12.1%)
JPS-T4	1 (0.9%)	1 (1.9%)	17 (5.0%)	4 (12.1%)	0 (0.0%)	5 (29.4%)	0 (0.0%)	55 (37.4%)	83 (11.3%)
Total	117 (100%)	52 (100%)	338 (100%)	33 (100%)	10 (100%)	17 (100%)	19 (100%)	147 (100%)	733 (100%)

表 6.3.b.15 UICC T 因子 UICC T factor

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
UICC-Tis	30 (38.5%)	12 (37.5%)	139 (41.4%)	13 (39.4%)	4 (57.1%)	6 (35.3%)	19 (100%)	1 (0.7%)	224 (33.6%)
UICC-T1	25 (32.1%)	7 (21.9%)	61 (18.2%)	5 (15.2%)	2 (28.6%)	2 (11.8%)	0 (0.0%)	16 (11.1%)	118 (17.7%)
UICC-T2	20 (25.6%)	11 (34.4%)	101 (30.1%)	13 (39.4%)	1 (14.3%)	7 (41.2%)	0 (0.0%)	43 (29.9%)	196 (29.4%)
UICC-T3	3 (3.8%)	1 (3.1%)	26 (7.7%)	1 (3.0%)	0 (0.0%)	1 (5.9%)	0 (0.0%)	60 (41.7%)	92 (13.8%)
UICC-T4	0 (0.0%)	1 (3.1%)	9 (2.7%)	1 (3.0%)	0 (0.0%)	1 (5.9%)	0 (0.0%)	24 (16.7%)	36 (5.4%)
Total	78 (100%)	32 (100%)	336 (100%)	33 (100%)	7 (100%)	17 (100%)	19 (100%)	144 (100%)	666 (100%)

図 6.3.b.16 JPS T 因子ごとにみた膵管内腫瘍の生存率 Survival of the patients with intraductal tumors by JPS T factors

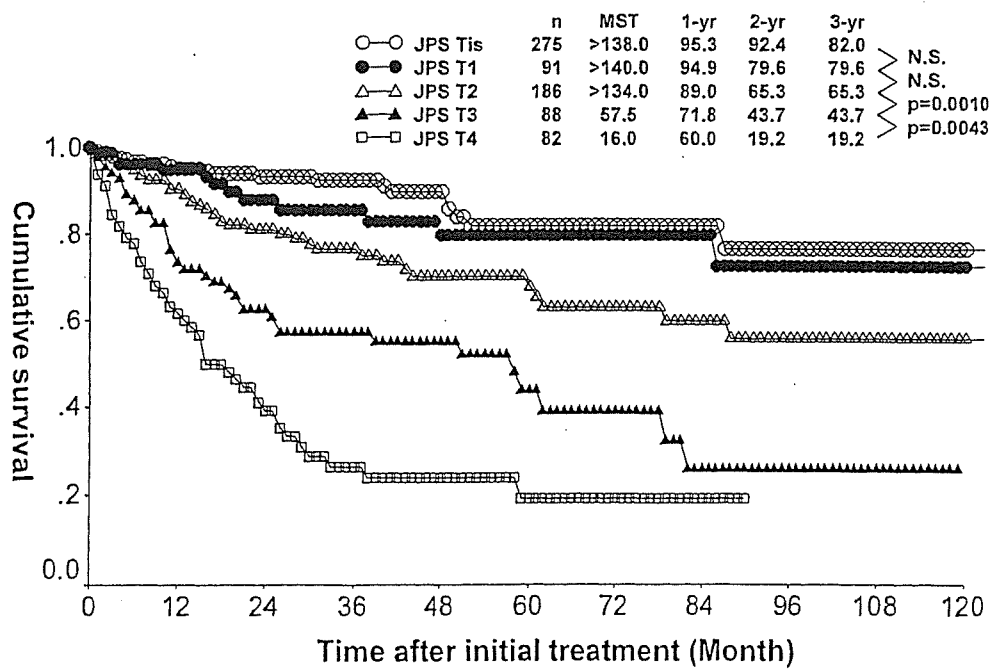
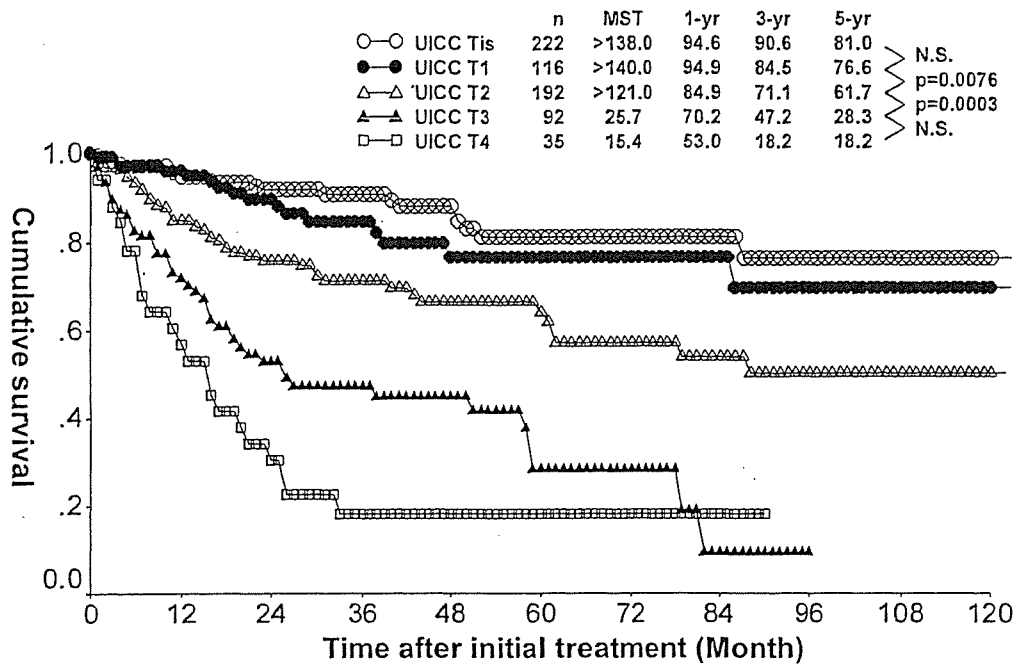


図 6.3.b.17 UICC T 因子ごとにみた膵管内腫瘍の生存率 Survival of the patients with intraductal tumors by UICC T factors



c. リンパ節転移 Lymph node metastasis

略語 Abbreviations

- IPMA-MH: 03a. 膵管内乳頭腺腫_粘液高産生性 Intraductal papillary mucinous adenoma with mucin hypersecretion
- IPMA-noM: 03b. 膵管内乳頭腺腫_粘液非高産生性 Intraductal papillary mucinous adenoma without mucin hypersecretion
- IPMC-MH: 03c. 膵管内乳頭腺癌_粘液高産生性 Intraductal papillary mucinous adenocarcinoma with mucin hypersecretion
- IPMC-noM: 03d. 膵管内乳頭腺癌_粘液非高産生性 Intraductal papillary mucinous adenocarcinoma without mucin hypersecretion
- ITA: 04a. 膵管内管状腺腫 Intraductal tubular adenoma
- ITC: 04b. 膵管内管状腺癌 Intraductal tubular adenocarcinoma
- AH-CIS: 05. 異型過形成および上皮内癌 Atypical hyperplasia and carcinoma in situ
- INV-IT: 15. 膵管内乳頭腺癌由来の浸潤癌 Invasive carcinoma originating in an intraductal tumor

表 6.3.c.1 JPS N 因子 JPS N factor

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
JPS-N0	111 (100%)	45 (97.8%)	264 (89.8%)	25 (80.6%)	10 (100%)	13 (81.3%)	14 (100%)	72 (53.3%)	554 (84.3%)
JPS-N1	0 (0.0%)	0 (0.0%)	8 (2.7%)	3 (9.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	24 (17.8%)	35 (5.3%)
JPS-N2	0 (0.0%)	1 (2.2%)	6 (2.0%)	1 (3.2%)	0 (0.0%)	2 (12.5%)	0 (0.0%)	16 (11.9%)	26 (4.0%)
JPS-N3	0 (0.0%)	0 (0.0%)	16 (5.4%)	2 (6.5%)	0 (0.0%)	1 (6.3%)	0 (0.0%)	23 (17.0%)	42 (6.4%)
Total	111 (100%)	46 (100%)	294 (100%)	31 (100%)	10 (100%)	16 (100%)	14 (100%)	135 (100%)	657 (100%)

表 6.3.c.2 UICC N 因子 UICC N factor

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
UICC-N0	120 (100%)	50 (98.0%)	277 (90.5%)	26 (81.3%)	10 (100%)	13 (81.3%)	15 (100%)	74 (53.2%)	585 (84.9%)
UICC-N1	0 (0.0%)	1 (2.0%)	29 (9.5%)	6 (18.8%)	0 (0.0%)	3 (18.8%)	0 (0.0%)	65 (46.8%)	104 (15.1%)
Total	120 (100%)	51 (100%)	306 (100%)	32 (100%)	10 (100%)	16 (100%)	15 (100%)	139 (100%)	689 (100%)

図 6.3.c.3 JPS N 因子ごとにみた膵管内腫瘍の生存率 Survival of the patients with intraductal tumors by JPS N factors

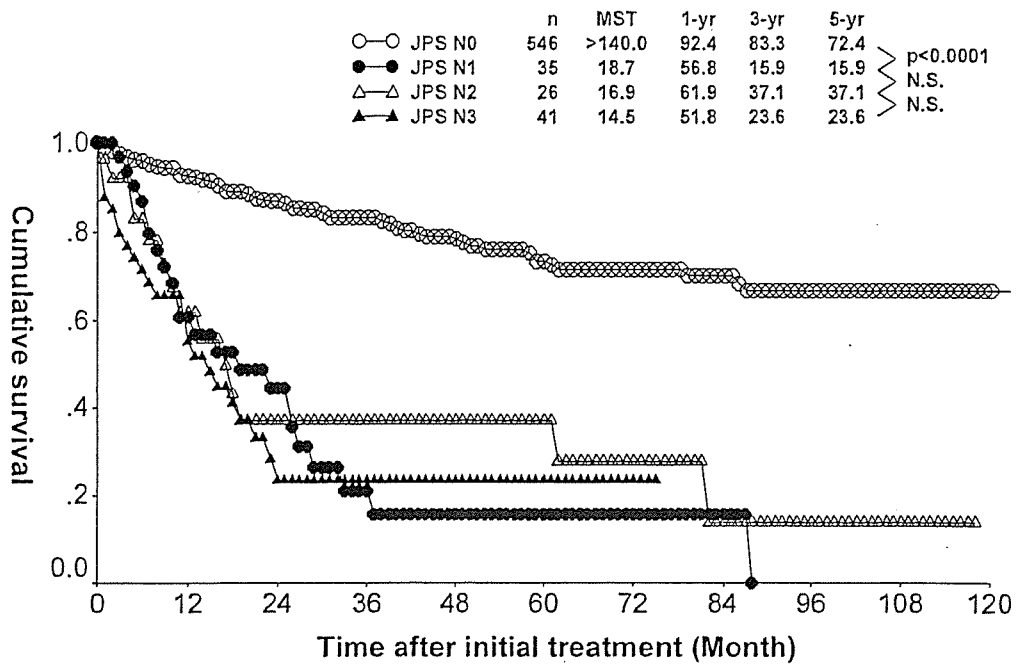
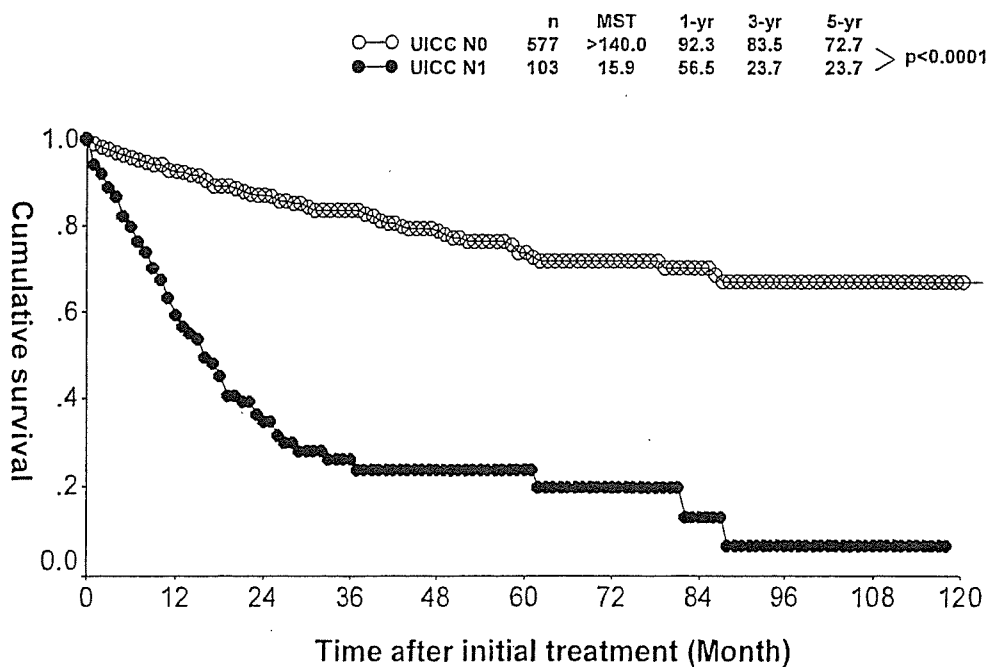


図 6.3.c.4 UICC N 因子ごとにみた膵管内腫瘍の生存率 Survival of the patients with intraductal tumors by UICC N factors



d. 遠隔転移 Distant metastasis

略語 Abbreviations

IPMA-MH:	03a. 膵管内乳頭腺腫 粘液高産生性 Intraductal papillary mucinous adenoma with mucin hypersecretion
IPMA-noM:	03b. 膵管内乳頭腺腫 粘液非高産生性 Intraductal papillary mucinous adenoma without mucin hypersecretion
IPMC-MH:	03c. 膵管内乳頭腺癌 粘液高産生性 Intraductal papillary mucinous adenocarcinoma with mucin hypersecretion
IPMC-noM:	03d. 膵管内乳頭腺癌 粘液非高産生性 Intraductal papillary mucinous adenocarcinoma without mucin hypersecretion
ITA:	04a. 膵管内管状腺腫 Intraductal tubular adenoma
ITC:	04b. 膵管内管状腺癌 Intraductal tubular adenocarcinoma
AH-CIS:	05. 異型過形成および上皮内癌 Atypical hyperplasia and carcinoma in situ
INV-IT:	15. 膵管内乳頭腺癌由来の浸潤癌 Invasive carcinoma originating in an intraductal tumor

表 6.3.d.1 JPS M 因子 JPS M factor

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
JPS-M0	124 (99.2%)	53 (98.1%)	326 (93.4%)	32 (94.1%)	10 (100%)	15 (88.2%)	19 (100%)	119 (78.3%)	698 (91.8%)
JPS-M1	1 (0.8%)	1 (1.9%)	23 (6.6%)	2 (5.9%)	0 (0.0%)	2 (11.8%)	0 (0.0%)	33 (21.7%)	62 (8.2%)
Total	125 (100%)	54 (100%)	349 (100%)	34 (100%)	10 (100%)	17 (100%)	19 (100%)	152 (100%)	760 (100%)

表 6.3.d.2 UICC M 因子 UICC M factor

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
UICC-M0	123 (99.2%)	53 (98.1%)	325 (93.1%)	32 (94.1%)	10 (100%)	15 (93.8%)	19 (100%)	117 (77.5%)	694 (91.7%)
UICC-M1	1 (0.8%)	1 (1.9%)	24 (6.9%)	2 (5.9%)	0 (0.0%)	1 (6.3%)	0 (0.0%)	34 (22.5%)	63 (8.3%)
Total	124 (100%)	54 (100%)	349 (100%)	34 (100%)	10 (100%)	16 (100%)	19 (100%)	151 (100%)	757 (100%)

表 6.3.d.3 遠隔転移部位 Site of distant metastasis

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
肝転移 HEP Liver	0 (0.0%)	0 (0.0%)	4 (1.1%)	0 (0.0%)	0 (0.0%)	1 (5.9%)	0 (0.0%)	4 (2.6%)	9 (1.2%)
腹膜播種 PER Peritoneal	0 (0.0%)	0 (0.0%)	6 (1.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	6 (4.0%)	12 (1.6%)
リンパ節 LYM lymph node	0 (0.0%)	1 (1.9%)	5 (4.0%)	2 (5.9%)	0 (0.0%)	1 (5.9%)	0 (0.0%)	15 (18.5%)	24 (5.3%)
肺転移 PUL Pulmonary	1 (0.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.1%)
胸膜播種 PLE Pleural	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
骨転移 OSS Bone	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.7%)	1 (0.1%)
骨髄転移 MAR Bone marrow	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
脳転移 BRA Brain	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
皮膚転移 SKI Skin	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
副腎転移 ADR Adrenal	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	127	55	352	34	10	17	19	154	768

それぞれの%は有効症例数に対する割合のため、Total に対する割合とは一致しない。Each percentage is the ratio to the informative cases and does not match the total number of cases.

図 6.3.d.4 JPS M 因子ごとにみた膵管内腫瘍の生存率 Survival of the patients with intraductal tumors by JPS M factors

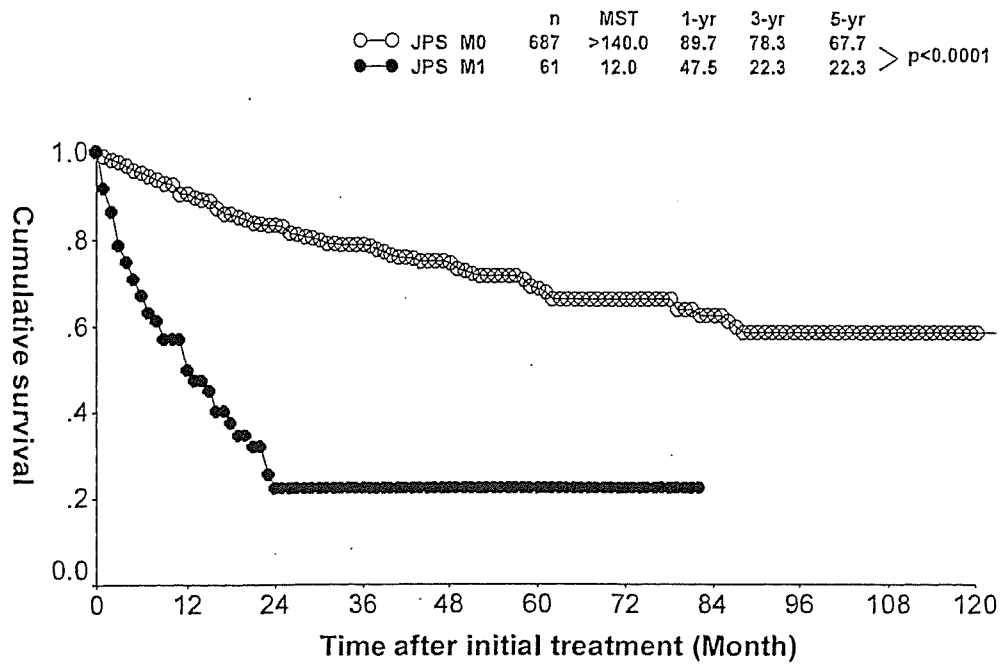
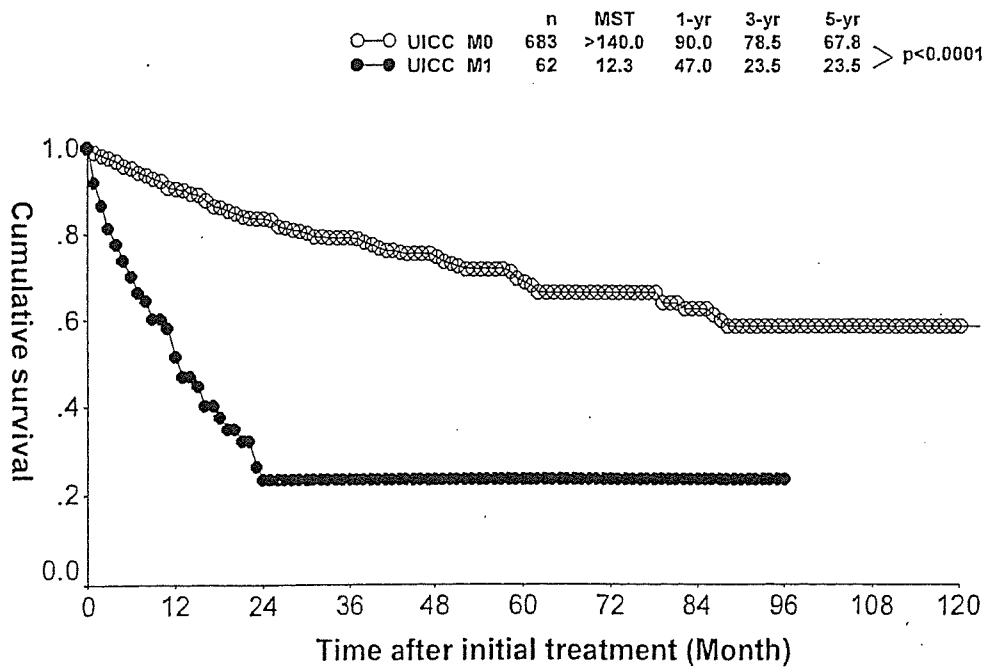


図 6.3.d.5 UICC M 因子ごとにみた膵管内腫瘍の生存率 Survival of the patients with intraductal tumors by UICC M factors



e. 臨床病期 JPS and UICC stage

略語 Abbreviations

- IPMA-MH: 03a. 膵管内乳頭腺腫 粘液高産生性 Intraductal papillary mucinous adenoma with mucin hypersecretion
- IPMA-noM: 03b. 膵管内乳頭腺腫 粘液非高産生性 Intraductal papillary mucinous adenoma without mucin hypersecretion
- IPMC-MH: 03c. 膵管内乳頭腺癌 粘液高産生性 Intraductal papillary mucinous adenocarcinoma with mucin hypersecretion
- IPMC-noM: 03d. 膵管内乳頭腺癌 粘液非高産生性 Intraductal papillary mucinous adenocarcinoma without mucin hypersecretion
- ITA: 04a. 膵管内管状腺腫 Intraductal tubular adenoma
- ITC: 04b. 膵管内管状腺癌 Intraductal tubular adenocarcinoma
- AH-CIS: 05. 異型過形成および上皮内癌 Atypical hyperplasia and carcinoma in situ
- INV-IT: 15. 膵管内乳頭腺癌由来の浸潤癌 Invasive carcinoma originating in an intraductal tumor

表 6.3.e.1 JPS Stage

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
JPS Stage 0	62 (60.2%)	25 (55.6%)	111 (38.1%)	13 (43.3%)	5 (50.0%)	7 (41.2%)	14 (100%)	0 (0.0%)	237 (36.8%)
JPS Stage I	10 (9.7%)	5 (11.1%)	41 (14.1%)	2 (6.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	8 (6.0%)	66 (10.2%)
JPS Stage II	30 (29.1%)	14 (31.1%)	80 (27.5%)	6 (20.0%)	4 (40.0%)	3 (17.6%)	0 (0.0%)	20 (14.9%)	157 (24.4%)
JPS Stage III	0 (0.0%)	0 (0.0%)	23 (7.9%)	4 (13.3%)	1 (10.0%)	1 (5.9%)	0 (0.0%)	37 (27.6%)	66 (10.2%)
JPS Stage IVa	0 (0.0%)	0 (0.0%)	11 (3.8%)	3 (10.0%)	0 (0.0%)	2 (11.8%)	0 (0.0%)	34 (25.4%)	50 (7.8%)
JPS Stage IVb	1 (1.0%)	1 (2.2%)	25 (8.6%)	2 (6.7%)	0 (0.0%)	4 (23.5%)	0 (0.0%)	35 (26.1%)	68 (10.6%)
Total	103 (100%)	45 (100%)	291 (100%)	30 (100%)	10 (100%)	17 (100%)	14 (100%)	134 (100%)	644 (100%)

表 6.3.e.2 UICC Stage

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
UICC Stage 0	29 (37.7%)	12 (37.5%)	117 (38.6%)	12 (37.5%)	4 (57.1%)	6 (37.5%)	15 (100%)	1 (0.7%)	196 (31.3%)
UICC Stage Ia	25 (32.5%)	7 (21.9%)	48 (15.8%)	3 (9.4%)	2 (28.6%)	2 (12.5%)	0 (0.0%)	13 (9.0%)	100 (16.0%)
UICC Stage Ib	20 (26.0%)	11 (34.4%)	84 (27.7%)	10 (31.3%)	1 (14.3%)	5 (31.3%)	0 (0.0%)	20 (13.9%)	151 (24.1%)
UICC Stage IIa	2 (2.6%)	1 (3.1%)	13 (4.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	27 (18.8%)	43 (6.9%)
UICC Stage IIb	0 (0.0%)	0 (0.0%)	10 (3.3%)	4 (12.5%)	0 (0.0%)	2 (12.5%)	0 (0.0%)	33 (22.9%)	49 (7.8%)
UICC Stage III	0 (0.0%)	0 (0.0%)	7 (2.3%)	1 (3.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	16 (11.1%)	24 (3.8%)
UICC Stage IV	1 (1.3%)	1 (3.1%)	24 (7.9%)	2 (6.3%)	0 (0.0%)	1 (6.3%)	0 (0.0%)	34 (23.6%)	63 (10.1%)
Unknown									
Total	77 (100%)	32 (100%)	303 (100%)	32 (100%)	7 (100%)	16 (100%)	15 (100%)	144 (100%)	626 (100%)

図 6.3.e.3 JPS Stage ごとにみた膵管内腫瘍の生存率 Survival of the patients with intraductal tumors by JPS Stage

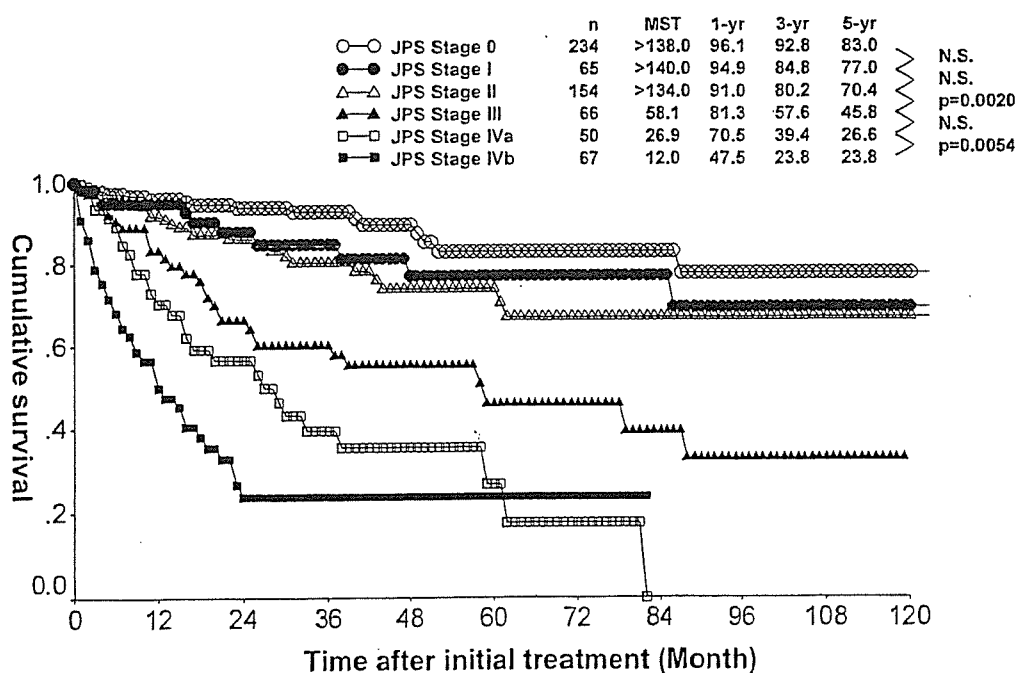
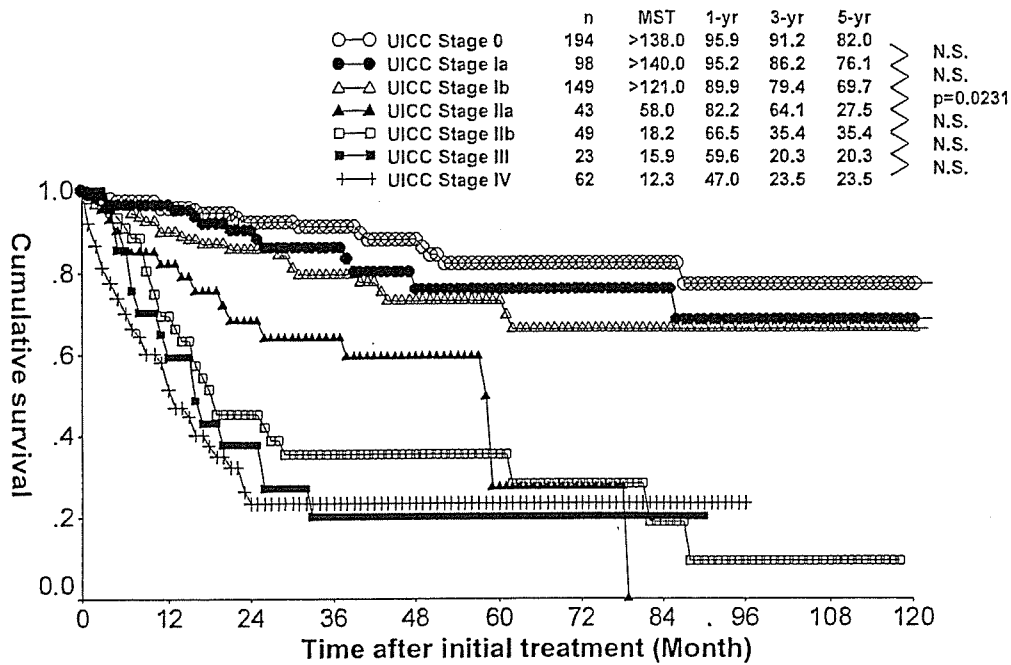


図 6.3.e.4 UICC Stage ごとにみた膵管内腫瘍の生存率 Survival of the patients with intraductal tumors by UICC Stage



IV. 手術治療 Surgical treatment

a. 治療法 Trend of treatment

略語 Abbreviations

- IPMA-MH: 03a. 膵管内乳頭腺腫_粘液高産生性 Intraductal papillary mucinous adenoma with mucin hypersecretion
- IPMA-noM: 03b. 膵管内乳頭腺腫_粘液非高産生性 Intraductal papillary mucinous adenoma without mucin hypersecretion
- IPMC-MH: 03c. 膵管内乳頭腺癌_粘液高産生性 Intraductal papillary mucinous adenocarcinoma with mucin hypersecretion
- IPMC-noM: 03d. 膵管内乳頭腺癌_粘液非高産生性 Intraductal papillary mucinous adenocarcinoma without mucin hypersecretion
- ITA: 04a. 膵管内管状腺腫 Intraductal tubular adenoma
- ITC: 04b. 膵管内管状腺癌 Intraductal tubular adenocarcinoma
- AH-CIS: 05. 異型過形成および上皮内癌 Atypical hyperplasia and carcinoma in situ
- INV-IT: 15. 膵管内乳頭腺癌由来の浸潤癌 Invasive carcinoma originating in an intraductal tumor

表 6.4.a.1 組織型分類ごとの治療法 Treatment according to the histological classification

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
1. 膵切除術 Pancreatectomy	117 (92.1%)	47 (85.5%)	343 (97.4%)	31 (91.2%)	7 (70.0%)	16 (94.1%)	19 (100%)	139 (90.3%)	719 (93.6%)
2. 姑息手術 Palliative operation	0 (0.0%)	0 (0.0%)	2 (0.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	5 (3.2%)	7 (0.9%)
3. 単開腹 Exploratory laparotomy	0 (0.0%)	0 (0.0%)	3 (0.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (0.4%)
4. 非手術 No surgical treatment	10 (7.9%)	8 (14.5%)	4 (1.1%)	3 (8.8%)	3 (30.0%)	1 (5.9%)	0 (0.0%)	9 (5.8%)	38 (4.9%)
5. 非手術剖検 Autopsy cases	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.6%)	1 (0.1%)
Total	127 (100%)	55 (100%)	352 (100%)	34 (100%)	10 (100%)	17 (100%)	19 (100%)	154 (100%)	768 (100%)
切除率 Rate of pancreatectomy	92.1%	85.5%	97.4%	91.2%	70.0%	94.1%	100%	90.3%	93.6%

表 6.4.a.2 占拠部位別にみた治療法 Treatment according to the locus of primary tumor

	膵頭部 Pancreatic head	膵体尾部 Pancreatic body and tail	2区域 Two areas of the pancreas	膵全体 Whole pancreas	Total
1. 膵切除術 Pancreatectomy	443 (95.1%)	175 (94.1%)	73 (90.1%)	26 (86.7%)	717 (94.0%)
2. 姑息手術 Palliative operation	3 (0.6%)	2 (1.1%)	0 (0.0%)	2 (6.7%)	7 (0.9%)
3. 単開腹 Exploratory laparotomy	2 (0.4%)	1 (0.5%)	0 (0.0%)	0 (0.0%)	3 (0.4%)
4. 非手術 No surgical treatment	18 (3.9%)	8 (4.3%)	8 (9.9%)	2 (6.7%)	36 (4.7%)
5. 非手術剖検 Autopsy cases	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	466 (100.0%)	186 (100.0%)	81 (100.0%)	30 (100.0%)	763 (100.0%)
切除率 Rate of pancreatectomy	95.1%	94.1%	90.1%	86.7%	94.0%

b. 膵切除術 Pancreatectomy

略語 Abbreviations

IPMA-MH:	03a. 膵管内乳頭腺腫_粘液高産生性	Intraductal papillary mucinous adenoma with mucin hypersecretion
IPMA-noM:	03b. 膵管内乳頭腺腫_粘液非高産生性	Intraductal papillary mucinous adenoma without mucin hypersecretion
IPMC-MH:	03c. 膵管内乳頭腺癌_粘液高産生性	Intraductal papillary mucinous adenocarcinoma with mucin hypersecretion
IPMC-noM:	03d. 膵管内乳頭腺癌_粘液非高産生性	Intraductal papillary mucinous adenocarcinoma without mucin hypersecretion
ITA:	04a. 膵管内管状腺腫	Intraductal tubular adenoma
ITC:	04b. 膵管内管状腺癌	Intraductal tubular adenocarcinoma
AH-CIS:	05. 異型過形成および上皮内癌	Atypical hyperplasia and carcinoma in situ
INV-IT:	15. 膵管内乳頭腺癌由来の浸潤癌	Invasive carcinoma originating in an intraductal tumor

表 6.4.b.1 膵切除の種類 Method of pancreatectomy

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	
01. TP (total pancreatectomy)	3 (2.6%)	1 (2.1%)	22 (6.4%)	2 (6.5%)	
02. PD (pancreaticoduodenectomy)	15 (12.8%)	4 (8.5%)	60 (17.5%)	9 (29.0%)	
03. PD (subtotal 二区域以上)	1 (0.9%)	1 (2.1%)	3 (0.9%)	0 (0.0%)	
04. PPPD (pylorus-preserving PD)	44 (37.6%)	19 (40.4%)	132 (38.5%)	8 (25.8%)	
05. SSPPD (subtotal stomach-preserving PD)	4 (3.4%)	2 (4.3%)	8 (2.3%)	0 (0.0%)	
06. DPPHR (duodenum-preserving pancreatic head resection)	2 (1.7%)	0 (0.0%)	8 (2.3%)	2 (6.5%)	
07. DP (tail) (distal pancreatectomy)	5 (4.3%)	2 (4.3%)	9 (2.6%)	0 (0.0%)	
08. DP (body-tail)	19 (16.2%)	9 (19.1%)	55 (16.0%)	4 (12.9%)	
09. DP (subtotal 二区域以上)	3 (2.6%)	0 (0.0%)	15 (4.4%)	0 (0.0%)	
10. SPDP (spleen-preserving DP)	0 (0.0%)	1 (2.1%)	0 (0.0%)	0 (0.0%)	
11. MP (middle pancreatectomy)	9 (7.7%)	5 (10.6%)	18 (5.2%)	3 (9.7%)	
12. PR (partial resection)	8 (6.8%)	2 (4.3%)	2 (0.6%)	1 (3.2%)	
13. その他 Others	4 (3.4%)	1 (2.1%)	4 (1.2%)	0 (0.0%)	
99. 不明 Unknown	0 (0.0%)	0 (0.0%)	7 (2.0%)	2 (6.5%)	
Total	117 (100%)	47 (100%)	343 (100%)	31 (100%)	
	ITA	ITC	AH-CIS	INV-IT	Total
01. TP (total pancreatectomy)	0 (0.0%)	2 (12.5%)	0 (0.0%)	13 (9.4%)	43 (6.0%)
02. PD (pancreaticoduodenectomy)	1 (14.3%)	2 (12.5%)	3 (15.8%)	40 (28.8%)	134 (18.6%)
03. PD (subtotal 二区域以上)	1 (14.3%)	1 (6.3%)	0 (0.0%)	6 (4.3%)	13 (1.8%)
04. PPPD (pylorus-preserving PD)	2 (28.6%)	4 (25.0%)	8 (42.1%)	44 (31.7%)	261 (36.3%)
05. SSPPD (subtotal stomach-preserving PD)	1 (14.3%)	1 (6.3%)	0 (0.0%)	3 (2.2%)	19 (2.6%)
06. DPPHR (duodenum-preserving pancreatic head resection)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	12 (1.7%)
07. DP (tail) (distal pancreatectomy)	0 (0.0%)	0 (0.0%)	1 (5.3%)	4 (2.9%)	21 (2.9%)
08. DP (body-tail)	2 (28.6%)	3 (18.8%)	5 (26.3%)	21 (15.1%)	118 (16.4%)
09. DP (subtotal 二区域以上)	0 (0.0%)	1 (6.3%)	1 (5.3%)	3 (2.2%)	23 (3.2%)
10. SPDP (spleen-preserving DP)	0 (0.0%)	1 (6.3%)	0 (0.0%)	0 (0.0%)	2 (0.3%)
11. MP (middle pancreatectomy)	0 (0.0%)	0 (0.0%)	1 (5.3%)	1 (0.7%)	37 (5.1%)
12. PR (partial resection)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	13 (1.8%)
13. その他 Others	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (1.4%)	11 (1.5%)
99. 不明 Unknown	0 (0.0%)	1 (6.3%)	0 (0.0%)	2 (1.4%)	12 (1.7%)
Total	7 (100%)	16 (100%)	19 (100%)	139 (100%)	719 (100%)

表 6.4.b.2 占拠部位別にみた膵切除の種類 Pancreatectomy according to the locus of primary tumor

	膵頭部 Pancreatic head	膵体尾部 Pancreatic body and tail	2区域 Two areas of the pancreas	膵全体 Whole pancreas	Total
01. TP (total pancreatectomy)	9 (2.0%)	3 (1.7%)	10 (13.7%)	21 (80.8%)	43 (6.0%)
02. PD (pancreaticoduodenectomy)	129 (29.1%)	1 (0.6%)	4 (5.5%)	0 (0.0%)	134 (18.7%)
03. PD (subtotal 二区域以上)	3 (0.7%)	2 (1.1%)	8 (11.0%)	0 (0.0%)	13 (1.8%)
04. PPPD (pylorus-preserving PD)	240 (54.2%)	1 (0.6%)	19 (26.0%)	0 (0.0%)	260 (36.3%)
05. SSPPD (subtotal stomach-preserving PD)	19 (4.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	19 (2.6%)
06. DPPHR (duodenum-preserving pancreatic head resection)	12 (2.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	12 (1.7%)
07. DP (tail) (distal pancreatectomy)	0 (0.0%)	18 (10.3%)	3 (4.1%)	0 (0.0%)	21 (2.9%)
08. DP (body-tail)	2 (0.5%)	95 (54.3%)	19 (26.0%)	1 (3.8%)	117 (16.3%)
09. DP (subtotal 二区域以上)	2 (0.5%)	13 (7.4%)	7 (9.6%)	1 (3.8%)	23 (3.2%)
10. SPDP (spleen-preserving DP)	0 (0.0%)	2 (1.1%)	0 (0.0%)	0 (0.0%)	2 (0.3%)
11. MP (middle pancreatectomy)	6 (1.4%)	30 (17.1%)	1 (1.4%)	0 (0.0%)	37 (5.2%)
12. PR (partial resection)	8 (1.8%)	5 (2.9%)	0 (0.0%)	0 (0.0%)	13 (1.8%)
13. その他 Others	8 (1.8%)	1 (0.6%)	1 (1.4%)	1 (3.8%)	11 (1.5%)
99. 不明 Unknown	5 (1.1%)	4 (2.3%)	1 (1.4%)	2 (7.7%)	12 (1.7%)
Total	443 (100.0%)	175 (100.0%)	73 (100.0%)	26 (100.0%)	717 (100.0%)

c. 癌遺残の評価 Evaluation of residual cancer

略語 Abbreviations

- IPMA-MH: 03a. 膵管内乳頭腺腫_粘液高産生性 Intraductal papillary mucinous adenoma with mucin hypersecretion
 IPMA-noM: 03b. 膵管内乳頭腺腫_粘液非高産生性 Intraductal papillary mucinous adenoma without mucin hypersecretion
 IPMC-MH: 03c. 膵管内乳頭腺癌_粘液高産生性 Intraductal papillary mucinous adenocarcinoma with mucin hypersecretion
 IPMC-noM: 03d. 膵管内乳頭腺癌_粘液非高産生性 Intraductal papillary mucinous adenocarcinoma without mucin hypersecretion
 ITA: 04a. 膵管内管状腺腫 Intraductal tubular adenoma
 ITC: 04b. 膵管内管状腺癌 Intraductal tubular adenocarcinoma
 AH-CIS: 05. 異型過形成および上皮内癌 Atypical hyperplasia and carcinoma in situ
 INV-IT: 15. 膵管内乳頭腺癌由来の浸潤癌 Invasive carcinoma originating in an intraductal tumor

表 6.4.c.1 膵切除断端における癌浸潤 Infiltration of cancer cells at pancreatic cut end margin (PCM)

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. PCM 陰性 PCM negative	104 (98.1%)	41 (100%)	304 (95.6%)	28 (93.3%)	7 (100%)	14 (93.3%)	19 (100%)	122 (93.1%)	639 (95.8%)
1. PCM 陽性 PCM positive	2 (1.9%)	0 (0.0%)	14 (4.4%)	2 (6.7%)	0 (0.0%)	1 (6.7%)	0 (0.0%)	9 (6.9%)	28 (4.2%)
Total	106 (100%)	41 (100%)	318 (100%)	30 (100%)	7 (100%)	15 (100%)	19 (100%)	131 (100%)	667 (100%)

表 6.4.c.2 術式と PCM Procedure of pancreatectomy and PCM

	TP	PD, subtotal PD, PPPD, SSPPD	DPPHR	DP, subtotal DP, spleen preserving DP	MP, PR	Total
0. PCM 陰性 PCM negative	34 (100.0%)	393 (97.0%)	11 (100.0%)	137 (90.7%)	44 (95.7%)	619 (95.7%)
1. PCM 陽性 PCM positive	0 (0.0%)	12 (3.0%)	0 (0.0%)	14 (9.3%)	2 (4.3%)	28 (4.3%)
Total	34 (100.0%)	405 (100.0%)	11 (100.0%)	151 (100.0%)	46 (100.0%)	647 (100.0%)

表 6.4.c.3 胆管切除断端における癌浸潤 Infiltration of cancer cells at bile duct cut end margin (BCM)

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. BCM 陰性 BCM negative	93 (98.9%)	40 (100%)	287 (99.7%)	27 (100%)	6 (100%)	13 (92.9%)	11 (100%)	120 (98.4%)	597 (99.2%)
1. BCM 陽性 BCM positive	1 (1.1%)	0 (0.0%)	1 (0.3%)	0 (0.0%)	0 (0.0%)	1 (7.1%)	0 (0.0%)	2 (1.6%)	5 (0.8%)
Total	94 (100%)	40 (100%)	288 (100%)	27 (100%)	6 (100%)	14 (100%)	11 (100%)	122 (100%)	602 (100%)

表 6.4.c.4 臓周囲剥離面における癌浸潤 Infiltration of cancer cells at dissected pancreatic tissue margin (DPM)

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. DPM 陰性 DPM negative	103 (99.0%)	42 (100%)	310 (97.2%)	30 (100%)	7 (100%)	14 (93.3%)	19 (100%)	115 (87.1%)	640 (95.8%)
1. DPM 陽性 DPM positive	1 (1.0%)	0 (0.0%)	9 (2.8%)	0 (0.0%)	0 (0.0%)	1 (6.7%)	0 (0.0%)	17 (12.9%)	28 (4.2%)
Total	104 (100%)	42 (100%)	319 (100%)	30 (100%)	7 (100%)	15 (100%)	19 (100%)	132 (100%)	668 (100%)

表 6.4.c.5 術式とDPM Procedure of pancreatotomy and DPM

	TP	PD, subtotal PD, PPPD, SSPPD	DPPHR	DP, subtotal DP, spleen preserving DP	MP, PR	Total
0. DPM 陰性 DPM negative	41 (95.3%)	381 (94.5%)	12 (100.0%)	143 (97.3%)	43 (100.0%)	620 (95.7%)
1. DPM 陽性 DPM positive	2 (4.7%)	22 (5.5%)	0 (0.0%)	4 (2.7%)	0 (0.0%)	28 (4.3%)
Total	43 (100.0%)	403 (100.0%)	12 (100.0%)	147 (100.0%)	43 (100.0%)	648 (100.0%)

表 6.4.c.6 癌遺残度 Residual tumor

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. R0	100 (97.1%)	42 (100%)	198 (71.0%)	29 (93.5%)	7 (100%)	14 (87.5%)	6 (46.2%)	86 (67.7%)	482 (78.0%)
1. R1	3 (2.9%)	0 (0.0%)	68 (24.4%)	2 (6.5%)	0 (0.0%)	2 (12.5%)	7 (53.8%)	19 (15.0%)	101 (16.3%)
2. R2	0 (0.0%)	0 (0.0%)	13 (4.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	22 (17.3%)	35 (5.7%)
Total	103 (100%)	42 (100%)	279 (100%)	31 (100%)	7 (100%)	16 (100%)	13 (100%)	127 (100%)	618 (100%)

表 6.4.c.7 術式と癌遺残度 Procedure of pancreatotomy and residual tumor

	TP	PD, subtotal PD, PPPD, SSPPD	DPPHR	DP, subtotal DP, spleen preserving DP	MP, PR	Total
0. R0	30 (81.1%)	306 (77.7%)	6 (60.0%)	93 (78.2%)	34 (82.9%)	469 (78.0%)
1. R1	2 (5.4%)	66 (16.8%)	4 (40.0%)	20 (16.8%)	7 (17.1%)	99 (16.5%)
2. R2	5 (13.5%)	22 (5.6%)	0 (0.0%)	6 (5.0%)	0 (0.0%)	33 (5.5%)
Total	37 (100.0%)	394 (100.0%)	10 (100.0%)	119 (100.0%)	41 (100.0%)	601 (100.0%)

図 6.4.c.8 IPMA-MH 切除例における膵切除断端所見と生存率 Survival of patients with IPMA-MH according to the pancreatic cut end margin (PCM)

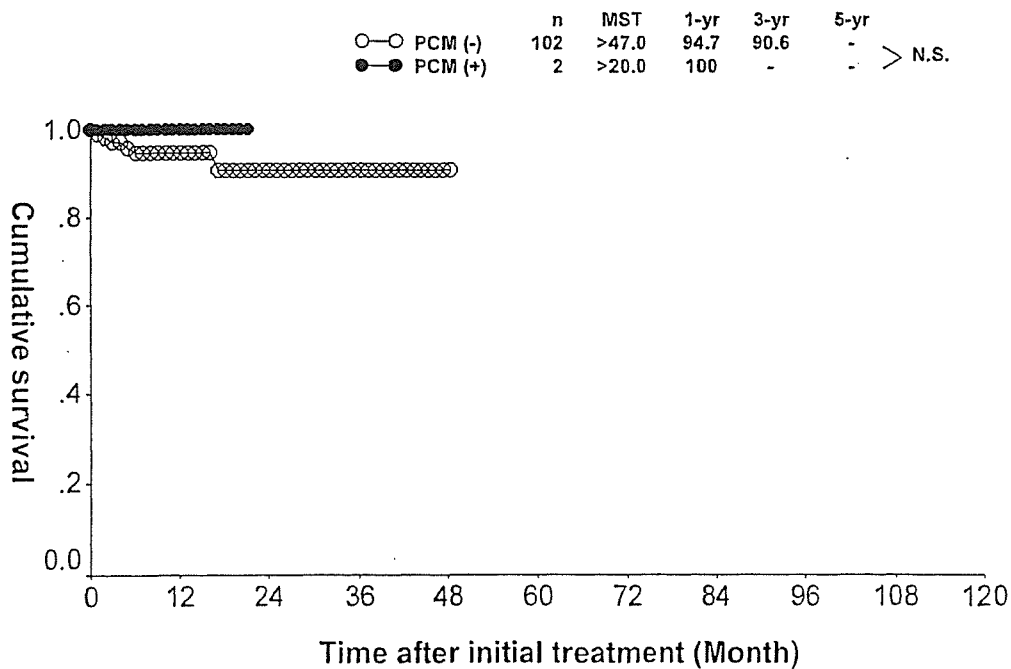


表 6.4.c.9 IPMC-MH 切除例における膵切除断端所見と生存率 Survival of patients with IPMC-MH according to the pancreatic cut end margin (PCM)

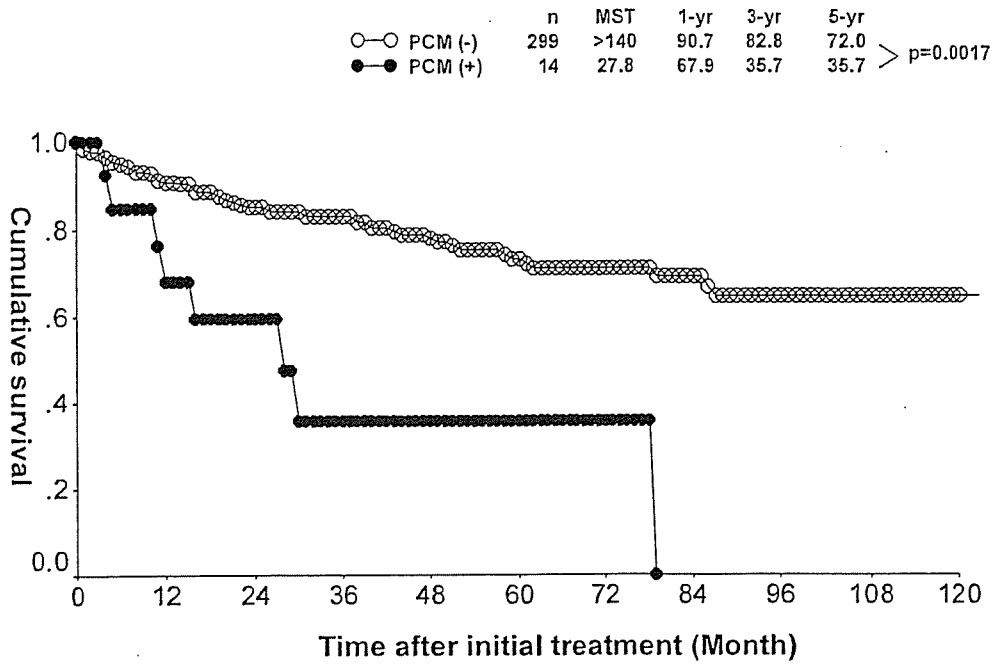
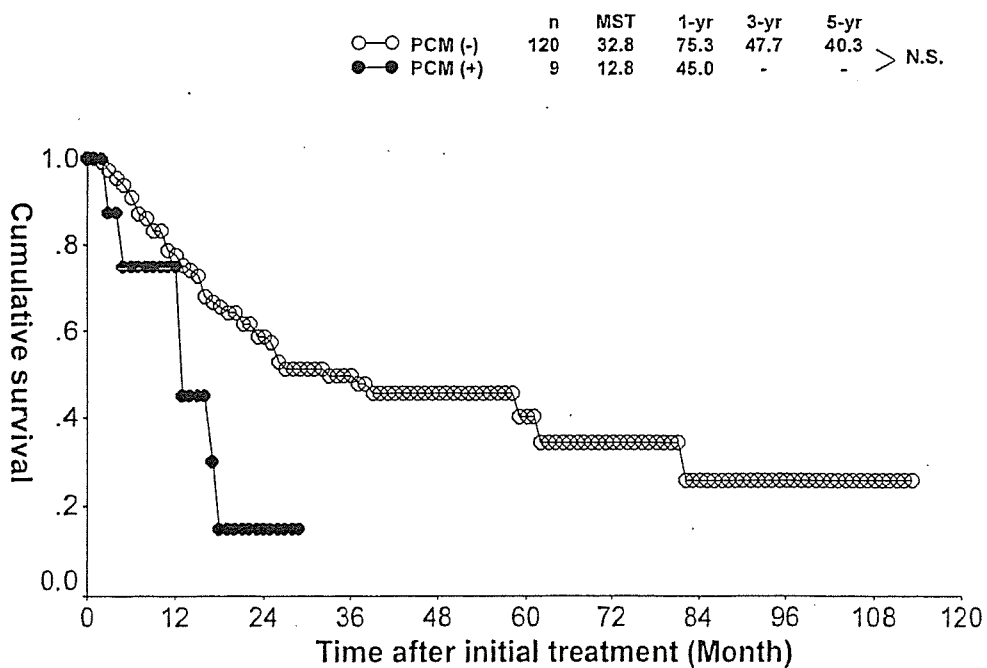


表 6.4.c.10 INV-IT 切除例における膵切除断端所見と生存率 Survival of patients with INV-IT according to the pancreatic cut end margin (PCM)



d. リンパ節郭清 Extent of dissection of lymph nodes

略語 Abbreviations

- IPMA-MH: 03a. 膵管内乳頭腺腫 粘液高産生性 Intraductal papillary mucinous adenoma with mucin hypersecretion
- IPMA-noM: 03b. 膵管内乳頭腺腫 粘液非高産生性 Intraductal papillary mucinous adenoma without mucin hypersecretion
- IPMC-MH: 03c. 膵管内乳頭腺癌 粘液高産生性 Intraductal papillary mucinous adenocarcinoma with mucin hypersecretion
- IPMC-noM: 03d. 膵管内乳頭腺癌 粘液非高産生性 Intraductal papillary mucinous adenocarcinoma without mucin hypersecretion
- ITA: 04a. 膵管内管状腺腫 Intraductal tubular adenoma
- ITC: 04b. 膵管内管状腺癌 Intraductal tubular adenocarcinoma
- AH-CIS: 05. 異型過形成および上皮内癌 Atypical hyperplasia and carcinoma in situ
- INV-IT: 15. 膵管内乳頭腺癌由来の浸潤癌 Invasive carcinoma originating in an intraductal tumor

表 6.4.d.1 リンパ節郭清の程度 Extent of lymph node dissection

	IPMA-MH	IPMA-noM	IPMC-MH	IPMC-noM	ITA	ITC	AH-CIS	INV-IT	Total
0. D0	48 (47.1%)	18 (41.9%)	108 (32.2%)	4 (12.9%)	4 (57.1%)	3 (18.8%)	14 (73.7%)	13 (9.6%)	212 (30.8%)
1. D1	45 (44.1%)	18 (41.9%)	152 (45.4%)	17 (54.8%)	2 (28.6%)	5 (31.3%)	5 (26.3%)	59 (43.4%)	303 (44.0%)
2. D2	9 (8.8%)	6 (14.0%)	73 (21.8%)	9 (29.0%)	1 (14.3%)	7 (43.8%)	0 (0.0%)	59 (43.4%)	164 (23.8%)
3. D3	0 (0.0%)	1 (2.3%)	2 (0.6%)	1 (3.2%)	0 (0.0%)	1 (6.3%)	0 (0.0%)	5 (3.7%)	10 (1.5%)
Total	102 (100%)	43 (100%)	335 (100%)	31 (100%)	7 (100%)	16 (100%)	19 (100%)	136 (100%)	689 (100%)

表 6.4.d.2 術式とリンパ節郭清の程度 Procedure of pancreatectomy and extent of lymph node dissection

	TP	PD, subtotal PD, PPPD, SSPPD	DP, subtotal DP, spleen preserving DP	DPPHR, MP, PR	Total	%
0. D0	7 (16.3%)	77 (18.7%)	10 (83.3%)	72 (46.8%)	36 (76.6%)	202 (30.2%)
1. D1	20 (46.5%)	202 (49.0%)	1 (8.3%)	65 (42.2%)	10 (21.3%)	298 (44.6%)
2. D2	13 (30.2%)	129 (31.3%)	1 (8.3%)	14 (9.1%)	1 (2.1%)	158 (23.7%)
3. D3	3 (7.0%)	4 (1.0%)	0 (0.0%)	3 (1.9%)	0 (0.0%)	10 (1.5%)
Total	43 (100.0%)	412 (100.0%)	12 (100.0%)	154 (100.0%)	47 (100.0%)	668 (100.0%)

図 6.4.d.3 膵管内腫瘍切除例のリンパ節郭清の程度と生存率
Survival of patients with intraductal tumors according to the extent of lymph node dissection

