

# アンケート調査 結果報告

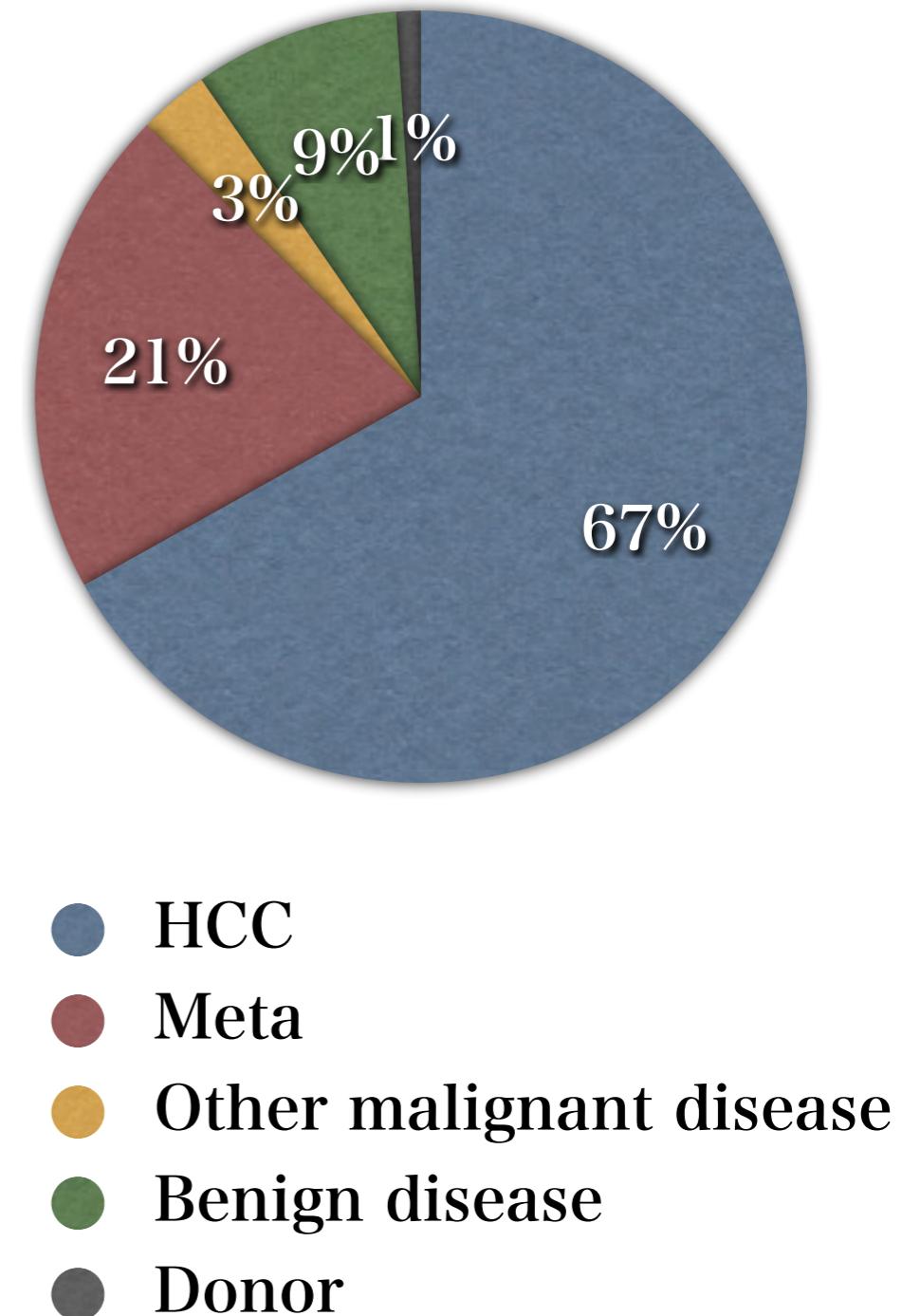
(~2008.12月 1057例)

# 疾患

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HCC with LC	544
HCC without LC	163
Metastatic liver tumor	217
CCC	14
Other malignant disease	17
Hemangioma	26
Cyst	8
Other benign disease	57
Donor	11
Total	1057

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HCC; Hepatocellular carcinoma

LC; Liver cirrhosis

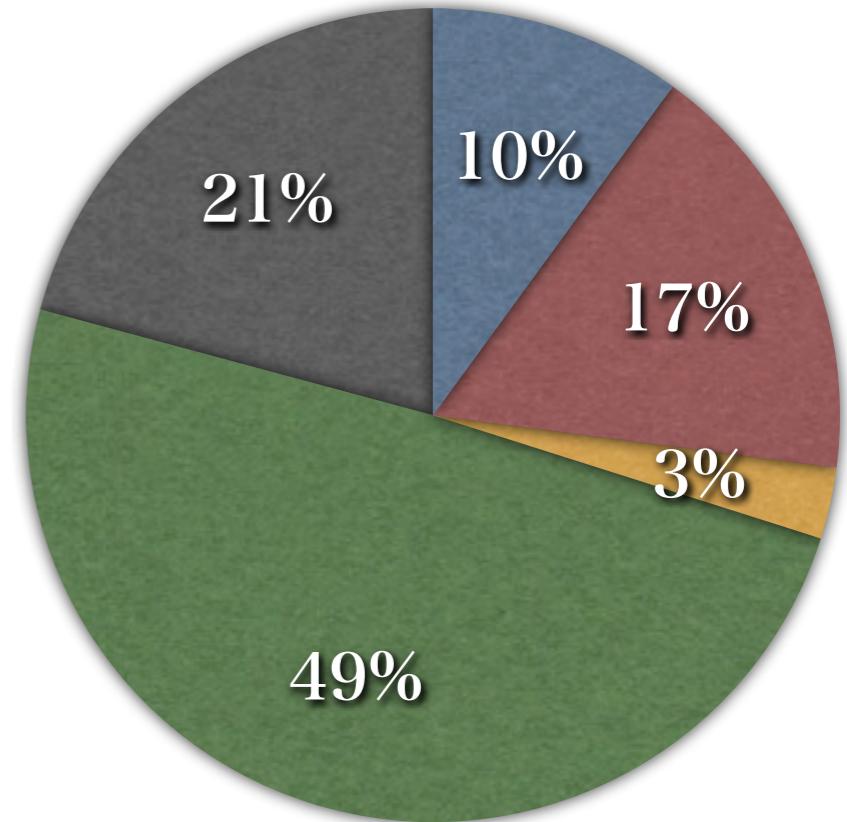
CCC; Cholangiocellular carcinoma

# 術式 (1)

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Trisectionectomy	2
Extended hemihepatectomy	12
Hemihepatectomy	70
Sectionectomy	22
Left lateral sectionectomy (LLS)	180
Anatomical segmentectomy	30
Non anatomical wedge resection	521
RFA	152
MCT	68
Total	1057

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- Major liver resection
- LLS
- Segmentectomy
- Wedge
- Ablation

Major liver resections included trisectionectomy, hemihepatectomy, and sectionectomy

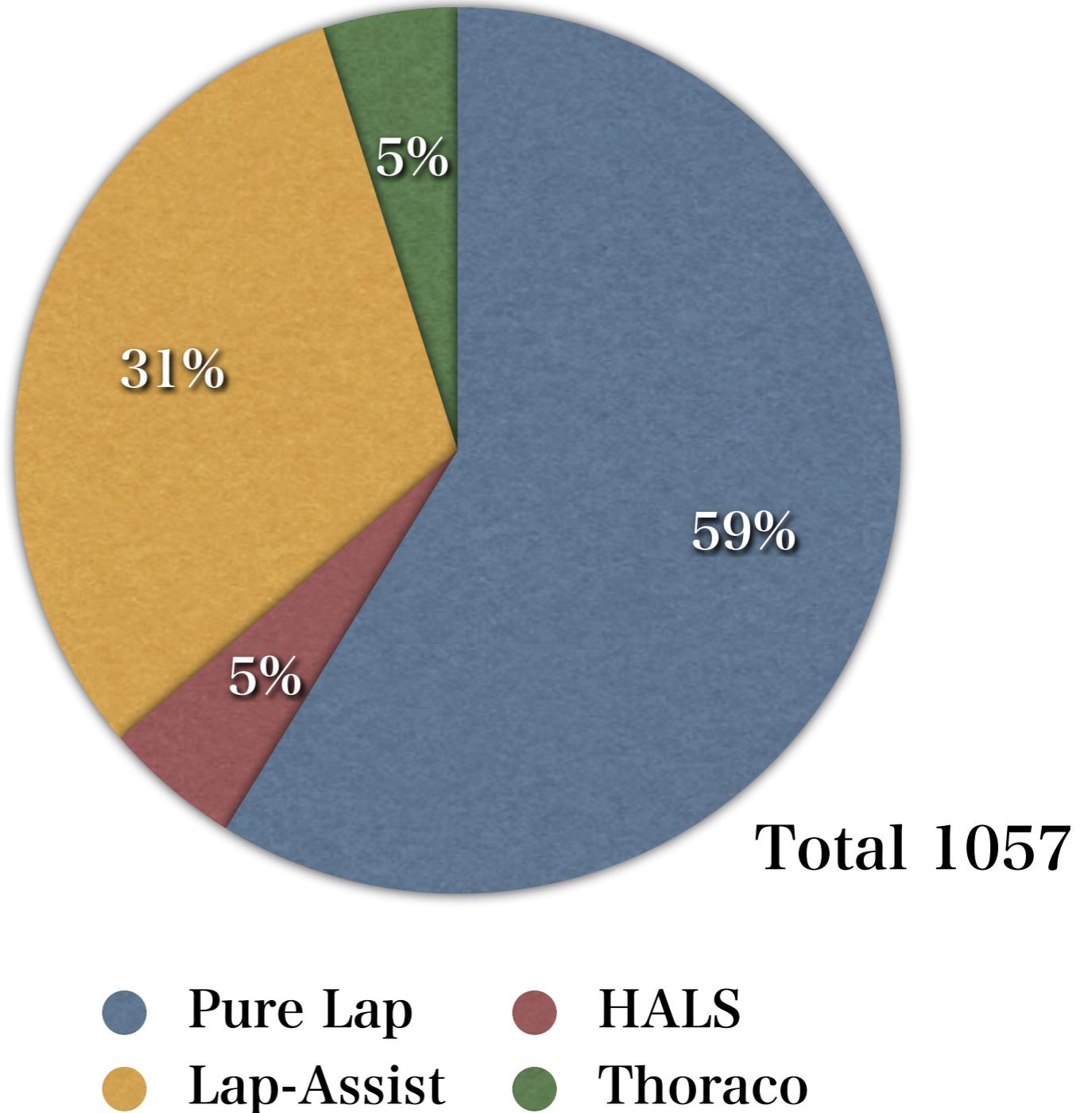
## 術式 (2)

Pure Lap  
n=621

HALS  
n=53

Lap-Assist  
n=331

Thoraco  
n=52



- Pure Lap      ● HALS
- Lap-Assist      ● Thoraco

# 術式 (3)

Pure Lap

n=621

Major liver resections	8
Left lateral sectionectomy	87
Anatomical segmentectomy	12
Non anatomical wedge resection	359
Ablation (RFA,MCT)	155

HALS

n=53

Major liver resections	4
Left lateral sectionectomy	6
Anatomical segmentectomy	2
Non anatomical wedge resection	36
Ablation (RFA,MCT)	5

Lap-Assist

n=331

Major liver resections	94
Left lateral sectionectomy	87
Anatomical segmentectomy	16
Non anatomical wedge resection	122
Ablation (RFA,MCT)	12

Thoraco

n=52

Non anatomical wedge resection	4
Ablation (RFA,MCT)	48

Major liver resections included trisectionectomy, hemihepatectomy, and sectionectomy

# 肝切除の手術成績 (1)

Conversion to open surgery	18	2.2%
Re-operation	0	-
Perioperative death	2	0.2%
Intraoperative accidents	14	1.7%
(Bleeding)	(11)	(1.3%)
(Injury to other organs)	(2)	(0.2%)
(Gas embolism)	(1)	(0.1%)
Postoperative complications	75	9.0%
(Bleeding)	(10)	(1.2%)
(Liver failure)	(3)	(0.4%)
(Bile leakage)	(14)	(1.7%)
(Pleural effusion)	(12)	(1.4%)
(Ascites)	(17)	(2.0%)
(Liver abscess)	(1)	(0.1%)
(Surgical site infection)	(12)	(1.4%)
(Pneumonia)	(1)	(0.1%)
(Gastrointestinal bleeding)	(2)	(0.2%)
(Hyper carbon dioxidemia)	(1)	(0.1%)
(Ileus)	(1)	(0.1%)
(ARDS)	(1)	(0.1%)

n=837

## 肝切除の手術成績 (2)

	Conversion	Intraoperative accident	Postoperative complication
Pure Lap n=466	12 (2.6%)	11 (2.4%)	31 (6.7%)
HALS n=48	0	0	6 (12.5%)
Lap-Assist n=319	5 (1.6%)	5 (1.6%)	36 (11.3%)
Thoraco n=4	0	0	3 (75%)
Total 837			

# 肝切除の手術成績 (3)

	MLR n=106	LLS n=180	AS n=30	NAWR n=521
Conversion	0	5 2.8%	2 6.7%	12 2.3%
Complication	18 17.0%	14 7.8%	2 6.7%	38 7.3%
(Bleeding)	(1) (0.9%)	(3) (1.7%)	(0)	(5) (1.0%)
(Liver failure)	(2) (1.9%)	(0)	(1) (3.3%)	(0)
(Bile leakage)	(6) (5.7%)	(4) (2.2%)	(0)	(4) (0.8%)
(Pleural effusion)	(2) (1.9%)	(1) (0.6%)	(0)	(5) (1.0%)
(Ascites)	(0)	(2) (1.1%)	(1) (3.3%)	(14) (2.7%)
(Liver abscess)	(0)	(0)	(0)	(1) (0.2%)
(Surgical site infection)	(5) (4.7%)	(4) (2.2%)	(0)	(5) (1.0%)
(Pneumonia)	(1) (0.9%)	(0)	(0)	(0)
(Gastrointestinal bleeding)	(0)	(0)	(0)	(2) (0.4%)
(Hyper carbon dioxidemia)	(0)	(0)	(0)	(1) (0.2%)
(Ileus)	(0)	(0)	(0)	(0)
(ARDS)	(1) (0.9%)	(0)	(0)	(1) (0.2%)

n=837

MLR; Major liver resection, LLS; Left lateral sectionectomy, AS; Anatomical segmentectomy  
NAWR; Non anatomical wedge resection

# 肝切除の手術成績 (4)

	HCC		Meta n=198
	LC(+) n=418	LC(-) n=151	
Conversion	13 3.1%	0	3 1.5%
Complication	40 9.6%	8 5.3%	15 7.6%
(Bleeding)	(5) (1.2%)	(3) (2.0%)	(1) (0.5%)
(Liver failure)	(1) (0.2%)	(0)	(1) (0.5%)
(Bile leakage)	(5) (1.2%)	(3) (2.0%)	(4) (2.0%)
(Pleural effusion)	(7) (1.7%)	(0)	(1) (0.5%)
(Ascites)	(13) (3.1%)	(2) (1.3%)	(0)
(Liver abscess)	(0)	(0)	(1) (0.5%)
(Surgical site infection)	(5) (1.2%)	(0)	(4) (2.0%)
(Pneumonia)	(1) (0.2%)	(0)	(0)
(Gastrointestinal bleeding)	(2) (0.5%)	(0)	(1) (0.5%)
(Hyper carbon dioxidemia)	(1) (0.2%)	(0)	(1) (0.5%)
(Ileus)	(0)	(0)	(1) (0.5%)

# Ablationの手術成績

<b>Conversion to open surgery</b>	<b>0</b>	<b>-</b>
<b>Re-operation</b>	<b>1</b>	<b>0.5%</b>
<b>Perioperative death</b>	<b>0</b>	<b>-</b>
<b>Intraoperative accidents</b>	<b>0</b>	<b>-</b>
(Bleeding)	(0)	
(Injury to other organs)	(0)	
(Gas embolism)	(0)	
<b>Postoperative complications</b>	<b>2</b>	<b>0.9%</b>
(Bleeding)	(1)	(0.5%)
(Liver failure)	(0)	
(Bile leakage)	(0)	
(Pleural effusion)	(0)	
(Ascites)	(0)	
(Liver abscess)	(0)	
(Surgical site infection)	(1)	(0.5%)
(Pneumonia)	(0)	
(Gastrointestinal bleeding)	(0)	
(Hyper carbon dioxidemia)	(0)	

n=220

# 肝硬変合併肝細胞癌の部位別術式

	Wedge resection n=254	Ablation n=177
S1	0	5
S2	21	9
S3	72	28
S4	25	10
S5	34	20
S6	79	23
S7	13	20
S8	10	62

# Surgical outcomes of HCC with LC

	MLR n=23	LLS n=69	AS n=19	NAWR n=256
<b>Conversion</b>	1 <b>4.3%</b>	3 <b>4.3%</b>	1 <b>5.3%</b>	8 <b>3.1%</b>
<b>Complication</b>	5 <b>22%</b>	7 <b>10.1%</b>	2 <b>10.5%</b>	29 <b>11.3%</b>
(Bleeding)	(0)	(1) <b>(1.4%)</b>	(0)	(4) <b>(1.6%)</b>
(Liver failure)	(0)	(0)	(1) <b>(5.3%)</b>	(0)
(Bile leakage)	(2) <b>(8.7%)</b>	(1) <b>(1.4%)</b>	(0)	(2) <b>(0.8%)</b>
(Pleural effusion)	(2) <b>(8.7%)</b>	(1) <b>(1.4%)</b>	(0)	(7) <b>(2.7%)</b>
(Ascites)	(0)	(2) <b>(2.9%)</b>	(1) <b>(5.3%)</b>	(10) <b>(4.0%)</b>
(Liver abscess)	(0)	(0)	(0)	(0)
(Surgical site infection)	(0)	(2) <b>(2.9%)</b>	(0)	(3) <b>(1.2%)</b>
(Pneumonia)	(1) <b>(4.3%)</b>	(0)	(0)	(0)
(Gastrointestinal bleeding)	(0)	(0)	(0)	(2) <b>(0.8%)</b>
(Hyper carbon dioxidemia)	(0)	(0)	(0)	(1) <b>(0.4%)</b>

n=368

MLR; Major liver resection, LLS; Left lateral sectionectomy, AS; Anatomical segmentectomy  
NAWR; Non anatomical wedge resection

## アンケート調査協力施設 32施設

愛知医科大学	外科	東京医科歯科大学	肝胆膵・総合外科
秋田大学	消化器外科	東京医科大学八王子医療センター	消化器外科
岩手医科大学	外科	東京慈恵医科大学	外科
永寿総合病院	外科	東京慈恵医科大学柏病院	外科
大分大学	第一外科	東京女子医科大学	消化器外科
大阪大学	消化器外科	東京大学	肝胆膵外科
大阪市立大学	肝胆膵外科	東邦大学	外科
北里大学	外科	東北大学	外科
京都大学	外科	徳島大学	消化器・移植外科
九州大学	消化器・総合外科	獨協医科大学	第二外科
熊本大学	消化器外科	長崎大学	移植・消化器外科
慶應義塾大学	外科	長野市民病院	外科
国立がんセンター東病院	上腹部外科	日本医科大学	外科
信州大学	消化器外科	広島大学	外科
聖マリアンナ医科大学	消化器・一般外科	北海道大学	第一外科
千葉県がんセンター	消化器外科	横山胃腸科病院	外科

(50音順)