

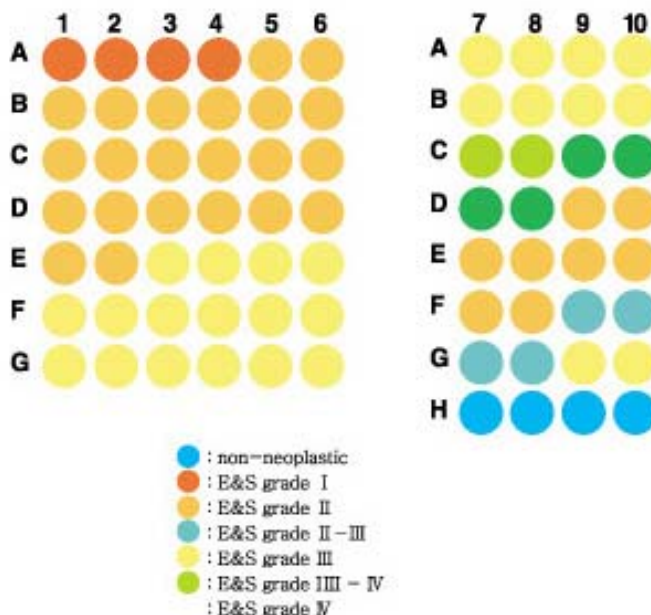
Specifications:

- No. of cases: 35
- Tissue type: Liver cancer tissues – Hepatocellular carcinoma
- No. of spots: 2 spots from each cancer case (70 spots)
4 non-neoplastic spots (4 spots)
- Total spots: 74
- Corresponding normal tissues with cancers: Yes
- Diameter: 1.0 mm

Documents:

- Product specification: layout, summary of tissue spots
- H&E stained images
- Detailed pathological information

Layout:



Summary of tissue spots

No.	Coordinate	Sex	Age	Key Word	E-S grade*	TNM Stage	
1	A	1, 2	f	48	hepatocellular carcinoma	I	T2NxM0 (II)
2		3, 4	m	55	hepatocellular carcinoma	I	T2N0M0 (II)
3		5, 6	m	51	hepatocellular carcinoma Cirrhosis B viral	II	T1N0M0 (I)
4		7, 8	m	49	hepatocellular carcinoma	III	T2N0M0 (II)
5		9, 10	m	42	hepatocellular carcinoma	III	T3N0M1 (IV)
6	B	1, 2	m	40	hepatocellular carcinoma	II	T3N0M1 (IV)
7		3, 4	m	50	hepatocellular carcinoma	II	T1N0M0 (I)
8		5, 6	f	45	hepatocellular carcinoma	II	T2N0M0 (II)
9		7, 8	m	43	hepatocellular carcinoma	III	T2N0M0 (II)
10		9, 10	m	42	hepatocellular carcinoma	III	T2N0M0 (II)
11	C	1, 2	f	50	hepatocellular carcinoma	II	T2N0M0 (II)
12		3, 4	m	53	hepatocellular carcinoma	II	T4N0M0 (IIIB)
13		5, 6	m	55	hepatocellular carcinoma Cirrhosis B viral	II	T1N0M0 (I)
14		7, 8	m	49	hepatocellular carcinoma	III to IV	T2N0M0 (II)
15		9, 10	m	40	hepatocellular carcinoma	IV	T1N0M0 (I)
16	D	1, 2	m	51	hepatocellular carcinoma Chronic hepatitis B viral	II	T4N0M0 (IIIB)
17		3, 4	m	56	hepatocellular carcinoma	II	T1 (I)
18		5, 6	m	33	hepatocellular carcinoma	II	T1N0M0 (I)
19		7, 8	f	56	hepatocellular carcinoma	IV	(IV)
20		9, 10	m	63	hepatocellular carcinoma	II	T3N0M1 (IV)
21	E	1, 2	m	52	hepatocellular carcinoma Cirrhosis B viral	II	T2N0M0 (II)
22		3, 4	m	41	hepatocellular carcinoma	III	T3N0M0 (IIIA)
23		5, 6	m	60	hepatocellular carcinoma	III	T4N1M1 (IV)
24		7, 8	m	66	hepatocellular carcinoma Cirrhosis C viral	II	T2N0M0 (II)
25		9, 10	m	70	hepatocellular carcinoma	II	T1N0M0 (I)
26	F	1, 2	m	37	hepatocellular carcinoma	III	T3N0M0 (IIIA)
27		3, 4	m	51	hepatocellular carcinoma	III	T3N0M0 (IIIA)
28		5, 6	m	60	hepatocellular carcinoma	III	T4N0M1 (IV)
29		7, 8	m	47	hepatocellular carcinoma	II	T3N0M0 (IIIA)
30		9, 10	m	70	hepatocellular carcinoma	II to III	T2N0M0 (II)

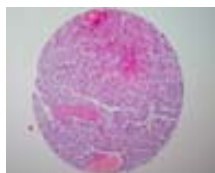
Summary of tissue spots

No.	Coordinate	Sex	Age	Key Word	E-S grade*	TNM Stage	
31	G	1, 2	m	63	hepatocellular carcinoma	III	T2N0M0 (II)
32		3, 4	m	56	hepatocellular carcinoma	III	T2N0M0 (II)
33		5, 6	m	56	hepatocellular carcinoma	III	T2N0M0 (II)
34		7, 8	m	72	hepatocellular carcinoma	II to III	T3N0M0 (IIIA)
35		9, 10	m	70	hepatocellular carcinoma	III	T3N0M0 (IIIA)
36	H	7	m	55	non-neoplastic, from A3, 4		
37		8	m	51	non-neoplastic, from A5, 6		
38		9	m	40	non-neoplastic, from B1, 2		
39		10	m	53	non-neoplastic, from C3, 4		

E-S grade* : Edmondson - Steiner grade TACE **: Trans Arterial Chemo Embolisation

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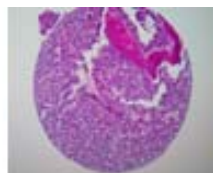
Haematoxylin and Eosin staining



A1



A2



A3



A4



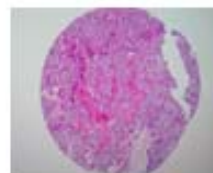
A5



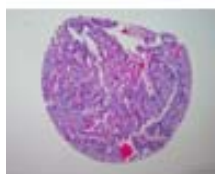
A6



A7



A8



A9



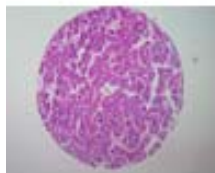
A10



B1



B2



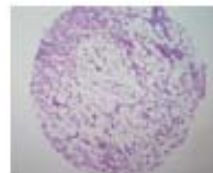
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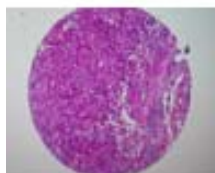
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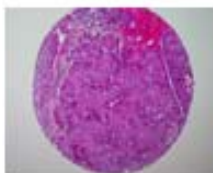
B5



B6



B7



B8



B9



B10



C1



C2



C3



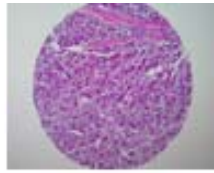
C4

QC sheet_LOT#122120309231

Haematoxylin and Eosin staining



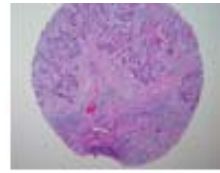
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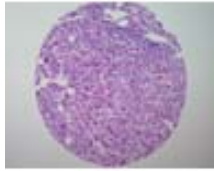
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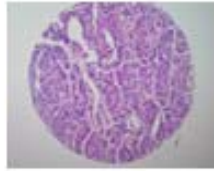
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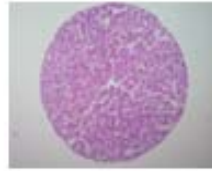
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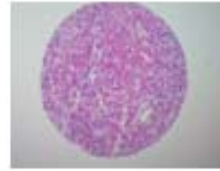
C9



C10



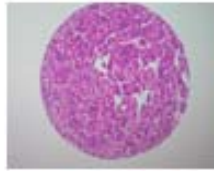
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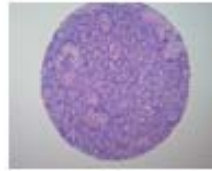
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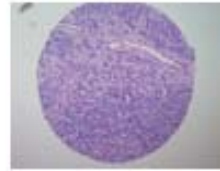
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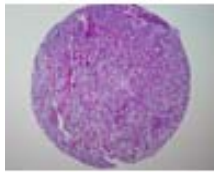
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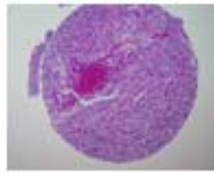
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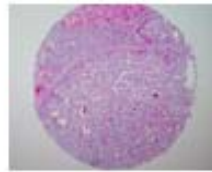
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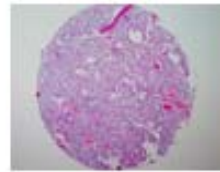
D7



D8



D9



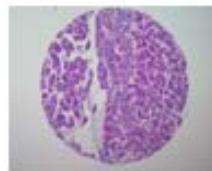
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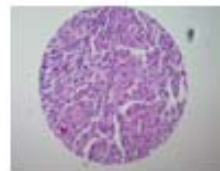
E1



E2



E3



E4



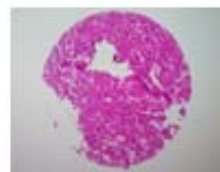
E5



E6

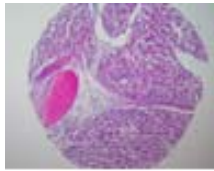


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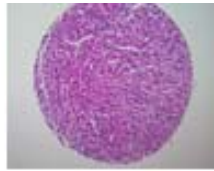


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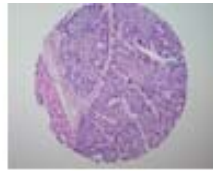
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Haematoxylin and Eosin staining



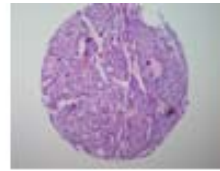
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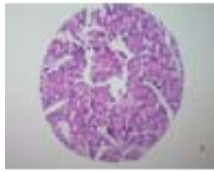
E10



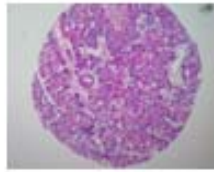
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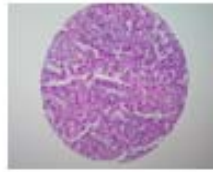
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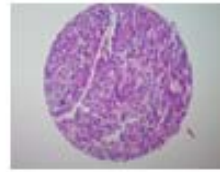
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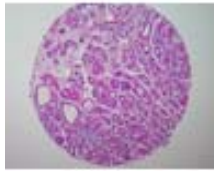
F4



F5



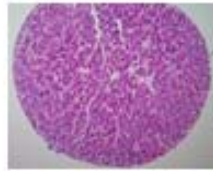
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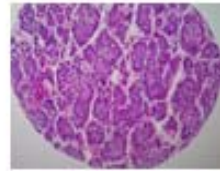
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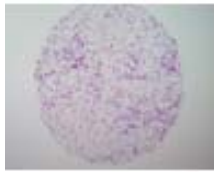
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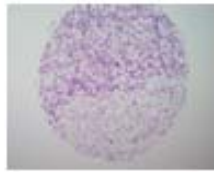
F9



F10



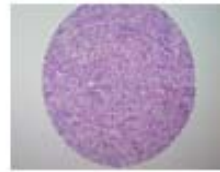
G1



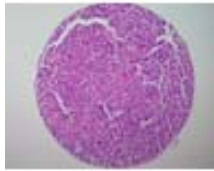
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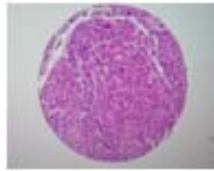
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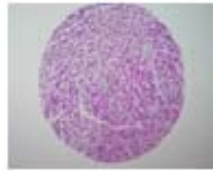
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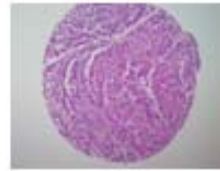
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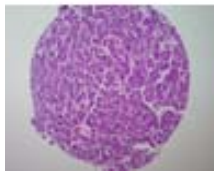
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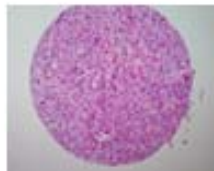
G7



G8



G9



G10

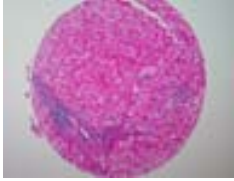


H7



H8

QC sheet_LOT#122120309231
Haematoxylin and Eosin staining



H9



H10

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment
1	A	1, 2	f	48 hepatocellular carcinoma	<p>1. Liver, wedge resection: hepatocellular carcinoma with</p> <ol style="list-style-type: none"> 1) size: 5x4x3.5 cm 2) Edmondson - Steiner grade I 3) trabecular histologic type 4) single nodular type with capsule formation and intrahepatic metastasis 5) portion of necrosis: about 65% 6) hepatic capsular involvement 7) intact hepatic resection margin 8) non-neoplastic liver showing chronic hepatitis, B-viral, with moderate inflammatory activity (grade III) and early cirrhosis (stage III) <p>2. Spleen, splenectomy: cavernous hemangioma</p> <p>3. Gallbladder, cholecystectomy: chronic cholecystitis</p>	I	T2NxM0 (II)	No information
2	A	3, 4	m	55 hepatocellular carcinoma	<p>1. Liver, subsegmentectomy: hepatocellular carcinoma with</p> <ol style="list-style-type: none"> 1) size: 4.5x3. 8x3 cm 2) Edmondson grade I 3) trabecular histologic type 4) multinodular gross type 5) microvascular invasion 6) no necrosis 7) intact intrahepatic resection margin 8) multiple, dysplastic nodules showing high to low grade dysplasia and transformation to hepatocellular carcinoma (early hepatocellular carcinoma) 9) chronic hepatitis, probably B viral, with minimal inflammatory activity (grade I) and macronodular cirrhosis (stage IV). <p>2. Gallbladder, cholecystectomy, separately submitted: free from tumor extension</p>	I	T2N0M0 (II)	No information
3	A	5, 6	m	51 hepatocellular carcinoma Cirrhosis B viral	<p>1. Liver, segmentectomy: hepatocellular carcinoma with</p> <ol style="list-style-type: none"> 1) expanding gross type 2) Edmondson-Steiner grade II 3) mixed trabecular and pseudoacinar microscopic pattern 4) necrosis less than 1/3 5) many cytoplasmic eosinophilic globules 6) Glisson's capsule: free of tumor 7) remaining liver: cirrhosis, macronodular, active, B-viral 8) resection margin: free of tumor <p>2. Gallbladder, cholecystectomy: chronic inflammation</p>	II	T1N0M0 (I)	No information

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment	
4	A	7, 8	m	49	hepatocellular carcinoma	Liver, lateral segmentectomy: hepatocellular carcinoma, moderate differentiated with 1) size: 3.5x3x3 cm 2) histology: compact and macrotrabecular pattern 3) Edmondson - Steiner grade III 4) necrosis: less than 10% of total volume 5) single nodular expansile growth with several small satellite nodules 6) extension to liver capsule 7) small vascular invasion 8) intact resection margin 9) Non neoplastic liver showing chronic B viral hepatitis with minimal inflammatory activity (grade 1) and portal fibrosis (stage I) by Ludwig classification	III	T2N0M0 (II)	No information
5	A	9, 10	m	42	hepatocellular carcinoma	1. Liver, right, lobectomy: hepatocellular carcinoma with 1) size: 10x8 cm 2) single nodular with perinodal expansion 3) portal vein invasion 4) macrotrabecular (compact) type 5) Edmondson-Steiner grade:moderately differentiated (grade III) 6) no bile duct invasion 7) necrosis: approximately 80% of total volume 8) resection margin: free of tumor 9) chronic hepatitis, B-viral, mild inflammatory activity (grade II) and septal fibrosis(stage III) 2. Gallbladder, cholecystectomy: free from tumor extension	III	T3N0M1 (IV)	TACE** Adriamycin 50mg+ Lipiodol 20cc
6	B	1, 2	m	40	hepatocellular carcinoma	1. Liver, right, lobectomy: hepatocellular carcinoma with 1) size: 10x6 cm 2) adenoid pattern with focal papillary growth (Edmondson-Steiner's grade II) 3) single nodular type with perinodal spread 4) necrosis: 50-60% 5) extension to hepatic capsule and intrahepatic metastasis 6) frequent vascular invasion 7) intact resection margin (safty margin 2 cm) 8) Non neoplastic liver: macronodular cirrhosis with mild inflammatory activity, B-viral 2. Gallbladder, cholecystectomy: free from tumor extension	II	T3N0M1 (IV)	TACE Adriamycin 50mg

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment	
7	B	3, 4	m	50	hepatocellular carcinoma	1. Liver, segment VII, segmentectomy: hepatocellular carcinoma with 1) size: 1.7 cm in the largest diameter 2) Edmondson-Steiner grade II 3) predominantly adenoid histologic pattern 4) single nodular type without capsulation (expanding growth) 5) dysplastic nodule, high grade (1 cm in diameter) 6) lymphovascular invasion 7) intact resection margin 8) non-neoplastic liver showing chronic hepatitis, B viral, with mild inflammatory activity (grade II) and mixed type cirrhosis (stage IV), and alcoholic liver disease 2. Gallbladder, cholecystectomy: autolysis	II	T1N0M0 (I)	Holmium therapy DW-166HC 48mci percutaneous inj.
8	B	5, 6	f	45	hepatocellular carcinoma	1. Liver, VIII, segmentectomy: hepatocellular carcinoma with 1) size: 4x3. 7x3.5 cm 2) Edmondson grade II (moderately differentiated) 3) single nodular type with expanding growth 4) compact histologic type composed of clean cells(clean cell type) and fatty change 5) no vascular invasion 6) intact hepatic resection margin 7) chronic hepatitis, B-viral, with mild inflammatory activity (grade II) and macronodular cirrhosis (stage IV) 2. Gallbladder,cholecystectomy, separately submitte: free from tumor extension	II	T2N0M0 (II)	No information
9	B	7, 8	m	43	hepatocellular carcinoma	1. Liver, segment IV, segmentectomy: hepatocellular carcinoma, moderately differentiated with 1) size: 5x3x3 cm 2) confluent multinodular type 3) Edmondson-Steiner grade III 4) compact and macrotrabecular pattern 5) infiltrative growth pattern without encapsulation and satellite nodule formation 6) extensive necrosis more than (50% of total volume) 7) vascular invasion 8) capsular involvement 9) intact resection margin (safety margin: 1 cm) 10) nonneoplastic liver showing chronic hepatitis, B viral,with mild inflammatory activity (grade II) and periportal fibrosis (stage II) 2. Gallbladder: free from tumor extension	III	T2N0M0 (II)	No information

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment	
10	B	9, 10	m	42	hepatocellular carcinoma	1. Liver, segment III, segmentectomy: hepatocellular carcinoma with 1) size: 3.5 cm in the greatest diameter 2) single nodular type with perinodal growth 3) Edmondson - Steiner grade III (moderately differentiated) 4) predominant histologic type: compact type 5) vascular invasion 6) hepatic capsular involvement 7) intact resection margin 8) chronic hepatitis, Bviral, with mild inflammatory activity (grade II) and cirrhosis (stage IV) 2. Gallbladder, cholecystectomy: free from tumor extension	III	T2N0M0 (II)	TACE Adriamycin 50mg
11	C	1, 2	f	50	hepatocellular carcinoma	1. Liver and gallbladder, wedge resection and cholecystectomy: hepatocellular carcinoma with 1) size: 3.5x3x2.5 cm 2) Edmondson grade II 3) adenoid histologic pattern 4) infiltrative spreading with fibrosis 5) prominent necrosis: about 60% of total volume 6) microvascular invasion 7) involvement at resection margin 8) non-neoplastic liver showing chronic hepatitis, B-viral, with mild inflammatory activity (grade II) and septal fibrosis (stage III) 2. Gallbladder, cholecystectomy: chronic cholecystitis	II	T2N0M0 (II)	TACE Adriamycin 50mg
12	C	3, 4	m	53	hepatocellular carcinoma	1. Liver, right lobe, lobectomy and cholecystectomy: hepatocellular carcinoma, ruptured with 1) size: 15 cm in the greatest diameter 2) Edmondson grade II 3) macrotrabecular type 4) single nodular type with capsulation and expanding growth 5) necrosis: less than 20% of total volume 6) vascular invasion 7) necrosis: about 20% of total volume 8) non-neoplastic liver showing chronic hepatitis, B-viral, mild inflammatory activity (grade II) and early cirrhosis (stage III) 2. Gallbladder: autolysis without tumor metastasis	II	T4N0M0 (IIIB)	TACE(2times) Adriamycin 50mg

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment
13	C	5, 6	m	55 hepatocellular carcinoma Cirrhosis B viral	1. Liver, right, lobectomy: hepatocellular carcinoma, with 1) expanding gross type 2) Edmonson-Steiner nuclear grade II 3) trabecular and pseudoacinar microscopic pattern 4) necrosis less than 10% 5) Glisson's capsule: free of tumor 6) resection margin: free of tumor 7) remaining liver: cirrhosis, macro nodular, active, B-viral 2. Gallbladder: chronic Nonspecific inflammation	II	T1N0M0 (I)	No information
14	C	7, 8	m	49 hepatocellular carcinoma	1. Liver, right, lobectomy: hepatocellular carcinoma, in right lobe with 1) size: 4 cm in diameter 2) single nodular type with perinodal spread(without encapsulation) 3) Edmondson Steinar: grade III to IV 4) macrotrabecular and compact histologic type 5) necrosis: 70% of total volume 6) no vascular invasion 7) capsular involvement 8) intact resection margin 9) Non neoplastic liver showing chronic hepatitis, B, viral,with mild inflammatory activity (grade II) and cirrhosis (stage IV) 2. Gallbladder, cholecystectomy: free from tumor extension	III to IV	T2N0M0 (II)	TACE Adriamycin 50mg
15	C	9, 10	m	40 hepatocellular carcinoma	1.Liver, subsegment VI, segmentectomy: small hepatocellular carcinoma, poorly differentiated (WHO classification) with 1) Edmondson - Steiner grade IV 2) size: 1.1 cm in the greatest diameter 3) single nodular type (expanding growth) with fibrotic capsulation 4) marked fibrosis without necrosis due to previous anterior embolization 5) macronodular cirrhosis(stage IV) and mild inflammatory activity (grade I), B viral 2.Gallbladder: free from tumor extension	IV	T1N0M0 (I)	No information

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment
16	D	1, 2	m	51 hepatocellular carcinoma Chronic hepatitis B viral	1. Liver, segmentectomy: hepatocellular carcinoma with 1) nodular spreading gross type 2) predominant trabecular pattern 3) Edmonson-Steiner nuclear grade II 4) Ischemic necrosis about 60% 5) rupture of the glison's capsule with fibrin deposition 6) remain liver: chronic hepatitis, inactive, B-viral 7) resection margin: free of tumor 2. Gallbladder: marked autolysis	II	T4N0M0 (IIIB)	No information
17	D	3, 4	m	56 hepatocellular carcinoma	1. Liver, right posterior segmentectomy: hepatocellular carcinoma with 1) expanding gross type 2) Edmonson-Steiner nuclear grade II 3) trabecular and pseudoacinar microscopic pattern 4) necrosis about 10% 5) resection margin: free of tumor 6) remaining liver: Cirrhosis, macronodular, active, said to be B-viral 2. Gallbladder: chronic Nonspecific inflammation	II	T1 (I)	No information
18	D	5, 6	m	33 hepatocellular carcinoma	1. Liver, segmentectomy: hepatocellular carcinoma with 1) nodular spreading gross type 2) Edmondson-Steiner nuclear grade II 3) predominant trabecular microscopic pattern 4) Glisson's capsule: free of tumor 5) necrosis: about 30% 6) remaining liver: i) chronic hepatitis, inactive, B-viral ii) fatty change, macro and microvesicular, 1+ 7) resection margin: free of tumor 2. Gallbladder, cholecystectomy: autolysis 3. Fibroadipose tissue, site not specified: free of tumor	II	T1N0M0 (I)	No information

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment
19	D	7, 8	f	56 hepatocellular carcinoma	<p>1. Liver, lateral segment, segmentectomy: hepatocellular carcinoma with</p> <ol style="list-style-type: none"> 1) size: 6x4x3.5 cm 2) Edmondson - Steiner grade IV 3) compact type 4) single nodular type with perinodal spread 5) expanding and focal invasive growth without encapsulation 6) extensive necrosis: more than 80% of total volume 7) invasion to major bile duct and liver capsule 8) involvement at hepatic resection margin 9) non-neoplastic liver showing chronic hepatitis, B viral mild inflammatory activity (grade II) and septal fibrosis (stage III) <p>2. Gallbladder,cholecystectomy,separately submitted: free from tumor extension</p> <p>3. Lymph nodes, clinically No.9, separately submitted: metastasis to1out of4 lymph nodes</p>	IV	(IV)	<p>TACE</p> <p>Oral anti cancer drugs</p> <p>Lipiodol</p> <p>Didox</p> <p>3times/day</p>
20	D	9, 10	m	63 hepatocellular carcinoma	<p>1. Liver, subsegmentectomy: hepatocellular carcinoma with</p> <ol style="list-style-type: none"> 1) nodular spreading gross type 2) Edmondson-Steiner grade II 3) peliosis hepatis 4) necrosis about 70% 5) glisson's capsule: extension of tumor without penetration 6) resection margin: extension of tumor 7) resection margin: Nonspecific reactive hepatitis with fatty change,1+, macrovesicular, alcoholic <p>2. Gallbladder, cholecystectomy: autolysis</p>	II	T3N0M1 (IV)	<p>TACE</p> <p>Lipiodol</p>
21	E	1, 2	m	52 hepatocellular carcinoma Cirrhosis B viral	<p>1. Liver, right, lobectomy: Large mass: hepatocellular carcinoma with</p> <ol style="list-style-type: none"> 1) nodular spreading gross type 2) Edmondson-Steiner nuclear grade II 3) trabecular microscopic pattern 4) no capsular invasion 5) ischemic necrosis: 90% 6) no vascular invasion 7) remaining liver: The additional report will follow 8) resection margin: free of tumor <p>Mass A,B: total ischemic necorsis, probably in the cirrhotic liver</p> <p>2. Gallbladder, cholecystectomy: chronic Nonspecific inflammation</p>	II	T2N0M0 (II)	<p>TACE</p> <p>Adriamycin</p> <p>40mg+</p> <p>Lipiodol</p>

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment
22	E	3, 4	m	41 hepatocellular carcinoma	<p>1. Liver, left, extended lobectomy: hepatocellular carcinoma, left lobe with</p> <ol style="list-style-type: none"> 1) size: 12x12x9 cm 2) Edmondson-Steiner grade III 3) compact and trabecular histologic pattern 4) single nodular type with perinodal spread 5) expanding growth pattern 6) extensive necrosis: more than 70% of total volume 7) frequent venous invasion 8) intact intrahepatic resection margin (safety margin 1 cm) 9) chronic hepatitis, B-viral, with mild inflammatory activity (grade II) and septal fibrosis (stage III) <p>2. Gallbladder, separately submitted: autolytic change without tumor extension</p>	III	T3N0M0 (IIIA)	TACE Adriamycin 50mg
23	E	5, 6	m	60 hepatocellular carcinoma	<p>1. Liver, right, lobectomy: hepatocellular carcinoma with</p> <ol style="list-style-type: none"> 1) size: 7.5x5x5 cm 2) Edmondson - Steiner grade III 3) compact histologic pattern with predominant fatty change 4) mixed gross type (infiltrative and expansive type) 5) portion of necrosis: less than 20% of total volume 6) vascular and capsular invasion 7) intact resection margin 8) surrounding liver showing chronic hepatitis, B viral, with minimal inflammatory activity (grade I) and early cirrhotic change (stage III) by ludwing classification <p>2. Gallbladder, cholecystectomy: free from tumor extension</p>	III	T4N1M1 (IV)	No information
24	E	7, 8	m	66 hepatocellular carcinoma Cirrhosis C viral	<p>1. Liver, lobectomy: hepatocellular carcinoma, nodular spreading gross type with</p> <ol style="list-style-type: none"> 1) Edmondson - Steiner nuclear grade II 2) no necrosis 3) glisson's capsule: free of tumor 4) resection margin: free of tumor 5) remaining liver: cirrhosis, active, macro and micro, said to be C-viral <p>2. Gallbladder, cholecystectomy: chronic Nonspecific inflammation</p>	II	T2N0M0 (II)	TACE Adriamycin 50mg

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment	
25	E	9, 10	m	70	hepatocellular carcinoma	1. Liver, lateral segment, segmentectomy: hepatocellular carcinoma with 1) size 2x1.5x1.3 cm 2) single nodular type 3) expanding growth pattern 4) Edmondson-Steiner grade II 5) predominantly adenoid pattern 6) intact resection margin 7) non-neoplastic liver showing chronic hepatitis, C viral, with mild inflammatory activity (grade II) and periportal fibrosis (stage II) by Ludwig classification 2. Gallbladder, cholecystectomy: chronic cholecystitis with stones	II	T1N0M0 (I)	No information
26	F	1, 2	m	37	hepatocellular carcinoma	1. Liver, trisegmentectomy: hepatocellular carcinoma with 1) size: 11x11x8 cm 2) Edmondson-Steiner grade III (predominant type) 3) compact and macrotrabecular types 4) massive type with infiltrative growth 5) lymphovascular invasion 6) extensive necrosis (more than 60% of total volume) 7) intact resection margin (safety margin 5 mm) 8) non-neoplastic liver showing chronic hepatitis, B-viral with minimal inflammatory activity (grade I) and septal fibrosis (stage III) 2. Gallbladder, cholecystectomy, separately submitted: free from tumor extension	III	T3N0M0 (IIIA)	TACE Adriamycin 50mg
27	F	3, 4	m	51	hepatocellular carcinoma	Liver, left lateral segment, segmentectomy: hepatocellular carcinoma with 1) size: 7 cm in the greatest diameter 2) Edmondson-Steiner grade III 3) compact and macrotrabecular histologic type 4) single nodular type with perinodal spread and intrahepatic metastasis 5) necrosis: less than 10% of total volume 6) vascular invasion 7) intact resection margin (safety margin: less than 5 mm) 8) surrounding liver showing chronic B viral hepatitis with mild inflammatory activity (grade II) and macronodular cirrhosis (stage IV)	III	T3N0M0 (IIIA)	TACE Lipiodol

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment	
28	F	5, 6	m	60	hepatocellular carcinoma	1. Liver, segment VII, segmentectomy: hepatocellular carcinoma with 1) size: 4.5x4x3 cm 2) Edmondson - Steiner grade III 3) compact and trabecular histologic type 4) infiltrative type 5) vascular invasion 6) necrosis: about 40% of total volume 7) penetration of caspule and invasion to surrounding soft tissue 8) involvement at hepatic resection margin 9) surrounding liver showing chronic hepatitis, B viral, with mild inflammatory activity (grade II) and macronodular cirrhosis (stage IV) 2. Gallbladder, cholecystectomy, separately submitted: fat necrosis without tumor extension 3. Skeletal muscle, clinically from diaphragm, separately submitted: extension of the tumor 4. Tissue, clinically from vessel, biopsy: hepatocellular carcinoma	III	T4N0M1 (IV)	TACE (2times) Adriamycin 50mg + Lipiodol
29	F	7, 8	m	47	hepatocellular carcinoma	1. Liver, lateral segment, segmentectomy: hepatocellular carcinoma with 1) size: 4.5x4x3.5 cm 2) Edmondson - Steiner grade II 3) adenoid histologic type 4) mixed infiltrative and single nodular gross type 5) intrahepatic metastasis 6) portal vein, frequent microvascular and perineural invasions 7) no significant necrosis (less than 5% of total volume) 8) chronic hepatitis, C viral, with moderate inflammatory activity (grade III) and cirrhosis (stage IV) 2. Gallbladder, separately submitted: free from tumor	II	T3N0M0 (IIIA)	No information
30	F	9, 10	m	70	hepatocellular carcinoma	1. Liver, segment IV, segmentectomy: hepatocellular carcinoma with 1) size: 4.5 cm in the greatest diameter 2) encapsulated single nodular type with perinodal growth 3) Edmondson-Steiner grade II to III 4) histologic type: adenoid, compact and macrotrabecular type 5) vascular invasion 6) no necrosis 7) intact resection margins (safety margin: less than 4 mm) 8) Non neoplastic liver: chronic hepatitis, C-viral, with moderate inflammatory activity (grade III) and septal fibrosis (stage III) by Ludwig classification	II to III	T2N0M0 (II)	TACE Adriamycin 50mg

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment	
31	G	1, 2	m	63	hepatocellular carcinoma	1. Liver, right lobe, lobectomy: hepatocellular carcinoma with 1) size: 3 cm in diameter 2) Edmondson - Steiner grade III 3) clear cell histologic type 4) single nodular type with perinodal spread 5) bile duct invasion 6) intrahepatic metastasis 7) intravascular invasion 8) clear resection margin (safety margin: less than 2 mm) 9) non-neoplastic liver showing chronic B viral carrier and marked cholestasis with early biliary cirrhosis 2. Gallbladder: free from tumor extension	III	T2N0M0 (II)	No information
32	G	3, 4	m	56	hepatocellular carcinoma	1. Liver, posterior segment, segmentectomy: hepatocellular carcinoma with 1) size: 5.5x5x4.5 cm 2) scirrhou type mostly composed of clear cells 3) Edmonson grade III 4) nodular with perinodular extension 5) intrahepatic metastasis forming in satellite nodule 6) microvessel invasion 7) Nonneoplastic liver showing chronic hepatitis, B viral, with mild inflammatory activity (Grade II) and periportal fibrosis (Stage II) byLudwing classification 2. Gallbladder, cholecystectomy: autolysis without tumor metastasis	III	T2N0M0 (II)	TACE
33	G	5, 6	m	56	hepatocellular carcinoma	1. Liver, segmentectomy: hepatocellular carcinoma with 1) size: 3.5x3.2x2.3 cm 2) histologic type: trabecular type 3) Edmondson grade III with perinodal spread 4) single nodular type 5) vascular invasion 6) necrosis: approximately 60% of total volume 7) intact hepatic resection margin 8) chronic hepatitis, B-viral, with moderate inflammatory activity (grade III) and early cirrhosis (stage III) showing multiple dysplastic nodules 2. Gallbladder, cholecystectomy: no pathological diagnosis	III	T2N0M0 (II)	TACE Adriamycin 50mg

A204: Liver cancer tissues - Hepatocellular carcinoma

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	E-S grade*	TNM Stage	Treatment
34	G	7, 8	m	72	hepatocellular carcinoma Liver, segmentectomy: Hepatocellular carcinoma with 1) size: about 5.3x5 cm 2) Edmondson - Steiner grade II to III 3) nodular confluent type without capsulation 4) infiltrative growth pattern 5) involvement of hepatic resection margin 6) non-neoplastic liver showing chronic hepatitis, viral, with mild inflammatory activity (grade II) and septal fibrosis (stage III)	II to III	T3N0M0 (IIIA)	TACE Adriamycin 50mg
35	G	9, 10	m	70	hepatocellular carcinoma 1. Liver, right lobe, right lobectomy: hepatocellular carcinoma with 1) size: 4cm in the greatest dimension 2) single nodular type with perinodal spread and indistinct capsule formation 3) compact and trabecular histologic types with Edmondson grade III 4) no necrosis in main mass 5) vascular invasion and capsular involvement 6) intrahepatic metastasis: the largest metastatic nodule, measuring 3.5 cm in the greatest dimension, with coagulative necrosis induced by TAE 7) intact resection margin 8) surrounding Nonneoplastic liver showing dysplastic nodule, low grade, with fatty change 9) Non neoplastic liver showing chronic hepatitis, C, viral, with mild inflammatory activity (grade II) and macronodular cirrhosis (stage IV) 2. Gallbladder, cholecystectomy, separately submitted: free from tumor extension	III	T3N0M0 (IIIA)	TACE(3times) Adriamycin 50mg
36	H	7	m	55	non-neoplastic	Non-neoplastic, from A3, 4		
37	H	8	m	51	non-neoplastic	Non-neoplastic, from A5, 6		
38	H	9	m	40	non-neoplastic	Non-neoplastic, from B1, 2		
39	H	10	m	53	non-neoplastic	Non-neoplastic, from C3, 4		

E-S grade* : Edmondson - Steiner grade

TACE **: Trans Arterial Chemo Embolisation