

Supplementary Materials: Proteome Characteristics of Non-Alcoholic Steatohepatitis Liver Tissue and Associated Hepatocellular Carcinomas

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Table S1. Clinicopathological features, tumor and treatment characteristics for NASH-associated and HCV+ HCC cancer patients.

		NASH HCC			HCV+ HCC			Metastatic tum. Normal Liver		
		Median (Range)	N	%	Median (Range)	N	%	Median (Range)	N	%
Patient demographics										
Gender	Male		8	80		6	60		7	70
	Female		2	20		4	40		3	30
Cirrhosis stage	1		2	20		1	10		0	0
	2		6	60		5	50		1	10
	3		1	10		1	10		0	0
	4		1	10		3	30		0	0
Age (y)	>70	75.2 (71–79)	4	40	75.2 (71–84)	4	40	74.0 (71–77)	2	20
	≤70	63.8 (54–69)	6	60	61.0 (45–67)	6	60	59.9(47–69)	8	80
BMI	15–24	0 (0)	0	0	21.3 (15.7–24.0)	8	80	22.1 (18.4–24.0)	7	70
	>25	28.1 (25.6–31.0)	10	100	27.4 (25.9–28.8)	2	20	25.9 (25.1–26.4)	3	30
Diabetes	Positive		7	70		1	10		2	20
	Negative		3	30		9	90		8	80
Alcohol	Drinker		0	0		3	30		8	80
	Non-drinker		10	100		7	70		2	20
Smoking	Smoker		7	70		8	80		4	40
	Non-smoker		3	30		2	20		6	60
AST	13–33 IU/L;		6	60		4	40		5	50
	>34 IU/L		4	40		6	60		5	50
ALT	6–27 IU/L		6	60		3	30		3	30
	>28 IU/L		4	40		7	70		7	70
ALP	115–359 IU/L		7	70		9	90		6	60
	>360 IU/L		3	30		1	10		4	40
Tumor characteristics										
Tumor size (cm ³)	≤3	2.4 (0.59–2.73)	3	30	0.9 (0.14–2.25)	6	60	0.4 (0.13–0.97)	6	60
	>3	100.4 (3.38– 367.5)	7	70	46.6 (3.00– 10.00)	4	40	46.6 (11.39– 101.25)	4	40
Depth of tumor invasion	T1		1	10		4	40		0	0
	T2		3	30		2	20		3	30
	T3		4	40		3	30		3	30
	T4		2	20		1	10		4	40
Differentiation	Well		0	0		0	0		0	0
	Moderate		10	100		10	100		7	70
	Poor		0	0		0	0		3	30
Clinical stage	I		1	10		4	40		0	0
	II		3	30		2	20		3	30
	III		4	40		3	30		3	30
	IV		2	20		1	10		4	40
Venous invasion	Positive		4	40		2	20		-	-
	Negative		6	60		8	80		-	-
Recurrence	Positive		6	60		4	40		5	50
	Negative		4	40		6	60		5	50
Distant metastasis, pM	Positive		0	0		1	10		6	60
	Negative		10	100		9	90		4	40
Bile duct invasion, pB	Positive		1	10		0	0		-	-
	Negative		9	90		10	100		-	-
Formation of capsule	Present		7	70		7	70		-	-
	Absent		3	30		3	30		-	-
Infiltration to capsule	Positive		6	60		6	60		-	-
	Negative		4	40		4	40		-	-

Table S1. Cont.

		NASH HCC		HCV+ HCC		Metastatic tum. Normal Liver	
		Median (Range)	N	Median (Range)	N	Median (Range)	N
Treatment characteristics							
Neoadjuvant therapy	Yes	3	30	2	20	9	90
	No	7	70	8	80	1	10
Radiation therapy	Yes	3	30	2	20	2	20
	No	7	70	8	80	8	80
Surgical resection	Lobe	2	20	0	0	4	40
	Wedge	8	80	10	100	6	60

Tumor volume was counted as length/2 * (width/2) * (width/2) and expressed in cm³; B, Brunt Criteria.

Table S2. Clinicopathological characteristics of NASH biopsy patients.

		NASH Biopsy	
		Median (Range)	%
Patient demographics			
Gender	Male		20
	Female		80
Age (y)	>70	71 (71–71)	20
	≤70	59.6 (47–68)	80
BMI	15–24	0	10
	>25	28.7 (25.0–35.6)	90
Diabetes	Positive		60
	Negative		40
Alcohol	Drinker		0
	Non-drinker		100
AST	13–33 IU/L ;	0	0
	>34 IU/L	57.7 (34–74)	100
ALT	6–27 IU/L	0	0
	>28 IU/L	54.2 (31–93)	100
ALP	115–359 IU/L	226.1 (169–331)	90
	>360 IU/L	257 (169–472)	10
GGT		88.9 (48–256)	100
Alb		3.6 (3.0–4.2)	100
T-bil		1.3 (0.6–1.8)	100
D-bil		0.4 (0.2–0.8)	100
TG		130 (60–217)	100
Accumulation of lipids in hepatocytes	grade 1		60
	grade 2		40
Inflammation	grade 2		100
	grade 3		
Hepatocytes ballooning	grade 1		10
	grade 2		90
	grade 3		10
	grade 4		0
NAS	grade 5		40
	grade 6		20
	grade 7		30
	grade 1		30
Accumulation of lipids in hepatocytes (B)	grade 2		50
	grade 3		20
	grade 2		50
Inflammation (B)	grade 3		50
	grade 4		100
Fibrosis (B)			100
Matteoni	grade 4		100

B, Brunt's criteria.

Table S6. Incidence and multiplicity of PPFs and liver tumors in STAM mice.

Lesion	No. mice	Incidence (%)	Multiplicity (No./mouse)
PPF			
Basophilic	7	7 (100)	2.71 ± 2.43
Eosinophilic	7	6 (85.7)	1.86 ± 1.35
Mixed type	7	6 (85.7)	4.71 ± 5.28
Vacuolated	7	2 (28.6)	2.43 ± 6.00
Total	7	7 (100)	11.71 ± 9.64
HCA	7	7 (100)	6.86 ± 8.67
HCC	7	2 (28.6)	0.43 ± 0.79
Total tumors	7	7 (100)	6.57 ± 8.42

PPF, proliferative preneoplastic foci.