

**Table S1** Characteristics of the hepatoblastoma cohort

Characteristics	Level	Alive	Dead	P
n		660	164	
Age, mean (SD)		1.63 (2.29)	2.30 (2.98)	0.002
Tumor size (mm), median [IQR]		100.00 [70.00, 116.50]	110.00 [77.50, 130.00]	0.021
Sex (%)	Female	258 (39.1)	57 (34.8)	0.351
	Male	402 (60.9)	107 (65.2)	
Race (%)	Black	46 (7.0)	25 (15.2)	0.009
	Other (American Indian/AK Native, Asian/Pacific Islander)	103 (15.6)	22 (13.4)	
	Unknown	9 (1.4)	2 (1.2)	
	White	502 (76.1)	115 (70.1)	
Grade (%)	Grade I	25 (3.8)	3 (1.8)	0.543
	Grade II	3 (0.5)	2 (1.2)	
	Grade III	5 (0.8)	2 (1.2)	
	Grade IV	12 (1.8)	3 (1.8)	
	NA	615 (93.2)	154 (93.9)	
AFP (%)	NA	226 (34.2)	83 (50.6)	0.001
	Negative	9 (1.4)	2 (1.2)	
	Positive	425 (64.4)	79 (48.2)	
Fibrosis score (%)	Moderate fibrosis	28 (4.2)	8 (4.9)	0.907
	NA	629 (95.3)	155 (94.5)	
	Severe fibrosis	3 (0.5)	1 (0.6)	
AJCC7 (%)	Blank(s)	418 (100.0)	122 (100.0)	NA
Lymph nodes surgery (%)	NA	80 (12.1)	44 (26.8)	<0.001
	None	374 (56.7)	99 (60.4)	
	Yes	206 (31.2)	21 (12.8)	
Radiotherapy (%)	No	658 (99.7)	164 (100.0)	1
	Yes	2 (0.3)	0 (0.0)	
Chemotherapy (%)	No/Unknown	37 (5.6)	28 (17.1)	<0.001
	Yes	623 (94.4)	136 (82.9)	
Systemic therapy (%)	NA	165 (25.0)	74 (45.1)	<0.001
	No	60 (9.1)	51 (31.1)	
	Yes	435 (65.9)	39 (23.8)	
Income (%)	High income	267 (40.5)	56 (34.1)	0.368
	Low income	17 (2.6)	6 (3.7)	
	Median high income	280 (42.4)	72 (43.9)	
	Median low income	96 (14.5)	30 (18.3)	
Survival months, median [IQR]		88.00 [41.00, 145.00]	9.00 [3.00, 19.00]	<0.001
Surgery (%)	No	56 (8.5)	89 (54.3)	<0.001
	Yes	604 (91.5)	75 (45.7)	
Status (%)	Alive	660 (100.0)	0 (0.0)	<0.001
	Dead	0 (0.0)	164 (100.0)	

**Table S2** Characteristics of the hepatocellular carcinoma cohort

Characteristics	Level	Alive	Dead	P
n		105	114	
Age, mean (SD)		11.58 (5.40)	13.49 (3.96)	0.003
Tumor size (mm), median [IQR]		81.00 [31.50, 140.00]	124.50 [88.00, 150.00]	0.01
Sex (%)	Female	40 (38.1)	49 (43.0)	0.55
	Male	65 (61.9)	65 (57.0)	
Race (%)	Black	7 (6.7)	11 (9.6)	0.399
	Other (American Indian/AK Native, Asian/Pacific Islander)	15 (14.3)	16 (14.0)	
	Unknown	6 (5.7)	2 (1.8)	
	White	77 (73.3)	85 (74.6)	
Grade (%)	Grade I	22 (21.0)	10 (8.8)	0.007
	Grade II	24 (22.9)	19 (16.7)	
	Grade III	6 (5.7)	12 (10.5)	
	Grade IV	3 (2.9)	0 (0.0)	
	NA	50 (47.6)	73 (64.0)	
AFP (%)	NA	45 (42.9)	48 (42.1)	0.819
	Negative	26 (24.8)	25 (21.9)	
	Positive	34 (32.4)	41 (36.0)	
Fibrosis score (%)	Moderate fibrosis	12 (11.4)	7 (6.1)	0.119
	NA	86 (81.9)	104 (91.2)	
	Severe fibrosis	7 (6.7)	3 (2.6)	
AJCC7 (%)	I	16 (15.2)	1 (0.9)	<0.001
	II	6 (5.7)	3 (2.6)	
	III	2 (1.9)	8 (7.0)	
	IV	6 (5.7)	18 (15.8)	
	NA	75 (71.4)	84 (73.7)	
Lymph nodes surgery (%)	NA	7 (6.7)	24 (21.1)	<0.001
	None	56 (53.3)	67 (58.8)	
	Yes	42 (40.0)	23 (20.2)	
Radiotherapy (%)	No	100 (95.2)	103 (90.4)	0.259
	Yes	5 (4.8)	11 (9.6)	
Chemotherapy (%)	No/Unknown	57 (54.3)	30 (26.3)	<0.001
	Yes	48 (45.7)	84 (73.7)	
Systemic therapy (%)	NA	20 (19.0)	41 (36.0)	0.02
	No	58 (55.2)	49 (43.0)	
	Yes	27 (25.7)	24 (21.1)	
Income (%)	High income	44 (41.9)	50 (43.9)	0.575
	Low income	2 (1.9)	5 (4.4)	
	Median high income	45 (42.9)	41 (36.0)	
	Median low income	14 (13.3)	18 (15.8)	
Survival months, median [IQR]		78.00 [25.00, 148.00]	14.00 [4.25, 36.75]	<0.001
Surgery (%)	No	16 (15.2)	70 (61.4)	<0.001
	Yes	89 (84.8)	44 (38.6)	
Status (%)	Alive	105 (100.0)	0 (0.0)	<0.001
	Dead	0 (0.0)	114 (100.0)	

**Table S3** Characteristics of the embryonal sarcoma cohort

Characteristics	Level	Alive	Dead	P
n		67	12	
Age, mean (SD)		8.72 (3.70)	8.42 (4.76)	0.805
Tumor size (mm), median [IQR]		140.00 [108.50, 172.50]	188.50 [177.00, 194.00]	0.047
Sex (%)	Female	35 (52.2)	8 (66.7)	0.542
	Male	32 (47.8)	4 (33.3)	
Race (%)	Black	4 (6.0)	3 (25.0)	0.121
	Other (American Indian/AK Native, Asian/Pacific Islander)	7 (10.4)	0 (0.0)	
	Unknown	2 (3.0)	0 (0.0)	
	White	54 (80.6)	9 (75.0)	
Grade (%)	Grade III	0 (0.0)	1 (8.3)	0.01
	Grade IV	49 (73.1)	11 (91.7)	
	NA	18 (26.9)	0 (0.0)	
AFP (%)	NA	37 (55.2)	5 (41.7)	0.528
	Negative	28 (41.8)	6 (50.0)	
	Positive	2 (3.0)	1 (8.3)	
Fibrosis score (%)	Moderate fibrosis	8 (11.9)	0 (0.0)	0.457
	NA	59 (88.1)	12 (100.0)	
AJCC7 (%)	Blank(s)	46 (100.0)	9 (100.0)	NA
Lymph nodes surgery (%)	NA	7 (10.4)	4 (33.3)	0.091
	None	38 (56.7)	6 (50.0)	
	Yes	22 (32.8)	2 (16.7)	
Radiotherapy (%)	No	60 (89.6)	9 (75.0)	0.355
	Yes	7 (10.4)	3 (25.0)	
Chemotherapy (%)	No/Unknown	3 (4.5)	2 (16.7)	0.34
	Yes	64 (95.5)	10 (83.3)	
Systemic therapy (%)	NA	20 (29.9)	6 (50.0)	0.032
	No	2 (3.0)	2 (16.7)	
	Yes	45 (67.2)	4 (33.3)	
Income (%)	High income	27 (40.3)	2 (16.7)	0.062
	Low income	1 (1.5)	1 (8.3)	
	Median high income	32 (47.8)	5 (41.7)	
	Median low income	7 (10.4)	4 (33.3)	
Survival months, median [IQR]		103.00 [32.50, 159.00]	6.50 [0.00, 62.75]	<0.001
Surgery (%)	No	5 (7.5)	5 (41.7)	0.005
	Yes	62 (92.5)	7 (58.3)	
Status (%)	Alive	67 (100.0)	0 (0.0)	<0.001
	Dead	0 (0.0)	12 (100.0)	