

**Supplementary Table 2.** Clinical features and operative variables of patients with HCC with different gross subtypes in the entire and IPTW cohorts.

N (%)	The entire cohort			The IPTW cohort		
	Type I/II/III (n = 344)	Type IV (n = 51)	<i>P</i>	Type I/II/III (n = 340.5)	Type IV (n = 53.2)	<i>P</i>
Age > 60 years	145 (42.2)	15 (29.4)	0.115	139.4 (40.9)	19.8 (37.3)	0.784
Male sex	259 (75.7)	45 (88.2)	0.073	263.1 (77.3)	42.2 (79.4)	0.876
BMI ≥ 25.0 kg/m <sup>2</sup>	135 (39.2)	18 (35.3)	0.699	132.0 (38.8)	23.5 (44.1)	0.691
HBV (+)	229 (66.6)	47 (92.2)	<0.001	236.2 (69.4)	35.9 (67.5)	0.894
HCV (+)	49 (14.2)	2 (3.9)	0.068	44.8 (13.2)	12.2 (22.9)	0.38
Largest tumor size > 5 cm	94 (27.3)	29 (56.9)	<0.001	106.0 (31.1)	13.9 (26.1)	0.588
Microvascular invasion	148 (43.0)	46 (90.2)	<0.001	165.5 (48.6)	33.8 (63.6)	0.307
Macrovascular invasion	15 (4.4)	25 (49.0)	<0.001	31.1 (9.1)	4.8 (9.1)	0.989
Intraoperative blood transfusion	91 (26.5)	21 (41.2)	0.044	92.1 (27.0)	12.9 (24.2)	0.805
Operation time > 180 min	207 (60.2)	35 (68.6)	0.316	206.1 (60.5)	35.3 (66.4)	0.665

BMI, body mass index; HBV, hepatitis B virus; HCV, hepatitis C virus; IPTW, inverse probability of treatment weight.