

**Supplementary Table S1. Characteristics of the included trials.**

Stages	Authors	Pub. Date	Country	Study Arms	Intervention	Sample Size	Available Data
<b>BCLC Stage 0</b>							
	Dai [1]	2014	China	2	LT vs. SR	13 vs. 25	1y, 3y, 5y
	Farinati [2]	2009	Italy	4	LT vs. SR vs. TACE vs. SC	3 vs. 8 vs. 17 vs. 3	5y
	Harada [3]	2016	Japan	2	SR vs. RFA	35 vs. 28	1y, 3y, 5y
	Hasegawa [4]	2012	Japan	3	SR vs. RFA vs. PEI	785 vs. 1241 vs. 534	1y, 3y, 5y
	Horigome [5]	1999	Japan	2	PEI vs. MWA	18 vs. 24	1y, 3y
	HUNG [6]	2011	Taiwan	2	SR vs. RFA	50 vs. 66	1y, 3y, 5y
	Imai [7]	2013	Japan	2	SR vs. RFA	38 vs. 51	1y, 3y, 5y
	Kim [8]	2015	Korea	2	SR vs. RFA	152 vs. 152	1y, 3y, 5y
	Lin [9]	2013	China	2	PEI vs. RFA	242 vs. 284	1y, 3y, 5y
	Liu [10]	2015	Taiwan	2	SR vs. RFA	109 vs. 128	1y, 3y, 5y
	Livrighi [11]	2008	Italy	2	SR vs. RFA	100 vs. 118	3y, 5y
	Pompili [12]	2013	Italy	2	SR vs. RFA	99 vs. 109	1y, 3y
	Pompili [13]	2015	Italy	2	PEI vs. RFA	81 vs. 81	1y, 3y, 5y
	Santambrogio [14]	2016	Italy	2	SR vs. RFA	76 vs. 76	1y, 3y, 5y
	Takayama [15]	2010	Japan	2	SR vs. RFA	1235 vs. 1315	1y
	Takuma [16]	2013	Japan	2	TACE+RFA vs. SR	59 vs. 52	1y, 3y, 5y
	TASHIRO [17]	2011	Japan	2	SR vs. RFA	53 vs. 41	1y, 3y, 5y
	Wahl [18]	2015	USA	2	RT vs. RFA	38 vs. 133	1y, 3y, 5y
	Wang [19]	2012	Taiwan	2	SR vs. RFA	52 vs. 91	1y, 3y, 5y
	Zhen [20]	2012	China	2	SR vs. RFA	29 vs. 37	1y, 3y, 5y
	Zhou [21]	2013	China	2	SR vs. RFA	21 vs. 31	1y, 3y, 5y
<b>BCLC Stage A</b>							
	Abu-Hilal [22]	2008	UK	2	RFA vs. SR	34 vs. 34	1y, 5y
	BABA [23]	2010	Japan	2	SR vs. TACE	114 vs. 68	5y
	Bu [24]	2015	China	2	RFA vs. SR	46 vs. 42	1y, 3y, 5y
	Chen [25]	2010	China	2	SR+TACE vs. SR	797 vs. 314	3y, 5y
	Chen [26]	2016	China	2	TACE vs. RFA	103 vs. 103	1y, 3y, 5y
	Cheung [27]	2012	HK	2	HIFU vs. RFA	41 vs. 56	1y, 3y
	Cho [28]	2007	Korea	2	SR vs. PEI	116 vs. 116	1y, 3y, 5y
	Daniele [29]	2003	Italy	2	SR vs. PEI	17 vs. 65	1y, 3y, 5y
	Desiderio [30]	2013	Italy	2	RFA vs. SR	44 vs. 52	1y, 3y, 5y
	Ding [31]	2013	China	2	RFA vs. MWA	85 vs. 113	1y, 3y
	Farinati [2]	2009	Italy	6	LT vs. RFA vs. SR vs. PEI vs. TACE vs. SC	11 vs. 58 vs. 75 vs. 106 vs. 128 vs. 62	5y
	Gerunda [32]	2000	Italy	2	TACE+SR vs. SR	20 vs. 20	1y, 5y

Ginsburg [33]	2015	USA	2	TACE+RFA vs. TACE+MWA	28 vs. 36	1y, 3y, 5y
GORY [34]	2015	Australia	2	RFA vs. SR	96 vs. 52	3y, 5y
Gournay [35]	2002	France	2	SR vs. PEI	50 vs. 55	1y, 3y, 5y
Graham [36]	2013	USA	2	LT vs. SR	344 vs. 560	5y
Graham [37]	2013	USA	2	LT vs. SR	608 vs. 557	1y, 3y
Guan [38]	2016	China	2	RFA vs. SR	102 vs. 92	1y, 3y, 5y
Guo [39]	2010	China	2	RFA vs. SR	86 vs. 73	1y, 3y, 5y
Guo [40]	2014	China	2	SR vs. TACE	152 vs. 152	1y, 3y, 5y
Guo [41]	2014	China	2	SR vs. TACE	84 vs. 42	1y, 3y, 5y
Harada [3]	2016	Japan	2	SR vs. RFA	46 vs. 12	1y, 3y, 5y
HARADA [42]	2016	Japan	2	RFA vs. SR	20 vs. 68	1y, 3y, 5y
Hasegawa [43]	2008	Japan	3	SR vs. RFA vs. PEI	2857 vs. 3022 vs. 1306	1y
Hasegawa [4]	2012	Japan	3	SR vs. RFA vs. PEI	2565 vs. 1265 vs. 329	1y, 3y, 5y
Hekele [44]	2009	Austria	2	TACE vs. SC	5 vs. 17	1y, 3y, 5y
Hiraoka [45]	2008	Japan	2	RFA vs. SR	105 vs. 59	1y, 3y, 5y
Ho [46]	2009	Taiwan	3	TACE vs. SR vs. SC	80 vs. 97 vs. 31	1y, 3y, 5y
Hocquelet [47]	2015	France	2	RFA vs. SR	140 vs. 37	3y, 5y
Honda [48]	2013	Japan	2	TACE+RT vs. TACE	30 vs. 38	1y, 3y
Hong [49]	2005	Korea	2	RFA vs. SR	55 vs. 93	1y, 3y
Hsu [50]	2012	Taiwan	2	TACE vs. SR	73 VS. 112	1y, 3y, 5y
Huang [51]	2011	China	2	RFA vs. SR	212 vs. 311	1y, 3y, 5y
Huang [52]	2014	China	2	RFA vs. SR	121 vs. 225	1y, 3y
HUNG [6]	2011	Taiwan	2	RFA vs. SR	190 vs. 229	1y, 3y, 5y
Huo [53]	2003	Taiwan	2	TACE+PAI vs. PAI	53 vs. 55	1y, 3y
HUO [54]	2004	Taiwan	2	TACE vs. PAI	113 vs. 68	1y, 3y, 5y
Hyun [55]	2015	Korea	2	TACE+RFA vs. TACE	37 vs. 54	1y, 3y
Jiang [56]	2015	China	2	RFA vs. SR	160 vs. 224	1y, 3y, 5y
Kagawa [57]	2010	Japan	2	TACE+RFA vs. SR	62 vs. 55	1y, 3y, 5y
Kamada [58]	2002	Japan	2	TACE+PEI vs. PEI	32 vs. 37	1y, 3y, 5y
Kang [59]	2015	Korea	2	RFA vs. SR	438 vs. 142	1y, 3y, 5y
Kim [60]	2014	Korea	2	RFA vs. SR	67 vs. 66	1y, 3y
Kim [61]	2006	Korea	2	LT+TACE vs. LT	36 vs. 21	1y, 3y, 5y
Kim [62]	2011	Korea	2	TACE+RFA vs. RFA	83 vs. 231	1y, 3y, 5y
Kim [8]	2015	Korea	2	RFA vs. SR	150 vs. 209	1y, 3y, 5y
KIM [63]	2012	Korea	2	HIFU+TACE vs. TACE	25 vs. 32	1y, 5y
Kim [64]	2013	Korea	2	TACE+RFA vs. SR	37 vs. 47	1y, 3y
Kobayashi [65]	2009	Japan	2	RFA vs. SR	209 vs. 199	1y, 3y, 5y
Koniaris [66]	2011	USA	2	LT vs. SR	205 vs. 33	1y, 3y, 5y

Lai [67]	2013	HK	2	RFA vs. SR	31 vs. 80	1y, 3y, 5y
LAI [68]	2016	China	2	RFA vs. SR	33 vs. 61	3y
Lee [69]	2016	HK	2	RFA vs. MWA	26 vs. 10	1y, 3y, 5y
Lee [70]	2015	Taiwan	2	RFA vs. SR	147 vs. 147	1y, 3y, 5y
Lei [71]	2014	China	2	RFA vs. SR	156 vs. 133	1y, 3y, 5y
Li [72]	2016	China	2	SR vs. MWA	220 vs. 60	1y, 3y, 5y
LI [73]	2013	China	2	PC vs. SR	24 vs. 58	1y, 3y, 5y
Li [74]	2014	China	2	LT vs. SR	27 vs. 199	1y, 3y, 5y
Lida [75]	2013	Japan	2	RFA vs. SR	33 vs. 15	1y, 3y, 5y
Liu [76]	2014	China	2	RFA vs. TACE	424 vs. 282	1y, 3y, 5y
LUPO [77]	2007	Italy	2	RFA vs. SR	60 vs. 42	1y, 3y, 5y
Montorsi [78]	2005	Italy	2	RFA vs. SR	58 vs. 40	1y, 3y
Moon [79]	2007	Korea	2	LT vs. SR	17 vs. 100	1y, 3y, 5y
Moreno-Luna [80]	2013	USA	2	TARE vs. TACE	12 vs. 23	1y, 3y, 5y
Park [81]	2014	Korea	2	RFA vs. SR	57 vs. 129	1y, 3y, 5y
Peng [82]	2013	China	2	RFA vs. SR	63 vs. 60	1y, 3y, 5y
Pompili [12]	2013	Italy	2	RFA vs. SR	298 vs. 246	1y, 3y
Potretzke [83]	2016	USA	2	RFA vs. MWA	55 vs. 99	1y, 3y
Santambrogio [84]	2009	Italy	2	RFA vs. SR	74 vs. 78	1y, 3y, 5y
Shi [85]	2014	China	2	SR vs. MWA	107 vs. 117	1y, 3y, 5y
Shi [86]	2016	China	2	RFA vs. RFA+PEI	180 vs. 180	1y, 3y, 5y
Song [87]	2016	Korea	3	TACE+RFA vs. RFA vs. TACE	86 vs. 70 vs. 43	1y, 3y, 5y
Song [88]	2015	China	2	RFA vs. SR	78 vs. 78	1y, 3y
Sotiropoulos [89]	2009	Germany	3	LT vs. SR vs. TACE	26 vs. 26 vs. 10	1y, 3y, 5y
Takahashi [90]	2007	Japan	2	RFA vs. SR	171 vs. 53	5y
Takuma [16]	2013	Japan	2	TACE+RFA vs. SR	154 vs. 176	1y, 3y, 5y
TASHIRO [17]	2011	Japan	2	RFA vs. SR	20 vs. 99	1y, 3y, 5y
Tohme [91]	2012	USA	2	RFA vs. SR	60 vs. 50	1y, 3y, 5y
Ueno [92]	2009	Japan	2	RFA vs. SR	34 vs. 84	1y, 3y, 5y
Vitale [93]	2015	Italy	2	SR vs. SC	244 vs. 97	1y, 3y, 5y
Vitali [94]	2015	Switzerland	2	RFA vs. SR	60 vs. 45	1y, 3y, 5y
Vivarelli [95]	2004	Italy	2	RFA vs. SR	13 vs. 19	1y, 3y
Wang [19]	2012	Taiwan	2	RFA vs. SR	254 vs. 208	1y, 3y, 5y
Wong [96]	2012	Taiwan	2	RFA vs. SR	36 vs. 46	1y, 3y, 5y
Yamakado [97]	2008	Japan	2	TACE+RFA vs. SR	104 vs. 62	1y, 3y, 5y
YAN [98]	2016	China	2	SR vs. RFA+Sorafenib	60 vs. 60	1y, 3y, 5y
Yang [99]	2014	Korea	3	TACE vs. RFA vs. SR	66 vs. 79 vs. 52	1y, 3y, 5y
Yun [100]	2011	Korea	2	RFA vs. SR	255 vs. 215	1y, 3y, 5y

Zhang [101]	2015	China	2	SR vs. RFA	19 vs. 16	1y, 3y, 5y
Zhang [102]	2014	China	3	SR vs. SR+RFA vs. TACE	16 vs. 12 vs. 7	1y, 3y, 5y
Zhang [103]	2016	China	2	SR vs. MWA	122 vs. 68	1y, 3y, 5y

#### BCLC Stage B

Arizumi [104]	2015	Japan	2	TACE vs. Sorafenib	24 vs. 32	1y, 3y
Azuma [105]	2015	Japan	2	TACE+RFA vs. TACE	20 vs. 39	1y, 3y
Ciria [106]	2015	Spain	2	SR vs. TACE	36 vs. 44	1y, 3y
Fouly [107]	2015	Germany	2	TACE vs. TARE	42 vs. 44	1y, 3y
Ginsburg [33]	2015	USA	2	TACE+RFA vs. TACE+MWA	8 vs. 10	1y, 3y
Guo [108]	2015	China	2	TACE+SR vs. SR	26 vs. 34	1y, 3y
Hekele [44]	2009	Austria	2	TACE vs. SC	9 vs. 22	1y, 3y
Ho [109]	2014	USA	2	SR vs. RFA	16 vs. 17	1y, 3y
Ho [46]	2009	Taiwan	3	TACE vs. SR vs. SC	163 vs. 122 vs. 70	1y, 3y
Jacob [110]	2015	USA	2	TACE+RT vs. TACE	37 vs. 123	1y, 3y
Jin [111]	2014	Korea	2	TACE vs. SR	61 vs. 62	1y, 3y
Ke [112]	2014	China	2	SR vs. TACE	53 vs. 53	1y, 3y
Kim [113]	2016	Korea	2	SR vs. TACE	52 vs. 225	1y, 3y
Lee [114]	2015	Korea	2	SR vs. TACE	59 vs. 59	1y, 3y
Lei [115]	2014	China	2	TACE vs. SR	490 vs. 433	1y, 3y
Lin [116]	2010	Taiwan	2	TACE vs. SR	78 vs. 93	1y, 3y
Liu [117]	2016	China	2	SR vs. TACE	156 vs. 156	1y, 3y
Lubienski [118]	2004	Germany	2	TACE+PEI vs. TACE	15 vs. 22	1y, 3y
Luo [119]	2011	China	2	TACE vs. SR	83 vs. 85	1y, 3y
Moreno-Luna [80]	2013	USA	2	TACE vs. TARE	13 vs. 34	1y, 3y, 5y
NISHIKAWA [120]	2014	Japan	2	TACE vs. TAC	145 vs. 81	1y, 3y
Pecorelli [121]	2016	Italy	3	TACE vs. Sorafenib vs. SC	233 vs. 18 vs. 21	1y, 3y
Shim [122]	2005	Korea	2	TACE+RT vs. TACE	38 vs. 35	1y
Vitale [93]	2015	Italy	2	SR vs. SC	264 vs. 213	1y, 3y
Yin [123]	2014	China	2	TACE+RFA vs. TACE	55 vs. 156	1y, 3y
Zhang [102]	2014	China	3	SR vs. SR+RFA vs. TACE	41 vs. 55 vs. 64	1y, 3y
Zhao [124]	2010	China	2	TACE vs. TACE+RFA	45 vs. 51	1y, 3y
Zhong [125]	2014	China	2	TACE vs. SR	135 vs. 257	1y, 3y
Zhong [126]	2013	China	2	SR vs. TACE	208 vs. 209	1y, 3y

#### BCLC Stage C

Bai [127]	2016	China	3	SR vs. SR+TACE vs. SR+RT	51 vs. 31 vs. 10	1y
Chen [128]	2010	Taiwan	2	HAC+RT vs. HAC	10 vs. 14	1y
Chen [129]	2014	China	2	TACE+Sorafenib vs. TACE	21 vs. 23	1y
Cheng [130]	2005	China	4	SR+TACE vs. SR vs. TACE vs. SC	9 vs. 20 vs. 7 vs. 38 vs. 10	1y

Cheong [131]	2005	Korea	3	SC vs. SCT vs. HAC	24 vs. 25 vs. 53	1y
Cheung [132]	2014	HK	2	HIFU vs. TACE	26 vs. 52	1y
Cho [133]	2014	Korea	2	TACE+RT vs. Sorafenib	27 vs. 27	1y
Cho [134]	2016	Korea	2	TACE+HAC vs. TACE	31 vs. 50	1y
Choi [135]	2016	Korea	2	TARE vs. Sorafenib	32 vs. 31	1y
Choi [136]	2013	Korea	2	TACE+Sorafenib vs. TACE	96 vs. 96	1y
Chung [137]	2011	Korea	2	TACE vs. SC	83 vs. 42	1y
Edeline [138]	2015	France	2	RT vs. Sorafenib	34 vs. 117	1y
Fan [139]	2005	China	4	SC vs. TACE+PVC vs. SR vs. SR+TACE+PVC	18 vs. 53 vs. 24 vs. 84	1y
Fan [140]	2001	China	4	SC vs. TACE+PVC vs. SR vs. SR+TACE+PVC	18 vs. 18 vs. 74 vs. 29	1y
Fan [141]	2003	China	4	SC vs. SCT vs. SR. vs. SR+SCT	14 vs. 41 vs. 19 vs. 64	1y
Ha [142]	2016	Korea	2	Sorafenib vs. TACE+Sorafenib	293 vs. 129	1y
Hirooka [143]	2010	Japan	2	HAC+RFA vs. HAC	20 vs. 33	1y
Ho [46]	2009	Taiwan	3	TACE vs. SR vs. SC	38 vs. 48 vs. 134	1y
Hu [144]	2014	China	2	TACE+Sorafenib vs. TACE	82 vs. 164	1y
Hu [145]	2007	China	2	TACE+SR vs. SR	29 vs. 47	1y
Huang [146]	2016	China	2	TARE vs. TACE	70 vs. 140	1y
Jang [147]	2007	Korea	2	HAC vs. SC	80 vs. 23	1y
Jin [148]	2003	China	2	TACE+HIFU vs. TACE	24 vs. 26	1y
Katamura [149]	2009	Japan	2	HAC+RT vs. HAC	16 vs. 16	1y
Kawaoka [150]	2015	Japan	2	HAC vs. Sorafenib	16 vs. 16	1y
Kim [151]	2009	Korea	2	SR vs. SC	19 vs. 51	1y
Kim [152]	2014	Korea	3	TACE+RT vs. TACE vs. Sorafenib	66 vs. 74 vs. 38	1y
Kodama [153]	2011	Japan	2	HAC+RT vs. HAC	19 vs. 26	1y
Lee [154]	2012	Taiwan	2	TACE vs. SC	27 vs. 27	1y
Lee [155]	1997	Korea	2	TACE vs. SC	31 vs. 16	1y
Li [156]	2011	China	2	TACE vs. TARE	30 vs. 26	1y
Li [157]	2016	China	2	TARE vs. TACE	38 vs. 36	1y
Li [158]	2016	China	2	SR+RT vs. SR	45 vs. 50	1y
Li [159]	2016	China	2	TARE+Sorafenib vs. TARE	15 vs. 38	1y
Li [160]	2016	China	2	TACE vs. SC	195 vs. 100	1y
Liang [161]	2008	China	2	SR+PVC vs. SR	33 vs. 53	1y
Lim [162]	2006	Korea	2	HAC vs. SC	40 vs. 39	1y
Liu [163]	2014	Taiwan	2	SR vs. TACE	108 vs. 108	1y
Liu [164]	2015	Taiwan	2	SR vs. TACE	163 vs. 163	1y
Lu [165]	2014	China	2	TACE+RT vs. TACE	30 vs. 33	1y
Luo [166]	2011	HK	2	TACE vs. SC	84 vs. 80	1y
Moreno-Luna [80]	2013	USA	2	TARE vs. TACE	14 vs. 19	1y

NAGAI [167]	2015	Japan	2	HAC+Sorafenib vs. HAC	18 vs. 20	1y
Nitta [168]	2013	Japan	2	SR+HAC vs. SR	38 vs. 35	1y
Niu [169]	2012	China	2	TACE vs. SC	115 vs. 35	1y
Onishi [170]	2015	Japan	2	HAC vs. HAC+RT	34 vs. 33	1y
Pinter [171]	2012	Austria	2	TACE vs. Sorafenib	34 vs. 63	1y
Radu [172]	2013	Romania	2	Sorafenib vs. SC	30 vs. 47	1y
Schmidt [173]	2014	Germany	2	TARE+Sorafenib vs. Sorafenib	16 vs. 21	1y
Song [174]	2014	Korea	2	Sorafenib vs. HAC	60 vs. 50	1y
TAN [175]	2014	China	2	TACE vs. TACE+PVE	64 vs. 52	1y
Tanaka [176]	1999	Japan	2	HAC+SR vs. SR	10 vs. 31	1y
Tang [177]	2013	China	2	TACE+SR vs. TACE+RT	186 vs. 185	1y
Torre [178]	2016	Spain	2	TARE vs. Sorafenib	26 vs. 46	1y
Vitale [93]	2015	Italy	2	SR vs. SC	42 vs. 184	1y
Wang [179]	2013	Taiwan	4	SR vs. Sorafenib vs. SC	68 vs. 11 vs. 140 vs. 88	1y
Wang [180]	2009	China	2	RT vs. TACE	10 vs. 12	1y
Wu [181]	2012	China	2	TARE vs. TACE	56 vs. 50	1y
Wu [182]	2011	China	2	SR vs. TACE+RT	64 vs. 81	1y
Xia [183]	2016	China	2	SR+Sorafenib vs. SR	34 vs. 68	1y
Xu [184]	2013	China	2	TACE+PEI vs. TACE	26 vs. 25	1y
Ye [185]	2014	China	4	SC vs. TACE vs. SR vs. SR+TACE	75 vs. 86 vs. 90 vs. 87	1y
Ye [186]	2016	China	5	TACE vs. TACE+Sorafenib vs. SR+TACE vs. Sorafenib vs. SC	274 vs. 33 vs. 54 vs. 15 vs. 42	1y
You [187]	2007	Korea	2	TACE+RT vs. TACE	27 vs. 22	1y
Yuan [188]	2016	China	2	SR vs. TACE	204 vs. 102	1y
ZHANG [189]	2015	China	2	TACE+Sorafenib vs. Sorafenib	45 vs. 44	1y
Zhang [190]	2009	China	2	TACE+RT vs. TACE	15 vs. 28	1y
Zhang [192]	2016	China	2	TACE+Sorafenib vs. TACE	20 vs. 60	1y
Zhang [102]	2014	China	3	SR vs. SR+RFA vs. TACE	32 vs. 47 vs. 76	1y
Zhang [191]	2016	China	2	SR vs. SR+TACE	205 vs. 115	1y
Zhao [124]	2010	China	2	TACE vs. TACE+RFA	32 vs. 21	1y
Zheng [193]	2016	China	2	SR vs. TACE	96 vs. 134	1y
Zhong [125]	2014	China	2	SR vs. TACE	248 vs. 85	1y
Zhou [194]	2011	China	3	TACE vs. SR vs. SR+PVC	10 vs. 38 vs. 31	1y

#### BCLC Stage D

Andriulli [195]	2004	Italy	2	LT vs. PEI	61 vs. 21	1y
D'Avola [196]	2011	Spain	2	LT vs. SC	13 vs. 18	1y
Hiraoka [197]	2016	Japan	2	RFA vs. TACE	10 vs. 20	1y
Kudo [198]	2013	Japan	3	TACE vs. RFA vs. HAC	79 vs. 60 vs. 64	1y

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**Supplementary Table S2. Quality assessment of included prospective or retrospective cohort based on Newcastle-Ottawa Scale (NOS).**

Authors	Pub. Date	Selection			Comparability			Outcome		Score
		Exposed Cohort	Non Exposed Selection	Exposure to Implants	Outcome of Interest	Design or Analysis	Assessment	Adequate Follow-up	Complete Follow-up	
<b>BCLC Stage 0</b>										
Dai [1]	2014	*	*	*	*	**	*	*	*	*****
Farinati [2]	2009	*	*	*	*	**	*	*	*	*****
Harada [3]	2016	*	*	*		*	*	*	*	*****
Hasegawa [4]	2012	*	*	*		*	*			****
Horigome [5]	1999	*	*	*	*	**	*	*	*	*****
HUNG [6]	2011	*	*	*	*	*	*	*		*****
Imai [7]	2013	*	*	*	*	*	*	*	*	*****
Kim [8]	2015	*	*			**	*	*	*	*****
Lin [9]	2013	*	*	*	*	*	*	*	*	*****
Liu [10]	2015	*	*	*	*	**	*	*		*****
Livraghi [11]	2008	*	*		*	*	*	*		****
Pompili [12]	2013	*	*			*	*	*		****
Pompili [13]	2015	*	*	*		*	*	*		*****
Santambrogio [14]	2016	*	*		*	**	*	*	*	*****
Takayama [15]	2010	*	*				*	*		***
Takuma [16]	2013	*	*			*	*	*		****
TASHIRO [17]	2011	*	*		*	**	*	*	*	*****
Wahl [18]	2015	*	*	*	*	*	*	*		*****
Wang [19]	2012	*	*		*	*	*	*		****
Zhen [20]	2012	*	*	*	*	*	*	*	*	*****
Zhou [21]	2013	*	*	*		*	*	*	*	*****
<b>BCLC Stage A</b>										
Abu-Hilal [22]	2008	*	*		*	*	*	*		****
BABA [23]	2010	*	*	*		**	*	*	*	*****
Bu [24]	2015	*	*	*	*	*	*	*		*****
Chen [25]	2010	*	*	*	*	**	*	*	*	*****
Chen [26]	2016	*	*	*		**	*	*		****
Cheung [27]	2012	*	*	*	*	*	*	*		****
Cho [28]	2007	*	*	*		*	*	*	*	****
Daniele [29]	2003	*	*	*	*	*	*	*		*****
Desiderio [30]	2013	*	*		*	**	*	*	*	*****
Ding [31]	2013	*	*	*	*	**	*	*	*	*****
Farinati [2]	2009	*	*	*	*	**	*	*		*****

Gerunda [32]	2000	*	*	*	*	*	**	*	*	*	*****
Ginsburg [33]	2015	*	*	*	*	*	**	*	*	*	*****
GORY [34]	2015	*			*	*	*	*	*	*	*****
Gournay [35]	2002	*			*		**	*	*	*	*****
Graham [36]	2013	*	*			*	*	*	*	*	*****
Graham [37]	2013	*	*			*	*	*	*	*	*****
Guan [38]	2016	*	*	*	*	*	**	*	*	*	*****
Guo [39]	2010	*	*	*	*	*	*	*	*	*	*****
Guo [40]	2014	*	*	*	*	*	*	*	*	*	*****
Guo [41]	2014	*	*	*	*	*	*	*	*	*	*****
Harada [3]	2016	*	*			*	*	*	*	*	*****
HARADA [42]	2016	*	*			*	*	*	*	*	*****
Hasegawa [43]	2008	*			*	*	*	*	*	*	*****
Hasegawa [4]	2012	*	*				*	*			****
Hekele [44]	2009	*	*	*	*	*		*	*	*	*****
Hiraoka [45]	2008	*	*	*	*	*	*	*	*	*	*****
Ho [46]	2009	*	*	*	*	*	*	*		*	*****
Hocquelet [47]	2015	*				*	*	*	*	*	****
Honda [48]	2013	*	*			*	*	*	*	*	*****
Hong [49]	2005	*	*			*	**	*	*	*	*****
Hsu [50]	2012	*	*			*	**	*	*	*	*****
Huang [51]	2011	*	*	*		*	*	*	*	*	*****
Huang [52]	2014	*	*	*	*	*	**	*	*	*	*****
HUNG [6]	2011	*	*	*	*	*	*	*	*	*	*****
Huo [53]	2003	*	*	*	*	*	*	*	*	*	*****
HUO [54]	2004	*	*	*	*	*	*	*	*	*	*****
Hyun [55]	2015	*	*	*		*	**	*	*		*****
Jiang [56]	2015	*	*			*	*	*	*		****
Kagawa [57]	2010	*	*		*	*	**	*	*	*	*****
Kamada [58]	2002	*			*	*	**	*	*	*	*****
Kang [59]	2015	*	*	*		*	*	*	*		****
Kim [60]	2014	*	*	*		*	*	*	*		*****
Kim [61]	2006	*	*	*		*	**	*	*	*	*****
Kim [62]	2011	*			*	*	**	*	*		****
Kim [8]	2015	*	*			*	*	*		*	****
KIM [63]	2012	*	*	*		*		*	*		****
Kim [64]	2013	*	*	*		*	**	*	*	*	*****
Kobayashi [65]	2009	*	*	*		*	*	*	*		****

Koniaris [66]	2011	*	*		*	*	*	*		*	*****
Lai [67]	2013	*	*		*	**	*	*			*****
LAI [68]	2016	*	*	*	*	**	*	*		*	*****
Lee [69]	2016	*		*	*	*	*	*		*	*****
Lee [70]	2014	*	*	*	*	*	*	*			*****
Lei [71]	2014	*		*	*	**	*	*		*	*****
Li [72]	2016	*	*	*	*	*	*	*			*****
LI [73]	2013	*	*		*	**	*	*		*	*****
Li [74]	2014	*	*	*	*	*	*	*			*****
Lida [75]	2013	*	*	*	*	**	*			*	*****
Liu [76]	2014	*	*		*	*	*			*	*****
LUPO [77]	2007	*	*	*	*	**	*	*		*	*****
Montorsi [78]	2005	*	*	*	*	*	*	*			*****
Moon [79]	2007	*	*		*	*	*	*		*	*****
Moreno-Luna [80]	2013	*	*	*	*	*	*	*		*	*****
Park [81]	2014	*	*	*	*	*	*	*			*****
Peng [82]	2013	*	*	*	*	**	*	*		*	*****
Pompili [12]	2013	*	*			*	*	*			****
Potretzke [83]	2016	*	*	*	*	*	*	*		*	*****
Santambrogio [84]	2009	*	*	*	*	*	*	*			*****
Shi [85]	2014	*	*	*	*	**	*	*		*	*****
Shi [86]	2016	*	*	*	*	*	*	*			*****
Song [87]	2016	*	*	*	*	**	*	*		*	*****
Song [88]	2015	*	*	*	*	**	*	*			*****
Sotiropoulos [89]	2009	*	*	*	*		*	*			****
Takahashi [90]	2007	*	*	*	*	*	*	*		*	*****
Takuma [16]	2013	*	*		*	*	*	*			****
TASHIRO [17]	2011	*	*	*	*	*	*	*		*	*****
Tohme [91]	2012	*	*	*	*	**	*	*		*	*****
Ueno [92]	2009	*	*	*	*	*	*	*			****
Vitale [93]	2015	*	*		*		*	*			****
Vitali [94]	2015	*			*	*	*	*		*	****
Vivarelli [95]	2004	*	*		*	*	*	*			****
Wang [19]	2012	*	*		*	*	*	*			****
Wong [96]	2012	*		*	*	**	*	*		*	*****
Yamakado [97]	2008	*	*	*	*	*	*	*			****
YAN [98]	2016	*	*	*	*		*	*		*	****
Yang [99]	2014	*	*	*	*	*	*	*		*	*****



Cheong [131]	2005	*		*	*	*	**	*	*		*****
Cheung [132]	2014	*	*	*	*	*	*	*	*	*	*****
Cho [133]	2013	*	*	*		*	*	*	*	*	*****
Cho [134]	2016	*	*	*		*	*	*	*	*	*****
Choi [135]	2016	*	*	*	*	*	**	*	*	*	*****
Choi [136]	2013	*	*	*	*	*	*	*	*		*****
Chung [137]	2011	*	*	*	*	*	*	*	*		*****
Edeline [138]	2015	*				*		*	*	*	****
Fan [139]	2005	*	*	*	*	*	**	*	*		*****
Fan [140]	2001	*	*			*	*	*		*	****
Fan [141]	2003	*	*	*		*		*	*		****
Ha [142]	2016	*	*			*	*	*	*		****
Hirooka [143]	2010	*	*	*		*	**	*	*	*	*****
Ho [46]	2009	*	*	*		*	*	*		*	****
Hu [144]	2014	*	*	*		*	**	*	*	*	*****
Hu [145]	2007	*	*	*		*		*	*		****
Huang [146]	2016	*	*	*		*	**	*	*	*	*****
Jang [147]	2007	*	*	*		*	**	*	*		*****
Jin [148]	2003	*	*	*		*		*	*		****
Katamura [149]	2009	*	*	*		*	**	*	*		*****
Kawaoka [150]	2015	*	*	*		*	*	*	*	*	*****
Kim [151]	2009	*	*	*		*	*	*	*		****
Kim [152]	2014	*	*	*		*	*	*	*		****
Kodama [153]	2011	*	*	*		*		*	*		****
Lee [154]	2012	*	*	*		*	*	*	*	*	*****
Lee [155]	1997	*	*	*		*	**	*	*		*****
Li [156]	2011	*	*	*		*	*	*	*		****
Li [157]	2016	*	*	*		*	**	*	*	*	*****
Li [158]	2016	*			*	*	*	*	*		****
Li [159]	2016	*	*	*		*	**	*	*	*	*****
Li [160]	2016	*	*	*		*	**	*	*	*	*****
Liang [161]	2008	*			*	*	**	*	*		****
Lim [162]	2006	*	*			*	**	*			****
Liu [163]	2014	*	*	*		*	*	*	*		****
Liu [164]	2015	*	*	*		*	*	*	*		****
Lu [165]	2014	*	*	*		*	**	*	*	*	*****
Luo [166]	2011	*	*			*	*	*	*		****
Moreno-Luna [80]	2013	*	*	*		*	*	*	*	*	*****

NAGAI [167]	2015	*	*	*	*	*	**	*	*		*****
Nitta [168]	2013	*	*	*	*	*	*	*	*		*****
Niu [169]	2012	*	*	*	*	*	**	*	*		*****
Onishi [170]	2015	*	*	*	*	*	**	*	*	*	*****
Pinter [171]	2012	*	*	*	*	*	*	*	*		*****
Radu [172]	2013	*	*	*	*	*		*	*		*****
Schmidt [173]	2014	*	*	*	*	*	**	*	*		*****
Song [174]	2014	*	*	*	*	*	**	*	*	*	*****
TAN [175]	2014	*	*	*	*	*		*	*		*****
Tanaka [176]	1999	*				*	*	*	*	*	*****
Tang [177]	2013	*	*	*	*	*	*	*	*	*	*****
Torre [178]	2016	*	*	*	*	*	**	*	*	*	*****
Vitale [93]	2015	*	*			*		*	*		****
Wang [179]	2009	*	*	*	*	*		*	*		****
Wang [180]	2013	*	*			*	*	*	*	*	****
Wu [181]	2012	*	*	*	*	*	**	*	*	*	*****
Wu [182]	2011	*	*	*	*	*		*	*		****
Xia [183]	2016	*	*	*	*	*	*	*	*		****
Xu [184]	2013	*	*	*	*	*	**	*	*		****
Ye [185]	2014	*	*	*	*	*	**	*	*		*****
Ye [186]	2016	*	*	*	*	*	**	*	*		*****
You [187]	2007	*	*			*	**	*		*	****
Yuan [188]	2016	*	*	*	*	*	**	*	*	*	*****
ZHANG [189]	2015	*	*	*	*	*	**	*	*		*****
Zhang [190]	2009	*	*	*	*	*	**	*	*		*****
Zhang [192]	2014	*	*	*	*	*	*	*	*		****
Zhang [102]	2016	*	*	*	*	*	**	*	*	*	*****
Zhang [191]	2016	*	*	*	*	*	**	*	*	*	*****
Zhao [124]	2010	*	*	*	*	*	**	*	*		****
Zheng [193]	2016	*	*			*	**	*	*		****
Zhong [125]	2014	*	*	*	*	*	**	*	*	*	*****
Zhou [194]	2011	*	*	*	*	*	**	*	*		****
<b>BCLC Stage D</b>											
Andriulli [195]	2004	*	*			*	*	*	*	*	****
D'Avola [196]	2011	*	*	*	*	*		*	*	*	****
Hiraoka [197]	2016	*	*	*	*	*	*	*	*		****
Kudo [198]	2013	*	*			*		*	*	*	****

**Supplementary Table S3. Checklist for quality assessment and scoring of prospective or retrospective cohort studies.****Check List****Selection**

1. Definitive diagnosis and assignment for treatment: any clear evidence ? (if yes, one star; no star if record linkage or based on self reports or no description)
2. Selection of the non-exposed cohort? (if drawn from the same community as the exposed cohort, one star; no star if drawn from a different source or no description)
3. Ascertainment of exposure to implants? (if secure medical record or structured interview, one star; no star if no description)
4. Demonstration that outcome of interest was not present at start of study. (if yes, one star; no star if no)

**Comparability**

Comparability of cases and controls on the basis of the design or analysis. (one star was assigned if study controls for BCLC stage and age; one star was assigned if study controls for any additional factor )

**Outcome**

1. Assessment of outcome? (if independent blind assessment or record linkage, one star)
2. Was follow up long enough for outcomes to occur? (if yes, one star)
3. Adequacy of follow up of cohorts ? (if complete follow up or small number lost < 40 %, or description of those losts, one star)

**Supplementary Table S4. Pooled hazard ratios for death.**

**Stages**

**Comparisons**

**BCLC Stage 0. 1-year overall survival**

LT	103.01 (0.00, (0.00, 8.16E+ 1.24E 37) 37)	0.00 (0.00, (0.00, 1.35E+1 +18) 8)	0.00 (0.00, (0.00, 6.7E +17) E+18)	0.00 (0.00, (0.00, 1.78 +17) E+18)	0.00 (0.00, (0.00, 8.13E +37))	1.02E +7
0.01 (0.00, 1.26E+ 31)	MWA	0.00 (0.00, (0.00, 1.12E +16) 6)	0.00 (0.00, (0.00, 1.17E+1 +15) E+16)	0.00 (0.00, (0.00, 6.3E +15))	0.00 (0.00, (0.00, 1.45 +45))	1090.6 5
9861.7 8 8 (0.00, 1.61E+ 32)	PEI	8.22E+ 7 (0.00, (0.00, 1.67E+ 33))	1.08 (0.32, 3.68)	0.54 (0.04 (0.41 8.08))	1.43 (0.41 6.45)	1.86E +10 (2.32, 2.67E +35)
9493.9 7 7 (0.00, 1.40E+ 32)	RFA	7.59E+ 0.93 (0.00, (0.00, 1.73E+ 33))	0.50 (0.05 (0.69 5.95))	1.34 (0.69 3.21)	1.71E +10 (2.49, 2.52E +35)	
20437. 99 7 (0.00, 2.64E+ 32)	RT	1.45E+ 1.87 (0.12, 24.07 3))	2.02 (0.17, 19.71)	2.69 (0.28 25.57)	3.29E +10 (3.87, 5.96E +35)	
6965.9 4 7 (0.00, 9.92E+ 32)	SR	5.54E+ 0.70 (0.00, (0.00, 1.17E+ 33))	0.37 (0.04 3.52)	1.23E +10 (1.84, 1.88E +35)		
0.00 (0.00, 1.98E+ 23)	TACE +RFA	0.00 (0.00, (0.00, 1.53E+ 25))	0.00 (0.00 (0.00 0.43))	0.00 (0.00 0.40)	0.00 (0.00 0.26)	3.29E +10 (3.87, 5.96E +35) +RFA

**BCLC Stage 0. 3-year overall survival**

LT	0.17 (0.00, 8.06)	0.59 (0.01, 14.99)	0.54 (0.01, 11.90)	0.25 (0.00 (0.02 10.09))	0.77 (0.00 16.84)	0.12 (0.00 5.70))
6.02 (0.12, 508.65)	MWA	3.38 (0.42, 31.56 ))	3.13 (0.32, 34.64)	1.51 (0.08 (0.44 30.56))	4.44 (0.44 49.86)	0.73 (0.03, 19.55))
1.70 (0.07, 94.59)	PEI	0.30 (0.03, 2.38)	0.92 (0.40, 2.16)	0.44 (0.05 (0.52 3.37))	1.30 (0.52 3.50)	0.22 (0.02, 2.16)
1.84 (0.08, 96.77)	RFA	0.32 (0.03, 3.13)	1.08 (0.46, 2.53)	0.48 (0.07 (0.87 3.18))	1.42 (0.87 2.37)	0.24 (0.02, 2.05)
4.03 (0.10, 284.91)	RT	0.66 (0.03, 13.24)	2.26 (0.30, 19.64)	2.07 (0.31, 15.14)	2.94 (0.49 20.27)	0.51 (0.02, 8.37))
1.29 (0.06, 63.14)	SR	0.23 (0.02, 2.26)	0.77 (0.29, 1.93)	0.71 (0.42, 1.15)	0.34 (0.05 2.04)	0.17 (0.02, 1.32))
8.14 (0.18, 718.05)	TACE +RFA	1.36 (0.05, 34.67)	4.51 (0.46, 57.51)	4.16 (0.49, 47.28)	1.98 (0.12 (0.76 40.24))	5.92 (0.76 65.36))

## BCLC Stage 0. 5-year overall survival

				0.04 (0.00)	0.24 (0.01)	0.04 (0.00)	0.04 (0.00)
LT	0.25 (0.01, 3.98)	0.13 (0.00, 1.73)	0.13 (0.00, 7.29)	0.04 (0.00, 1.96)	0.24 (0.01, 3.09)	0.04 (0.00, 0.80)	0.04 (0.00, 1.13)
4.03 (0.25, 181.91 )	PEI	0.52 (0.20, 1.42)	0.60 (0.01, 12.89)	0.15 (0.00, 5.47)	0.95 (0.33, 2.82)	0.15 (0.01, 2.26)	0.17 (0.02, 1.58)
7.62 (0.58, 305.20 )	RFA	1.92 (0.71, 5.07)	1.14 (0.03, 20.80)	0.30 (0.00, 9.50)	1.82 (1.04, 3.23)	0.29 (0.02, 3.64)	0.33 (0.04, 2.59)
7.51 (0.14, 1152.9 )	RT	1.66 (0.08, 73.36)	0.88 (0.05, 33.54)	0.28 (0.00, , )	1.57 (0.10, , )	0.26 (0.01, 34.73)	0.29 (0.01, 19.91)
28.41 (0.51, 4557.7 )	SC	6.50 (0.18, 472.48)	3.37 (0.11, 226.5)	3.62 (0.03, 642.71)	6.18 (0.21, 407.3)	0.96 (0.04, 51.93)	1.12 (0.02, 108.56)
4.15 (0.32, 164.24 )	SR	1.05 (0.35, 3.07)	0.55 (0.31, 0.96)	0.64 (0.02, 10.34)	0.16 (0.00, 4.67)	0.16 (0.01, 1.81)	0.18 (0.03, 1.29)
26.72 (1.25, 1548.0 )	TACE	6.57 (0.44, 102.85)	3.45 (0.27, 44.40)	3.81 (0.05, 177.16)	1.04 (0.02, 28.05)	6.35 (0.55, 80.25)	1.17 (0.05, 27.95)
24.00 (0.88, 1390.5 )	TACE +RFA	5.78 (0.63, 53.21)	3.03 (0.39, 24.32)	3.42 (0.05, 109.18)	0.89 (0.01, 43.56)	5.52 (0.77, 39.57)	0.86 (0.04, 18.88)

## BCLC Stage A. 1-year overall survival

) )												) )											
2.19 (0.14, 87.35)	1.07E+ 3.11E+ (4.02, 3.38)	14 (4.02, 3.38)	1.26 (0.46, 5.41)	0.57 (0.04, 5.41)	0.69 (0.24, 1.91)	2.41 (0.30, 24.85)	0.00 (0.00, +20)	8.30E (8.30E, +20)	PEI	0.72 (0.37, 1.34)	1.49 (0.34, 6.36)	0.87 (0.14, 5.19)	0.12 (0.04, 0.35)	0.86 (0.46, 1.57)	0.64 (0.06, 8.49)	0.72 (0.33, 1.53)	3.39 (0.41, 28.46)	1.62 (0.23, 12.44)	1.45 (0.58, 3.63)	0.66 (0.10, 4.33)	2.30 (0.30, 19.57)	0.34 (0.04, 2.90)	1.82E +12 (14.07)
118.17 )	3.06 (0.22, 3.88E+ 4.01)	14 (5.26, 7.14)	1.76 (0.77, 2.21)	0.79 (0.07, 33.03)	0.96 (0.42, 1.23E)	3.38 (0.47, +20)	0.00 (0.00, +20)	1.40 (0.74, 2.72)	RFA	2.08 (0.57, 7.57)	1.21 (0.21, 6.73)	0.17 (0.07, 0.43)	1.21 (0.93, 1.57)	0.89 (0.09, 11.14)	1.01 (0.62, 1.67)	4.70 (0.64, 38.18)	2.28 (0.29, 19.38)	2.03 (1.00, 4.21)	0.93 (0.16, 5.46)	3.19 (0.45, 26.41)	0.47 (0.06, 3.90)	2.58E +12 (20.29)	
72.07 )	1.47 (0.07, 1.92E+ 4.02)	14 (2.31, 4.85)	0.86 (0.18, 2.19)	0.37 (0.02, 22.76)	0.46 (0.10, 6.41E)	1.66 (0.15, +20)	0.00 (0.00, +20)	0.67 (0.16, 2.92)	RFA+P EI	0.59 (0.07, 4.85)	0.08 (0.02, 0.40)	0.58 (0.15, 2.18)	0.44 (0.03, 7.66)	0.49 (0.12, 2.05)	2.29 (0.21, 25.82)	1.09 (0.09, 14.27)	0.98 (0.22, 4.35)	0.45 (0.05, 3.93)	1.57 (0.15, 17.59)	0.23 (0.02, 2.57)	1.32E +12.51 (9.79, 9.86E +63)		
132.30 )	2.58 (0.10, 2.65E+ 9.47)	14 (3.92, 11.19)	1.43 (0.22, 5.47)	0.65 (0.03, )	0.78 (0.12, 48.62)	2.78 (0.21, +20)	0.00 (0.00, +20)	1.14 (0.19, 7.27)	RFA+S orafenib	0.14 (0.02, 0.96)	1.00 (0.18, 5.43)	0.75 (0.04, 15.62)	0.83 (0.15, 4.89)	3.94 (0.29, 56.67)	1.92 (0.13, 28.20)	1.66 (0.27, 10.81)	0.77 (0.07, 8.79)	2.65 (0.20, 36.28)	0.39 (0.03, 5.73)	2.03E +12 (15.57)			
774.46 )	18.13 (1.13, 215E+ 57)	14 (35.01, 48.89)	10.28 (3.17, )	4.61 (0.34, )	5.62 (1.67, 19.72)	19.86 (2.41, 231.5)	0.00 (0.00, +20)	8.13 (2.83, 25.29)	5.80 (2.34, 15.01)	11.97 (2.51, 64.80)	7.09 (1.05, 49.22)	7.00 (2.97, 17.69)	5.25 (0.49, 78.00)	5.89 (2.33, 15.32)	27.54 (3.15, 264.61)	13.26 (1.45, 133.60)	11.88 (3.94, 37.54)	5.46 (0.78, 38.16)	18.59 (2.23, 181.45)	2.71 (0.33, 27.55)	1.38E +13 (109.5)		
101.48 )	2.55 (0.18, 3.13E+ 5.79)	14 (4.47, 1.86)	1.46 (0.66, )	0.65 (0.06, )	0.80 (0.34, 27.84)	2.80 (0.38, +20)	0.00 (0.00, +20)	1.16 (0.64, 2.19)	0.83 (0.64, 1.07)	1.72 (0.46, 6.55)	1.00 (0.18, 5.46)	0.14 (0.06, 0.34)	0.74 (0.08, 9.13)	0.84 (0.52, 1.35)	3.91 (0.53, 30.71)	1.89 (0.24, 16.26)	1.68 (0.84, 3.44)	0.77 (0.13, 4.48)	2.65 (0.39, 21.41)	0.39 (0.05, 3.16)	2.01E +12 (17.23)		
256.74 )	3.44 (0.09, 3.80E+ 57)	14 (5.94, 19.97)	1.94 (22.01, )	0.81 (0.03, )	1.08 (0.08, 11.90)	3.77 (0.16, 89.79)	0.00 (0.00, +21)	1.57 (0.12, 16.19)	1.12 (0.09, 31.86)	2.28 (0.13, 22.71)	1.33 (0.06, 2.06)	0.19 (0.01, 12.85)	1.35 (0.11, )	SR+RFA	1.13 (0.09, 10.77)	5.20 (0.22, 112.97)	2.59 (0.10, 53.63)	2.24 (0.17, 23.89)	1.02 (0.05, 17.35)	3.58 (0.14, 74.28)	0.52 (0.02, 11.60)	2.68E +12 (21.47)	
126.52 )	2.98 (0.20, 3.72E+ 7.22)	14 (5.21, 2.47)	1.74 (0.69, )	0.78 (0.06, )	0.95 (0.37, 31.97)	3.33 (0.48, +21)	0.00 (0.00, +21)	1.38 (0.66, 3.04)	0.99 (0.60, 1.63)	2.06 (0.49, 8.26)	1.20 (0.20, 6.88)	0.17 (0.07, 0.43)	1.19 (0.74, 1.93)	0.89 (0.09, 10.92)	TACE	4.64 (0.61, 38.88)	2.24 (0.27, 19.73)	2.02 (0.93, 4.37)	0.92 (0.17, 5.10)	3.19 (0.42, 26.26)	0.47 (0.07, 3.62)	2.68E +12 (21.20)	
43.08 )	3.52E+ (0.02, 43.08)	13 (0.90, 6.85E+ 57)	0.38 (0.04, 3.29)	0.16 (0.01, )	0.20 (0.02, 1.79)	0.73 (0.04, 14.94)	0.00 (0.00, +20)	0.29 (0.04, 2.46)	0.21 (0.03, 1.56)	0.44 (0.04, 4.83)	0.25 (0.02, 3.48)	0.04 (0.00, 0.32)	0.26 (0.03, 1.88)	0.19 (0.01, 4.62)	TACE+MWA	0.47 (0.03, 8.70)	0.43 (0.06, 2.75)	0.19 (0.01, 2.73)	0.69 (0.04, 11.76)	0.69 (0.01, 1.77)	0.10 (0.01, 4.22E +63)	5.91E	
104.31 )	1.38 (0.04, 104.31)	13 (2.14, 2.27E+ 7.10)	0.77 (0.08, 7.31)	0.34 (0.01, )	0.43 (0.04, 3.82)	1.50 (0.08, 31.94)	0.00 (0.00, +20)	0.62 (0.08, 4.36)	0.44 (0.05, 3.45)	0.92 (0.07, 10.59)	0.52 (0.04, 7.84)	0.08 (0.01, 0.69)	0.53 (0.06, 4.19)	0.39 (0.02, 10.11)	TACE+P EI	0.89 (0.09, 7.82)	0.41 (0.02, 6.03)	1.44 (0.08, 25.11)	0.21 (0.01, 3.76)	0.21 (0.01, 8.30E +63)	9.93E		
62.48 )	7.45E+ (0.09, 62.48)	13 (2.63, 1.88E+ 3.86)	0.88 (0.30, 3.86)	0.39 (0.03, )	0.47 (0.16, 1.39)	1.66 (0.21, 18.00)	0.00 (0.00, +20)	0.69 (0.28, 1.72)	0.49 (0.24, 1.00)	1.02 (0.23, 4.53)	0.60 (0.09, 3.73)	0.08 (0.03, 0.25)	0.60 (0.29, 1.18)	0.45 (0.04, 5.99)	TACE+RFA	0.46 (0.07, 2.99)	1.60 (0.19, 14.27)	1.12 (0.13, 10.84)	0.92 (0.03, 2.03)	0.23 (0.03, 9.41E +63)	1.27E +13 (10.61)		
192.80 )	3.36 (0.14, 192.80)	14 (4.69, 4.04E+ 13.35)	1.88 (13.20)	0.84 (0.04, )	1.05 (0.14, 7.32)	3.70 (0.29, 56.96)	0.00 (0.00, +21)	1.51 (0.23, 10.00)	1.07 (0.18, 6.35)	2.20 (0.25, 21.29)	1.30 (0.11, 14.78)	0.18 (0.03, 1.28)	1.29 (0.22, 7.55)	0.98 (0.06, 20.74)	TACE+RT	3.53 (0.24, 50.41)	0.52 (0.04, 7.18)	2.19 (0.33, 14.22)	0.23 (0.03, 10.84)	0.23 (0.03, 9.41E +63)	3.47E +12 (20.09)		
63.60 )	4.36E+ (0.03, 63.60)	13 (1.30, 1.29E+ 4.60)	0.55 (0.06, 4.60)	0.24 (0.01, )	0.30 (0.03, 2.59)	1.08 (0.06, 20.47)	0.00 (0.00, +20)	0.43 (0.05, 3.36)	0.31 (0.04, 2.21)	0.64 (0.06, 6.76)	0.38 (0.03, 5.03)	0.05 (0.01, 0.45)	0.38 (0.05, 2.57)	0.28 (0.01, 6.98)	TACE+SR	0.14 (0.01, 2.53)	0.28 (0.04, 5.22E +63)	0.70 (0.04, 4.13)	0.28 (0.02, 10.84)	0.28 (0.02, 9.41E +63)	7.64E		
6.70 )	3.47E+ (0.02, 6.70)	13 (0.42, 1.37)	3.72 (0.07, 1.63)	1.63 (0.07, )	2.03 (0.22, 0.26)	7.26 (0.42, 0.34)	0.00 (0.00, )	2.96 (0.28, 0.26)	2.11 (0.24, 0.39)	4.31 (0.26, 0.39)	2.57 (0.17, 0.17)	0.37 (0.04, 0.32)	2.57 (0.09, 0.09)	1.91 (0.09, 0.28)	TARE	4.31 (0.14, 0.57)	1.94 (0.14, 0.49)	6.92 (0.14, 0.40)	4.75 (0.27, 0.27)	4.31 (0.14, 0.49)	6.79E +11		

452.32	(9.54,	32.22	35.73)	,	,	3.21E	24.49)	15.83	47.75)	35.10)	2.99)	,	,	15.18)	169.51)	90.62)	34.11)	25.84)	120.33)	(43.04	,	3.48E	+63)
)	7.70E+	)	57)	)	17.30	131.3	+21)	)	)	)	18.52	43.72	)	)	)	)	)	)	)	)	)	)	
0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,	
0.23)	1.11E+	0.09)	0.04)	31)	0.05)	0.18)	+16)	8.57E	0.07)	0.05)	0.10)	0.06)	0.01)	0.06)	0.05)	0.05)	0.25)	0.13)	0.09)	0.05)	0.20)	0.02)	

### BCLC Stage A. 3-year overall survival

HIFU	6.25	3.71	1.18	2.04	2.20	(0.30	(0.27	1.98	1.49	2.55	2.43	0.30	2.40	1.68	1.38	6.28	5.22	1.75	0.00	3.10	2.17	9.16		
)	(1.36,	31.27)	38.00	5.56)	13.68	17.62	9.69)	6.06)	)	15.53	(0.43,	(0.35,	(0.06,	(0.58,	(0.18	(0.33	(0.85,	(0.65,	(0.40,	(0.00,	(0.51,	(0.16,	(0.90,	
0.16	LT	0.59	0.19	0.32	0.34	0.32	0.24	0.41	0.39	0.05	0.39	0.26	0.22	1.00	0.84	0.28	0.00	0.49	0.35	1.46				
(0.03,	0.73)	(0.11,	3.16)	(0.08,	0.44)	(0.08	(0.07	(0.13,	(0.12,	(0.11,	(0.09,	(0.02,	(0.20,	(0.19,	(0.16,	(0.16,	(0.12,	(0.00,	(0.14,	(0.03,	(0.21,			
0.27	TAC	1.69	LT+	0.32	0.55	0.60	0.54	0.40	0.68	0.65	0.08	0.65	0.45	0.37	1.74	1.44	0.48	0.00	0.84	0.59	2.53			
(0.03,	2.68)	(0.32,	9.38)	E	2.19	5.04)	6.65)	3.82)	2.51)	6.10)	6.08)	0.58)	4.01)	5.81)	2.48)	18.02)	15.67)	3.12)	0.08)	7.06)	10.05)	32.46)		
0.85	MWA	5.22	3.13	1.69	1.81	1.68	1.25	2.15	2.02	0.25	2.02	1.41	1.16	5.30	4.38	1.48	0.00	2.58	1.85	7.61				
(0.18,	3.66)	(2.29,	12.15)	)	(0.43	(0.36	(0.76,	(0.72,	(0.60,	(0.50,	(0.09,	(1.17,	(0.23	(0.61	(1.05,	(0.86,	(0.71,	(0.00,	(0.76,	(0.19,	(1.12,			
0.49	PAI	3.09	1.83	0.59	1.08	0.99	0.74	1.27	1.19	0.15	1.20	0.83	0.69	3.15	2.62	0.89	0.00	1.53	1.08	4.49				
(0.07,	3.31)	(0.75,	12.60)	)	(0.15	(0.15	(0.24,	(0.20,	(0.23,	(0.20,	(0.03,	(0.33,	(0.43,	(0.36,	(0.22,	(0.00,	(0.28,	(0.09,	(1.20,					
0.45	PC	2.92	1.68	0.55	0.92	0.91	0.69	1.17	1.10	0.14	1.11	0.77	0.64	2.93	2.47	0.81	0.00	1.42	1.01	4.16				
(0.06,	3.74)	(0.53,	15.09)	)	(0.10	(0.10	(0.14,	(0.14,	(0.17,	(0.14,	(0.02,	(0.23,	(0.32,	(0.27,	(0.15,	(0.00,	(0.20,	(0.07,	(0.36,					
0.51	PEI	3.12	1.85	0.60	1.01	1.10	0.75	1.29	1.20	0.15	1.20	0.83	0.69	3.15	2.64	0.89	0.00	1.55	1.09	4.56				
(0.10,	2.35)	(1.36,	7.60)	)	(0.25	(0.22	(0.27,	(0.25	(0.30,	(0.30,	(0.05,	(0.67,	(0.64,	(0.64,	(0.41,	(0.00,	(0.43,	(0.12,	(0.67,					
0.67	RFA	4.17	2.48	0.80	1.34	1.46	1.34	1.34	1.62	0.20	1.61	1.11	0.93	4.23	3.53	1.19	0.00	2.06	1.47	6.10				
(0.17,	2.72)	(2.21,	8.32)	)	(0.46	(0.46	(0.38	(0.38	(0.32	(0.72,	(0.56,	(0.43,	(0.57,	(0.92,	(0.74,	(0.72,	(0.00,	(0.67,	(0.17,	(0.99,				
0.39	RFA+PEI	2.43	1.46	0.46	0.78	0.85	0.77	0.58	0.93	0.12	0.94	0.66	0.54	2.51	2.05	0.68	0.00	1.20	0.86	3.53				
(0.06,	2.33)	(0.68,	9.17)	)	(0.15	(0.13	(0.15	(0.15	(0.13	(0.22,	(0.17,	(0.19,	(0.17,	(0.36,	(0.31,	(0.21,	(0.00,	(0.25,	(0.07,	(0.42,				
0.41	RFA+Sorafenib	2.59	1.53	0.50	0.84	0.91	0.83	0.62	1.08	0.13	1.00	0.69	0.58	2.66	2.20	0.73	0.00	1.29	0.90	3.83				
(0.06,	2.86)	(0.64,	10.95)	)	(0.14	(0.12	(0.14	(0.14	(0.12	(0.20,	(0.17,	(0.19,	(0.17,	(0.36,	(0.29,	(0.19,	(0.00,	(0.23,	(0.07,	(0.42,				
3.31	SC	20.74	12.20	3.93	6.69	7.18	(1.51	(1.30	6.62	4.95	8.47	7.99	8.00	5.47	4.58		0.00	10.11	7.29	30.18				
(0.63,	17.95)	(7.39,	17.95)	)	(1.45	(1.45	(1.45	(2.35,	(2.07,	(3.25,	(2.07,	(36.27	(1.77,	(3.47,	(2.08,	(1.92	(20.88	17.44	5.86	(0.00,	(2.55,	(0.71,	(4.04,	
0.42	SR	2.58	1.53	0.49	0.83	0.90	0.83	0.62	1.07	1.00	0.13	0.69	0.58	2.62	2.18	0.73	0.00	1.28	0.91	3.78				
(0.10,	1.72)	(1.39,	4.95)	(0.25,	(0.28,	(0.28,	(0.23	(0.28,	(0.34,	(0.27,	(0.05,	(0.12	(0.12	(0.12	(0.57,	(0.47,	(0.45,	(0.00,	(0.41,	(0.10,	(0.60,			
0.59	TAC+E	3.78	2.24	0.71	1.20	1.30	(0.14	(0.13	1.20	0.90	1.52	1.45	0.18	1.45	0.84	3.82	3.16	1.06	0.00	1.85	1.32	5.48		
(0.07,	5.58)	(0.59,	24.52)	(0.12,	(0.12	(0.12	(0.19	(0.19	(0.16,	(11.88	(12.54)	(1.28)	(8.34)	(4.93)	(38.36)	(33.21)	(6.54)	(0.00,	(0.24,	(0.08,	(0.45,			
0.72	TACE	4.48	2.69	0.86	1.45	1.56	(0.43	(0.33	1.45	1.08	1.85	1.74	0.22	1.74	1.20	4.51	3.78	1.27	0.00	2.23	1.58	6.56		
(0.16,	3.04)	(2.21,	9.52)	(0.44,	(0.44	(0.43	(0.71	(0.71	(0.57,	(0.46,	(0.46,	(0.08,	(1.18,	(6.95)	(22.06)	(18.58)	(2.25)	(0.00,	(0.69,	(0.18,	(1.08,			
0.16	TACE+MWA	1.00	0.57	0.19	0.32	0.34	(0.04	(0.04	0.24	0.40	0.38	0.05	0.38	0.26	0.22	0.81	0.28	0.00	0.49	0.34	1.43			
(0.02,	1.18)	(0.19,	5.21)	(0.06,	(0.06	(0.06	(0.05	(0.05	(0.06,	(0.05	(0.05	(0.01	(0.08,	(2.71)</										

0.57	3.52	2.09	0.68	1.13	1.23	1.13	0.84	1.47	1.37	0.17	1.36	0.94	0.78	3.59	2.97	TACE+ RFA	0.00	1.74	1.24	5.12		
(0.12,	(1.62,	(0.32,	(0.33,	(0.30	(0.24	(0.52,	(0.51,	(0.43,	(0.34,	(0.06,	(0.83,	(0.15	(0.44	(0.83,	(0.59,		(0.00,	(0.51,	(0.13,	(0.76,		
2.52)	8.01)	)	13.17	1.41)	4.55)	6.46)	2.42)	1.39)	4.86)	5.15)	0.45)	2.23)	5.74)	1.41)	15.53)	14.92)		(0.15)	5.95)	10.48)	34.65)	
				4.06	4.06							3.64	2.53									
2.04E+	1.16E+	7.44E		E+10	E+10	3.51E	2.67E+	5.33E		4.64E+	1.572E+	4.35E	E+10	E+10	1.25E+	9.84E+	3.22E+	6.06E	+10	4.49E	1.82E+	
10	11	+10	2.14E+	(8.25	(8.11	+10	10	+10		0	(8.80,	0	(1.18,	+10	(6.14	(5.62	10	10	(11.34	+10	+10	10
(3.43,	(24.65,			,	,	(8.06,	(5.89,	(9.04,		1.15E+	2.138E+	1.17E	9.29	6.82	2.52E+	2.41E+	9.63E+		(6.73,	(32.63,		
5.48E+	2.86E+	8,	5.40E+	1.07	1.09	9.43E	7.35E+	1.27E		4)	4)	4)	+24)	E+24	E+24	24)	24)	1.42E	1.35E	4.77E+		
24)	24)			E+24	E+24	+24)	+24)	+24)					)	)	)	)		+24)	+24)	24)		
0.32	2.02	1.19	0.39	0.65	0.70	0.65	0.49	0.83	0.78	0.10	0.78	0.54	0.45	2.04	1.71	0.57	0.00	TACE	0.72	2.91		
(0.05,	(0.56,	(0.14,	(0.11,	(0.12,	(0.10,	(0.18,	(0.15,	(0.17,	(0.14,	(0.02,	(0.25,	(0.07	(0.14	(0.31,	(0.26,	(0.17,	(0.00,	+SR	(0.06,	(0.35,		
1.97)	7.31)	9.95)	1.32)	,	,	2.33)	1.50)	3.93)	4.27)	0.39)	2.42)	,	4.14)	1.46)	14.01)	11.75)	1.98)	0.09)		7.92)	25.48)	
				3.60)	4.90)																	
0.46	2.87	1.70	0.54	0.93	0.99	(0.08	(0.07	0.92	0.68	1.16	1.11	0.14	1.10	(0.05	0.63	2.95	2.42	0.81	0.00	1.39	4.24	
(0.04,	(0.31,	(0.10,	(0.06,	(0.11,	(0.10,	(0.10,	(0.08,	(0.08,	(0.11,	(0.09,	(0.01,	(0.13,	,	(0.21,	(0.17,	(0.10,	(0.00,	TARE	(0.13,	(0.25,		
6.17)	28.82)	)	11.01	14.94	8.36)	5.94)	,	,	13.66	13.93)	1.42)	9.66)	11.96	,	40.29)	32.18)	7.43)	0.15)	16.04)	67.64)		
				)	)								)									
0.11	0.69	0.39	0.13	0.22	0.24	0.22	0.16	0.28	0.26	0.03	0.26	0.18	0.15	0.70	0.57	0.20	0.00	Tace+	0.00	0.34	0.24	
(0.01,	(0.10,	(0.03,	(0.02,	(0.06	(0.02	(0.03,	(0.03,	(0.03,	(0.03,	(0.00,	(0.04,	(0.02	(0.03,	(0.06,	(0.05,	(0.03,	(0.00,	PAI	(0.04,	(0.01,	(0.01,	
1.11)	4.86)	5.59)	0.89)	,	,	1.50)	1.01)	2.36)	2.41)	0.25)	1.66)	2.20)	0.93)	7.58)	6.40)	1.32)	0.03)	2.86)	4.00)			

### BCLC Stage A.5-year overall survival

HIFU+	2.90	5.92	0.79	1.14	0.42	0.68	0.65	1.06	1.01	0.14	1.02	0.85	0.48	2.79	2.55	0.80	1.79	2.68			
TACE	(0.49,	(0.56,	(0.13,	(0.13	(0.04	(0.11,	(0.12,	(0.13,	(0.12,	(0.02,	(0.19,	(0.06	(0.09	(0.26,	(0.24,	(0.14,	(0.25,	(0.09,			
	16.92)	65.08	4.70)	,	,	3.72)	3.44)	8.26)	8.53)	0.90)	5.41)	,	9.85)	2.40)	30.64)	26.90)	4.60)	12.31)	182.2	7)	
				8.97)	3.95)																
0.35	2.01	0.14	0.27	0.38	0.14	0.23	0.22	0.36	0.35	0.05	0.35	0.29	0.17	0.96	0.87	0.27	0.61	0.88			
(0.06,	(0.39,	(0.10,	(0.06,	(0.08	(0.03	(0.10,	(0.11,	(0.09,	(0.08,	(0.02,	(0.19,	(0.03	(0.08	(0.16,	(0.15,	(0.12,	(0.19,	(0.04,			
2.02)	LT	10.31	)	,	,	0.50)	0.42)	1.40)	1.54)	0.13)	0.64)	,	2.24)	0.33)	5.88)	5.14)	0.63)	1.92)	51.63)		
				1.72)	0.73)																
0.17	0.50	LT+	0.13	0.19	0.07	0.11	0.11	0.18	0.17	0.02	0.17	0.14	0.08	0.48	0.44	0.14	0.30	0.44			
(0.02,	(0.10,	TAC	(0.02,	(0.02	(0.01	(0.02,	(0.02,	(0.02,	(0.02,	(0.00,	(0.03,	(0.03,	(0.01	(0.01	(0.04,	(0.04,	(0.02,	(0.04,	(0.02,		
1.80)	2.55)	E	0.89)	,	,	0.71)	0.64)	1.53)	1.55)	0.16)	0.99)	,	1.86)	0.48)	5.42)	4.83)	0.84)	2.16)	31.85)		
				1.73)	0.72)																
1.26	3.66	7.44	MWA	1.42	0.53	0.84	0.82	1.32	1.29	0.18	1.29	1.06	0.61	3.53	3.21	1.01	2.27	3.34			
(0.21,	(1.50,	(1.12,	(0.30	(0.10	(0.35	(0.35,	(0.40,	(0.32,	(0.28,	(0.06,	(0.65,	(0.11	(0.28	(0.58,	(0.52,	(0.41,	(0.68,	(0.16,			
7.89)	9.59)	)	,	,	2.07)	1.70)	5.46)	5.86)	0.53)	2.62)	,	8.94)	1.33)	22.64)	20.38)	2.51)	7.38)	189.4	1)		
				6.60)	2.76)																
0.88	2.62	5.25	PAI	0.37	0.60	0.58	0.94	0.90	0.13	0.91	0.75	0.43	2.51	2.28	0.72	1.60	2.37				
(0.11,	(0.58,	(0.15,	(0.05	(0.13	(0.14	(0.15,	(0.15,	(0.13,	(0.03,	(0.23,	(0.23,	(0.06	(0.11	(0.28,	(0.26,	(0.16,	(0.29,	(0.09,			
7.52)	47.67	)	,	,	2.66)	2.34)	6.05)	6.38)	0.62)	3.69)	,	8.44)	1.66)	22.78)	19.65)	3.09)	8.61)	141.0	8)		
				2.87)																	
2.41	6.95	14.06	PC	2.70	1.59	1.54	2.54	2.43	0.35	2.45	1.97	1.15	6.81	6.18	1.91	4.30	6.25				
(0.25,	(1.37,																				

1.18	3.46	7.07	0.94	1.33	0.51	0.80	0.77	1.26	1.20	0.17	1.21	0.57	3.39	3.02	0.94	2.13	3.26	
(0.10,	(0.45,	(0.54,	(0.11,	(0.12,	(0.04	(0.10,	(0.11,	(0.12,	(0.11,	(0.02,	(0.17,	SR+	(0.08	(0.25,	(0.23,	(0.12,	(0.23,	
17.99)	32.67)	107.2	8)	17.42	7.11)	7.17)	6.80)	14.87	15.28)	1.73)	10.74	RFA	,	48.53)	47.30)	8.66)	22.34)	287.1
		)									)	4.87)					9)	
2.07	6.02	12.22	1.64	2.31	0.87	1.38	1.34	2.18	2.12	0.30	2.12	0.21	1.75	TAC	5.84	5.26	1.65	
(0.42,	(3.02,	(2.07,	(0.75,	(0.60	(0.18	(0.72,	(0.89,	(0.60,	(0.51,	(0.13,	(1.46,	,	E	(1.06,	(0.97,	(0.85,	3.73	5.36
10.82)	12.40)	71.73	3.63)	,	,	2.64)	2.01)	7.88)	8.61)	0.69)	3.16)	12.86	)	33.80)	29.30)	3.22)	(1.29,	(0.29,
		)		9.13)	4.08)											10.58)	292.6	
0.36	1.04	2.10	0.28	0.40	0.15	0.24	0.23	0.37	0.36	0.05	0.36	0.30	0.17	TACE	0.91	0.28	0.64	0.95
(0.03,	(0.17,	(0.18,	(0.04,	(0.04	(0.02	(0.04,	(0.04,	(0.05,	(0.04,	(0.01,	(0.07,	(0.02	(0.03	+MWA	(0.08,	(0.06,	(0.09,	(0.03,
3.81)	6.40)	22.56	1.72)	,	,	1.35)	1.24)	2.96)	3.26)	0.32)	1.97)	,	,	9.80)	1.38)	4.57)	69.43)	
		)	3.55)	1.43)														
0.39	1.15	2.30	0.31	0.44	0.16	0.26	0.25	0.41	0.40	0.06	0.40	0.33	0.19	TACE	0.31	0.71	1.04	
(0.04,	(0.19,	(0.21,	(0.05,	(0.05	(0.02	(0.05,	(0.05,	(0.05,	(0.05,	(0.01,	(0.08,	(0.02	(0.03	+PEI	(0.05,	(0.10,	(0.04,	
4.15)	6.79)	25.76	1.93)	,	,	1.26)	1.35)	3.21)	3.40)	0.35)	2.15)	,	,	11.89)		1.74)	4.66)	73.87)
		)	3.89)	1.57)														
1.25	3.65	7.31	0.99	1.40	0.52	0.84	0.81	1.32	1.28	0.18	1.28	1.06	0.61	TACE+RFA	2.25	3.27		
(0.22,	(1.58,	(1.18,	(0.40,	(0.32	(0.10	(0.38,	(0.44,	(0.34,	(0.28,	(0.07,	(0.72,	(0.12	(0.31		(0.71,	(0.17,		
7.38)	8.68)	45.29	2.41)	,	,	1.88)	1.46)	5.10)	5.70)	0.48)	2.30)	,	,	17.59)	(0.57,	194.3	5)	
		)	6.35)	2.71)														
0.56	1.63	3.30	0.44	0.62	0.23	0.37	0.36	0.58	0.57	0.08	0.57	0.47	0.27	TACE+SR	1.44			
(0.08,	(0.52,	(0.46,	(0.14,	(0.12	(0.04	(0.12,	(0.13,	(0.13,	(0.11,	(0.02,	(0.22,	(0.22	(0.09		(0.22,	(0.21,	(0.15,	
3.95)	5.28)	24.91	1.46)	,	,	1.15)	0.99)	2.87)	3.07)	0.28)	1.53)	,	,	11.28)	9.90)	1.41)		
		)	3.48)	1.38)														
0.37	1.13	2.25	0.30	0.42	0.16	0.26	0.25	0.39	0.38	0.06	0.39	0.00	0.19	TARE	1.05	0.96	0.31	0.69
(0.01,	(0.02,	(0.03,	(0.01,	(0.01	(0.00	(0.00,	(0.00,	(0.01,	(0.01,	(0.00,	(0.01,	(0.01,	(0.00		(0.01,	(0.01,	(0.01,	
11.13)	22.65)	64.31	6.31)	10.63	4.01)	4.92)	4.58)	9.88)	9.44)	1.16)	7.35)	10.85	3.40)	)	31.83)	27.58)	5.92)	14.73)
		)																

### BCLC Stage B. 1-year overall survival

RFA	0.19	1.92	1.69	0.73	1.06	0.84	2.98	2.01	4.06	2.30	12.00	0.84							
	(0.02,	(0.22,	(0.13,	(0.06	(0.08	,	(0.09,	(0.08,	(0.35,	(0.19,	(0.67,	(0.07							
	2.07)	18.56	22.49)	,	9.27)	16.32	8.15)	95.25)	43.89	49.25)	28.03)	249.9	,						
												9)	11.17						
5.20	10.04	3.80	5.52	8.73	(1.02	(1.03	4.39	14.83	10.34	20.99	11.86	60.73	4.43						
(0.48,	(4.64,	(4.64,	(1.82,	,	,	,	(2.03,	(0.83,	(1.15,	(5.72,	(3.06,	(8.00,	(1.06						
53.59)	23.55	42.03)	14.72	30.98	10.07)	256.18)	)	)	95.86	81.67)	46.36)	547.1	,						
												9)	20.12						
0.52	0.10	0.37	0.54	0.87	(0.11	(0.11	0.43	1.46	1.03	2.06	1.18	5.99	0.44						
(0.05,	(0.04,	(0.04,	(0.21,	(0.28,	(0.09,	(0.12,	(0.65)	22.51)	8.57)	(0.67,	(0.35,	(0.88,	(0.12						
4.49)	0.22)	3.39)	1.27)	2.53)					6.66)	3.81)		45.87	,						
												1.59)							
0.59	0.11	1.16	SR+RF	0.43	0.64	0.50	1.68	1.19	2.40	1.37	6.98	0.51							
(0.04,	(0.02,	(0.29,	A	(0.07	(0.08	(0.13,	(0.08,	(0.09,	(0.41,	(0.23,	(0.68,	(0.08							
7.73)	0.55)	4.72)		2.64)	4.57)	1.99)	34.40)	)	14.11)	8.07)		81.25	,						
												3.29)							
1.36	0.26	2.68	2.30	Soraf	1.44	1.16	3.85	2.73	5.49	3.11	16.19	1.17							
(0.11,	(0.07,	(0.78,	(0.38,	enib	(0.22	(0.36,	(0.20,	(0.24,	(1.15,	(0.61,	(1.68,	(0.20							
16.85)	0.98)	9.20)	13.49)	,	10.22	3.76)	73.17)	)	27.60	27.45)	15.76)	185.8	,						
												2)	6.35						
0.94	0.18	1.84	1.57	TAC	0.69	0.80	2.69	1.89	3.88	2.15	11.25	0.81							
(0.06,	(0.03,	(0.40,	(0.22,		(0.10	(0.17,	(0.12,	(0.14,	(0.61,	(0.33,	(0.92,	(0.11							
13.07)	0.97)	8.78)	11.95)		4.59)	3.52)	60.6												

0.44 (0.04, 5.25)	0.08 (0.02, 0.33)	0.85 (0.26, 2.83)	0.73 (0.12, 4.31)	0.32 (0.06 1.65) )	0.47 (0.07 3.01) )	0.37 (0.12, 1.15) )	1.26 (0.06, 23.30) )	0.88 (0.08, 9.05) )	1.78 (0.38, 8.60) )	TACE+ RT	5.20 (0.55, 54.27 , )	0.38 (0.07 1.97) )
0.08 (0.00, 1.49)	0.02 (0.00, 0.13)	0.17 (0.02, 1.14)	0.14 (0.01, 1.48)	0.06 (0.01 0.60) )	0.09 (0.01 1.08) )	0.07 (0.01, 0.50) )	0.24 (0.01, 6.97) )	0.17 (0.01, 2.83) )	0.35 (0.03, 3.34) )	0.19 (0.02, 1.82) )	TAC E+S R	0.07 (0.01 0.70) )
1.19 (0.09, 13.93)	0.23 (0.05, 0.95)	2.29 (0.63, 8.32)	1.97 (0.30, 12.13)	0.86 (0.16 4.91) )	1.24 (0.18 8.86) )	0.99 (0.29, 3.41) )	3.39 (0.18, 66.75) )	2.31 (0.21, 26.19) )	4.72 (0.93, 24.78) )	2.66 (0.51, 14.17) )	13.62 (1.42, 4) TAR	156.4 E

### BCLC Stage B. 3-year overall survival

RFA	1.01 (0.06, 20.38)	11.37 (0.92, 190.7 4)	7.94 (0.37, 228.14)	4.96 (0.21 3) 3.95 (0.16 0) )	3.69 (0.16 3) 14.82 (0.08 3) 2.22 (0.02 2) )	17.80 (1.13, 401.19) 4)	4.80 (0.16, 160.25) 3)	9 (4.64, 5.33E +3) 1)	137.7 (430.8 +3) 16.16
0.99 (0.05, 16.63)	SC	11.30 (3.81, 39.86 )	8.06 (1.03, 65.55 )	4.86 (0.68 3) 3.81 (0.44 0) )	3.75 (1.22, 38.00 )	13.97 (0.15, 39.25 3) 2.26 (0.05, 12.96 0) )	17.68 (3.75, 104.25) 3)	4.64 (0.41, 53.76) 5)	136.6 (11.5 +3) 15.67
0.09 (0.01, 1.08)	SR	0.70 (0.12, 3.89)	0.44 (0.06 3) 0.34 (0.05 2.62) 2.37)	0.33 (0.19, 0.55) 1.22 (0.01, 114.19 0) 0.19 (0.00, 5.12) )	1.22 (0.01, 114.19) 0.19 (0.00, 5.12) )	1.57 (0.43, 5.81) 0.42 (0.04, 3.49) )	11.91 (1.21, 116.4 8) 1.38 9.00)	1.38 (2.17 4, 144.2 5) )	
0.13 (0.00, 2.70)	SR+RF A	0.62 (0.05 7.01)	0.48 (0.04 6.40) 0.47 (0.09, 2.63) 1.76 (0.01, 229.96 0) 0.28 (0.00, 10.55 0)	0.28 (0.00, 10.55 0) 2.25 (0.27, 18.92) 0.60 (0.04, 8.90) )	2.25 (0.27, 18.92) 0.60 (0.04, 8.90) )	16.89 (1.03, 319.5 7) 1.98 25.89 )	1.98 (0.17 7) )		
0.20 (0.01, 4.76)	Soraf enib	2.29 (0.38, 15.56 )	1.62 (0.14, 19.48 )	0.79 (0.06 10.41 0) 0.76 (0.13, 4.71 0) 2.91 (0.03, 389.68 0) 0.45 (0.01, 18.23 0) )	0.45 (0.01, 18.23 0) 3.60 (0.48, 32.88) 0.96 (0.06, 15.10 0) 27.61 (1.52, 566.4 7) 3.19 40.18 )	3.60 (0.48, 32.88) 0.96 (0.06, 15.10 0) 27.61 (1.52, 566.4 7) 3.19 40.18 )			
0.25 (0.01, 6.08)	2.96 (0.42, 21.70 )	2.08 (0.16, 26.53 )	1.27 (0.10 17.07 0) TAC	0.97 (0.14, 6.38) 3.62 (0.03, 490.31 0) 0.58 (0.01, 24.66 0) 4.58 (0.51, 44.81) 1.21 (0.07, 21.14) 35.41 (1.90, 716.3 0) 4.10 56.55 )	3.62 (0.03, 490.31 0) 24.66 (0.01, 24.66 0) 4.58 (0.51, 44.81) 1.21 (0.07, 21.14) 35.41 (1.90, 716.3 0) 4.10 56.55 )				
0.27 (0.02, 3.37)	3.03 (0.08, 3.82 )	2.13 (1.82, 5.27 )	1.32 (0.21 7.41) 1.03 (0.16 6.90) TACE	3.74 (0.05, 350.41) 0.59 (0.01, 14.83 0) 4.72 (1.51, 15.56) 1.26 (0.15, 10.12) 36.00 (3.58, 375.5 8) 4.18 25.29 )	0.59 (0.01, 14.83 0) 15.56 (1.51, 10.12) 1.26 (0.15, 10.12) 36.00 (3.58, 375.5 8) 4.18 25.29 )				
0.07 (0.00, 11.82)	0.82 (0.01, 6.89)	0.57 (0.00, 68.94 0) 0.34 (0.00 39.63 0) 0.28 (0.00 32.01 0) TACE +MWA	0.57 (0.00 39.63 0) 0.28 (0.00 32.01 0) 0.28 (0.00 22.05 0) 0.15 (0.00 39.77 0) 1.30 (0.01, 89.93) 0.33 (0.00, 44.37) 9.82 (0.06, 1302. 60) 1.15 )	0.15 (0.00 39.77 0) 1.30 (0.01, 89.93) 0.33 (0.00, 44.37) 9.82 (0.06, 1302. 60) 1.15 )					
0.45 (0.01, 40.93)	5.17 (0.20, 228.9 1)	3.57 (0.09, 213.13 0) 2.23 (0.05 149.7 0) 1.73 (0.04 111.7 0)	6.83 (0.03, 2070.7 2) TAC E+PE I	6.83 (0.03, 2070.7 2) 8.16 (0.25, 397.46) 2.14 (0.05, 144.37) 62.40 (1.17, 5112. 59) 7.36 445.2 6)	8.16 (0.25, 397.46) 2.14 (0.05, 144.37) 62.40 (1.17, 5112. 59) 7.36 445.2 6)				
0.06 (0.00, 0.88)	0.64 (0.17, 0.27 )	0.44 (0.05, 0.27 )	0.28 (0.03 2.09) 0.22 (0.02 1.98) TACE+ RFA	0.21 (0.06 0.66) 0.77 (0.01 0.66) 0.12 (0.00 66.81) 4.01 0.27 (0.02, 2.86) 100.1 (0.57, 7) 7.59 7.55 )	0.21 (0.06 0.66) 0.77 (0.01 0.66) 0.12 (0.00 66.81) 4.01 0.27 (0.02, 2.86) 100.1 (0.57, 7) 7.59 7.55 )				
0.21 (0.01, 6.09)	0.22 (0.02, 22.91 )	1.68 (0.11, 27.40 0) 1.05 (0.07 15.93 0) 0.83 (0.07 14.53 0)	0.47 (0.01, 20.44 0) 3.76 (0.35, 48.65) TACE+ RT	0.47 (0.01, 20.44 0) 3.76 (0.35, 48.65) 29.01 (1.32, 696.9 7) 3.39 56.30 )	0.47 (0.01, 20.44 0) 3.76 (0.35, 48.65) 29.01 (1.32, 696.9 7) 3.39 56.30 )				
0.01 (0.00, 0.22)	0.08 (0.01, 0.09 )	0.06 (0.00, 0.82 )	0.04 (0.00 0.66) 0.03 (0.00 0.53) 0.03 (0.00 0.66) 0.10 (0.00 0.86) 0.02 (0.00 1.76) 0.13 (0.01 0.76) 0.03 (0.00 0.76) TAC E+S R	0.04 (0.00 0.66) 0.03 (0.00 0.53) 0.03 (0.00 0.66) 0.10 (0.00 0.86) 0.02 (0.00 1.76) 0.13 (0.01 0.76) 0.03 (0.00 0.76) 0.12 (0.01 2.37) 0.12 2.37 )	0.04 (0.00 0.66) 0.03 (0.00 0.53) 0.03 (0.00 0.66) 0.10 (0.00 0.86) 0.02 (0.00 1.76) 0.13 (0.01 0.76) 0.03 (0.00 0.76) 0.12 (0.01 2.37) 0.12 2.37 )				
0.06 (0.00, 1.35)	0.72 (0.11, 0.46 )	0.50 (0.04, 4.11 )	0.31 (0.02 3.58) 0.24 (0.02 3.08) TACE+ RFA	0.24 (0.04 1.23) 0.87 (0.04 117.41) 0.14 (0.01 5.59) 1.11 (0.13 9.51) 0.29 (0.02 4.36) 8.59 (0.42, 5) 0.90 100.1 7) 7.59 7.55 )	0.24 (0.04 1.23) 0.87 (0.04 117.41) 0.14 (0.01 5.59) 1.11 (0.13 9.51) 0.29 (0.02 4.36) 8.59 (0.42, 5) 0.90 100.1 7) 7.59 7.55 )				

### BCLC Stage C. 1-year overall survival

HAC	2.10 (0.21, 22.44)	3.55 (0.99, 13.72)	0.83 (0.35, 12.92)	0.90 (0.06, 11.57)	0.05 (0.01, 26.98)	0.33 (0.04, 2.49)	0.70 (0.19, 2.52)	0.40 (0.05, 3.72)	2.04 (0.29, 14.87)	0.90 (0.09, 8.44)	3.19 (0.43, 23.60)	2.14 (0.19, 24.22)	2.69 (0.22, 40.11)	0.95 (0.22, 3.97)	2.30 (0.33, 16.19)	0.21 (0.06, 0.74)	0.38 (0.11, 1.35)	1.90 (0.15, 23.55)	0.41 (0.01, 27.93)	0.50 (0.03, 7.97)	0.26 (0.03, 2.01)	0.56 (0.04, 6.97)	1.20 (0.08, 15.86)	1.18 (0.27, 4.99)	3.87 (0.84, 16.86)	1.2 (0.2, 5.2)			
0.48 (0.04, 4.79)	HAC+ RFA (0.11, 25.36)	1.68 (0.05, 19.31)	0.40 (0.01, 13.23)	0.42 (0.01, 24.37)	0.02 (0.00, 3.38)	0.16 (0.01, 3.38)	0.33 (0.02, 4.72)	0.19 (0.01, 4.83)	0.94 (0.05, 19.13)	0.42 (0.02, 9.90)	1.54 (0.07, 33.56)	0.99 (0.04, 27.03)	1.25 (0.03, 48.90)	0.45 (0.05, 6.90)	1.05 (0.05, 23.31)	0.10 (0.01, 1.39)	0.18 (0.01, 2.49)	0.91 (0.03, 26.86)	0.19 (0.00, 26.08)	0.23 (0.01, 8.29)	0.12 (0.01, 2.72)	0.26 (0.01, 7.69)	0.57 (0.02, 18.36)	0.56 (0.03, 8.75)	1.79 (0.11, 28.73)	0.5 (0.0, 9.1)			
0.28 (0.07, 1.01)	HAC +RT (0.06, 8.88)	0.60 (0.04, 8.88)	0.59 (0.01, 5.45)	0.24 (0.01, 4.32)	0.25 (0.00, 9.00)	0.01 (0.01, 1.04)	0.09 (0.01, 1.15)	0.20 (0.03, 1.44)	0.11 (0.01, 6.03)	0.57 (0.05, 3.35)	0.25 (0.02, 9.41)	0.90 (0.08, 9.40)	0.60 (0.04, 14.91)	0.77 (0.04, 1.83)	0.27 (0.06, 6.40)	0.64 (0.01, 0.35)	0.11 (0.02, 0.62)	0.54 (0.03, 8.67)	0.12 (0.00, 9.36)	0.14 (0.01, 2.88)	0.07 (0.01, 0.78)	0.16 (0.01, 2.59)	0.34 (0.02, 6.00)	0.33 (0.04, 2.30)	1.08 (0.14, 7.65)	0.3 (0.0, 5.5)			
0.47 (0.08, 2.88)	HAC+S orafenib (0.18, 19.63)	1.00 (0.05, 16.01)	1.69 (0.05, 15.83)	0.40 (0.01, 7.24)	0.42 (0.02, 0.15)	0.02 (0.00, 1.96)	0.16 (0.01, 2.14)	0.33 (0.05, 2.42)	0.19 (0.02, 10.32)	0.96 (0.09, 5.37)	0.43 (0.03, 17.62)	0.13 (0.07, 16.70)	0.06 (0.06, 27.81)	1.26 (0.07, 3.23)	0.46 (0.11, 11.48)	1.08 (0.11, 0.65)	0.10 (0.02, 1.06)	0.18 (0.03, 14.61)	0.92 (0.05, 16.08)	0.20 (0.01, 5.08)	0.23 (0.01, 1.37)	0.12 (0.01, 4.52)	0.27 (0.01, 10.76)	0.57 (0.03, 3.93)	1.82 (0.24, 12.84)	0.5 (0.0, 1.1)			
1.21 (0.09, 16.90)	HIF U (0.23, 82.96)	2.49 (0.08, 87.28)	4.24 (0.14, 49.77)	2.49 (0.08, 49.77)	1.05 (0.03, 54.58)	0.06 (0.01, 8.71)	0.40 (0.02, 8.97)	0.84 (0.08, 9.87)	0.48 (0.02, 39.29)	2.46 (0.15, 39.29)	1.06 (0.21, 20.76)	3.79 (0.10, 69.53)	2.52 (0.11, 65.45)	3.21 (0.09, 92.70)	1.14 (0.18, 13.19)	2.70 (0.18, 43.22)	0.25 (0.02, 2.95)	0.46 (0.04, 55.46)	2.28 (0.09, 49.20)	0.49 (0.00, 17.30)	0.60 (0.02, 5.62)	0.31 (0.03, 16.26)	0.67 (0.03, 37.37)	1.41 (0.05, 17.81)	4.54 (0.36, 57.48)	1.4 (0.1, 17.97)			
1.11 (0.04, 27.67)	2.35 (0.04, 124.29)	3.96 (0.11, 130.6)	0.95 (0.02, 75.96)	2.39 (0.06, 75.96)	0.06 (0.01, 39.18)	0.79 (0.03, 1.18)	0.45 (0.01, 12.50)	2.25 (0.07, 14.56)	61.24 (0.07, 61.24)	0.99 (0.03, 105.9)	3.59 (0.10, 96.50)	2.34 (0.06, 139.08)	3.04 (0.04, 23.46)	1.08 (0.07, 70.60)	2.57 (0.07, 5.10)	0.24 (0.01, 8.40)	0.43 (0.02, 82.22)	2.15 (0.04, 68.91)	0.46 (0.01, 27.09)	0.57 (0.01, 8.60)	0.29 (0.01, 23.02)	0.62 (0.01, 59.15)	1.30 (0.03, 59.15)	1.29 (0.05, 92.81)	1.4 (0.0, 30.71)				
19.26 (5.76, 71.68)	41.15 (3.03, 609.77)	68.19 (12.1, 7)	16.23 (40.61, 186.3)	17.23 (1.49, 1.6)	16.23 (1.49, 1.6)	7.23 (6.47, 1)	17.23 (6.47, 1)	SC (0.94, 48.07)	6.44 (6.83, 52.37)	13.59 (11.17, 52.37)	7.92 (7.87, 207.28)	39.60 (2.45, 9)	17.55 (129.2, 3)	62.35 (351.3, 3)	40.46 (437.3, 3)	52.14 (50.19)	18.45 (236.82)	43.61 (10.15)	4.10 (1.80, 14.93)	7.43 (3.94, )	36.64 (374.69)	7.87 (495.03)	9.78 (124.23)	5.06 (28.56)	10.85 (109.56)	22.93 (273.85)	22.57 (67.11)	74.18 (228.17)	24. (69.17)
3.00 (0.40, 23.13)	6.33 (0.30, 148.94)	10.62 (0.96, 120.9)	2.50 (0.11, 83.65)	2.75 (0.08, 52.04)	0.16 (0.02, 106.9)	0.16 (0.02, 1.06)	SCT (0.30, 13.84)	2.12 (0.30, 17.02)	1.23 (0.09, 64.85)	6.09 (0.53, 17.02)	2.68 (0.19, 8)	9.88 (39.19, 8)	6.36 (108.3, 8)	6.36 (55.69, 8)	2.86 (163.49)	6.83 (22.46)	0.64 (0.09, 83.88)	1.16 (0.16, 4.72)	5.77 (0.62, 4.72)	1.21 (0.09, 7.96)	1.21 (100.41)	1.49 (109.83)	0.79 (34.36)	1.69 (34.36)	3.64 (8.98)	3.54 (30.39)	11.55 (73.63)	6.6 (94.35)	3.7 (94.35)
1.42 (0.40, 5.28)	3.03 (0.21, 44.01)	4.94 (0.87, 34.67)	1.19 (0.11, 19.23)	1.27 (0.06, 13.29)	0.07 (0.04, 33.12)	0.47 (0.07, 0.15)	SR (0.09, 3.46)	0.58 (0.67, 13.07)	2.88 (0.19, 8.45)	1.27 (0.93, 22.96)	0.93 (0.35, 29.64)	3.80 (0.38, 41.39)	1.36 (0.58, 3.08)	3.20 (0.74, 14.94)	0.30 (0.13, 0.72)	0.54 (0.31, 0.97)	2.68 (0.27, 26.16)	0.58 (0.01, 37.39)	0.72 (0.05, 8.76)	0.37 (0.02, 1.85)	0.80 (0.08, 7.54)	1.68 (0.08, 18.74)	1.66 (0.15, 4.37)	5.42 (0.15, 15.78)	7 (15.78)	1.7 (15.78)			
2.47 (0.27, 21.61)	5.27 (0.21, 130.51)	8.79 (0.69, 120.4)	2.07 (0.10, 41.10)	2.21 (0.07, 82.27)	0.13 (0.02, 0.86)	0.82 (0.06, 11.67)	1.71 (0.29, 10.59)	SR+HA C (0.50, 50.72)	4.90 (0.17, 28.76)	2.19 (0.76, 86.22)	7.86 (0.32, 97.56)	5.20 (0.38, 129.49)	6.65 (0.33, 17.57)	2.32 (0.57, 57.36)	5.59 (3.95)	0.52 (6.08)	0.93 (87.80)	4.59 (97.42)	1.01 (26.12)	1.23 (7.02)	0.64 (24.52)	1.37 (57.20)	2.86 (57.20)	2.87 (22.18)	9.26 (78.75)	4 (11)	3.0 (11)		
0.49 (0.07, 3.44)	1.06 (0.05, 21.50)	1.76 (0.17, 18.61)	1.04 (0.10, 10.87)	0.41 (0.02, 6.62)	0.45 (0.03, 13.65)	0.03 (0.00, 0.13)	0.16 (0.02, 1.88)	0.35 (0.08, 1.50)	0.20 (0.02, 2.01)	SR+PV C (4.68)	1.58 (14.42)	1.04 (14.57)	1.34 (20.91)	0.47 (2.46)	1.12 (9.17)	0.11 (0.14)	0.19 (0.02)	0.94 (0.06)	0.20 (0.01)	0.25 (0.01)	0.13 (0.01)	0.27 (0.02)	0.59 (0.03)	0.57 (0.03)	1.87 (11.15)	2 (11.15)	0.6 (11.15)		
1.11 (0.12, 10.68)	2.37 (0.10, 10.68)	4.00 (0.30, 10.68)	0.94 (0.05, 31.25)	1.01 (0.03, 17.96)	0.06 (0.01, 39.67)	0.37 (0.01, 5.25)	0.79 (0.12, 5.21)	0.46 (0.03, 5.96)	2.28 (0.21, 24.93)	SR+ RFA (43.46)	3.60 (45.46)	2.35 (64.82)	3.00 (8.07)	1.06 (29.04)	2.56 (1.78)	0.24 (0.03)	0.43 (0.06)	2.13 (0.11)	0.46 (0.01)	0.56 (0.02)	0.29 (0.02)	0.62 (0.04)	1.33 (0.07)	1.30 (10.79)	4.24 (26.93)	8 (34.65)	1.3 (34.65)		
0.31 (0.04, 2.35)	0.65 (0.03, 14.36)	1.12 (0.11, 12.69)</td																											

0.47	1.01	1.67	0.98	0.40	0.43	0.01	0.02	0.16	0.34	0.19	0.96	0.43	(0.10	1.54	SR+	1.28	0.45	1.09	0.10	0.18	0.89	0.19	0.23	0.12	0.26	0.56	0.56	1.81	0.5	
(0.04,	(0.04,	27.68	(0.06,	(0.02,	,	(0.00,	(0.02,	(0.03,	(0.01,	(0.07,	(0.02,	,	(0.10,	),	SCT	(0.05,	(0.04,	(0.07,	(0.01,	(0.02,	(0.04,	(0.00,	(0.01,	(0.01,	(0.02,	(0.05,	(0.16,	9	0.84	
5.17)	27.24)	)	15.77)	9.56)	,	20.02	0.22)	1.29)	2.86)	3.13)	12.85)	7.15)	21.63)	)		29.79)	4.44)	14.84)	1.01)	1.58)	20.51)	21.40)	6.53)	1.75)	5.80)	13.70)	5.69)	19.48)	(0.0,	
0.37	0.80	1.31	0.79	0.31	0.33	0.01	0.02	0.12	0.26	0.15	0.75	0.33	(0.07	0.03	1.19	0.78	SR+So	0.35	0.84	0.08	0.14	0.71	0.15	0.19	0.10	0.21	0.43	0.44	1.42	0.4
(0.02,	(0.02,	26.63	(0.04,	(0.04,	,	(0.00,	(0.01,	(0.02,	(0.01,	(0.05,	(0.02,	,	(0.02,	),	rafenib	(0.03,	(0.05,	(0.01,	(0.01,	(0.03,	(0.00,	(0.01,	(0.01,	(0.02,	(0.03,	(0.11,	6	0.66		
5.29)	25.36)	)	15.20)	9.06)	,	15.82	0.20)	2.54)	2.64)	2.64)	12.77)	6.65)	20.37	20.05)	)		4.05)	12.96)	0.96)	1.56)	17.70)	17.14)	5.77)	1.73)	5.64)	11.64)	5.49)	17.55)	(0.0,	
1.05	2.21	3.72	2.20	0.88	0.92	(0.08	(0.04	0.05	0.35	0.74	0.43	2.12	0.94	(0.63	(0.23	2.84	SR+TA	2.36	0.23	0.40	2.00	0.42	0.53	0.27	0.58	1.23	1.23	3.99	1.3	
(0.25,	(0.15,	27.85	(0.31,	(0.31,	,	(0.02,	(0.04,	(0.32,	(0.06,	(0.41,	(0.12,	,	(0.25,	),	CE	(0.44,	(0.08,	(0.17,	(0.18,	(0.01,	(0.04,	(0.05,	(0.06,	(0.10,	(0.42,	(1.24,	1	1.85		
4.50)	34.11)	)	16.28)	11.13	24.84	0.14)	2.82)	1.72)	3.00)	11.75)	6.99)	18.42	24.18	35.27)	)		14.07)	0.64)	0.97)	20.93)	28.91)	7.17)	1.69)	6.29)	15.19)	3.66)	13.43)	(0.4,		
0.44	0.95	1.57	0.93	0.37	0.39	(0.01	0.02	0.15	0.31	0.18	0.89	0.39	(0.16	(0.07	1.43	0.92	SR+TA	0.10	0.17	0.83	0.18	0.22	0.11	0.25	0.52	0.52	1.69	0.5		
(0.06,	(0.04,	16.04	(0.09,	(0.09,	,	(0.00,	(0.01,	(0.07,	(0.02,	(0.11,	(0.03,	,	(0.08,	),	CE+PV	(0.02,	(0.03,	(0.05,	(0.00,	(0.01,	(0.02,	(0.03,	(0.09,	(0.28,	(0.28,	0.9,	0.79			
3.01)	18.71)	)	9.38)	5.70)	,	13.35	0.11)	1.60)	1.36)	1.75)	7.13)	4.23)	12.46	14.14	19.67)	)		0.50)	0.80)	12.86)	14.71)	3.94)	0.61)	3.64)	8.73)	2.93)	9.95)	3.2,		
4.67	9.98	16.33	9.78	3.94	4.15	(0.34	(0.20	0.24	1.55	3.30	1.92	9.49	4.19	15.11	9.82	Sorafe	1.79	8.88	1.95	2.33	1.23	2.62	5.51	5.49	17.93	4	5.8			
(1.35,	(0.72,	(2.89,	(1.54,	(1.54,	,	(0.10,	(0.21,	(1.40,	(0.25,	(1.75,	(1.75,	32.14)	(2.49	(0.99	12.59	4.44	10.46	(0.84,	(0.83,	(0.03,	(0.18,	(0.21,	(0.25,	(0.48,	(1.93,	(6.53,	(2.3,			
17.07)	140.80	107.4	65.31)	46.42	107.1	0.56)	11.58)	7.74)	13.38)	51.10)	)	)	89.57	107.8	160.54)	13.09)	)	3.80)	89.36)	130.42	30.41)	7.35)	25.90)	68.24)	15.73)	49.12)	4,	52.54)		
2.60	5.52	9.10	5.50	2.17	2.31	(0.21	(0.12	0.13	0.86	1.84	1.08	5.36	2.34	8.33	5.43	TACE	4.93	1.06	1.32	0.68	1.46	3.07	3.05	9.94	4	3.2				
(0.74,	(0.40,	60.46	(0.94,	(0.94,	,	(0.07,	(0.13,	(1.04,	(0.16,	(1.15,	(1.15,	15.43)	(1.62	(0.63	7.01	2.50	5.88	(0.26,	(0.53,	(0.02,	(0.11,	(0.13,	(0.17,	(0.30,	(1.29,	(3.95,	(1.3,			
9.50)	79.88)	)	34.77)	23.18	54.50	0.25)	6.42)	3.25)	6.75)	25.13)	)	)	43.89	53.32	79.59)	5.83)	)	29.41)	1.20)	42.79)	64.49)	14.74)	3.74)	13.01)	32.54)	7.51)	26.06)	7,	31.39)	
0.53	1.10	1.86	1.09	0.44	0.47	(0.02	(0.01	0.03	0.17	0.37	0.22	1.06	0.47	(0.10	(0.05	1.69	1.12	TACE	0.21	0.26	0.14	0.29	0.62	0.62	2.01	0.6				
(0.04,	(0.04,	32.81	(0.07,	(0.07,	,	(0.00,	(0.01,	(0.04,	(0.01,	(0.07,	(0.03,	0.99	4.91	2.18	7.79	5.31	+HAC	(0.00,	(0.01,	(0.01,	(0.01,	(0.03,	(0.03,	(0.06,	(0.19,	(0.05,	(0.05,			
6.66)	38.80)	)	20.44)	11.25	24.75	0.27)	3.42)	3.69)	3.83)	16.22)	9.26)	28.82	25.92	37.67)	5.42)	)	19.53)	1.20)	21.77)	7.16)	2.37)	6.33)	15.62)	6.88)	23.89)	7.2,	17.51)			
2.43	5.36	8.34	5.02	2.02	2.18	(0.02	(0.01	0.13	0.83	1.73	0.99	4.91	2.18	7.79	5.31	TACE	1.22	0.64	1.39	2.96	2.92	9.04	2	3.0						
(0.04,	(0.04,	161.06	(0.06,	(0.06,	,	(0.00,	(0.01,	(0.01,	(0.01,	(0.01,	(0.01,	199.8	(0.10	(0.05	6.53	2.36	5.62	(0.05,	(0.01,	(0.01,	(0.02,	(0.02,	(0.04,	(0.14,	(0.14,	(0.05,	(0.05,			
161.06	601.75	731.9	419.85)	216.3	344.7	7.50)	76.65)	3)	104.9	90.27)	394.87)	3)	659.9	529.1	730.22)	145.88)	432.30)	31.10)	54.59)	470.80)	149.42)	53.78)	138.98	282.83	184.2	609.26)	197,	381.99)		
2.00	4.41	7.06	4.27	1.67	1.76	(0.06	(0.04	0.10	0.67	1.40	0.81	4.01	1.80	6.48	4.27	TACE	0.53	1.11	2.35	2.34	7.73	7,	2.4							
(0.13,	(0.12,	162.28	(0.20,	(0.20,	,	(0.01,	(0.03,	(0.03,	(0.03,	(0.11,	(0.04,	18.55	(0.35	(0.15	5.36	1.90	4.55	(0.03,	(0.03,	(0.03,	(0.03,	(0.03,	(0.03,	(0.03,	(0.03,	(0.03,	(0.03,			
32.16)	143.7	)	90.76)	49.11	107.6	1.30)	16.82)	)	)	18.25)	79.64)	)	127.1	126.9	162.84)	25.80)	93.71)	5.62)	9.37)	106.93	101.73)	)	)	10.89)	29.10)	70.21)	108.67)	34,	80.03)	
3.80	8.12	13.58	8.16	3.21	3.42	(0.18	(0.12	0.20	1.27	2.69	1.55	7.71	3.41	12.24	8.08	TACE	2.10	4.51	4.49	4.49	14.49	4	4.7							
(0.50,	(0.37,	174.38	(0.73,	(0.73,	,	(0.04,	(0.11,	(0.11,	(0.11,	(0.14,	(0.14,	13.10	(0.29	(0.																

## BCLC Stage D. 1-year overall survival

	0.17 (0.01, 4.95)	0.19 (0.02, 1.52)
5.93 (0.20, 195.80)	RFA	1.10 (0.08, 13.62)
)	)	
5.22 (0.66, 62.75)	0.91 (0.07, 13.03)	TAC E

## **BCLC Stage D. 1-year overall survival**

LT	0.61 (0.00, 724.43 )	0.00 (0.00, 0.01)
1.63 (0.00, 1982.1 9)	PEI	0.00 (0.00, 0.01)
8.90E+ 23 (191.0 3, 1.72E+ 62)	4.80E+ 23 (71.51, 1.20E+ 62)	SC

**Supplementary Table S5. Results of Node-splitting Models for the Test of Difference Between Direct and Indirect Effect.**

Items	Comparison	Direct Effect	Indirect Effect	Overall	P value
<b>BCLC Stage 0. 1-year</b>	<b>overall survival</b>				
	PEI, SR	-0.43 (-2.80, 1.99)	0.60 (-0.90, 2.53)	0.36 (-0.92, 1.88)	0.40
<b>BCLC Stage 0. 3-year</b>	<b>overall survival</b>				
	PEI, SR	-0.18 (-1.86, 1.50)	0.32 (-0.75, 1.47)	0.24 (-0.69, 1.19)	0.57
<b>BCLC Stage 0. 5-year</b>	<b>overall survival</b>				
	PEI, SR	-0.53 (-2.43, 1.36)	-0.10 (-1.37, 1.19)	-0.06 (-1.14, 1.05)	0.68
<b>BCLC Stage A. 1-year</b>	<b>overall survival</b>				
	LT, TACE	0.12 (-2.02, 2.45)	-0.68 (-1.65, 0.25)	-0.54 (-1.50, 0.33)	0.48
	MWA, RFA	0.44 (-0.73, 1.58)	-0.42 (-1.69, 0.80)	0.06 (-0.78, 0.90)	0.31
	MWA, SR	-0.21 (-1.51, 0.98)	0.64 (-0.53, 1.87)	0.25 (-0.61, 1.09)	0.31
	PEI, RFA	-0.14 (-1.04, 0.76)	-0.43 (-1.14, 0.31)	-0.34 (-0.96, 0.30)	0.59
	RFA, SR	0.22 (-0.06, 0.50)	-0.04 (-0.71, 0.63)	0.18 (-0.08, 0.44)	0.47
	RFA, TACE	0.16 (-0.62, 0.92)	-0.08 (-0.75, 0.59)	0.01 (-0.50, 0.51)	0.65
	RFA, TACE+RFA	0.48 (-0.66, 1.66)	0.89 (-0.03, 1.85)	0.70 (0.00, 1.44)	0.58
	SC, SR	1.84 (0.87, 2.89)	2.51 (1.10, 3.99)	1.94 (1.06, 2.89)	0.41
	SC, TACE	2.30 (1.00, 3.76)	1.66 (0.51, 2.84)	1.77 (0.84, 2.75)	0.44
	SR, TACE	-0.22 (-0.85, 0.43)	-0.21 (-1.00, 0.59)	-0.17 (-0.66, 0.31)	0.99
	SR, TACE+RFA	0.68 (-0.30, 1.67)	0.33 (-0.66, 1.38)	0.52 (-0.18, 1.24)	0.62
	TACE, TACE+RFA	0.83 (-0.47, 2.23)	0.60 (-0.32, 1.56)	0.69 (-0.08, 1.50)	0.77
<b>BCLC Stage A. 3-year</b>	<b>overall survival</b>				
	LT, TACE	-1.52 (-3.40, 0.31)	-1.55 (-2.32, -0.78)	-1.50 (-2.25, -0.76)	0.97
	MWA, RFA	0.64 (-0.16, 1.43)	-0.14 (-0.90, 0.63)	0.23 (-0.34, 0.78)	0.17
	MWA, SR	0.35 (-0.37, 1.05)	1.13 (0.32, 1.95)	0.71 (0.15, 1.27)	0.15
	PEI, RFA	-0.49 (-1.60, 0.60)	-0.27 (-0.94, 0.39)	-0.30 (-0.91, 0.30)	0.73
	RFA, SR	0.51 (0.29, 0.73)	0.33 (-0.21, 0.87)	0.48 (0.28, 0.69)	0.55
	RFA, TACE	-0.22 (-0.84, 0.40)	0.08 (-0.48, 0.62)	-0.07 (-0.47, 0.33)	0.47
	RFA, TACE+RFA	0.47 (-0.41, 1.37)	0.02 (-0.60, 0.63)	0.17 (-0.34, 0.68)	0.41
	SC, SR	2.00 (1.06, 2.97)	2.39 (1.12, 3.81)	2.08 (1.21, 2.96)	0.57
	SC, TACE	1.85 (0.62, 3.14)	1.44 (0.42, 2.49)	1.53 (0.63, 2.46)	0.56
	SR, TACE	-0.65 (-1.17, -0.15)	-0.40 (-1.01, 0.21)	-0.55 (-0.94, -0.16)	0.53
	SR, TACE+RFA	-0.16 (-0.81, 0.50)	-0.50 (-1.25, 0.24)	-0.31 (-0.80, 0.18)	0.49
	TACE, TACE+RFA	-0.09 (-1.03, 0.87)	0.36 (-0.35, 1.05)	0.24 (-0.32, 0.80)	0.45
<b>BCLC Stage A. 5-year</b>	<b>overall survival</b>				

LT, PEI	-1.91 (-3.43, -0.40)	-1.28 (-2.19, -0.38)	-1.46 (-2.30, -0.65)	0.44
LT, RFA	-0.17 (-1.66, 1.24)	-1.57 (-2.22, -0.95)	-1.50 (-2.15, -0.86)	0.06
LT, SC	-2.79 (-4.43, -1.17)	-3.22 (-4.54, -2.00)	-3.01 (-4.01, -2.01)	0.65
LT, SR	-1.14 (-1.79, -0.53)	-0.62 (-1.77, 0.51)	-1.04 (-1.66, -0.43)	0.38
LT, TACE	-1.91 (-3.14, -0.70)	-1.77 (-2.56, -1.03)	-1.79 (-2.51, -1.11)	0.82
MWA, RFA	-0.45 (-2.57, 1.50)	-0.17 (-0.96, 0.59)	-0.20 (-0.92, 0.54)	0.79
MWA, SR	0.29 (-0.46, 1.03)	0.03 (-2.10, 2.01)	0.26 (-0.43, 0.97)	0.80
PEI, RFA	-0.10 (-1.02, 0.82)	-0.04 (-0.65, 0.61)	-0.04 (-0.61, 0.55)	0.92
PEI, SC	-1.04 (-2.48, 0.35)	-1.76 (-3.10, -0.53)	-1.54 (-2.49, -0.61)	0.44
PEI, SR	0.39 (-0.22, 1.01)	0.24 (-0.59, 1.11)	0.42 (-0.12, 0.99)	0.78
PEI, TACE	-0.35 (-1.65, 0.95)	-0.25 (-0.95, 0.44)	-0.33 (-0.99, 0.33)	0.88
RFA, SC	-2.04 (-3.54, -0.61)	-1.73 (-2.90, -0.63)	-1.51 (-2.35, -0.69)	0.73
RFA, SR	0.38 (0.16, 0.62)	0.95 (0.39, 1.51)	0.46 (0.25, 0.68)	0.07
RFA, TACE	-0.26 (-0.87, 0.33)	-0.41 (-1.03, 0.21)	-0.30 (-0.71, 0.12)	0.74
RFA, TACE+RFA	0.80 (-0.12, 1.75)	-0.15 (-0.96, 0.66)	0.21 (-0.38, 0.81)	0.12
SC, SR	1.83 (0.92, 2.74)	2.06 (1.08, 3.07)	1.96 (1.16, 2.79)	0.66
SC, TACE	1.07 (0.09, 2.12)	1.29 (0.34, 2.27)	1.21 (0.35, 2.08)	0.71
SR, TACE	-0.83 (-1.32, -0.35)	-0.38 (-1.13, 0.35)	-0.75 (-1.16, -0.36)	0.30
SR, TACE+RFA	-0.59 (-1.36, 0.18)	0.20 (-0.68, 1.10)	-0.25 (-0.83, 0.34)	0.19
TACE, TACE+RFA	0.67 (-0.71, 2.00)	0.28 (-0.48, 1.05)	0.51 (-0.16, 1.18)	0.62

#### BCLC Stage B. 1-year overall survival

SC, SR	2.17 (1.15, 3.26)	2.66 (1.62, 3.78)	2.31 (1.56, 3.15)	0.48
SC, Sorafenib	0.41 (-1.30, 2.16)	2.69 (0.90, 4.57)	1.35 (0.05, 2.68)	0.06
SC, TACE	1.98 (1.05, 2.97)	1.03 (0.01, 2.00)	1.48 (0.73, 2.29)	0.13
SR, TACE	-0.89 (-1.33, -0.46)	-0.35 (-2.10, 1.33)	-0.83 (-1.26, -0.45)	0.53

#### BCLC Stage B. 3-year overall survival

SC, SR	2.25 (0.78, 3.77)	2.75 (1.15, 4.63)	2.42 (1.36, 3.66)	0.61
SC, Sorafenib	-21.86 (-85.64, -0.87)	25.03 (4.11, 85.74)	1.60 (-0.36, 3.72)	0.09
SC, TACE	2.23 (0.74, 4.00)	0.60 (-1.00, 1.96)	1.31 (0.25, 2.57)	0.07
SR, TACE	-1.16 (-1.72, -0.62)	0.22 (-2.60, 3.91)	-1.10 (-1.64, -0.58)	0.34

#### BCLC Stage C. 1-year overall survival

HAC, HAC+Sorafenib	0.43 (-2.03, 2.94)	1.15 (-1.54, 3.86)	0.71 (-1.11, 2.55)	0.68
HAC, SC	-2.33 (-4.39, -0.60)	-3.50 (-5.16, -1.92)	-2.97 (-4.30, -1.74)	0.35
HAC, SCT	-2.23 (-6.04, 0.65)	-0.24 (-3.09, 2.55)	-1.08 (-3.15, 0.90)	0.33
HAC, Sorafenib	-1.64 (-3.43, 0.10)	-1.47 (-3.31, 0.26)	-1.54 (-2.78, -0.30)	0.89

HAC+Sorafenib, TACE	-1.99 (-4.30, 0.31)	-1.30 (-4.23, 1.57)	-1.67 (-3.47, 0.07)	0.70
SC, SR	2.66 (1.81, 3.61)	2.70 (1.74, 3.71)	2.61 (1.95, 3.32)	0.95
SC, SR+TACE	2.20 (0.83, 3.65)	3.69 (2.59, 4.87)	2.93 (1.97, 3.90)	0.09
SC, Sorafenib	1.04 (-0.41, 2.51)	1.66 (0.64, 2.77)	1.44 (0.59, 2.30)	0.47
SC, TACE	2.25 (1.50, 3.07)	1.64 (0.81, 2.54)	2.01 (1.38, 2.70)	0.27
SC, TACE+Sorafenib	5.67 (3.11, 8.33)	3.85 (2.71, 5.07)	4.31 (3.25, 5.43)	0.20
SCT, SR	0.37 (-2.24, 2.89)	0.88 (-1.60, 3.34)	0.72 (-1.19, 2.73)	0.75
SR, SR+TACE	0.91 (-0.02, 1.85)	-1.42 (-3.01, 0.04)	0.31 (-0.51, 1.14)	0.07
SR, Sorafenib	-1.26 (-3.74, 1.21)	-1.22 (-2.17, -0.29)	-1.18 (-2.04, -0.32)	0.97
SR, TACE	-0.78 (-1.45, -0.08)	-0.28 (-1.23, 0.66)	-0.59 (-1.18, -0.03)	0.40
SR, TACE+RT	0.17 (-1.98, 2.26)	0.60 (-0.48, 1.69)	0.51 (-0.42, 1.51)	0.73
SR+PVC, TACE	-2.32 (-5.17, 0.33)	-1.49 (-3.14, 0.20)	-1.65 (-3.25, -0.05)	0.59
SR+RT, SR+TACE	-0.65 (-3.09, 1.77)	-1.63 (-3.54, 0.25)	-1.22 (-2.96, 0.49)	0.49
SR+TACE, Sorafenib	-0.64 (-4.36, 2.39)	-1.42 (-2.48, -0.36)	-1.49 (-2.53, -0.44)	0.66
SR+TACE, TACE	0.16 (-1.13, 1.48)	-1.30 (-2.22, -0.36)	-0.91 (-1.76, -0.04)	0.06
SR+TACE, TACE+RT	-0.43 (-2.47, 1.69)	0.47 (-0.82, 1.80)	0.20 (-0.87, 1.30)	0.45
SR+TACE, TACE+Sorafenib	4.31 (2.04, 6.86)	0.92 (-0.38, 2.20)	1.39 (0.19, 2.60)	0.10
Sorafenib , TACE	1.41 (0.17, 2.65)	0.25 (-0.52, 1.05)	0.58 (-0.15, 1.32)	0.10
Sorafenib , TACE+RT	3.10 (1.46, 4.80)	1.05 (-0.20, 2.32)	1.70 (0.69, 2.75)	0.06
Sorafenib , TACE+Sorafenib	2.44 (1.13, 3.77)	3.22 (1.74, 4.79)	2.88 (1.88, 3.90)	0.42
Sorafenib , TARE	1.25 (-0.03, 2.53)	2.24 (0.99, 3.53)	1.75 (0.88, 2.67)	0.28
Sorafenib , TARE+Sorafenib	1.51 (-1.04, 4.01)	2.89 (0.32, 5.49)	2.12 (0.32, 3.96)	0.45
TACE, TACE+RT	0.70 (-0.44, 1.89)	1.62 (0.27, 3.05)	1.12 (0.26, 2.02)	0.30
TACE, TACE+Sorafenib	2.40 (1.32, 3.52)	0.85 (-0.85, 2.51)	2.30 (1.39, 3.24)	0.13
TACE, TARE	1.64 (0.57, 2.70)	0.31 (-1.18, 1.78)	1.17 (0.31, 2.04)	0.14
TARE, TARE+Sorafenib	0.95 (-1.43, 3.50)	-0.38 (-3.02, 2.28)	0.38 (-1.42, 2.18)	0.46