

Table SI. Summary of study design characteristics.

NCT number	Author, year	Intervention	Participants	PFS (95%CI) (months)	HR (95%CI)	OS (95%CI) (month)	HR (95%CI)	OR
NCT01668784	Motzer, 2015	Nivolumab	410	4.6 (3.7 to 5.4)	0.88 (0.75 to 1.03)	25.0 (21.8 to NA)	NA	103
NCT00410124	Motzer, 2008	Everolimus	411	4.4 (3.7 to 5.5)		19.6 (17.6 to 23.1)		22
		Everolimus	272	4.0 (3.7 to 5.5)	0.30 (0.22 to 0.40)	NA	0.83 (0.50 to 1.37)	NA
		Placebo	138	1.9 (1.8 to 1.9)		8.8 (7.9 to NA)		NA
NCT01136733	Motzer, 2015	Lenvatinib+Everolimus	51	14.6 (5.9 to 20.1)	1+e vs. e 0.40 (0.24 to 0.68)	25.5 (20.8 to 25.5)	1+e vs. e 0.51 (0.30 to 0.88)	22
		Lenvatinib	52	7.4 (5.6 to 10.2)	1+e vs. 1.066 (0.30 to 1.10)	18.4 (13.3 to NA)	1+e vs. 1.075 (0.43 to 1.30)	14
		Everolimus	50	5.5 (3.5 to 7.1)	1 vs. e 0.61 (0.38 to 0.98)	17.5 (11.8 to NA)	1 vs. e 0.68 (0.41 to 1.14)	3
NCT01865747	Choueiri, 2015	Cabozantinib	330	7.4 (5.6 to 9.1)	0.58 (0.45 to 0.75)	NA		40
		Everolimus	328	3.8 (3.7 to 5.4)		NA		9
NCT01835158	Choueiri, 2016	Cabozantinib	79	8.2 (6.2 to 8.8)	0.66 (0.46 to 0.95)	30.3 (14.6 to 35.0)	0.80 (0.50 to 1.26)	26
		Sunitinib	78	5.6 (3.4 to 8.1)		21.8 (16.3 to 27.0)		9
NCT00098657	Motzer, 2007	Sunitinib	375	11 (10 to 12)	0.42 (0.32 to 0.54)	26.4 (23.0 to 32.9)	0.821 (0.673 to 1.001)	103
		IFN- α	375	5 (4 to 6)		21.8 (17.9 to 26.9)		20
NCT00375674	Ravaud, 2016	Sunitinib	309	81.6 (69.6 to NA)	0.76 (0.59 to 0.98)	NA	0.92 (0.66-1.28)	NA
		Placebo	306	67.2 (45.6 to 79.2)		NA		NA
NCT00326898	Haas, 2016	Sunitinib	647	70 (19.2 to 98.4)	su vs. p 1.02 (0.85 to 1.23)	NA	su vs. p 1.17 (0.90 to 1.52)	NA
		Sorafenib	649	73.4 (20.4 to NA)	so vs. p 0.97 (0.80 to 1.17)	NA	so vs. p 0.98 (0.75 to 1.28)	NA
		Placebo	647	79.6 (18 to NA)		NA		NA
NCT00678392	Motzer, 2013	Axitinib	361	8.3 (6.7 to 9.2)	0.656 (0.552 to 0.779)	20.1 (16.7 to 23.4)	0.969 (0.800 to 1.174)	70
NCT00920816	Hutson, 2013	Sorafenib	362	5.7 (4.7 to 6.5)		19.2 (17.5 to 22.3)		34
		Axitinib	192	10.1 (7.2 to 12.1)	0.77 (0.56 to 1.05)	21.7 (18.0 to 31.7)	0.995 (0.731-1.356)	62
		Sorafenib	96	6.5 (4.7 to 8.3)		23.3 (18.1 to 33.2)		14
NCT00920816	Qin, 2015	Axitinib	135	6.5 (4.7 to 9.1)	0.731 (0.506 to 1.058)	NA	NA	32
		Sorafenib	69	4.8 (3.0 to 6.5)		NA		7
CALGB 90206	Rini, 2008	IFN- α +Bevacizumab	369	8.5 (7.5 to 9.7)	0.71 (0.61 to 0.83)	18.3 (16.5 to 22.5)	0.86 (0.73 to 1.01)	94
		IFN- α	363	5.2 (3.1 to 5.6)		17.4 (14.4 to 20.0)		48
NCT00065468	Hudes, 2007	IFN- α	207	3.1 (NA)	NA	7.3 (NA)	t vs. i 0.73 (0.58 to 0.92)	10
		Temsirolimus	209	5.5 (NA)		10.9 (NA)	t+ i vs. 1.096 (0.76 to 1.20)	18
NCT00474786	Hutson, 2013	Temsirolimus	210	4.7 (NA)		8.4 (NA)		17
		Temsirolimus	259	4.3 (NA)	0.87 (0.71 to 1.07)	12.3 (NA)	1.31 (1.05 to 1.63)	20
		Sorafenib	253	3.9 (NA)		16.6 (NA)		20
NCT00631371	Rini, 2013	Temsirolimus+Bevacizumab	400	9.1 (8.1 to 10.2)	1.1 (0.9 to 1.3)	25.8 (21.1 to 30.7)	1.0 (0.9 to 1.3)	108
NCT00720941	Motzer, 2013	IFN- α +Bevacizumab	391	9.3 (9.0 to 11.2)		25.5 (22.4 to 30.8)		107
		Pazopanib	557	8.4 (8.3 to 10.9)	1.05 (0.90 to 1.22)	28.4 (26.2 to 35.6)	0.91 (0.76 to 1.08)	171
		Sunitinib	553	9.5 (8.3 to 11.1)		29.3 (25.3 to 32.5)		137
NCT00334282	Sternberg, 2010	Pazopanib	290	9.2 (NA)	0.46 (0.34 to 0.62)	22.9 (NA)	0.9 (0.71-1.16)	88
		Placebo	145	4.2 (NA)		20.5 (NA)		5
NCT01223027	Motzer, 2014	Dovitinib	284	3.7 (3.5 to 3.9)	0.86 (0.72 to 1.04)	11.1 (9.5 to 13.4)	0.96 (0.75 to 1.22)	11
		Sorafenib	286	3.6 (3.5 to 3.7)	-	11.0 (8.6 to 13.5)	-	11

