

Table SI. Characteristics of the studies included in the meta-analysis.

First author, year	Country	Cancer type	Study design	ICI treatment	Sample size, n	Line of treatment	GPS/mGPS	Male/female, n	Median age, years (range)	Follow-up time, month	Score of 0/1/2, n	Analysis model	Outcome	NO S	(Refs.)
Sakai <i>et al</i> , 2022	Japan	GC	Retrospective	Nivolumab	100	Third- or further -line	GPS	78/22	71 (38-89)	5.0 (0.8-33.6)	NR	Multivariate	OS	5	(28)
Yang <i>et al</i> , 2022	China	ICC	Retrospective	Nivolumab, pembrolizumab, toripalimab, camrelizumab or sintilimab	73	NR	GPS	49/24	57 (31-75)	11.2	26/40/7	Univariate	OS	5	(29)
Kurosaki <i>et al</i> , 2020	Japan	GC	Retrospective	Nivolumab	80	Third- or further -line	GPS	67/13	71 (43-87)	5.1	30/32/18	Univariate and multivariate	PFS and OS	6	(30)
Kang <i>et al</i> , 2021	Korea	NSCLC	Retrospective	Pembrolizumab, nivolumab or atezolizumab	78	Second - or further -line	GPS	64/14	67 (38-84)	NR	19/35/24	Univariate and multivariate	PFS and OS	5	(31)
Minichsdorfer <i>et al</i> , 2022	Austria	Solid tumor	Retrospective	Pembrolizumab or nivolumab	114	First- or further -line	GPS	74/40	60(22-88)	NR	17/61/35	Univariate	PFS/OS	5	(32)
Namikawa <i>et al</i> , 2020	Japan	GC	Retrospective	Nivolumab	29	Second - or	GPS	19/10	71 (49-	32.0	NR	Univariate and	PFS and OS	5	(33)

						further -line			86)			multivari ate			
Kasajima <i>et al</i> , 2022	Japan	NSCLC	Retrospect ive	Pembrolizu mab or atezolizuma b	80	Second - or further -line	GPS	56/24	71 (44- 86)	11.1 (0.1- 60.1)	42/18/ 20	Multivari ate	PFS and OS	5	(34)
Kim <i>et al</i> , 2022	Korea	ESCC	Retrospect ive	Pembrolizu mab or nivolumab	60	Second -line	GPS	56/4	68 (52- 76)	16.0 (7.4- 24.5)	NR	Univariat e and multivari ate	PFS and OS	5	(35)
Tokuyama <i>et al</i> , 2021	Japan	GC	Retrospect ive	Nivolumab	45	Second - or further -line	GPS	31/14	65 (40- 81)	NR	25/18/ 2	Univariat e	PFS	6	(36)
Fujiwara <i>et al</i> , 2021	Japan	RCC	Retrospect ive	Nivolumab	45	First- or further -line	mGPS	NR	62 (55- 69)	26.4 (16.9- 30.3)	29/8/8	Univariat e and multivari ate	OS	6	(37)
Matsuki <i>et al</i> , 2020	Japan	HNSCC	Retrospect ive	Nivolumab	88	Second - or further -line	mGPS	71/17	67 (23- 81)	6.1 (0.8- 16.9)	41/25/ 22	Univariat e and multivari ate	PFS and OS	6	(38)
Brown <i>et al</i> , 2021 ^a	USA	UC	Retrospect ive	Atezolizuma b, pembrolizu mab or nivolumab	53	First- or further -line	mGPS	45/8	70 (32- 86)	27.1	23/15/ 15	Univariat e and multivari ate	PFS and OS	6	(39)
Brown <i>et al</i> , 2021 ^b	USA	RCC	Retrospect ive	NR	156	First- or further -line	mGPS	108/48	64 (23- 90)	24.2	57/62/ 37	Univariat e and multivari ate	PFS and OS	6	(40)
Freitas <i>et al</i> , 2021	Portug al	NSCLC	Retrospect ive	Pembrolizu mab or nivolumab	77	First- or further	mGPS	55/22	65 (44- 87)	NR	20/14/ 11	Univariat e and multivari	PFS and OS	7	(41)

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Diker <i>et al</i> , 2022	Cyprus	NSCLC	Retrospective	Pembrolizumab, nivolumab or nivolumab plus ipilimumab	102	First- or further -line	mGPS	89/13	67 (35-88)	8.4 (0.0-49.5)	35/44/23	Univariate and multivariate	PFS and OS	5	(42)
Pflug <i>et al</i> , 2021	Germany	Melanoma	Retrospective	NR	117	First-line	mGPS	66/51	NR	NR	NR	Univariate and multivariate	PFS and OS	5	(43)
Ogura <i>et al</i> , 2021	Japan	NSCLC	Retrospective	Nivolumab	34	First- or second -line	mGPS	29/5	72 (55-81)	NR	NR	Univariate	PFS and OS	6	(44)
Niwa <i>et al</i> , 2020	Japan	SGC	Retrospective	Nivolumab	24	Second - or further -line	mGPS	19/5	56 (29-82)	6.5 (0.6-28.2)	NR	Univariate	PFS and OS	5	(45)

^{a,b}Denote different studies conducted by the same author in the same year and correspond to the same studies in the figures. GC, gastric cancer; NSCLC, non-small cell lung cancer; GPS, Glasgow prognostic score; mGPS, modified GPS; NOS, Newcastle-Ottawa Scale; NR, not reported; PFS, progression-free survival; OS, overall survival; HNSCC, head and neck squamous cell carcinoma; UC, urothelial carcinoma; RCC, renal cell carcinoma; ESCC, esophageal squamous cell carcinoma; ICC, intrahepatic cholangiocarcinoma; SGC, salivary gland carcinoma.