

Supplementary Table S1. Baseline patient demographics and disease characteristics for the PD-L1 and tTMB BEPs and the ITT population

	PD-L1 BEP (N = 438)			tTMB BEP (N = 283)			ITT population (N = 805)		
	D+EP (n = 152)	D+T+EP (n = 157)	EP (n = 129)	D+EP (n = 107)	D+T+EP (n = 105)	EP (n = 71)	D+EP (n = 268)	D+T+EP (n = 268)	EP (n = 269)
Median age (range), years	63.0 (40–81)	63.0 (36–84)	63.0 (38–80)	62.0 (40–81)	63.0 (36–83)	63.0 (38–78)	62.0 (28–82)	63.0 (36–88)	63.0 (35–82)
Age group, n (%)									
<65 years	89 (58.6)	95 (60.5)	77 (59.7)	65 (60.7)	66 (62.9)	41 (57.7)	167 (62.3)	154 (57.5)	157 (58.4)
≥65 years	63 (41.4)	62 (39.5)	52 (40.3)	42 (39.3)	39 (37.1)	30 (42.3)	101 (37.7)	114 (42.5)	112 (41.6)
Sex, n (%)									
Men	111 (73.0)	113 (72.0)	89 (69.0)	78 (72.9)	75 (71.4)	44 (62.0)	190 (70.9)	202 (75.4)	184 (68.4)
Women	41 (27.0)	44 (28.0)	40 (31.0)	29 (27.1)	30 (28.6)	27 (38.0)	78 (29.1)	66 (24.6)	85 (31.6)
Race, n (%)									
White	133 (87.5)	133 (84.7)	106 (82.2)	102 (95.3)	96 (91.4)	62 (87.3)	229 (85.4)	215 (80.2)	221 (82.2)
Asian	16 (10.5)	23 (14.6)	19 (14.7)	3 (2.8)	7 (6.7)	6 (8.5)	36 (13.4)	47 (17.5)	42 (15.6)
Black	2 (1.3)	0	2 (1.6)	1 (0.9)	0	2 (2.8)	2 (0.7)	1 (0.4)	3 (1.1)
Other or missing data	1 (0.7)	1 (0.6)	2 (1.6)	1 (0.9)	2 (1.9)	1 (1.4)	1 (0.4)	5 (1.9)	3 (1.1)
Disease stage, n (%)									
III	18 (11.8)	9 (5.7)	10 (7.8)	12 (11.2)	7 (6.7)	8 (11.3)	28 (10.4)	18 (6.7)	24 (8.9)
IV	134 (88.2)	148 (94.3)	119 (92.2)	95 (88.8)	98 (93.3)	63 (88.7)	240 (89.6)	250 (93.3)	245 (91.1)
WHO PS, n (%)									
0	49 (32.2)	55 (35.0)	41 (31.8)	34 (31.8)	37 (35.2)	23 (32.4)	99 (36.9)	109 (40.7)	90 (33.5)
1	103 (67.8)	102 (65.0)	88 (68.2)	73 (68.2)	68 (64.8)	48 (67.6)	169 (63.1)	159 (59.3)	179 (66.5)
Smoking history, n (%)									
Never smoker	14 (9.2)	11 (7.0)	7 (5.4)	10 (9.3)	7 (6.7)	3 (4.2)	22 (8.2)	15 (5.6)	15 (5.6)
Former smoker	70 (46.1)	82 (52.2)	53 (41.1)	43 (40.2)	52 (49.5)	30 (42.3)	126 (47.0)	141 (52.6)	128 (47.6)
Current smoker	68 (44.7)	64 (40.8)	69 (53.5)	54 (50.5)	46 (43.8)	38 (53.5)	120 (44.8)	112 (41.8)	126 (46.8)
Brain or CNS metastases, n (%)	12 (7.9)	25 (15.9)	12 (9.3)	12 (11)	17 (16)	9 (13)	28 (10.4)	38 (14.2)	27 (10.0)
Liver metastases, n (%)	55 (36.2)	73 (46.5)	52 (40.3)	42 (39.3)	52 (49.5)	36 (50.7)	108 (40.3)	117 (43.7)	104 (38.7)
PD-L1 expression									
IC <1%	117 (77.0)	107 (68.2)	101 (78.3)						
IC ≥1%	35 (23.0)	50 (31.8)	28 (21.7)						

TC <1%	145 (95.4)	147 (93.6)	121 (93.8)						
TC ≥1%	7 (4.6)	10 (6.4)	8 (6.2)						
TC and IC <1%	114 (75.0)	103 (65.6)	97 (75.2)						
TC or IC ≥1%	38 (25.0)	54 (34.4)	32 (24.8)						
tTMB score									
<10 mut/Mb				50 (46.7)	57 (54.2)	45 (63.4)			
≥10 mut/Mb				57 (53.3)	48 (45.7)	26 (36.6)			

BEP, biomarker evaluable population; CNS, central nervous system; D, durvalumab; EP, platinum-etoposide; IC, immune cell; ITT, intention-to-treat; mut/Mb, mutation per megabase; PD-L1, programmed cell death ligand-1; PS, performance status; T, tremelimumab; TC, tumor cell; tTMB, tissue tumor mutational burden; WHO, World Health Organization.