

Supplementary Table S1. Efficacy outcomes reported for pembrolizumab (Pembro; PD-1 blocker)*

Cancer type	Study details	Comparator	Efficacy outcomes (Median reported in months; parentheses include 95% CI)
Melanoma	Open label, multicenter; KEYNOTE-006 Cohort 1: Pembro 10 mg/kg Q2W (n=278) Cohort 2: Pembro 10 mg/kg Q3W (n=277) Cohort 3: Ipi 3 mg/kg Q3W for 4 doses (n=256)	Ipilimumab	Q2W cohort <u>OS</u> Median: Not reported HR: 0.69 (0.56-0.90) ORR: 33% (27-39) <u>PFS</u> Median: 5.5 (3.4, 6.9) HR: 0.58 (0.47-0.72) Q3W cohort <u>OS</u> Median: Not reported HR: 0.63 (0.47-0.83) <u>PFS</u> Median: 4.1 (2.9, 6.9) HR: 0.58 (0.46-0.72) ORR: 34% (28-40)
Non-small cell lung cancer	Double-blind, multicenter; KEYNOTE-189 Cohort 1: Pembro 200 mg Q3W, pemetrexed 500 mg/m2 and investigator-choice cisplatin 75 mg/m2 or carboplatin AUC 5 mg/mL/min Cohort 2: Placebo; pemetrexed 500 mg/m2 and investigator-choice cisplatin 75 mg/m2 or carboplatin AUC 5 mg/mL/min	Placebo	<u>OS</u> Median: Not reached HR: 0.49 (0.38, 0.64) <u>PFS</u> Median: 8.8 (7.6, 9.2) HR: 0.52 (0.43, 0.64) ORR: 48% (43, 53)
Non-small cell lung cancer	Open label, multicenter; KEYNOTE-042 Cohort 1: Pembro 200 mg Q3W Cohort 2: Investigator-choice chemotherapy	Chemotherapy	Cohort TPS≥50% <u>OS</u> Median: 20.0 (15.4, 24.9) HR: 0.69 (0.56, 0.85) <u>PFS</u> Median: 6.9 (5.9, 9.0) HR: 0.82 (0.68, 0.99) ORR: 39% (33.9, 45.3)
Malignant pleural mesothelioma	Open label, multicenter; KEYNOTE-483 Cohort 1: Pembro 200 mg Q3W, pemetrexed 500 mg/m2 and cisplatin 75 mg/m2 or carboplatin AUC 5 mg/mL/min IV Cohort 2: Pemetrexed 500 mg/m2 and cisplatin 75 mg/m2 or carboplatin AUC 5 mg/mL/min IV	Chemotherapy	<u>OS</u> Median: 17.3 (14.4, 21.3) HR: 0.79 (0.64, 0.98) <u>PFS</u> Median: 7.1 (6.9, 8.1) HR: 0.80 (0.65, 0.99) ORR: 52% (45.5, 59.0)

Head and neck squamous cell carcinoma	Open label, multicenter; KEYNOTE-048 Cohort 1: Pembro 200 mg Q3W Cohort 2: Pembro 200 mg Q3W, carboplatin AUC 5 mg/mL/min IV or cisplatin 100 mg/m2 IV and FU 1000 mg/m2/day Cohort 3: Cetuximab initial dose and carboplatin AUC 5 mg/mL/min IV or cisplatin 100 mg/m2 IV and FU 1000 mg/m2/day	Pembro plus chemotherapy vs Chemotherapy	<u>OS</u> Median: 13.0 (10.9, 14.7) HR: 0.77 (0.63, 0.93) <u>PFS</u> Median: 4.9 (4.7, 6.0) HR: 0.92 (0.77, 1.10) ORR: 36% (30.0, 41.5)
Urothelial cancer	Open label, multicenter, KEYNOTE-A39 Cohort 1: Pembro 200 mg Q3W and enfortumab vedotin 1.25 mg/kg Cohort 2: Gemcitabine 1000 mg/m2 and cisplatin 70 mg/m2 or carboplatin (AUC = 4.5 or 5)	Chemotherapy	<u>OS</u> Median: 31.5 (25.4, NR) HR: 0.47 (0.38, 0.58) <u>PFS</u> Median: 12.5 (10.4, 16.6) HR: 0.45 (0.38, 0.54) ORR: 68% (68, 72)
Microsatellite Instability-High or Mismatch Repair deficient cancer	3 multicenter, non-randomized, open-label, multi-cohort trials: KEYNOTE-164, KEYNOTE-158, and KEYNOTE-051 Pembro 200 mg Q3W	Single arm	ORR: 33% (29, 38) Duration of response: 63.2 months (1.9+–63.9+)
Microsatellite Instability-High or Mismatch Repair deficient colorectal cancer	Multicenter, open-label; KEYNOTE-177 Cohort 1: Pembro 200 mg Q3W Cohort 2: Investigator choice chemotherapy	Chemotherapy	<u>PFS</u> Median: 16.5 (5.4, 32.4) HR: 0.60 (0.45, 0.80) <u>OS</u> Median: NR (49.2, NR) HR: 0.74 (0.53, 1.03) ORR: 44% (36, 52)
Gastric cancer	Multicenter, double-blind; KEYNOTE-811 Cohort 1: Pembro 200 mg Q3W, trastuzumab 6 mg/kg followed by investigator-choice chemotherapy Cohort 2: placebo, trastuzumab 6 mg/kg followed by investigator-choice chemotherapy	Placebo combination	<u>OS</u> Median: 20.1 (17.9, 22.9) HR: 0.79 (0.66, 0.95) <u>PFS</u> Median: 10.9 (8.5, 12.5) HR: 0.72 (0.60, 0.87) ORR: 73% (68, 78)
Esophageal cancer	Multicenter, placebo controlled, KEYNOTE-590 Cohort 1: Pembro 200 mg Q3W, cisplatin 80 mg/m2 and FU 800 mg/m2 Cohort 2: Placebo, cisplatin 80 mg/m2 and FU 800 mg/m2	Placebo combination	Squamous cell histology CPS≥1 cohort <u>OS</u> Median: 12.7 (10.5, 14.4) HR: 0.71 (0.59, 0.84) <u>PFS</u> Median: 6.3 (6.2, 7.1) HR: 0.62 (0.52, 0.73) ORR: 45% (40, 51)
Cervical cancer	Multicenter, double-blind; KEYNOTE-A18 Cohort 1: Pembro 200 mg Q3W and cisplatin 40 mg/m2 followed by radiation therapy Cohort 2: Placebo and cisplatin 40 mg/m2 followed by radiation therapy	Placebo combination	At prespecified analyses <u>OS</u> Median not reported HR: 0.65 (0.47, 0.90) <u>PFS</u> Median not reached HR: 0.59 (0.43, 0.81) ORR: not reported in PI

Hepatocellular carcinoma	Multicenter, double-blind; KEYNOTE-394 Cohort 1: Pembro 200 mg Q3W Cohort 2: Placebo	Placebo	<u>OS at prespecified final analysis</u> Median: 13.9 (12.5, 17.9) HR: 0.78 (0.61, 0.99) <u>PFS at prespecified interim analysis</u> Median: 2 (1.4, 2.7) HR: 0.78 (0.61, 1.00) ORR: 11% (7, 16)
Biliary tract cancer	Multicenter, double-blind; KEYNOTE-966 Cohort 1: Pembro 200 mg Q3W, gemcitabine 1000 mg/m2 and cisplatin 25 mg/m2 Cohort 2: Placebo, gemcitabine 1000 mg/m2 and cisplatin 25 mg/m2	Placebo combination	<u>OS</u> Median: 12.7 (11.5, 13.6) HR: 0.83 (0.72, 0.95) <u>PFS</u> Median: 6.5 (5.7, 6.9) HR: 0.86 (0.75, 1.00); p-value not significant ORR: 29% (25, 33)
Renal cell carcinoma	Multicenter, open-label; KEYNOTE-426 Cohort 1: Pembro 200 mg Q3W and axitinib 5 mg Cohort 2: Sunitinib 50 mg	Sunitinib	<u>OS (updated)</u> Median: 45.7(43.6, NR) HR: 0.73 (0.60, 0.88) <u>PFS</u> Median: 15.1 (12.6, 17.7) HR: 0.69 (0.56, 0.84) ORR: 59% (54, 64)
Endometrial carcinoma	Multicenter, double-blind; KEYNOTE-868/NRG-GY018 Cohort 1: Pembro 200 mg Q3W, paclitaxel 175 mg/m2 and carboplatin 5 mg/mL/min Cohort 2: Placebo, paclitaxel 175 mg/m2 and carboplatin 5 mg/mL/min	Placebo combination	<u>dMMR population PFS</u> Median not reached HR: 0.30 (0.19, 0.48) <u>pMMR population PFS</u> Median: 11.1 (8.7, 13.5) HR: 0.60 (0.46, 0.78) OS was not mature at the time of reporting ORR not reported
Triple negative breast cancer	Multicenter, double-blind; KEYNOTE-355 Cohort 1: Pembro 200 mg Q3W, paclitaxel, gemcitabine and carboplatin Cohort 2: Placebo, paclitaxel, gemcitabine and carboplatin	Placebo combination	<u>OS at pre-specified final analysis</u> Median: 23 (19.0, 26.3) HR: 0.73 (0.55, 0.95) <u>PFS at pre-specified interim analysis</u> Median: 9.7 (7.6, 11.3) HR: 0.65 (0.49, 0.86) ORR: 53% (46, 59)
Ovarian cancer	Multicenter, double-blind; KEYNOTE-B96 Cohort 1: Pembro 200 mg Q3W plus paclitaxel 80 mg/m2 with or without bevacizumab 10 mg/kg Cohort 2: Placebo plus paclitaxel 80 mg/m2 with or without bevacizumab 10 mg/kg	Placebo combination	<u>PFS</u> Median: 8.3 (7.0, 9.4) HR: 0.72 (0.58, 0.89) <u>OS</u> Median: 18.2 (15.3, 21.0) HR: 0.76 (0.61, 0.94) ORR: not reported in the PI

*source, package insert from 02/2026. Please refer to latest PI for accurate information on study details and dose regimen. Only first-line indications or advanced unresectable tumors are listed in the table. Refer to pembrolizumab PI for comprehensive list of indications and efficacy. Refer to respective PIs for clinical outcomes reported for other PD-1 blockers[1]

References

1. Zhou, X.; Yao, Z.; Bai, H.; Duan, J.; Wang, Z.; Wang, X.; Zhang, X.; Xu, J.; Fei, K.; Zhang, Z.; et al. Treatment-Related Adverse Events of PD-1 and PD-L1 Inhibitor-Based Combination Therapies in Clinical Trials: A Systematic Review and Meta-Analysis. *Lancet Oncol* **2021**, *22*, 1265–1274, doi:10.1016/S1470-2045(21)00333-8.