KEYTRUDA is the first immunotherapy to present 5-year data in three first-line metastatic NSCLC indications licensed in the UK[1–5]

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GB-PDO-03871 | Date of preparation: May 2026

MSD Oncology

KEYNOTE-024

KEYTRUDA® (pembrolizumab) vs chemotherapy for PD-L1 TPS ≥50% non-small cell lung cancer

These slides are provided to UK healthcare professionals as a resource for data for your personal education. To ensure compliance with all relevant codes and regulations these slides must not be amended.

NSCLC, non-small cell lung cancer; PD-L1, programmed death-ligand 1; TPS, tumour proportion score.

1. Garassino MC, *et al. J Clin Oncol* 2023:41:1992–1998. **2.** Novello S, *et al. J Clin Oncol* 2023:41:1999–2006. **3.** Reck M, *et al. J Clin Oncol* 2021;39:2339–2349. **4.** Jassem J, *et al. J Thorac Oncol* 2021;16:1872–1882. **5.** KEYTRUDA Summary of Product Characteristics. MSD. Available at: https://www.medicines.org.uk/emc/product/2498/smpc. Accessed: May 2026.

KEYTRUDA® (pembrolizumab)

MSD

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KEYTRUDA metastatic NSCLC indications[1]

- **KEYTRUDA as monotherapy is indicated for the first-line treatment of metastatic non-small cell lung carcinoma in adults whose tumours express PD-L1 with a ≥50% TPS with no *EGFR*- or *ALK*-positive tumour mutations**
- KEYTRUDA, in combination with pemetrexed and platinum chemotherapy, is indicated for the first-line treatment of metastatic non-squamous non-small cell lung carcinoma in adults whose tumours have no *EGFR*- or *ALK*-positive mutations
- KEYTRUDA, in combination with carboplatin and either paclitaxel or nab-paclitaxel, is indicated for the first-line treatment of metastatic squamous non-small cell lung carcinoma in adults
- KEYTRUDA as monotherapy is indicated for the treatment of locally advanced or metastatic non-small cell lung carcinoma in adults whose tumours express PD-L1 with a ≥1% TPS and who have received at least one prior chemotherapy regimen. Patients with *EGFR*- or *ALK*-positive tumour mutations should also have received targeted therapy before receiving KEYTRUDA
- The recommended dose of KEYTRUDA in adults is either 200 mg every 3 weeks or 400 mg every 6 weeks administered as an intravenous infusion over 30 minutes
- Refer to the Summary of Product Characteristics and Risk Minimisation Materials available on the EMC website before prescribing in order to help reduce the risks associated with KEYTRUDA

Please refer to the Summary of Product Characteristics and Risk Minimisation Materials available on the EMC website before prescribing.

ALK, anaplastic lymphoma kinase; *EGFR*, epidermal growth factor receptor; EMC, Electronic Medicines Compendium; NSCLC, non-small cell lung cancer; PD-L1, programmed death-ligand 1; TPS, tumour proportion score.

1. KEYTRUDA Summary of Product Characteristics. MSD. Available at: https://www.medicines.org.uk/emc/product/2498/smpc. Accessed: May 2026.

KEYNOTE-024:

KEYTRUDA vs chemotherapy for PD-L1 TPS ≥50% non-small cell lung cancer[1,2]

PD-L1, programmed death-ligand 1.

1. Reck M, *et al. N Engl J Med* 2016;375:1823–1833 (and supplementary appendix). **2.** Reck M, *et al. J Clin Oncol* 2021;39:2339–2349.

KEYNOTE-024: Definition of analyses

Analysis	Cut-off date	Slide symbol	Median follow-up (range) months
Interim analysis 1 (1-year)	9 May 2016	1	11.2 (6.3–19.7)[1]
Interim analysis 2 (2-year)	10 July 2017	2	25.2 (20.4–33.7)[2]
Updated analysis (5-year)	1 June 2020	3	59.9 (55.1–68.4)[3]

1. Reck M, *et al. N Engl J Med* 2016;375:1823–1833 (and supplementary appendix). **2.** Reck M, *et al. J Clin Oncol* 2019;37:537–546. **3.** Reck M, *et al. J Clin Oncol* 2021;39:2339–2349.

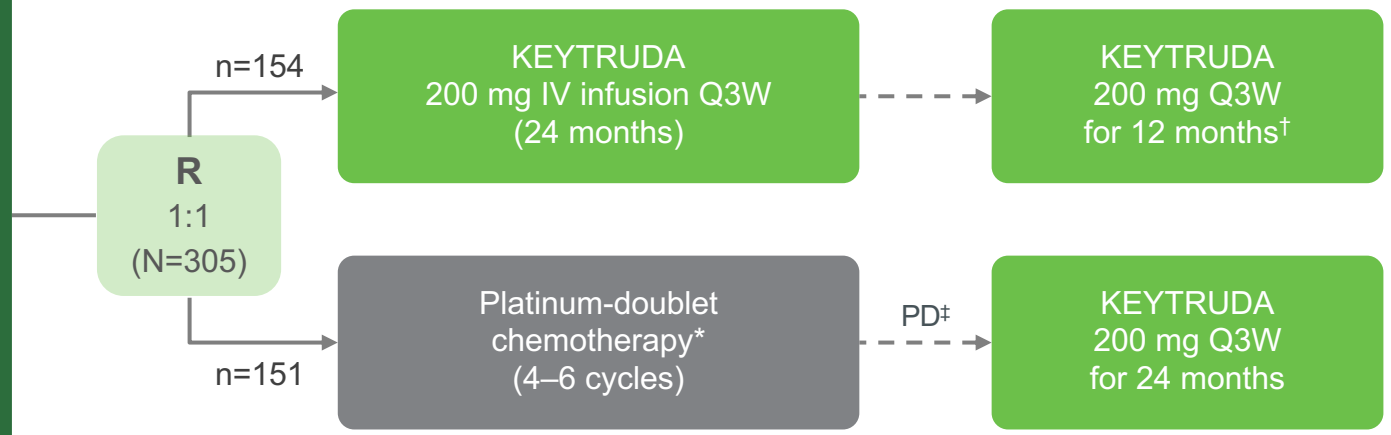
KEYNOTE-024 study design: International, randomised, open-label, Phase III trial[1,2]

Patients

- Untreated Stage IV NSCLC
- PD-L1 TPS ≥50%
- ECOG PS 0–1
- No sensitising *EGFR* mutation or *ALK* translocation
- No untreated brain metastases
- No active autoimmune disease requiring systemic therapy
- No active immune ILD or pneumonitis requiring systemic therapy

Key endpoints:

- Primary: PFS (RECIST v1.1 per blinded, independent central review)
- Secondary: OS, ORR, safety
- Exploratory: DOR



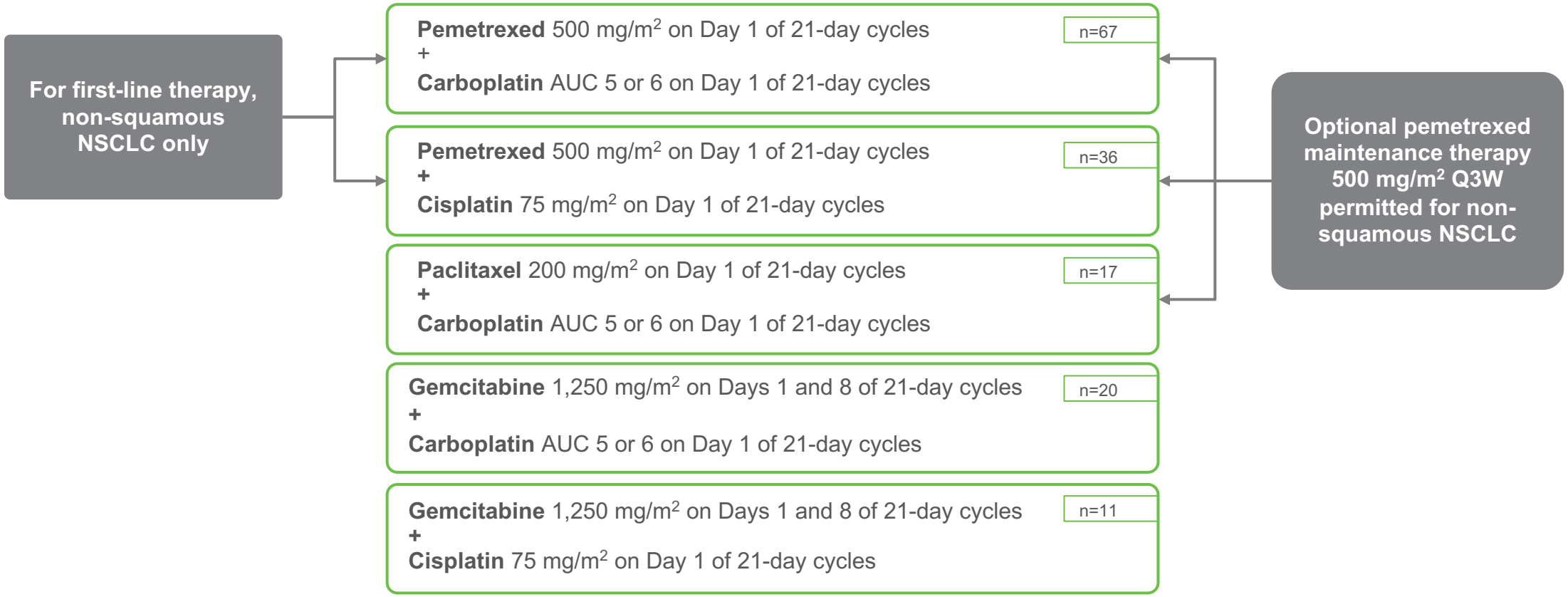
Adapted from Reck M, *et al.* 2016.[1]

*Investigator's choice of chemotherapy.[1] †Patients randomised to KEYTRUDA who completed 2 years of therapy or who stopped KEYTRUDA after achieving CR and then had PD were eligible for a second course of KEYTRUDA monotherapy.[1] ‡To be eligible for crossover, PD had to be confirmed by blinded, independent central radiology review and all safety criteria had to be met.[1]

ALK, anaplastic lymphoma kinase; CR, complete response; DOR, duration of response; ECOG PS, Eastern Co-operative Oncology Group Performance Status; EGFR, epidermal growth factor receptor; ILD, interstitial lung disease; IV, intravenous; NSCLC, non-small cell lung cancer; ORR, objective response rate; OS, overall survival; PD, progressive disease; PD-L1, programmed death-ligand 1; PFS, progression-free survival; R, randomised; RECIST, Response Evaluation Criteria In Solid Tumours.; Q3W, every 3 weeks; TPS, tumour proportion score.

1. Reck M, *et al. N Engl J Med* 2016;375:1823–1833 (and supplementary appendix). **2.** Reck M, *et al. J Clin Oncol* 2021;39:2339–2349.

KEYNOTE-024: Investigator's choice of platinum-doublet chemotherapy*[1]



Adapted from Reck M, *et al.* 2016.[1]

*All chemotherapy regimens were given for up to 4–6 cycles.[1]
AUC, area under the curve; NSCLC, non-small cell lung cancer; Q3W, every 3 weeks.

1. Reck M, *et al. N Engl J Med* 2016;375:1823–1833 (and supplementary appendix).

KEYNOTE-024: Interim analysis 1 – patient disposition[1,2]

Median follow-up: 11.2 months.

305 patients randomly allocated*

KEYTRUDA 200 mg IV Q3W
- 154 allocated
- 154 treated

- 74 ongoing
- 80 discontinued:
  - 51 progressive disease†
  - 17 AEs
  - 6 deaths
  - 4 patient withdrawals
  - 1 physician decision
  - 1 complete response

- 66 crossed over to KEYTRUDA on study
  - 9 received anti-PD-1 outside of crossover
  - **50% (75/151) total crossover rate (ITT)**

Platinum-doublet chemotherapy
- 151 allocated
- 150 treated‡

- 15 ongoing
- 29 completed treatment
- 106 discontinued:
  - 69 progressive disease†
  - 16 AEs
  - 9 deaths
  - 5 patient withdrawals
  - 7 physicians' decisions

Adapted from Reck M, *et al.* 2016 & Reck M, *et al.* 2016.[1,2]

*Reasons for screen failure were untreated brain metastases (n=59), *EGFR* or *ALK* aberration (n=30), ECOG PS 2 or 3 (n=27), inadequate organ function (n=19), prohibited intercurrent condition (n=16), NSCLC not confirmed (n=13), and other (n=33).[2] †Includes patients with clinical progression or progressive disease.[2] ‡46 patients received pemetrexed maintenance therapy.[2]

AE, adverse event; *ALK*, anaplastic lymphoma kinase; ECOG PS, Eastern Co-operative Oncology Group Performance Status; *EGFR*, epidermal growth factor receptor; ITT, intention to treat; IV, intravenous; PD-1, programmed death protein 1; NSCLC, non-small cell lung cancer; Q3W, every 3 weeks.

1. Reck M, *et al.* ESMO. 7–11 October 2016. Copenhagen, Denmark. Oral presentation. **2.** Reck M, *et al. N Engl J Med* 2016;375:1823–1833 (and supplementary appendix).

KEYNOTE-024: Updated analysis – selected baseline characteristics[1]

Median follow-up: 59.9 months.

Characteristic, n (%)*	KEYTRUDA 200 mg Q3W (n=154)	Chemotherapy (n=151)	35 cycles (2 years) of KEYTRUDA (n=39)‡	Second course of KEYTRUDA (n=12)§
Age, median (range), years	64.5 (33–90)	66.0 (38–85)	61.0 (43–80)	60.0 (43–77)
Male	92 (59.7)	95 (62.9)	25 (64.1)	8 (66.7)
ECOG PS 1	99 (64.3)	98 (64.9)	23 (59.0)	9 (75.0)
Enrolled in East Asia	21 (13.6)	19 (12.6)	8 (20.5)	3 (25.0)
Squamous histology	29 (18.8)	27 (17.9)†	2 (5.1)	1 (8.3)
Current/former smoker	149 (96.8)	132 (87.4)	37 (94.9)	12 (100.0)
Treated brain metastases	18 (11.7)	10 (6.6)	9 (23.1)	1 (8.3)
Prior neoadjuvant therapy	3 (1.9)	1 (0.7)	0	0
Prior adjuvant therapy	6 (3.9)	3 (2.0)	0	0

Adapted from Reck M, *et al.* 2021.[1]

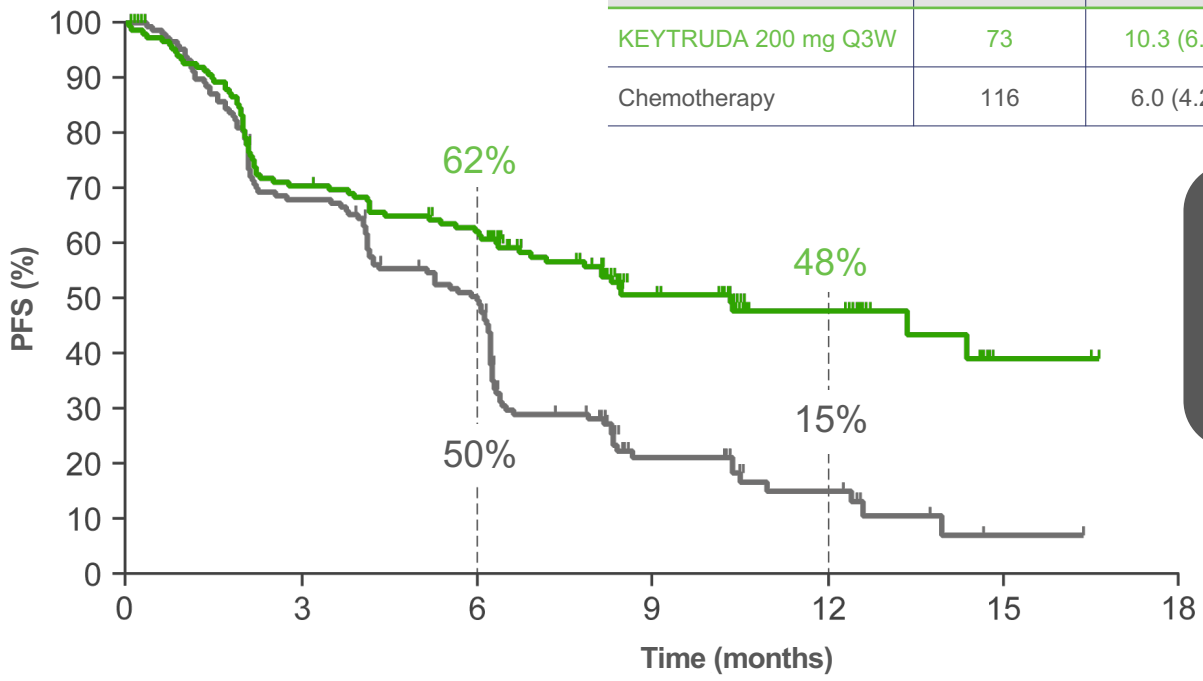
*Unless otherwise stated.[1] †Includes patients with squamous cell carcinoma and poorly differentiated squamous cell carcinoma.[1] ‡Only includes patients who were initially allocated to KEYTRUDA who received 35 cycles of KEYTRUDA according to actual exposure assessment.[1] §Only includes patients initially allocated to KEYTRUDA who received a second course of KEYTRUDA therapy according to actual exposure assessment.[1]
ECOG PS, Eastern Cooperative Oncology Group Performance Status; Q3W, every 3 weeks.

1. Reck M, *et al. J Clin Oncol* 2021;39:2339–2349.

KEYNOTE-024: Interim analysis 1 – 1-year landmark PFS*[1,2]

Median follow-up: 11.2 months.

Treatment arm	Events, n	Median, months	HR (95% CI)	p value
KEYTRUDA 200 mg Q3W	73	10.3 (6.7–NR)	0.50 (0.37–0.68)	<0.001
Chemotherapy	116	6.0 (4.2–6.2)	–	



KEYTRUDA monotherapy demonstrated a superior PFS benefit vs platinum-based chemotherapy with a 50% reduced risk of progression or death (HR: 0.50; p<0.001)[1,2]

Adapted from Reck M, *et al.* 2016 & Reck M, *et al.* 2016.[1,2]

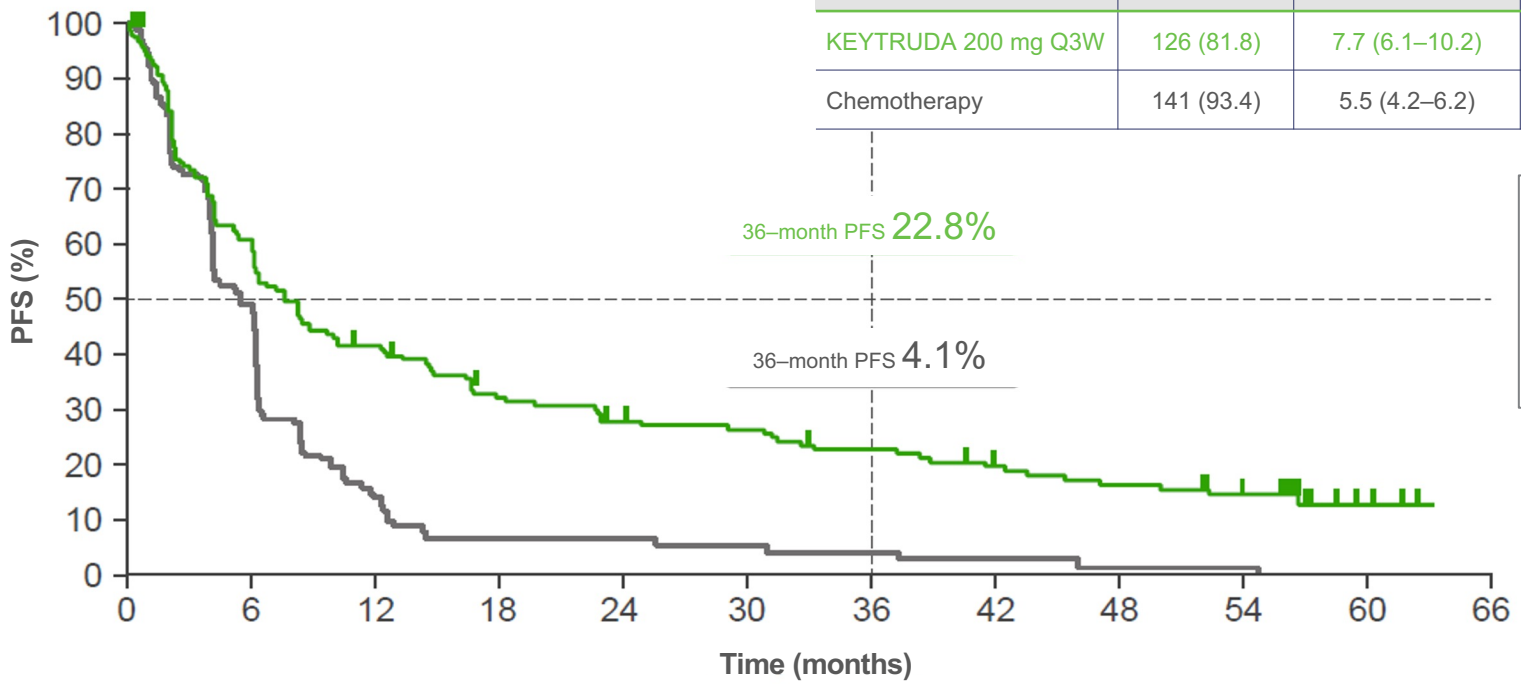
*Assessed per RECIST v1.1 by blinded, independent central review.[2] †The estimated percentage of patients who were alive and had no disease progression at 6 or 12 months.[2]
CI, confidence interval; HR, hazard ratio; NR, not reached; PFS, progression-free survival; Q3W, every 3 weeks; RECIST, Response Evaluation Criteria in Solid Tumours.

1. Reck M, *et al.* ESMO. 7–11 October 2016. Copenhagen, Denmark. Oral presentation. **2.** Reck M, *et al. N Engl J Med* 2016;375:1823–1833 (and supplementary appendix).

KEYNOTE-024: Updated analysis – 5-year median PFS*[1]

Median follow-up: 59.9 months.

Treatment arm	Events, n (%)	Median (95% CI), months	HR (95% CI)
KEYTRUDA 200 mg Q3W	126 (81.8)	7.7 (6.1–10.2)	0.50 (0.39–0.65)
Chemotherapy	141 (93.4)	5.5 (4.2–6.2)	–



Number at risk

KEYTRUDA 200 mg Q3W	154	92	62	46	38	36	30	24	20	15	3	0
Chemotherapy	151	73	20	6	5	4	3	2	1	1	0	0

No statistical conclusions can be drawn from exploratory analyses[1]

Statistical significance was met for primary and secondary endpoints in interim analysis 1 (2016)[1]

Adapted from Reck M, *et al.* 2021.[1]

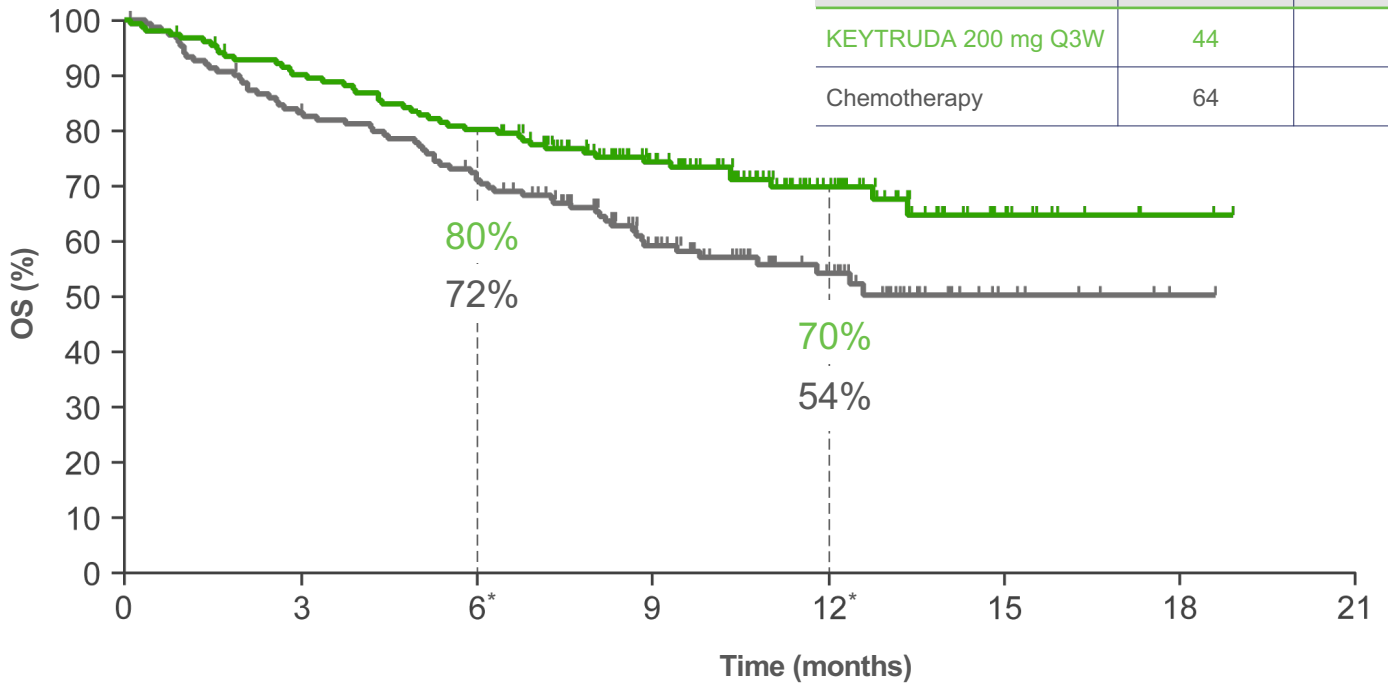
*Assessed per RECIST v1.1 by blinded, independent central review.[1]
CI, confidence interval; HR, hazard ratio; PFS, progression-free survival; Q3W, every 3 weeks; RECIST, Response Evaluation Criteria in Solid Tumours.

1. Reck M, *et al. J Clin Oncol* 2021;39:2339–2349.

KEYNOTE-024: Interim analysis 1 – 1-year landmark OS*[1,2]

Median follow-up: 11.2 months.

Treatment arm	Events, n	Median, months	HR (95% CI)	p value
KEYTRUDA 200 mg Q3W	44	NR	0.60 (0.41–0.89)	0.005
Chemotherapy	64	NR	–	



Number at risk

KEYTRUDA 200 mg Q3W	154	136	121	82	39	11	2	0
Chemotherapy	151	123	106	64	34	7	1	0

KEYTRUDA monotherapy demonstrated a superior OS benefit vs platinum-based chemotherapy, with a 40% reduced risk of death (HR: 0.60; p=0.005)[2]

DSMC recommended stopping the trial because of superior efficacy observed with KEYTRUDA vs chemotherapy[1]

Adapted from Reck M, *et al.* 2016 & Reck M, *et al.* 2016.[1,2]

*The estimated percentage of patients who were alive and had no disease progression at 6 or 12 months.[2]

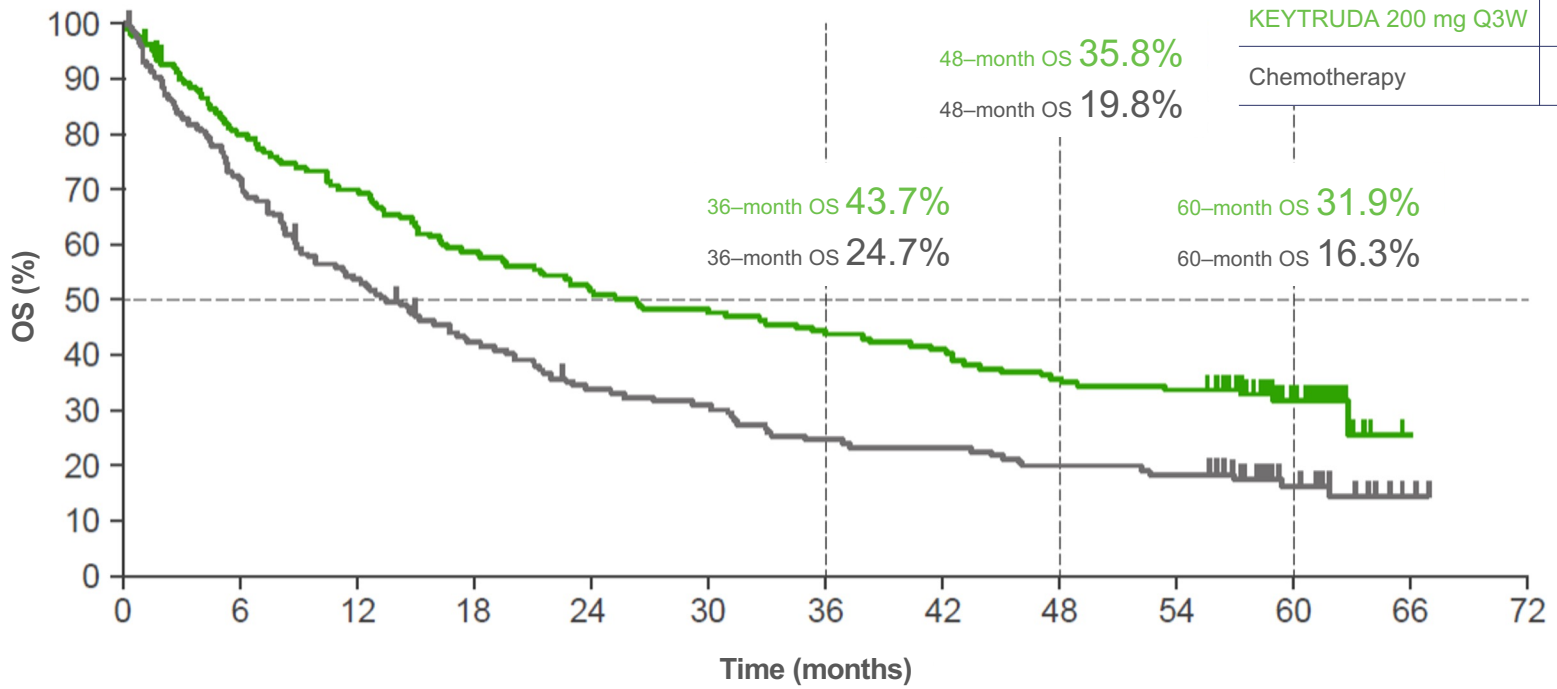
CI, confidence interval; DSMC, Data and Safety Monitoring Committee; HR, hazard ratio; NR, not reached; OS, overall survival; Q3W, every 3 weeks; RECIST, Response Evaluation Criteria in Solid Tumours.

1. Reck M, *et al.* ESMO. 7–11 October 2016. Copenhagen, Denmark. Oral presentation. **2.** Reck M, *et al. N Engl J Med* 2016;375:1823–1833 (and supplementary appendix).

KEYNOTE-024: Updated analysis – 5-year median OS*[1]

Median follow-up: 59.9 months.

Treatment arm	Events, n (%)	Median (95% CI), months	HR (95% CI)
KEYTRUDA 200 mg Q3W	103 (66.9)	26.3 (18.3–40.4)	0.62 (0.48–0.81)
Chemotherapy	123 (81.5)	13.4 (9.4–18.3)	–



Number at risk

KEYTRUDA 200 mg Q3W	154	121	106	89	78	73	66	62	54	51	20	0	0
Chemotherapy	151	168	80	61	48	44	35	33	28	26	13	3	0

No statistical conclusions can be drawn from exploratory analyses[1]

Statistical significance was met for primary and secondary endpoints in interim analysis 1 (2016)[1]

5-year OS rate numerically doubled with KEYTRUDA: 31.9% vs 16.3% with chemotherapy (with a 66% effective crossover rate)

Median OS was numerically more than 1 year longer in the KEYTRUDA group (26.3 months, 95% CI: 18.3–40.4) than in the chemotherapy group (13.4 months, 95% CI: 9.4–18.3), HR: 0.62; 95% CI: 0.48–0.81

Adapted from Reck M, *et al.* 2021.[1]

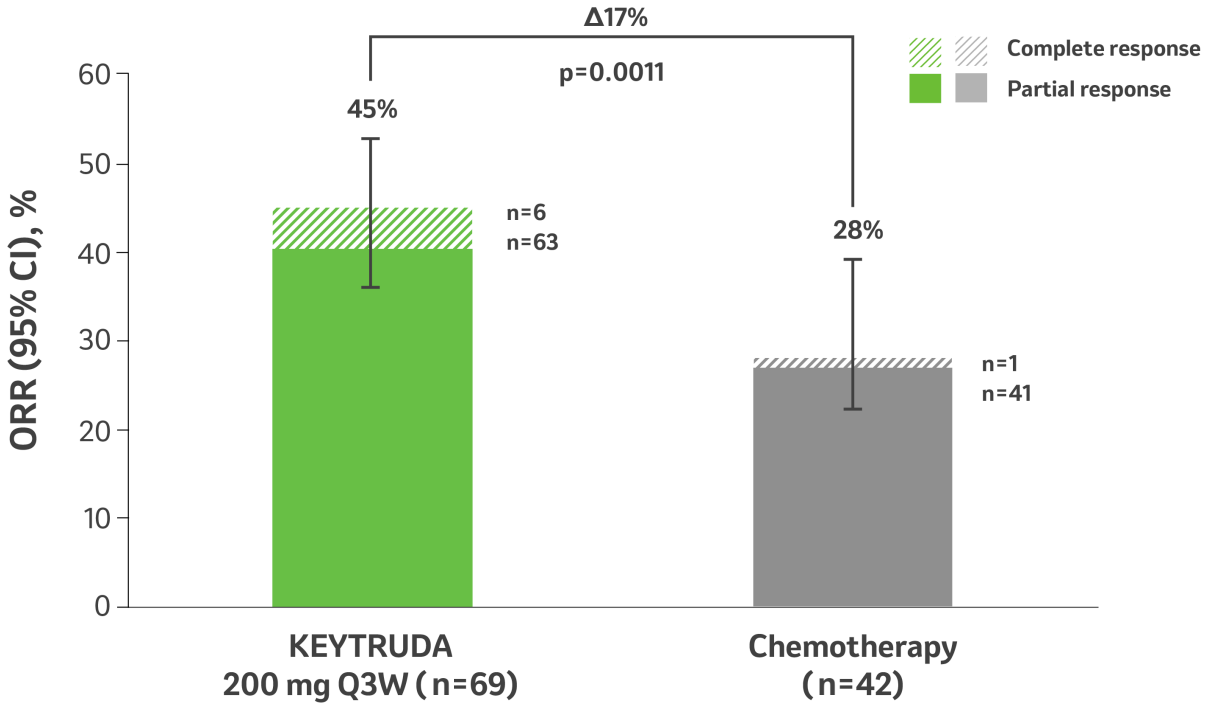
*Effective crossover rate from chemotherapy to anti-PD-L1 therapy: 66.0% (99 patients in total crossed over to anti-PD-1 or PD-L1 therapy: 83 patients crossed over to KEYTRUDA during the study and 16 additional patients received anti-PD-1 or PD-L1 therapy outside of the crossover).[1]

CI, confidence interval; HR, hazard ratio; OS, overall survival; PD-1, programmed deatlh-1; PD-L1, programmed death-ligand 1; Q3W, every 3 weeks.

1. Reck M, *et al. J Clin Oncol* 2021;39:2339–2349.

KEYNOTE-024: Interim analysis 1 – summary of responses*[1,2]

Median follow-up: 11.2 months.



	KEYTRUDA 200 mg Q3W responders (n=69)	Chemotherapy responders (n=42)
TTR, median (range), months	2.2 (1.4–8.2)	2.2 (1.8–12.2)
DOR,† median (range), months	NR (1.9+–14.5+)	6.3 (2.1+–12.6+)

Adapted from Reck M, *et al.* 2016 & Reck M, *et al.* 2016.[1,2]

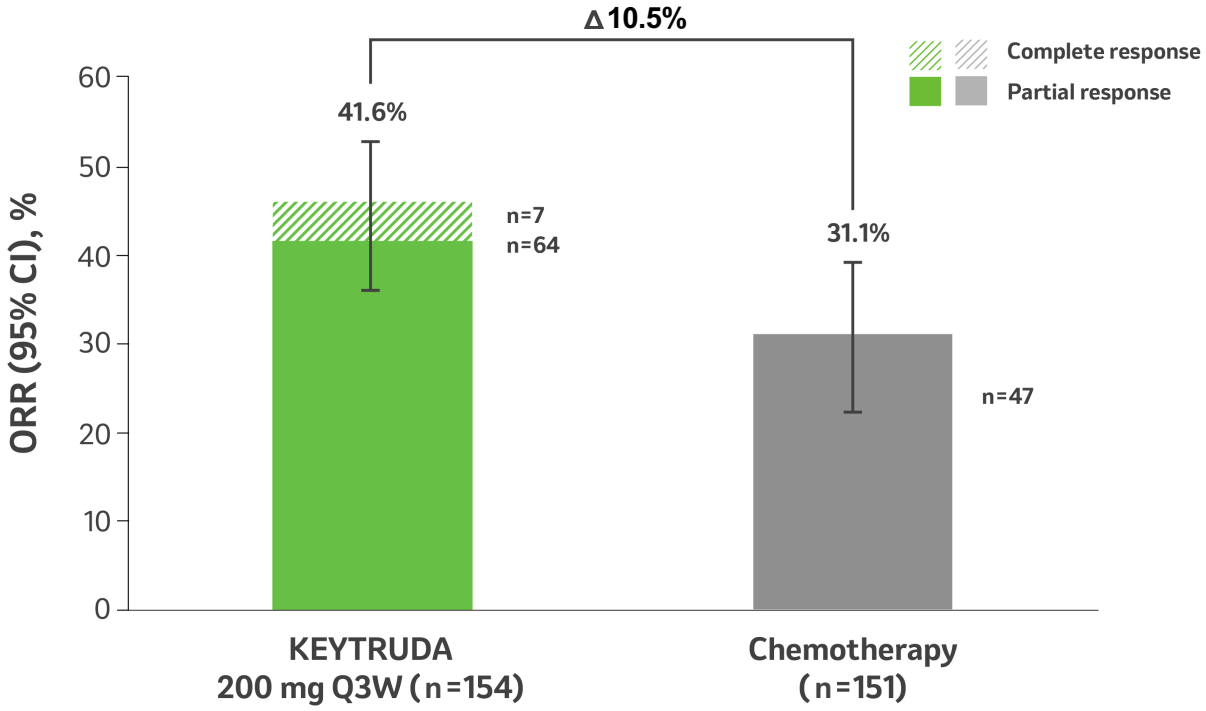
*Assessed per RECIST v1.1 by blinded, independent central review.[2] †+ denotes a response that was ongoing at the data cut-off.[2]
CI, confidence interval; DOR, duration of response; NR, not reached; ORR, objective response rate; Q3W, every 3 weeks; RECIST, Response Evaluation Criteria in Solid Tumours; TTR, time to response.

1. Reck M, *et al.* ESMO. 7–11 October 2016, Copenhagen, Denmark. Oral presentation. **2.** Reck M, *et al. N Engl J Med* 2016;375:1823–1833 (and supplementary appendix).

KEYNOTE-024: Updated analysis – summary of responses*[1]

Median follow-up: 59.9 months.

No statistical conclusions can be drawn from exploratory analyses.
Statistical significance was met for primary and secondary endpoints in interim analysis 1 (2016).



	KEYTRUDA 200 mg Q3W (n=154)	Chemotherapy (n=151)
Best ORR, n (%)		
SD	37 (24.0)	60 (39.7)
PD	35 (22.7)	25 (16.6)
NE	0	1 (0.7)
NA	11 (7.1)	18 (11.9)
Median time to response, months (range)	2.1 (1.4–14.6)	2.1 (1.1–12.2)
DOR, median, months (range)	29.1 (2.2–60.8+)†	6.3 (3.1–52.4)

Adapted from Reck M, *et al.* 2021.[1]

*Assessed by RECIST v1.1 by investigator review.[1] †"+" indicates response duration is censored.[1]
CI, confidence interval; DOR, duration of response; NA; no assessment; NE, not evaluable; ORR, objective response rate; PD, progressive disease; Q3W, every 3 weeks; RECIST, Response Evaluation Criteria in Solid Tumours; SD, stable disease.

1. Reck M, *et al. J Clin Oncol* 2021;39:2339–2349.

KEYNOTE-024: Updated analysis – best OR after 35 cycles (2-years) of KEYTRUDA[1]

Median follow-up: 59.9 months.

No statistical conclusions can be drawn from exploratory analyses.

	KEYTRUDA 200 mg Q3W (n=39)
3-year OS rate from completion of KEYTRUDA, %	81.4
OR, n (%)	32 (82.1)
Best OR, n (%)	
CR	4 (10.3)
PR	28 (71.8)
SD	6 (15.4)
PD	1 (2.6)

At data cut-off, 18/39 patients (46.2%) were alive without PD or subsequent therapy for NSCLC per investigator assessment

1 patient developed a secondary malignancy and was treated accordingly

Adapted from Reck M, *et al.* 2021.[1]

CR, complete response; NSCLC, non-small cell lung cancer; PD, progressive disease; PR, partial response; OR, objective response; OS, overall survival; Q3W, every 3 weeks; RECIST, Response Evaluation Criteria in Solid Tumours; SD, stable disease.

1. Reck M, *et al. J Clin Oncol* 2021;39:2339–2349.

KEYNOTE-024: Interim analysis 2 – AE summary*[1,2]

Median follow-up: 25.2 months.

No statistical conclusions can be drawn from exploratory analyses.

	KEYTRUDA 200 mg Q3W (n=154)	Chemotherapy (n=150)
Median (range) duration of initially assigned treatment	7.9 (0.03–28.8)	3.5 (0.03–30.5)
Treatment-related AEs, n (%)	118 (76.6)	135 (90.0)
Grade 3–5	48 (31.2)	80 (53.3)
Serious	35 (22.7)	31 (20.7)
Led to discontinuation	21 (13.6)	16 (10.7)
Led to death	2 (1.3)	3 (2.0)
Immune-mediated AEs,† n (%)	52 (33.8)	8 (5.3)
Grade 3–5	21 (13.6)	1 (0.7)
Led to death	1 (0.6)	0

KEYTRUDA monotherapy had fewer Grade 3–5 treatment-related AEs, but a higher frequency of Grade 3–5 immune-mediated AEs and infusion reactions, vs chemotherapy[2]

Adapted from Brahmer JR, *et al.* 2017 & Reck M, *et al.* 2019.[1,2]

*During treatment with the initially assigned therapy.[2] †Irrespective of attribution to treatment by the investigator.[2]
AE, adverse event; Q3W, every 3 weeks.

1. Brahmer JR, *et al.* IASLC. 15–18 October 2017. Yokohama, Japan. Oral presentation. **2.** Reck M, *et al. J Clin Oncol* 2019;37:537–546.

KEYNOTE-024: Updated analysis – AE summary*[1]

Median follow-up: 59.9 months.

No statistical conclusions can be drawn from exploratory analyses.

	KEYTRUDA 200 mg Q3W (n=154)*	Chemotherapy (n=150)*	35 cycles (2 years) of KEYTRUDA 200 mg Q3W (n=39)*
Treatment-related AEs, n (%)	118 (76.6)	135 (90.0)	34 (87.2)
Grade 3–5†	48 (31.2)	80 (53.3)	6 (15.4)
Serious	35 (22.7)	31 (20.7)	4 (10.3)
Led to discontinuation	21 (13.6)	16 (10.7)	0
Led to death	2 (1.3)	3 (2.0)	0
Immune-mediated AEs‡, n (%)	53 (34.4)	8 (5.3)	12 (30.8)
Grade 3–5	21 (13.6)	1 (0.7)	3 (7.7)
Led to death	1 (0.6)	0	0

Exposure-adjusted AE rates in the ITT population decreased over time in both treatment groups

Adapted from Reck M, *et al.* 2021.[1]

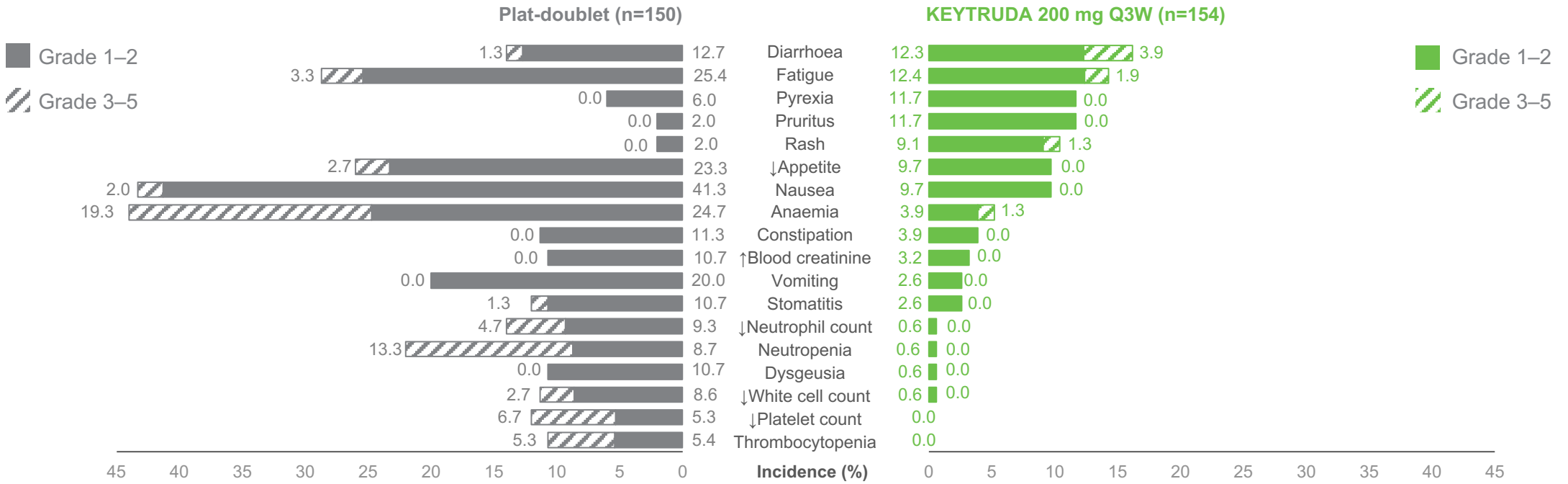
*During treatment with the initially assigned therapy.[1] †7 additional patients in the KEYTRUDA arm and no additional patients in the chemotherapy arm had treatment-related Grade 3–5 AEs since the initial publication of KEYNOTE-024 (Reck M, *et al. N Engl J Med* 2016;375:1823–1833). There was no change since the updated analysis at 25.2 months median follow-up.[1] ‡Irrespective of attribution to treatment by the investigator.[1]
AE, adverse event; ITT, intention-to-treat; Q3W, every 3 weeks.

1. Reck M, *et al. J Clin Oncol* 2021;39:2339–2349.

KEYNOTE-024: Interim analysis 2 – TRAEs occurring in ≥10 patients in either treatment arm*†[1,2]

Median follow-up: 25.2 months.

No statistical conclusions can be drawn from exploratory analyses.



Adapted from Brahmer JR, *et al.* 2017 & Reck M, *et al.* 2019.[1,2]

*During treatment with the initially assigned therapy. †Two Grade 5 treatment-related AEs occurred in the KEYTRUDA arm (pneumonitis and sudden death) and three in the chemotherapy arm (death, pulmonary sepsis and pulmonary alveolar haemorrhage).

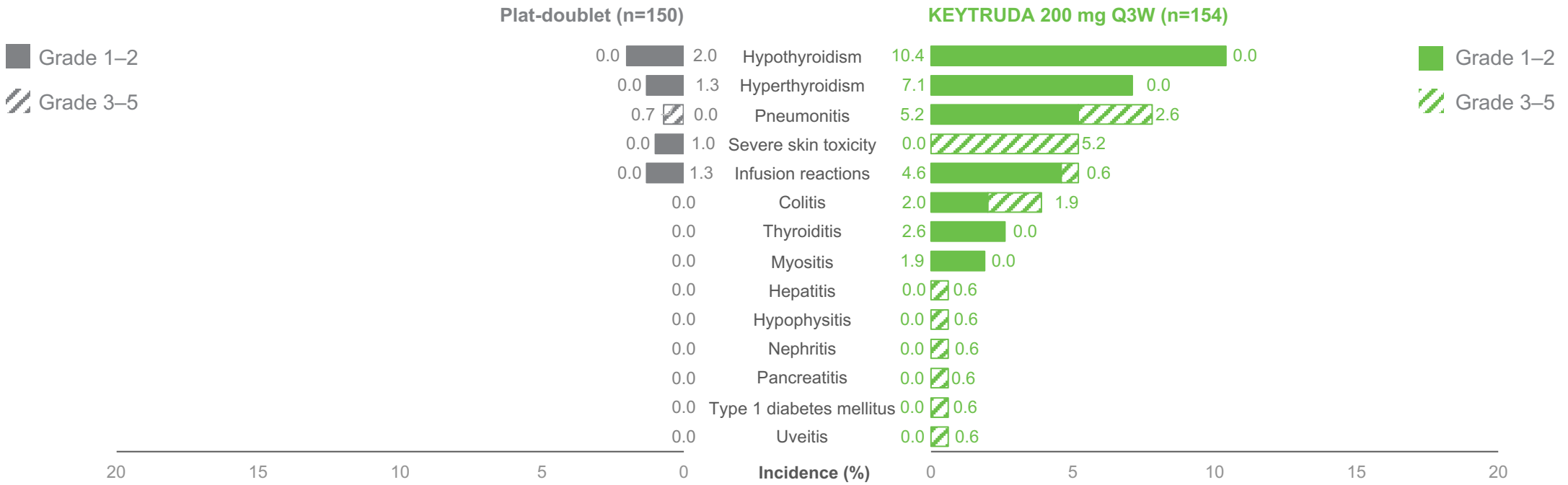
AE, adverse event; Q3W, every 3 weeks; TRAE, treatment-related adverse event.

1. Brahmer JR, *et al.* IASLC. 15–18 October 2017. Yokohama, Japan. Oral presentation. **2.** Reck M, *et al. J Clin Oncol* 2019;37:537–546.

KEYNOTE-024: Interim analysis 2 – immune-mediated AEs*†[1,2]

Median follow-up: 25.2 months.

No statistical conclusions can be drawn from exploratory endpoints.



Adapted from Brahmer JR, *et al.* 2017 & Reck M, *et al.* 2019.[1,2]

*Irrespective of attribution to treatment by the investigator and occurring during treatment with the initially assigned therapy.[1,2] †One Grade 5 event occurred in the KEYTRUDA arm (pneumonitis).[1,2]
AE, adverse event; Q3W, every 3 weeks.

1. Brahmer JR, *et al.* IASLC. 15–18 October 2017. Yokohama, Japan. Oral presentation. **2.** Reck M, *et al. J Clin Oncol* 2019;37:537–546.

KEYNOTE-024: HRQoL[1]

EORTC QLQ-C30 GHS.

No statistical conclusions can be drawn from exploratory endpoints.

	KEYTRUDA 200 mg Q3W (n=151)	Chemotherapy (n=148)
Mean score at baseline (SD) N	62.2 (22.3) 145	59.9 (22.3) 137
Mean score at Week 15 (SD) n	71.0 (21.2) 109	63.7 (20.6) 92
LS mean change from baseline (95% CI) n*	6.9 (3.3–10.6) 150	−0.9 (−4.8–3.0) 147
Difference in LS mean (95% CI) p value	7.8 (2.8–12.8) p=0.0020	

Adapted from Brahmer JR, *et al.* 2017.[1]

HRQoL was an exploratory endpoint.

*Based on a cLDA model. For baseline and Week 15, n is the number of patients in each treatment group with non-missing assessments at the specific time point; for change from baseline, n is the number of patients in the analysis population in each treatment group.[1]

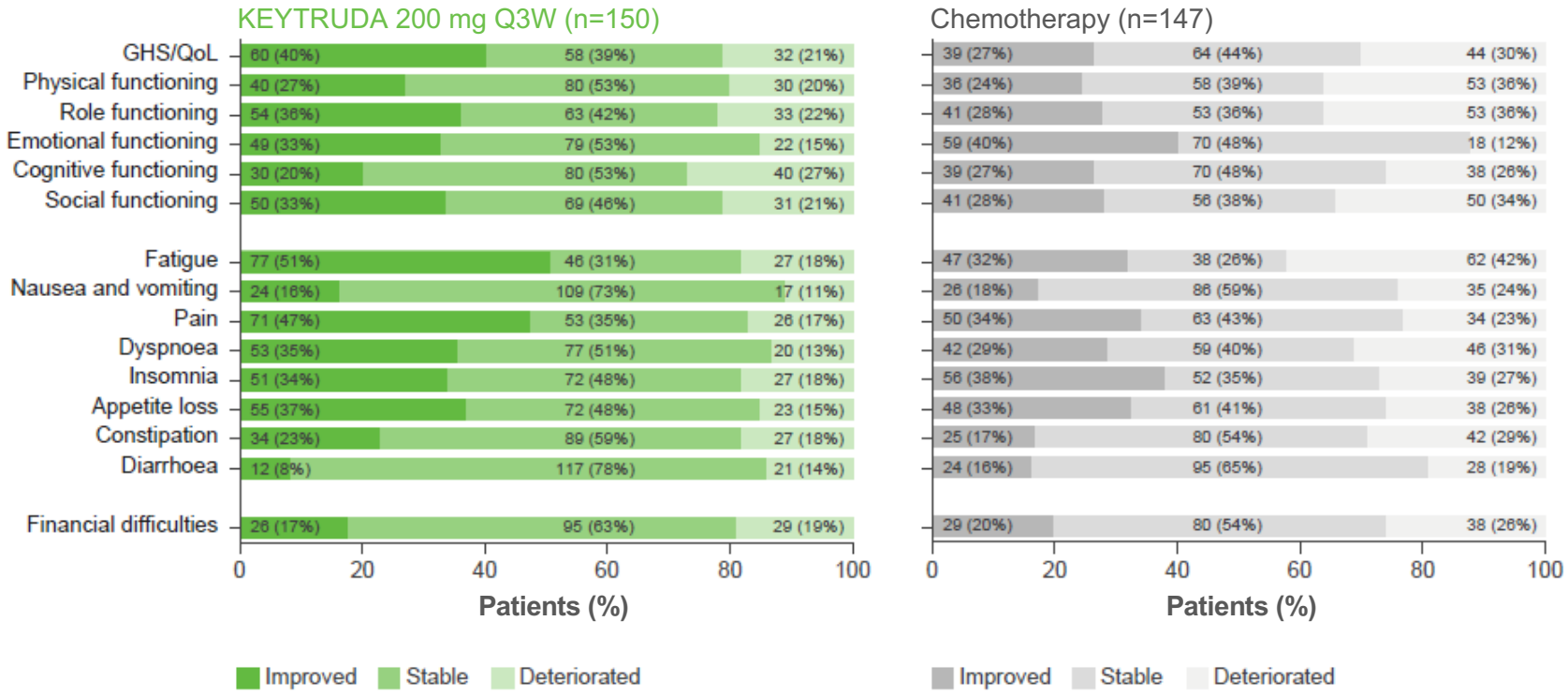
CI, confidence interval; cLDA, constrained longitudinal data analysis; EORTC QLQ-C30, European Organization for Research and Treatment of Cancer Quality of Life Questionnaire Core 30 items; GHS, global health status; HRQoL, health-related quality of life; LS, least squares; Q3W, every 3 weeks; SD, standard deviation.

1. Brahmer JR, *et al. Lancet Oncol* 2017;18:1600–1609.

KEYNOTE-024: HRQoL[1]

Proportion of patients with improved, stable and deteriorated QLQ-C30 scores at 15 weeks.

No statistical conclusions can be drawn from exploratory endpoints.



Adapted from Brahmer JR, *et al.* 2017.[1]

GHS, global health status; HRQoL, health-related quality of life; Q3W, every 3 weeks; QoL; quality of life; QLQ-C30, Quality of Life Questionnaire Core 30 items.

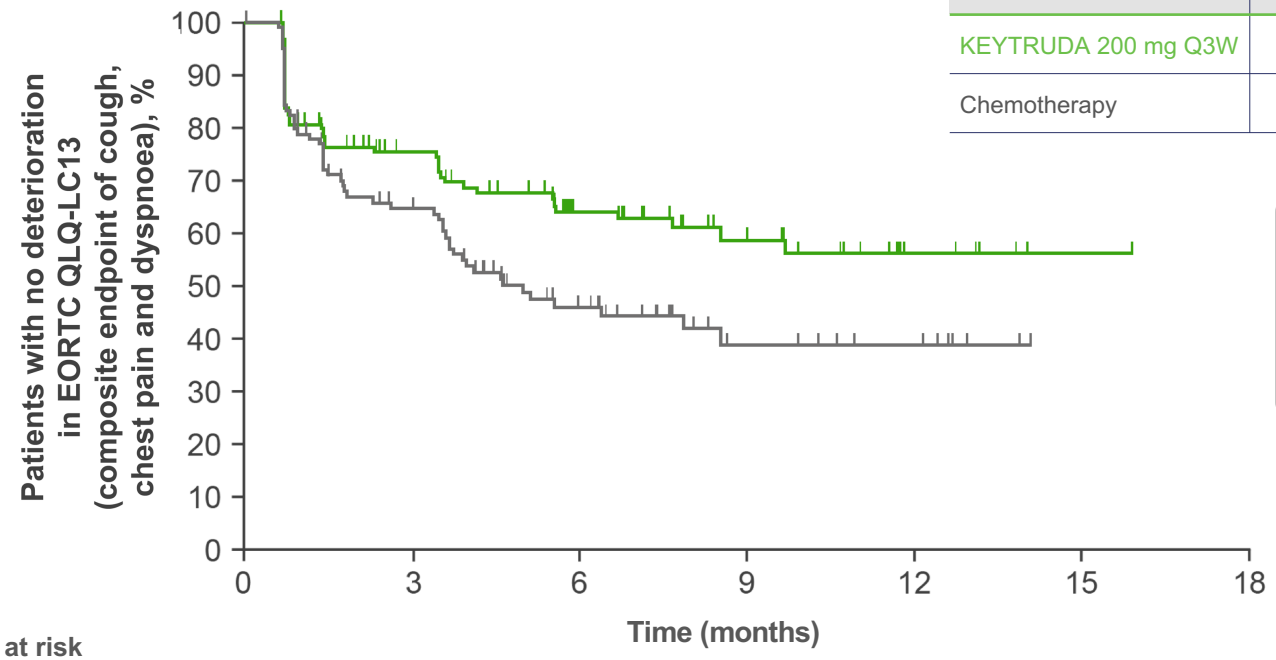
1. Brahmer JR, *et al. Lancet Oncol* 2017;18:1600–1609.

KEYNOTE-024: Time to deterioration analysis[1]

Composite endpoint of cough, chest pain and dyspnoea.

No statistical conclusions can be drawn from exploratory endpoints.

Treatment arm	Events, n	HR (95% CI)	p value*
KEYTRUDA 200 mg Q3W	46 (30.5%)	0.66	0.029
Chemotherapy	58 (39.2%)	(0.44–0.97)	



Number at risk

KEYTRUDA 200 mg Q3W	151	78	47	26	7	1	0
Chemotherapy	148	60	30	11	7	0	0

Time to deterioration was longer with KEYTRUDA than with chemotherapy (median not reached, [95% CI: 8.5–NR] vs 5.0 months [95% CI: 3.6–NR])

Adapted from Brahmer JR *et al.* 2017.[1]

*Two-sided nominal p value.[1]

CI, confidence interval; EORTC QLQ-LC13, The European Organization for Research and Treatment of Cancer Quality of Life Questionnaire Lung Cancer 13 Module; HR, hazard ratio; NR, not reached; Q3W, every 3 weeks.

1. Brahmer JR, *et al. Lancet Oncol* 2017;18:1600–1609.

KEYNOTE-024: Efficacy and safety summary

A key to more possibilities for appropriate patients with metastatic NSCLC.

Efficacy of KEYTRUDA in KEYNOTE-024[1,2]

- At IA1, KEYTRUDA monotherapy demonstrated a superior PFS and OS benefit vs platinum-based chemotherapy (median follow-up: 11.2 months):[1,2]

50% reduced risk of progression

HR: 0.50 (95% CI: 0.37–0.68), p<0.001 (secondary endpoint, statistically significant)

40% reduced risk of death

HR: 0.60 (95% CI: 0.41–0.89), p=0.005 (primary endpoint, statistically significant)

- Patients who completed 35 cycles (2 years) of KEYTRUDA experienced long-term OS[3]

Safety profile of KEYTRUDA in KEYNOTE-024[3,4]

- KEYTRUDA monotherapy displayed a generally manageable tolerability profile
- No new safety signals were identified with long-term treatment with KEYTRUDA

In the 5-year follow-up, treatment with KEYTRUDA monotherapy continued to demonstrate an OS and PFS benefit vs platinum-based chemotherapy (median follow-up: 59.9 months; p not tested)[3]

- The 5-year OS rate was approximately doubled in the KEYTRUDA arm vs the chemotherapy arm (31.9% vs 16.3%), with a median DOR of 29.1 months (despite the 66% effective crossover rate)[3]

CI, confidence interval; DOR, duration of response; HR, hazard ratio; HRQoL, health-related quality of life; IA, interim analysis; NSCLC, non-small cell lung cancer; OS, overall survival; PFS, progression-free survival.

1. Reck M, *et al*. ESMO. 7–11 October 2016. Copenhagen, Denmark. Oral presentation. **2.** Reck M, *et al. N Engl J Med* 2016;375:1823–1833 (and supplementary appendix). **3.** Reck M, *et al. J Clin Oncol* 2021;39:2339–2349. **4.** Reck M, *et al. J Clin Oncol* 2019;37:537–546. **5.** Brahmer JR, *et al. Lancet Oncol* 2017;18:1600–1609.

KEYNOTE-024: HRQoL summary[1]

EORTC QLQ-C30 and QLQ-LC13. No statistical conclusions can be drawn from exploratory endpoints.

HRQoL with KEYTRUDA in KEYNOTE-024

- KEYTRUDA improved or maintained HRQoL compared with that for chemotherapy
- The mean change from baseline in EORTC QLQ-C30 GHS/QoL scores increased over 33 weeks in patients who received KEYTRUDA compared with those who received chemotherapy
- In most EORTC QLQ-C30 functioning and symptom domains, changes from baseline to Week 15 were greater for patients who received KEYTRUDA compared with those who received chemotherapy
- Overall, changes from baseline to Week 15 in EORTC QLQ-LC13 symptom domains were also greater for the KEYTRUDA group than the chemotherapy group
  - Neuropathy, alopecia and chest pain were nominally significantly different between groups*

*Described by no overlaps within the 95% CI interval between the KEYTRUDA and chemotherapy groups.
CI, confidence interval; EORTC QLQ-C30, European Organization for Research and Treatment of Cancer Quality of Life Questionnaire Core 30 items; HRQoL, health-related quality of life; GHS, global health status; QoL, quality of life; QLQ-LC13, Quality of Life Questionnaire Lung Cancer 13 items.

1. Brahmer JR, *et al. Lancet Oncol* 2017;18:1600–1609.

KEYTRUDA offers flexibility of dosing[1]

Administered as an IV infusion

Over 30 minutes

200 mg Q3W or 400 mg Q6W

The 200 mg Q3W (once every 3 weeks) regimen has been assessed in Phase 2 and 3 registration studies across a multitude of indications of KEYTRUDA. An exposure-response evaluation, using modelling and simulation, led to the approval of the 400 mg Q6W (once every 6 weeks) dosing for monotherapy and combination therapy.[1]

IV, intravenous; Q3W, every 3 weeks; Q6W, every 6 weeks.

1. KEYTRUDA Summary of Product Characteristics. MSD. Available at: https://www.medicines.org.uk/emc/product/2498/smpc. Accessed: May 2026.

Data dive

PFS

- Interim analysis 1 (1-year)
- Updated analysis (5-year)

OS

- Interim analysis 1 (1-year)
- Updated analysis (5-year)

Responses

- Interim analysis 1 – Summary (1-year)
- Updated analysis – Summary (5-year)
- Updated analysis – Best OR after 35 cycles of KEYTRUDA

Safety

- Interim analysis 2 – AEs (2-year)
- Updated analysis – AEs (5-year)
- Interim analysis 2 – TRAEs (2-year)
- Interim analysis 2 – Immune-mediated AEs (2-year)

HRQoL

- EORTC QLQ-C30 GHS
- Breakdown of QLQ-C30 scores
- Time to deterioration analysis

AE, adverse event; DCR, disease control rate; DOR, duration of response; EORTC, The European Organisation for Research and Treatment of Cancer; HRQoL, health-related quality of life; ITT, intent-to-treat; OR, objective response; OS, overall survival; PFS, progression-free survival; QLQ-C30, Quality of Life Questionnaire Core 30; QLQ-LC13, Quality of Life Questionnaire Lung Cancer 13; TRAE, treatment-related adverse event; TPS, tumour proportion score.