MSD Oncology

KEYTRUDA® (pembrolizumab) in the treatment of patients with advanced (unresectable or metastatic) melanoma

Adverse events should be reported. Reporting forms and information can be found at https://yellowcard.mhra.gov.uk/ or search for MHRA Yellow Card in the Google Play or Apple App Store. Adverse events should also be reported to MSD, UK (Tel: 0208 154 8000).

Please refer to the full KEYTRUDA Summary of Product Characteristics and Risk Minimisation Materials for Patients before prescribing KEYTRUDA.

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.

Images are illustrative of the range of patients diagnosed with melanoma.

UK prescribing information can be found at https://www.emcpi.com/pi/33162. Full indications can be found on Slide 2.

GB-OOC-00948 | Date of preparation: April 2025.

KEYTRUDA® (pembrolizumab)

KEYTRUDA melanoma indications[1]

- KEYTRUDA as monotherapy is indicated for the treatment of adults and adolescents aged 12 years and older with advanced (unresectable or metastatic) melanoma
- KEYTRUDA as monotherapy is indicated for the adjuvant treatment of adults and adolescents aged 12 years and older with Stage IIB, IIC or III melanoma and who have undergone complete resection

Dosing information[1]

- Patients with advanced melanoma should be treated with KEYTRUDA until disease progression or unacceptable toxicity
- For the adjuvant treatment of melanoma, KEYTRUDA should be administered until disease recurrence, unacceptable toxicity or the duration of up to 1 year
- The recommended dose of KEYTRUDA as monotherapy in adults is either 200 mg every 3 weeks or 400 mg every 6 weeks administered as an intravenous infusion over 30 minutes
- The recommended dose of KEYTRUDA as monotherapy in paediatric patients aged 12 years and older with melanoma is 2 mg/kg bodyweight (up to a maximum of 200 mg), every 3 weeks administered as an intravenous infusion over 30 minutes
- A link to the prescribing information for KEYTRUDA can be found at the top of each slide in this presentation
- For any queries, please contact your local MSD contact at msdukoncology@msd.com

MSD does not recommend the use of products outside their licensed indications. Please refer to the Summary of Product Characteristics and risk minimisation materials available on the EMC website before prescribing.

EMA, European Medicines Agency.
1. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYTRUDA offers flexibility of dosing[1]

Administered as an IV infusion

Over 30 minutes

ADULT DOSING OPTIONS

200 mg Q3W

400 mg Q6W

Assessment of regimens

The 200 mg Q3W (once every 3 weeks) regimen has been assessed in phase II and III 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.

The recommended dose of KEYTRUDA as monotherapy in paediatric patients aged 12 years and older with melanoma is 2 mg/kg body weight (up to a maximum of 200 mg), every 3 weeks administered as an intravenous infusion over 30 minutes.

What does the flexibility of dosing mean for you and your patients?

Please refer to the KEYTRUDA Summary of Product Characteristics and patient Risk Minimisation Materials before prescribing KEYTRUDA.

IV, intravenous; **Q3W,** every three weeks; **Q6W,** every six weeks.

1. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYTRUDA: bringing immunotherapy to Stage IIB–IV melanoma

This deck covers KEYNOTE-006 and patients with Stage IV melanoma. To find out more about KEYTRUDA in Stage II and III melanoma, contact your local MSD representative or visit MSD Connect.

KEYNOTE-716
Over 4 years of data

KEYNOTE-054
Over 7 years of data

KEYNOTE-006
Over 10 years of data

Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA as monotherapy is indicated for the treatment of adults and adolescents aged 12 years and older with advanced (unresectable or metastatic) melanoma.[1]
KEYTRUDA as monotherapy is indicated for the adjuvant treatment of adults and adolescents aged 12 years and older with Stage IIB, IIC or III melanoma and who have undergone complete resection.[1]

1. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

How can KEYTRUDA support patients with advanced melanoma?

Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA® (pembrolizumab)

Meet Farah,
a patient who has Stage IV metastatic melanoma*

Name: Farah
Age: 77
Medical history:

- Farah visited her GP in 2019 with concerns about a mole on her back and was referred to a dermatologist
- The mole was excised and histopathological review confirmed the diagnosis of Stage IIC melanoma
- Sentinel lymph node biopsy was conducted and no disease was detected
- Recently however, Farah discovered hardened lumps under her skin, and has had shortness of breath along with chest pain
- A chest X-ray showed a suspicious right-sided nodule and a subsequent CT scan showed metastases to the lung and a soft-tissue nodule in the liver

Farah and other patients with unresectable advanced melanoma are at a high risk of mortality[1]

*Not a real patient. **CT,** computed tomography; **GP,** general practitioner.
1. Cancer Research UK. Available at: https://www.cancerresearchuk.org/about-cancer/melanoma/survival. Accessed February 2025.

KEYTRUDA® (pembrolizumab)

Learn how patients may benefit from KEYTRUDA treatment

Pivotal KEYTRUDA trials in advanced melanoma

KEYNOTE-001[1]

KEYTRUDA dose comparison (N=655)

Phase Ib

Ipilimumab-naïve and ipilimumab-treated

Primary endpoint: ORR

KEYTRUDA dosing*

2 mg/kg Q3W or 10 mg/kg Q2W or Q3W

View this trial

KEYNOTE-002[2]

KEYTRUDA vs chemotherapy (N=540)

Phase II

Ipilimumab-treated

Primary endpoints: PFS, OS

KEYTRUDA dosing*

2 mg/kg Q3W or 10 mg/kg Q3W

View this trial

KEYNOTE-006[3]

KEYTRUDA vs ipilimumab (N=834)

Phase III

Ipilimumab-naïve and ≤1 previous systemic therapy for advanced disease

Primary endpoints: PFS, OS

KEYTRUDA dosing*

10 mg/kg Q2W or 10 mg/kg Q3W

View this trial

***THESE ARE UNLICENSED DOSES IN ADULTS. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes. Data from KEYNOTE-001, 002 and 006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[4]**

ORR, overall response rate; **OS,** overall survival; **PFS,** progression-free survival; **Q2W,** every two weeks; **Q3W,** every three weeks; **Q6W,** every 6 weeks.

1. Ribas A, *et al. JAMA* 2016;315:1600–1609. **2.** Ribas A, *et al. Lancet Oncol* 2015;16:908–918. **3.** Robert C, *et al. N Engl J Med* 2015;372:2521–2532. **4.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYNOTE-001:

Phase Ib trial of KEYTRUDA for the treatment of patients with unresectable advanced melanoma

View the study design ›

View KEYNOTE-001 efficacy data ›

View KEYNOTE-001 safety data ›

Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001: study design[1]

- KEYNOTE-001 was a partially-randomised, independent, multicentre, international and open-label Phase Ib study designed to assess the efficacy and safety of several doses of KEYTRUDA
- KEYTRUDA was administered until disease progression or withdrawal was determined by an investigator for intolerable toxicity or protocol violation

Inclusion criteria:

- Advanced unresectable melanoma with measurable disease per investigator assessment
- Aged ≥18 years
- ECOG PS 0–1
- Adequate organ function

Exclusion criteria:

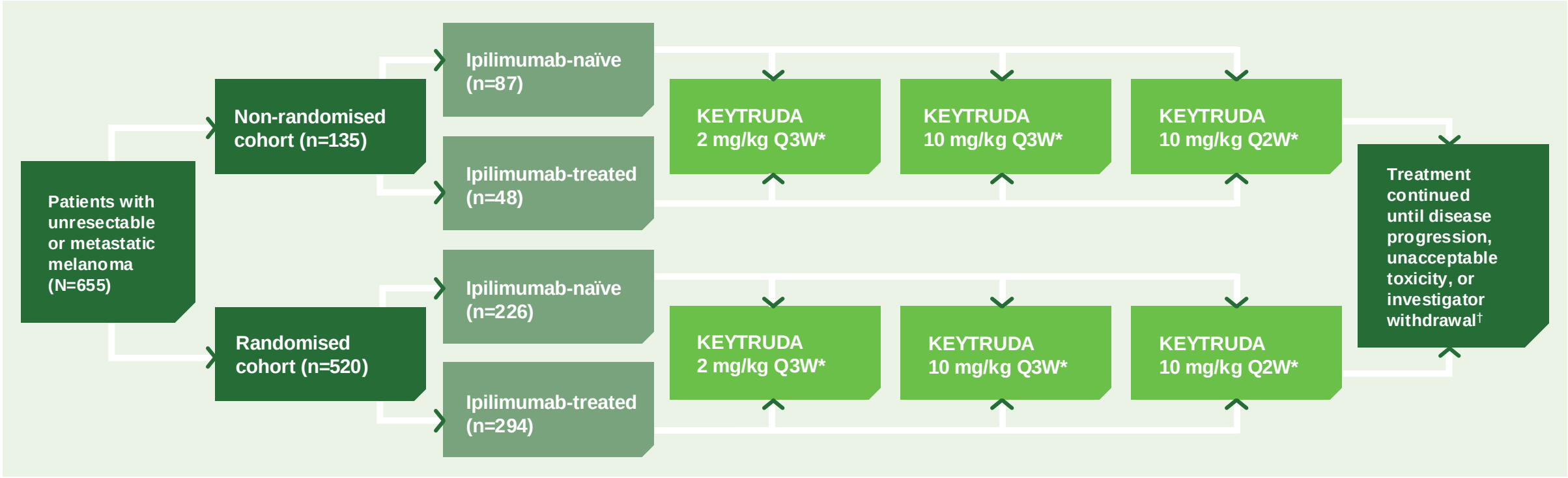
- Chemotherapy within 4 weeks of the first study dose
- Active infection
- Active autoimmune disease (or history thereof)
- Ongoing systemic corticosteroid therapy at treatment doses
- Previous treatment targeting the PD-1 pathway

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[3] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[3]

Refer to the Supplementary Appendix for a full list of inclusion and exclusion criteria.[2]
ECOG PS, Eastern Cooperative Oncology Group performance status; **PD-1,** programmed cell death protein 1; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks.
1. Ribas A, *et al. JAMA* 2016;315:1600–1609. **2.** Ribas A, *et al. JAMA* 2016;315:1600–1609. Supplementary appendix. **3.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001: study design[1]



Adapted from Ribas A, *et al. JAMA* 2016.[1]

View baseline patient characteristics

*These are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

†Clinically stable patients with initial evidence of disease progression were permitted to remain on treatment until disease progression was confirmed.
Q2W, every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks.
1. Ribas A, *et al. JAMA* 2016;315:1600–1609. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001: key trial endpoints[1]

1

Primary efficacy endpoint:

- Objective response rate (ORR): defined as the percentage of patients with a best overall response of complete or partial response*

2

Secondary endpoints:

- ORR as assessed by immune-mediated response criteria by investigators
- Duration of response (time from best overall response to first documentation of disease progression)
- Progression-free survival (PFS): time from start of treatment to documented disease progression or death due to any cause
- Overall survival (OS): time from start of treatment to death due to any cause

Analysis of ORR was done in the full analysis set, defined as all patients with measurable disease per independent central review at baseline who received at least one dose of study treatment. All other analyses were performed in the all-patients-as-treated population (all patients who received at least one dose of study treatment).

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

*ORR was assessable only in patients with measurable disease at baseline and was assessed by independent central review using RECIST v1.1. For assessment of response rate, patients without post-baseline disease assessments were counted as non-responders. A pre-specified subgroup analysis of ORR was conducted.

ORR, objective response rate; **OS,** overall survival; **PFS,** progression-free survival; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **RECIST,** Response Evaluation Criteria in Solid Tumours.

1. Ribas A, *et al. JAMA* 2016;315:1600–1609. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

Objective response rate (ORR) following treatment with KEYTRUDA[1]

Median duration of follow-up was 21 months (range: 14–35 months)

	No. with objective response	Total no. of patients	Objective response rate, % (95% CI)*
Overall	**194**	**581**	**33.4 (29.6–37.4)**
Previous ipilimumab†			
Naïve	107	277	38.6 (32.9–44.6)
Treated	87	304	28.6 (23.6–34.1)
KEYTRUDA dose and schedule†			
2 mg/kg Q3W	45	143	31.5 (24.0–39.8)
10 mg/kg Q3W	86	272	31.6 (26.1–37.5)
10 mg/kg Q2W	63	166	38.0 (30.5–45.8)

Adapted from Ribas A, *et al. JAMA* 2016.[1]

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Data cut-off: 18 October 2014. Full analysis set included 581 patients who had measurable disease assessed by central review at baseline (RECIST v1.1). *ORR was defined as the percentage of patients with a complete or partial response. †Original analysis additional subgroup data on objective response rate by sex, age, ECOG PS, LDH level, presence of brain metastases, *BRAF* status, M stage, number of previous therapies, type of previous therapies and baseline tumour size. **CI,** confidence interval; **ECOG PS,** Eastern Cooperative Oncology Group performance status; **LDH,** lactate dehydrogenase; **M,** metastasis; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **RECIST,** Response Evaluation Criteria in Solid Tumours.

1. Ribas A, *et al. JAMA* 2016;315:1600–1609. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

Treatment-related adverse events (TRAEs) with KEYTRUDA[1]

Median duration of follow-up was 55 months

TRAEs*	KEYTRUDA, n (%) N=655
Any grade	562 (86)
Grade 3–4†	114 (17)
Led to death	0
Led to discontinuation	51 (8)

Adapted from Hamid O, *et al. Ann Oncol* 2019.[1]

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[3] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[3]

Data cut-off: 1 September 2017. *Determined by the investigator to be related to treatment.[2] †Grades are based on National Cancer Institute Common Terminology Criteria for Adverse Events version 4.0.[2]
Q2W, every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks.
1. Hamid O, *et al. Ann Oncol* 2019;30:582–588. **2.** Hamid O, *et al. Ann Oncol* 2019;30:582–588. Supplementary appendix. **3**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001: final analysis

Click on the arrows below to view 55-month follow-up data for:[1]

- Overall survival
- Objective response rates
- Progression-free survival
- Immune-mediated adverse events

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Q2W, every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks.

1. Ribas A, *et al. JAMA* 2016;315:1600–1609. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-002:

Phase II trial of KEYTRUDA for the treatment of patients with unresectable advanced melanoma

View the study design ›

View KEYNOTE-002 efficacy data ›

View KEYNOTE-002 safety data ›

Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA® (pembrolizumab)

KEYNOTE-002: study design[1]

- KEYNOTE-002 was an international, randomised, controlled, Phase II study comparing KEYTRUDA with investigator-choice chemotherapy in patients previously treated with ipilimumab
- Randomisation was stratified by ECOG PS, LDH concentration (normal vs raised [≥110% ULN]) and *BRAF* status (wild-type vs *V600* mutant-positive)

Inclusion criteria:

- Histologically or cytologically confirmed unresectable Stage III or Stage IV melanoma not amenable to local therapy
- Aged ≥18 years
- Confirmed disease progression within 24 weeks of the last ipilimumab dose
- Previous *BRAF* or *MEK* inhibitor therapy or both (if *BRAF V600* mutant-positive)
- ECOG PS 0–1
- Resolution or improvement of ipilimumab-related adverse events to Grade 0–1
- Measurable disease per RECIST v1.1

Exclusion criteria:

- Known active brain metastases or carcinomatous meningitis
- Active autoimmune disease
- Active infection requiring systemic therapy
- Known history of HIV infection
- Active hepatitis B or C virus infection
- History of Grade 4 ipilimumab-related adverse events or Grade 3 ipilimumab-related adverse events lasting longer than 12 weeks
- Previous treatment with any other anti-PD-1 or anti-PD-L1 therapy

NOTE: In KEYNOTE-002, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-002 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

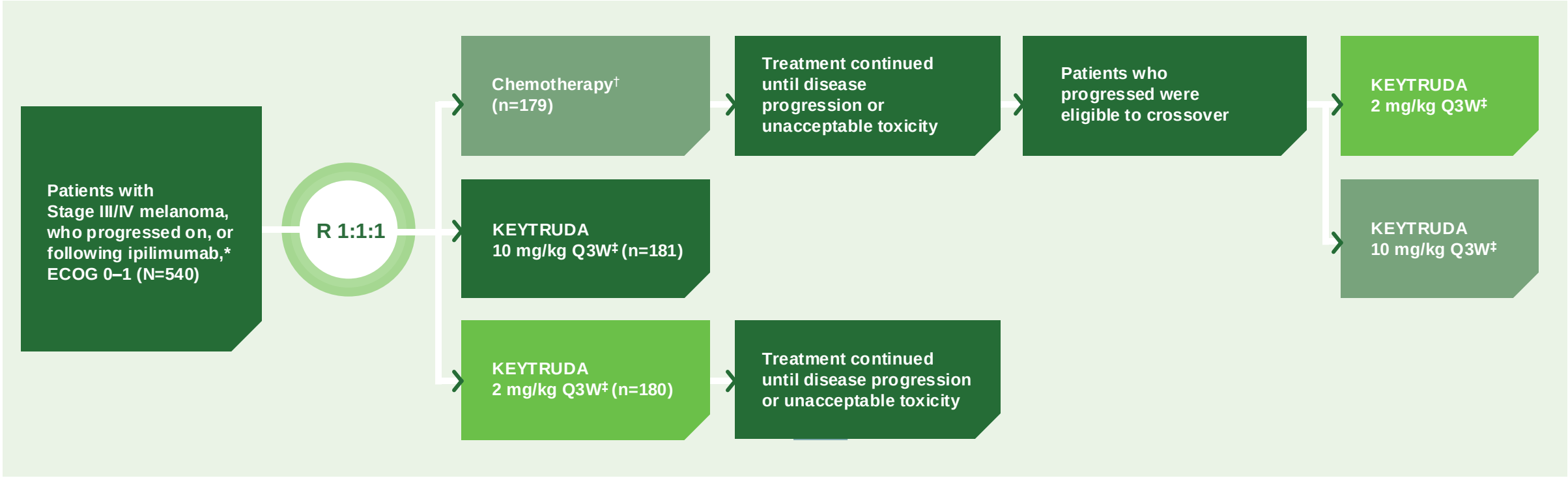
Refer to the Supplementary Appendix for a full list of inclusion and exclusion criteria.[2]

ECOG PS, Eastern Cooperative Oncology Group performance status; **HIV,** human immunodeficiency virus; **LDH,** lactate dehydrogenase; **PD-1,** programmed cell death protein 1; **PD-L1,** programmed death ligand 1; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **RECIST,** Response Evaluation Criteria in Solid Tumours; **ULN,** upper limit of normal.

1. Ribas A, *et al. Lancet Oncol* 2015;16:908–918. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-002: study design[1]



Adapted from Ribas A, *et al. Lancet Oncol* 2015.[1]

View baseline patient characteristics

‡These are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-002 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

*Patients with *BRAF V600* mutation were also previously treated with a *BRAF* or *MEK* inhibitor. †The chemotherapy agent used for each patient in the chemotherapy arm was based on investigator choice, from five options (carboplatin alone, carboplatin + paclitaxel alone, dacarbazine or temozolomide). **ECOG,** Eastern Cooperative Oncology Group; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **R,** randomisation. **1.** Ribas A, *et al. Lancet Oncol* 2015;16:908–918. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-002: key trial endpoints[1]

The sample size of the study was determined based on the overall survival endpoint at the final analysis

1

Primary efficacy endpoint:

- Progression-free survival: the time from randomisation to first documented disease progression as per RECIST v1.1 by independent central review or death from any cause, whichever occurred first
- Overall survival

2

Secondary endpoints:

- Proportion of patients who had an objective response
- Proportion of patients who had a complete or partial response (assessed per RECIST v1.1 by central review)
- Response duration
- Time from best overall response of complete or partial response until disease progression
- Safety

Exploratory endpoints:

- Change from baseline to Week 12 in global health status and QoL score of the EORTC QLQ-C30 questionnaire
- Other functional and symptom subscales as supportive evidence

NOTE: In KEYNOTE-002, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-002 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

EORTC, European Organisation for the Research and Treatment of Cancer; **QLQ-C30,** Quality of Life Questionnaire C30; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **RECIST,** Response Evaluation Criteria in Solid Tumours.

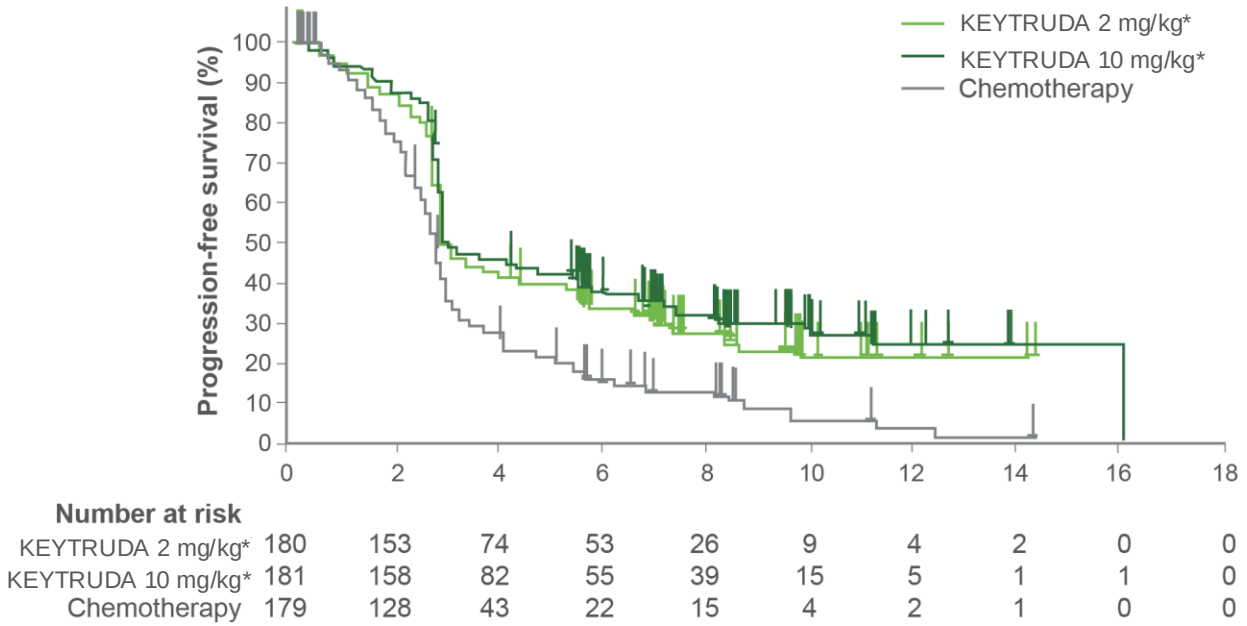
1. Ribas A, *et al. Lancet Oncol* 2015;16:908–918. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

PFS following treatment with KEYTRUDA vs chemotherapy[1]

Median duration of follow-up was 10 months. PFS assessed by RECIST v1.1 by central review in the ITT population.[1]

Kaplan-Meier estimate of PFS in the ITT population



	KEYTRUDA 2 mg/kg* (n=180)	KEYTRUDA 10 mg/kg* (n=181)	Chemotherapy control (n=179)
Number of events, n (%)	129 (72)	126 (70)	155 (87)
Median duration, months (range)	2.9 (2.8–3.8)	2.9 (2.8–4.7)	2.7 (2.5–2.8)
Proportion progression-free at 6 months, % (range)	34 (27–41)	38 (31–45)	16 (10–22)
Proportion progression-free at 9 months, % (range)	24 (17–31)	29 (23–37)	8 (4–14)
HR for death or disease progression,† KEYTRUDA vs chemotherapy, (95% CI)	0.57 (0.45–0.73); p<0.0001‡	0.50 (0.39–0.64); p<0.0001‡	

Adapted from Ribas A, *et al. Lancet Oncol* 2015.[1]

***These are unlicensed doses in adults.** To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-002 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Data cut-off: 12 May 2014. †HRs and associated 95% CIs were based on Cox regression models with treatment as a covariate stratified by ECOG performance status (0 vs 1), lactate dehydrogenase concentration (normal vs raised), and *BRAF V600* status (mutant vs wild-type). ‡One-sided p-value on the log-rank test. **CI,** confidence interval; **ECOG,** Eastern Cooperative Oncology Group; **HR,** hazard ratio; **ITT,** intention-to-treat; **PFS,** progression-free survival; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks. **RECIST,** Response Evaluation Criteria in Solid Tumours.

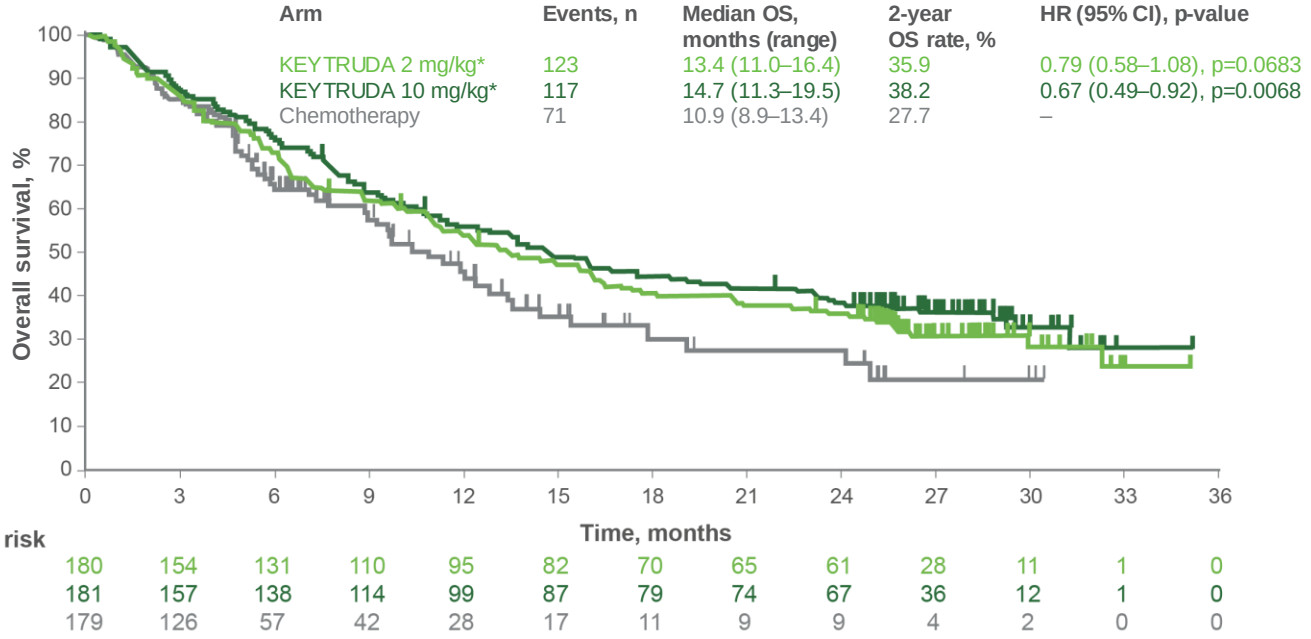
1. Ribas A, *et al. Lancet Oncol* 2015;16:908–918. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

OS following treatment with KEYTRUDA vs chemotherapy[1]

Median duration of follow-up was 28 months. Kaplan-Meier estimate of overall survival adjusted for crossover in KEYNOTE-002.[1]

Kaplan-Meier estimate of overall survival adjusted for crossover in KEYNOTE-002[1]



Adapted from Hamid O, *et al. Eur J Cancer* 2017.[1]

***These are unlicensed doses in adults.** To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-002 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Data cut-off 16 November 2015.
CI, confidence interval; **HR,** hazard ratio; **OS,** overall survival; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks. **1.** Hamid O, *et al. Eur J Cancer* 2017;86:37–45. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

Treatment-related adverse events with KEYTRUDA[1]

Median time on treatment was 112.5 days (range: 1.0–988.0) and 145.0 days (range: 1.0–967.0) for patients receiving KEYTRUDA 2 mg/kg and 10 mg/kg,* respectively.[1]*

Treatment-related adverse events† with KEYTRUDA[1]

TRAEs, n (%)	KEYTRUDA 2 mg/kg* (n=178)			KEYTRUDA 10 mg/kg* (n=179)			Chemotherapy (n=171)		
	Grade 1–2	Grade 3–4	Grade 5	Grade 1–2	Grade 3–4	Grade 5	Grade 1–2	Grade 3–4	Grade 5
Any	101 (56.7)	24 (13.5)	0	106 (59.2)	29 (16.2)	1 (<1)	93 (54.3)	45 (26.3)	0
Led to discontinuation	2 (1.1)	6 (3.3)	0	4 (2.2)	11 (6.1)	0	5 (2.9)	4 (2.3)	0

Adapted from Hamid O, *et al. Eur J Cancer* 2017.[1]

View detailed TRAEs

View detailed IMAEs

***These are unlicensed doses in adults.** To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-002 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]*

Data cut-off: 16 November 2015.

†Safety was assessed in all patients who received ≥1 dose of study treatment. The relationship between an adverse event and a study drug was attributed by the investigator.

IMAE, immune-mediated adverse event; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **TRAE,** treatment-related adverse event.

1. Hamid O, *et al. Eur J Cancer* 2017;86:37–45.
2. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-006:

Phase III trial of KEYTRUDA for the treatment of patients with unresectable advanced melanoma

View the study design

View KEYNOTE-006 efficacy data

View KEYNOTE-006 safety data

Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA® (pembrolizumab)

KEYNOTE-006: a multicentre, randomised, open-label Phase III trial in patients with unresectable Stage III or IV melanoma

View the study design

September 2014 — *Initial PFS analysis (IA1)*[1]

March 2015 — *Initial OS analysis (IA2)*[1]

December 2015 — *Final analysis*[2]

December 2018 — *5-year post-hoc analysis*[3]

April 2021 — *7-year post-hoc analysis*[4]

May 2024 — *10-year post-hoc analysis*[5]

View the summary

View the efficacy data

View the safety data

June 2019

KEYNOTE-006 ended; transition to KEYNOTE-587 for eligible patients[5]

View the efficacy data

Data from 5-, 7- and 10-year post hoc analyses includes patients enrolled onto KEYNOTE-006 who subsequently transitioned to the KEYNOTE-587 study which was designed to continue collecting long-term efficacy data in patients with solid tumours who previously received KEYTRUDA in a clinical trial.

In KEYNOTE-006, KEYTRUDA was dosed at 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[6] Data from KEYNOTE-006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[6]

IA1, interim analysis; **OS,** overall survival; **PFS,** progression-free survival; **Q2W,** every 2 weeks; **Q3W,** every 2 weeks; **Q6W,** every 6 weeks.

1. Robert C, *et al. N Engl J Med* 2015;372:2521–2532. **2.** Schachter J, *et al. Lancet* 2017;390:1853–1862. **3.** Robert C, *et al. Lancet Oncol* 2019;20:1239–1251. **4.** Robert C, *et al. J Clin Oncol* 2023;41:3998–4003. **5.** Long GV, *et al. Ann Oncol* 2024;S0923-7534(24)03910-3. **6.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-006 / KEYNOTE-587 study design[1,2]

Histologically confirmed, unresectable Stage III or IV melanoma

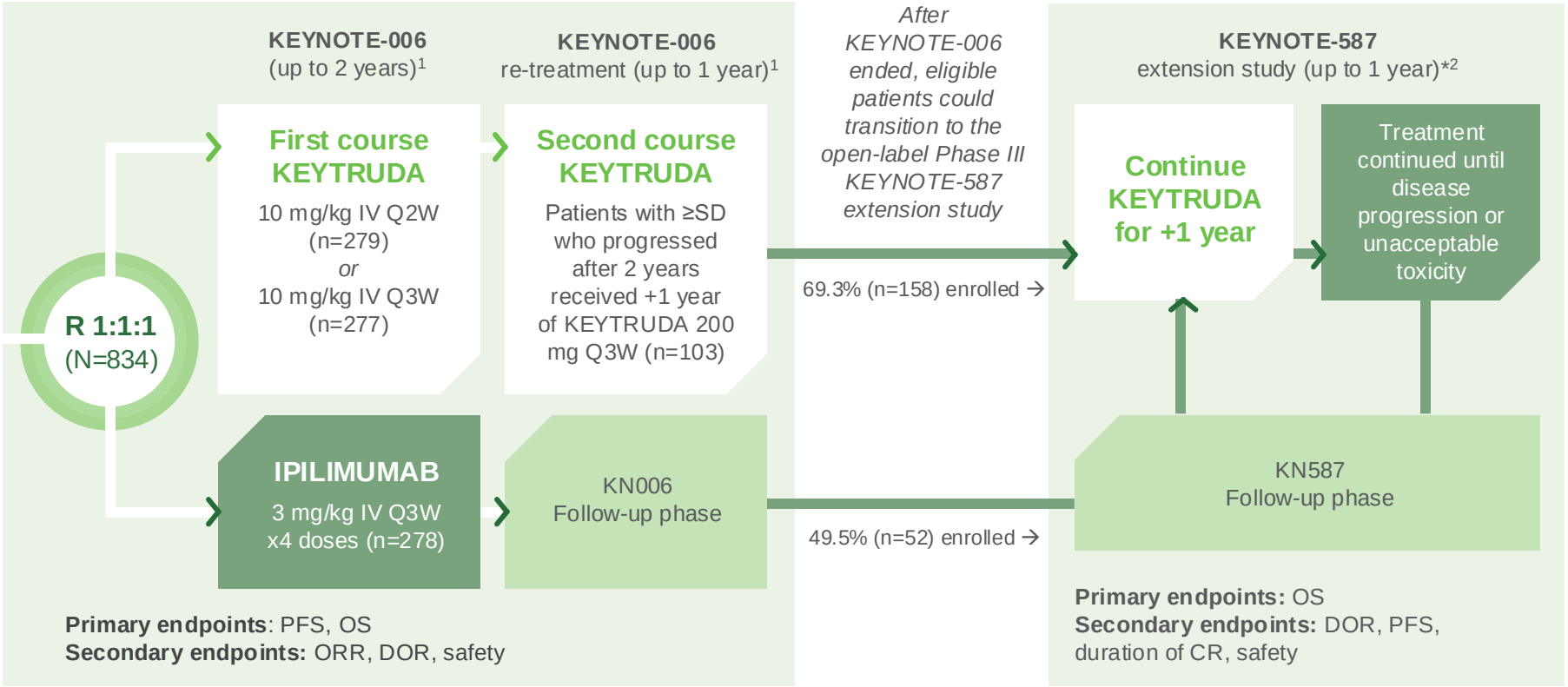
- Aged ≥18 years
- ECOG PS 0–1
- ≤1 previous systemic therapy for advanced disease
- Known *BRAF V600* mutational status

Stratification factors:

- ECOG PS (0 vs 1), line of therapy (1 vs 2), PD-L1 expression (+ vs -)

Please refer to the protocol for the full list of inclusion and exclusion criteria.

View baseline patient characteristics



In KEYNOTE-006, KEYTRUDA was dosed at 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[3] Data from KEYNOTE-006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[3]

Adapted from Robert C, *et al. N Eng J Med* 2015[1] and Robert C, *et al. J Clin Oncol* 2023[2]

Refer to the Supplementary Appendix for the list of inclusion and exclusion criteria.[2]

*All patients from KEYNOTE-006 who enrolled in KEYNOTE-587 had completed the first course of KEYTRUDA. **CR,** complete response; **DOR,** duration of response; **ECOG,** Eastern Cooperative Oncology Group; **IV,** intravenous; **ORR,** overall response rate; **OS,** overall survival; **PD,** progressive disease; **PD-L1,** programmed death ligand 1; **PFS,** progression-free survival; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **R,** randomisation.

1. Robert C, *et al. N Engl J Med* 2015;372:2521–2532. **2.** Robert C, *et al. J Clin Oncol* 2023;41:3998–4003. **3.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-006 / KEYNOTE-587: key trial endpoints[1–3]

KEYNOTE-006 key trial endpoints[1]

Primary efficacy endpoint:

- Progression-free survival (PFS): time from randomisation to documented disease progression according to RECIST v1.1 or death from any cause
- Overall survival: time from randomisation to death from any cause
- *One-sided alpha of 0.002 was given to the primary objective of KEYTRUDA vs ipilimumab for PFS for the initial analysis*

Secondary endpoints:

- Objective response rate: percentage of patients with complete or partial response according to RECIST
- Duration of response: time from first documented response to radiologic progression according to RECIST
- Safety

KEYNOTE-587 key trial endpoints[3]

Primary efficacy endpoint:

- Overall survival: time from randomisation to death from any cause
- *For PFS and OS analysis, patients in KEYNOTE-006 who did not enrol in KEYNOTE-587 were censored at the date last known alive*

Secondary endpoints:

- Duration of response per evaluation criteria used in the parent study
- PFS
- Duration of complete response per evaluation criteria used in the parent study
- Safety

› Assessment of tumour status was performed at 12 weeks, then every 6 weeks through Week 48, followed by every 12 weeks thereafter[1]

In KEYNOTE-006, KEYTRUDA was dosed at 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

ORR, objective response rate; **OS,** overall survival; **PFS,** progression-free survival; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **RECIST,** Response Evaluation Criteria in Solid Tumours.

1. Robert C, *et al. N Engl J Med* 2015;372:2521–2532. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025. **3.** Robert C, *et al. J Clin Oncol* 2023;41:3998–4003.

KEYTRUDA® (pembrolizumab)

KEYNOTE-006:

Efficacy data from final analysis of PFS and OS

View 10-year data ›

Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA® (pembrolizumab)

At the final analysis of KEYNOTE-006, KEYTRUDA demonstrated PFS and OS benefits vs ipilimumab[1]

Final analysis of primary endpoints measured after 22.9 months median follow-up within the intent-to-treat population

PFS

Risk of disease progression or death with KEYTRUDA vs ipilimumab

- Patients with events, % (n):
  - Q2W: 64.9% (181/279)
  - Q3W: 66.1% (183/277)
  - IPI: 72.7% (202/278)
- **Q2W vs IPI:** HR: 0.61; 95% CI: 0.50–0.75; p<0.0001
- **Q3W vs IPI:** HR: 0.61; 95% CI: 0.50–0.75; p<0.0001

39%

relative risk reduction

2-year PFS rate
(Q2W vs Q3W vs IPI)*
31% vs 28% vs 14%

OS

Risk of death with KEYTRUDA vs ipilimumab

- Patients with events, % (n):
  - Q2W: 43.7% (122/279)
  - Q3W: 43.0% (119/277)
  - IPI: 51.1% (142/278)
- **Q2W vs IPI:** HR: 0.68; 95% CI: 0.53–0.87; p<0.0009
- **Q3W vs IPI:** HR: 0.68; 95% CI: 0.53–0.86; p<0.0008

32%

relative risk reduction

2-year OS rate
(Q2W vs Q3W vs IPI)*
55% vs 55% vs 43%

***In KEYNOTE-006, KEYTRUDA was dosed at 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]** **ARR,** absolute response rate; **CI,** confidence interval; **HR,** hazard ratio; **IA,** interim analysis; **IPI,** ipilimumab; **ITT,** intent-to-treat; **OS,** overall survival; **PFS,** progression-free survival; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks.

1. Schachter J, *et al. Lancet* 2017;390:1853–1862. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-006:

Safety data

Pooled safety data of KEYTRUDA across all indications and adverse event management can be found in the Summary of Product Characteristics.

The safety profile of KEYTRUDA among the patients enrolled in KEYNOTE-006 was consistent with previous analyses.

View safety data after the initial analysis ›

View safety data after 5 years ›

Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA® (pembrolizumab)

Initial analysis: TRAEs were observed with KEYTRUDA and ipilimumab[1]

Median duration of follow-up was 7.9 months. Safety was assessed in the as-treated population, which was defined as all patients who underwent randomisation and who received at least one dose of a study drug.

	KEYTRUDA 10 mg/kg Q2W* (n=278)		KEYTRUDA 10 mg/kg Q3W* (n=277)		Ipilimumab (n=256)	
Related to treatment,† n (%)	**Any grade**	**Grade 3–5**	**Any grade**	**Grade 3–5**	**Any grade**	**Grade 3–5**
Any	221 (79.5)	37 (13.3)	202 (72.9)	28 (10.1)	187 (73.0)	51 (19.9)
Occurring in ≥10% in any study group						
Fatigue	58 (20.9)	0	53 (19.1)	1 (0.4)	39 (15.2)	3 (1.2)
Diarrhoea	47 (16.9)	7 (2.5)	40 (14.4)	3 (1.1)	58 (22.7)	8 (3.1)
Rash	41 (14.7)	0	37 (13.4)	0	37 (14.5)	2 (0.8)
Pruritus	40 (14.4)	0	39 (14.1)	0	65 (25.4)	1 (0.4)
Asthenia	32 (11.5)	1 (0.4)	31 (11.2)	0	16 (6.3)	2 (0.8)
Nausea	28 (10.1)	0	31 (11.2)	1 (0.4)	22 (8.6)	1 (0.4)
Arthralgia	26 (9.4)	0	32 (11.6)	1 (0.4)	13 (5.1)	2 (0.8)
Vitiligo	25 (9.0)	0	31 (11.2)	0	4 (1.6)	0

Adapted from Robert C, *et al. N Engl J Med* 2015.[1]

Please refer to the pooled safety data for KEYTRUDA in the SmPC for a full list of adverse events across multiple studies.[2]

***These are unlicensed doses in adults.** The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Data cut-off: 3 September 2014. †The relationship between an adverse event and a study drug was attributed by the investigator.
Q2W, every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **SmPC,** Summary of Product Characteristics. **1.** Robert C, *et al. N Engl J Med* 2015;372:2521–2532. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

Initial analysis: adverse events of special interest in the as-treated population[1]

Post-hoc analysis. Median duration of follow-up was 7.9 months. Safety was assessed in the as-treated population, which was defined as all patients who underwent randomisation and who received at least one dose of a study drug.

	KEYTRUDA 10 mg/kg Q2W* (n=278)		KEYTRUDA 10 mg/kg Q3W* (n=277)		Ipilimumab (n=256)	
AEOSI,† n (%)	**Any grade**	**Grade 3–5**	**Any grade**	**Grade 3–5**	**Any grade**	**Grade 3–5**
Hypothyroidism	28 (10.1)	1 (0.4)	24 (8.7)	0	5 (2.0)	0
Hyperthyroidism	18 (6.5)	0	9 (3.2)	0	6 (2.3)	1 (0.4)
Colitis	5 (1.8)	4 (1.4)	10 (3.6)	7 (2.5)	21 (8.2)	18 (7.0)
Hepatitis	3 (1.1)	3 (1.1)	5 (1.8)	5 (1.8)	3 (1.2)	1 (0.4)
Hypophysitis	1 (0.4)	1 (0.4)	2 (0.7)	1 (0.4)	6 (2.3)	4 (1.6)
Pneumonitis	1 (0.4)	0	5 (1.8)	1 (0.4)	1 (0.4)	1 (0.4)
Type 1 diabetes mellitus	1 (0.4)	1 (0.4)	1 (0.4)	1 (0.4)	0	0
Uveitis	1 (0.4)	0	3 (1.1)	0	0	0
Myositis	0	0	2 (0.7)	0	1 (0.4)	0
Nephritis	0	0	1 (0.4)	0	1 (0.4)	1 (0.4)

Adapted from Robert C, *et al. N Engl J Med* 2015.[1]

Please refer to the pooled safety data for KEYTRUDA in the SmPC for a full list of adverse events across multiple studies.[2]

***These are unlicensed doses in adults.** The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Data cut-off: 3 September 2014. †The listed adverse events of special interest include related terms and are provided regardless of attribution to a study drug.
AEOSI, adverse events of special interest; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **SmPC,** Summary of Product Characteristics.
1. Robert C, et al. N Engl J Med 2015;372:2521–2532. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

5-year analysis: TRAEs were observed with KEYTRUDA and ipilimumab

Post-hoc analysis. Median duration of follow-up was 57.7 months. Safety was assessed in the as-treated population, which was defined as all patients who underwent randomisation and who received at least one dose of a study drug.

	KEYTRUDA (pooled 10 mg/kg Q2W* + 10 mg/kg Q3W* dosing groups; n=555)		Ipilimumab (n=256)	
Related to treatment,† n (%)	**Grade 1–2**	**Grade 3–5**	**Grade 1–2**	**Grade 3–5**
Any	436 (79)	103 (19)	183 (71)	54 (21)
Diarrhoea	92 (17)	10 (2)	55 (21)	7 (3)
Nausea	73 (13)	1 (<1)	23 (9)	1 (<1)
Asthenia	68 (12)	2 (<1)	14 (5)	2 (<1)
Fatigue	141 (25)	4 (<1)	40 (16)	3 (1)
Arthralgia	70 (13)	3 (<1)	12 (5)	1 (<1)
Pruritus	111 (20)	1 (<1)	65 (25)	2 (<1)
Rash	92 (17)	0	38 (15)	2 (<1)
Vitiligo	71 (13)	0	4 (2)	0

Adapted from Robert C, *et al. N Engl J Med* 2019.[1]

Please refer to the pooled safety data for KEYTRUDA in the SmPC for a full list of adverse events across multiple studies.[2]

***These are unlicensed doses in adults.** The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Data cut-off: 3 December 2018. †The relationship between an adverse event and a study drug was attributed by the investigator.
Q2W, every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **SmPC,** Summary of Product Characteristics. **1.** Robert C, *et al. Lancet Oncol* 2019;20:1239–1251. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

5-year analysis: IMAEs in the as-treated population[1]

Post-hoc analysis. Median duration of follow-up was 57.7 months. Safety was assessed in the as-treated population, which was defined as all patients who underwent randomisation and who received at least one dose of a study drug.

	KEYTRUDA (pooled 10 mg/kg Q2W* + 10 mg/kg Q3W* dosing groups; n=555)	Ipilimumab (n=256)
Immune-mediated AEs summary,† n (%)		
Any grade	148 (27)	48 (19)
Grade 3–4	53 (10)	31 (12)
Led to death	0 (0)	0 (0)
Led to discontinuation	30 (5)	14 (6)
Immune-mediated AEs occurring in >2% of patients,† n (%)		
Hypothyroidism	60 (11)	5 (2)
Hyperthyroidism	29 (5)	6 (2)
Colitis	18 (3)	19 (7)
Skin disorders	14 (3)	5 (2)
Pneumonitis	13 (2)	1 (<1)

One case of death occurred in the KEYTRUDA 10 mg/kg Q2W* arm that was considered by the investigator to be drug-related (sepsis)[2]

Adapted from Robert C, *et al. N Engl J Med* 2019 (Supplementary appendix).[1]

Please refer to the pooled safety data for KEYTRUDA in the SmPC for a full list of adverse events across multiple studies.[2]

***These are unlicensed doses in adults.** The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[3] Data from KEYNOTE-006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[3]

Data cut-off: 3 December 2018. †Not adjusted for exposure. IMAEs are based on a list of terms specified by the sponsor and were considered regardless of attribution by the investigator.
AE, adverse event; **IMAE,** immune-mediated adverse event; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **SmPC,** Summary of Product Characteristics.
1. Robert C, *et al. Lancet Oncol* 2019;20:1239–1251. Supplementary appendix. **2.** Robert C, *et al. Lancet Oncol* 2019;20:1239–1251. **3.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-006:

Efficacy data from 10-year post hoc analysis

Data from 10-year post hoc analysis includes patients enrolled onto KEYNOTE-006 who subsequently transitioned to the KEYNOTE-587 extension study for long-term follow-up.

View initial data at IA1 and IA3 ›

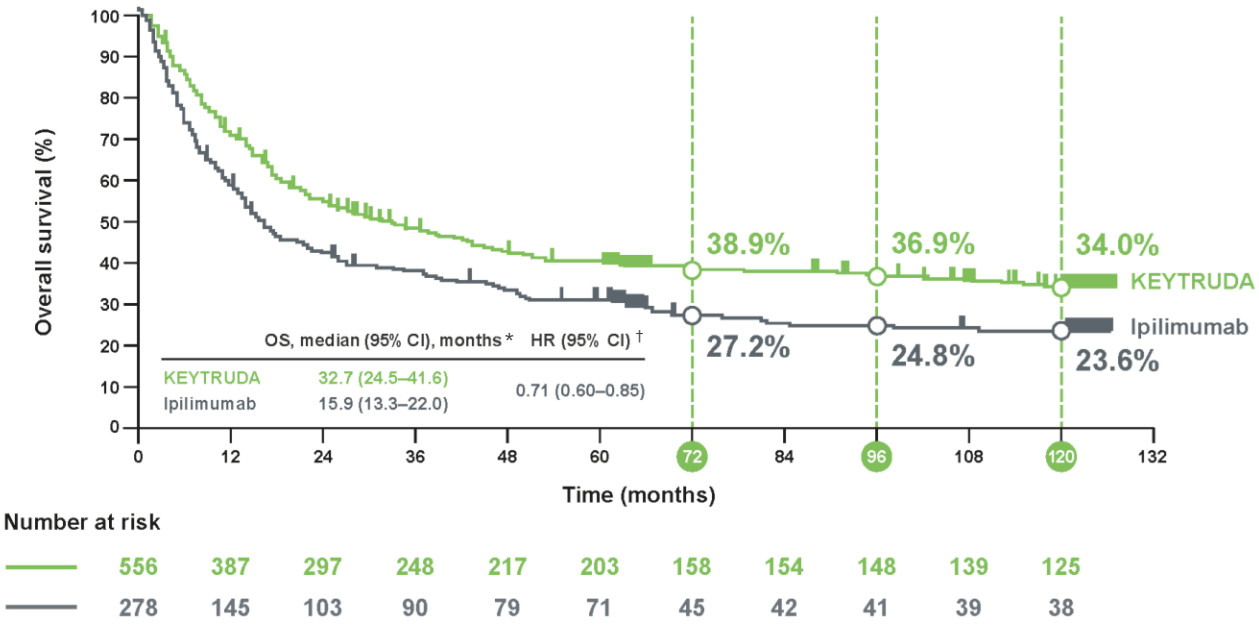
Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA® (pembrolizumab)

KEYTRUDA continued to prolong OS vs ipilimumab after 10 years[1]

Exploratory long-term analysis; significance was not tested, therefore no statistical conclusions can be drawn from this analysis

10 years **Kaplan-Meier estimates of OS in the ITT population**



Adapted from Long GV, *et al. Ann Oncol* 2024.[1]

29% relative risk reduction

- KEYTRUDA demonstrated a **29% relative risk reduction** in death versus ipilimumab
  - Patients with events: 62.6% (348/556) vs 66.5% (185/278)
  - HR: 0.71; 95% CI: 0.60–0.85

View OS after >94 weeks of KEYTRUDA
View OS by subgroups
View OS by best overall response
View OS with KEYTRUDA as 1L

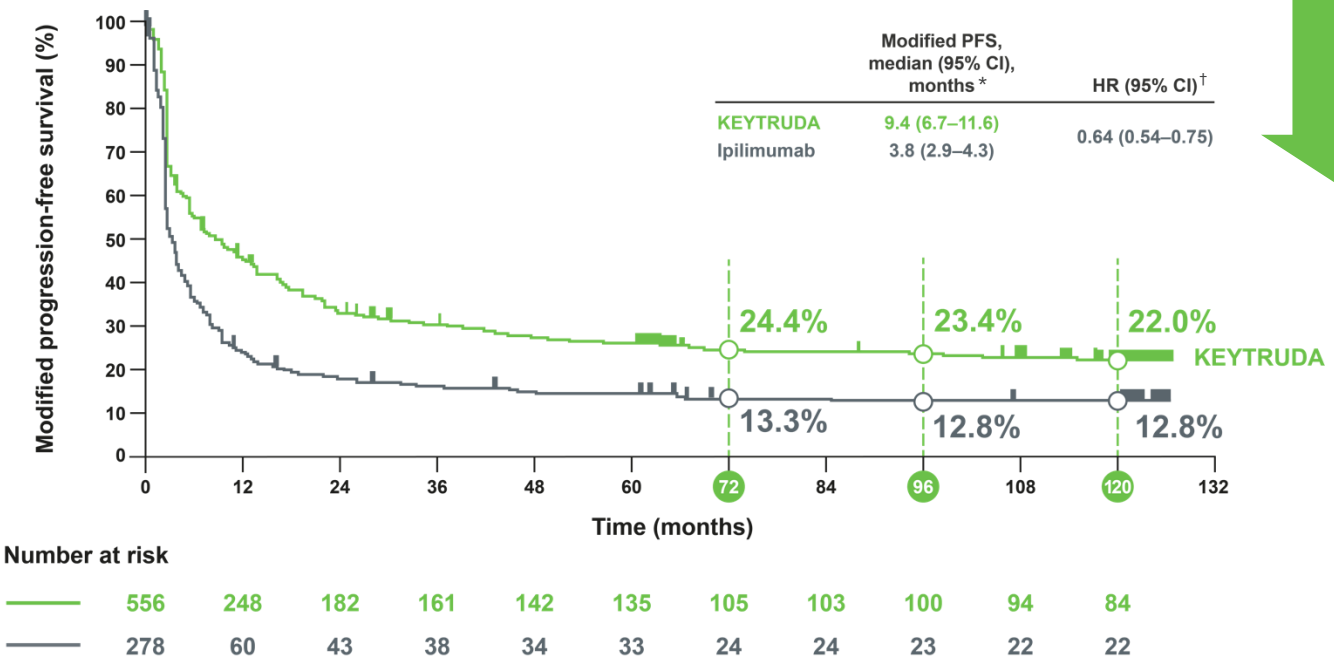
Data cut-off: 1 May 2024. Overall survival was defined as the time from randomization to death from any cause. Patients without an OS event were right-censored at the end of the date last known to be alive or data cut-off date if an event had not occurred. Patients who did not transition to KEYNOTE-587 were censored at the last date known to be alive in KEYNOTE-006.
*From product-limit (Kaplan-Meier) method for censored data. †Based on Cox regression model with the Efron method of handling ties with treatment as a covariate.
CI, confidence interval; **HR,** hazard ratio; **ITT,** intent-to-treat; **OS,** overall survival.
1. Long GV, *et al. Ann Oncol* 2024; S0923-7534(24)03910-3.

KEYTRUDA® (pembrolizumab)

KEYTRUDA continued to prolong PFS vs ipilimumab after 10 years[1]

Exploratory long-term analysis; significance was not tested, therefore no statistical conclusions can be drawn from this analysis

10 years **Kaplan-Meier estimates of modified PFS in the ITT population**



Adapted from Long GV, *et al. Ann Oncol* 2024.[1]

36% relative risk reduction

- KEYTRUDA demonstrated a **36% relative risk reduction** in disease progression or death versus ipilimumab
  - Patients with events: 76.1% (423/556) vs 79.1% (220/278)
  - HR: 0.64; 95% CI: 0.54–0.75
- In this population, KEYTRUDA was associated with a modified median PFS of 9.4 months vs 3.8 months for ipilimumab

View PFS after >94 weeks of KEYTRUDA
View PFS after second course of KEYTRUDA
View PFS by best overall response
View PFS with KEYTRUDA as 1L

Data cut-off: 1 May 2024. PFS was defined as the time from randomization to documented disease progression according to RECIST or death from any cause. Patients without a PFS event were right-censored at the end of the date last known to be alive or data cut-off date if an event had not occurred. Patients who did not transition to KEYNOTE-587 were censored at the last date known to be alive in KEYNOTE-006. *From product-limit (Kaplan-Meier) method for censored data. †Based on Cox regression model with the Efron method of handling ties with treatment as a covariate.
CI, confidence interval; **HR,** hazard ratio; **ITT,** intent-to-treat; **PFS,** progression-free survival; **RECIST,** Response Evaluation Criteria in Solid Tumours.

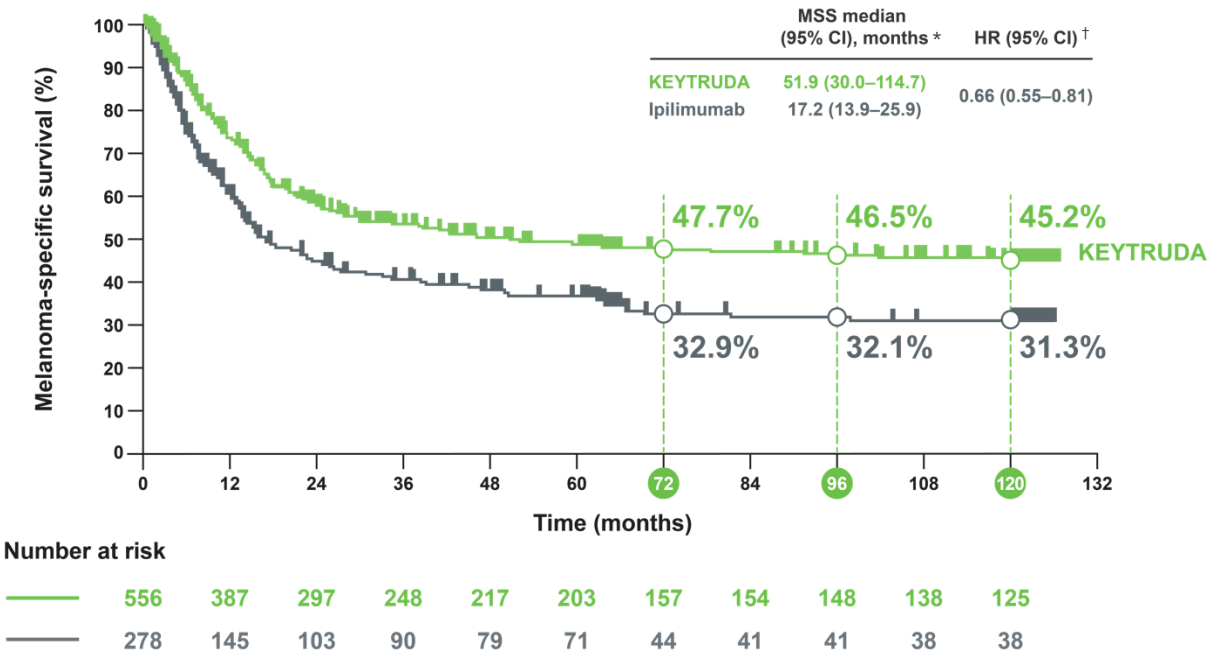
1. Long GV, *et al. Ann Oncol* 2024; S0923-7534(24)03910-3.

KEYTRUDA® (pembrolizumab)

KEYTRUDA extended melanoma-specific survival (MSS) vs ipilimumab[1]

Exploratory long-term analysis; significance was not tested, therefore no statistical conclusions can be drawn from this analysis

10 years **Kaplan-Meier estimates of MSS in the ITT population**



Adapted from Long GV, *et al. Ann Oncol* 2024.[1]

34% relative risk reduction

- KEYTRUDA demonstrated a **34% relative risk reduction** in melanoma-related death versus ipilimumab
  - Patients with events: 50.0% (278/556) vs 57.6% (160/278)
  - HR: 0.66; 95% CI: 0.55–0.81
- In this first analysis of MSS, KEYTRUDA extended median MSS by 34.7 months vs ipilimumab (51.9 vs 17.2) and was associated with a 10-year MSS of 45.2% vs 31.3%

Data cut-off: 1 May 2024.
*From product-limit (Kaplan-Meier) method for censored data. †Based on Cox regression model with the Efron method of handling ties with treatment as a covariate.
CI, confidence interval; **HR,** hazard ratio; **ITT,** intent-to-treat; **MSS,** melanoma-specific survival.
1. Long GV, *et al. Ann Oncol* 2024; S0923-7534(24)03910-3.

KEYTRUDA® (pembrolizumab)

Patients such as Farah* could benefit from KEYTRUDA treatment, similar to patients in KEYNOTE-006

During KEYNOTE-006, in patients with advanced-stage melanoma, KEYTRUDA demonstrated vs ipilimumab:

Significant improvements in OS and PFS[1]

- **OS: Q2W vs IPI:** HR: 0.68; 95% CI: 0.53–0.87; p<0.0009; **Q3W vs IPI:** HR: 0.68; 95% CI: 0.53–0.86; p<0.0008
- **PFS: Q2W vs IPI:** HR: 0.61; 95% CI: 0.50–0.75; p<0.0001; **Q3W vs IPI:** HR: 0.61; 95% CI: 0.50–0.75; p<0.0001

Sustained improvement in both OS and PFS after over 10 years of follow-up[2]

- **OS: 29% RRR** in death vs IPI (HR: 0.71; 95% CI: 0.60–0.85)†
- **PFS: 36% RRR** in disease progression or death vs IPI (HR: 0.64; 95% CI: 0.54–0.75)†

Favourable OS and PFS for KEYTRUDA in subgroups associated with poor prognosis[2]

- At the 123.7-month median follow-up, OS and PFS benefit was seen in patients who:
  - received KEYTRUDA as 1L
  - completed >94 weeks of treatment (vs <94 weeks)
  - achieved PR or CR to treatment (vs SD)

A manageable safety profile, consistent with previous reports[1,3,4]

- After 5 years:
  - Grade ≥3 TRAEs occurred in 19% (n=103) vs 21% (n=54)
  - Grade ≥3 IMAEs occurred in 10% (n=53) vs 12% (n=31)

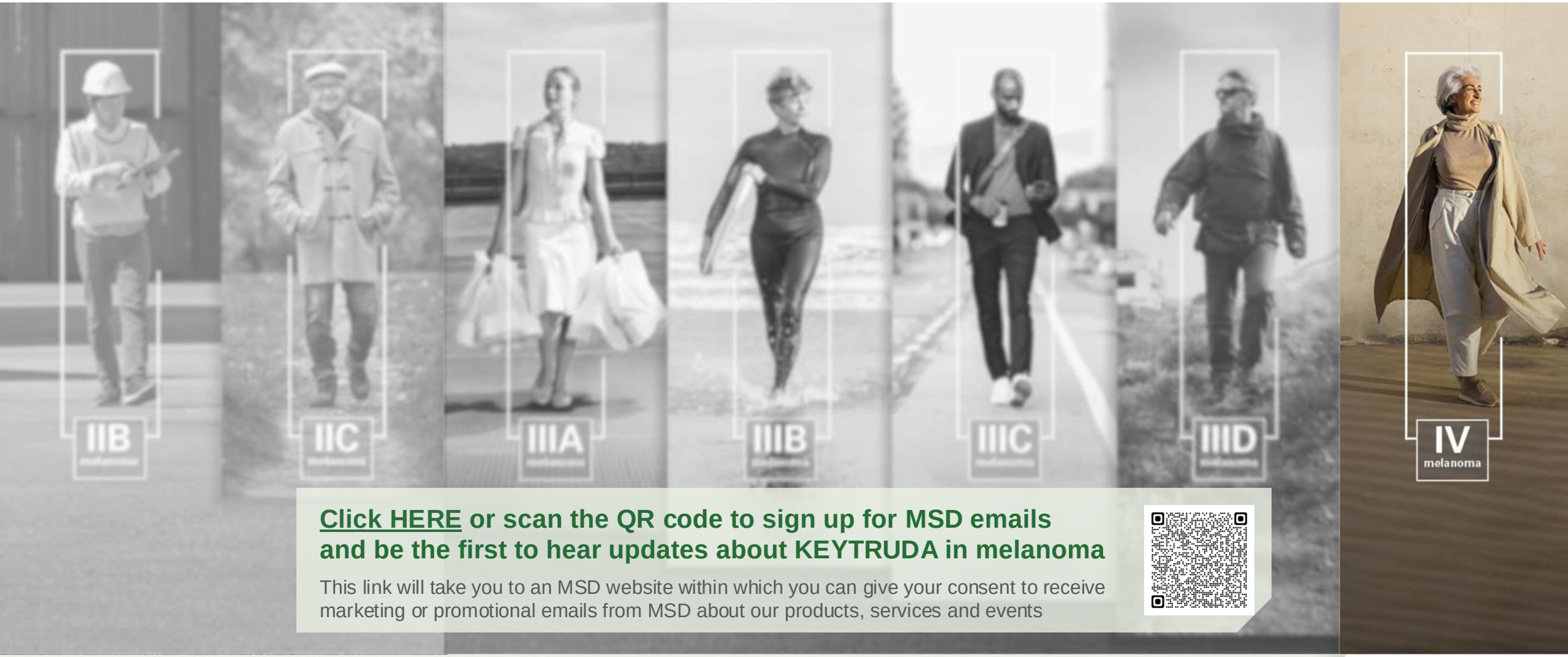
For further details on adverse events and risk management, please refer to the SmPC and Risk Management Materials.

NOTE: In KEYNOTE-006, KEYTRUDA was dosed at 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[5] Data from KEYNOTE-006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[5]

*Not a real patient. †From product-limit (Kaplan-Meier) method for censored data.
1L, first-line; **CI,** confidence interval; **CR,** complete response; **HR,** hazard ratio; **IA,** interim analysis; **IMAE,** immune-mediated adverse event; **IPI,** ipilimumab; **OS,** overall survival; **PFS,** progression-free survival; **PR,** partial response; **Q2W,** every two weeks; **Q3W,** every three weeks; **RRR,** relative risk reduction, **SD,** stable disease; **SmPC,** Summary of Product Characteristics; **TRAE,** treatment-related adverse event.

1. Schachter J, *et al.* Lancet 2017;390:1853–1862. **2.** Long GV, *et al. Ann Oncol* 2024;S0923-7534(24)03910-3. **3.** Robert C, *et al. Lancet Oncol* 2019;20:1239–1251. **4.** Robert C, *et al. Lancet Oncol* 2019;20:1239–1251 (Supplementary appendix). **5.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)



Click HERE or scan the QR code to sign up for MSD emails and be the first to hear updates about KEYTRUDA in melanoma

This link will take you to an MSD website within which you can give your consent to receive marketing or promotional emails from MSD about our products, services and events

Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001:

Appendix

Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001: patient baseline characteristics (1/3)[1]

	Total (N=655)	Ipilimumab-treated (n=342)	Ipilimumab-naïve (n=313)	Treatment-naïve (n=152)*
Age, median (range), years	61 (18–94)	61 (18–88)	61 (23–94)	63 (26–90)
Male, n (%)	405 (62)	214 (63)	191 (61)	103 (68)
Race, n (%)				
White	636 (97)	334 (98)	302 (96)	144 (95)
Asian	10 (2)	3 (1)	7 (2)	4 (3)
Black or African American	5 (1)	3 (1)	2 (1)	2 (1)
Other	4 (1)	2 (1)	2 (1)	2 (1)
ECOG PS, n (%)				
0	444 (68)	215 (63)	229 (73)	113 (74)
1	210 (32)	126 (37)	84 (27)	39 (26)
Unknown	1 (0.2)	1 (0.3)	0	0
BRAF mutation status, n (%)				
Mutant	155 (24)	64 (19)	91 (29)	25 (16)
Wild-type	494 (75)	277 (81)	217 (69)	125 (82)
Unknown	6 (1)	1 (0.3)	5 (2)	2 (1)

Adapted from Ribas A, *et al. JAMA* 2016.[1]

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Return to study design

Due to rounding, some sections may not add up to 100%. *Indicates patients without any prior systemic treatment for advanced melanoma.
ECOG PS, Eastern Cooperative Oncology Group performance status; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks.

1. Ribas A, *et al. JAMA* 2016;315:1600–1609. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001: patient baseline characteristics (2/3)[1]

	Total (N=655)	Ipilimumab-treated (n=342)	Ipilimumab-naïve (n=313)	Treatment-naïve (n=152)*
Brain metastasis, n (%)				
Yes	54 (8)	37 (11)	17 (5)	7 (5)
No	600 (9.2)	305 (89)	295 (94)	145 (95)
Unknown	1 (0.2)	0	1 (0.3)	0
LDH, n (%)				
Normal (≤100% ULN)	393 (60)	199 (58)	194 (62)	95 (63)
Elevated (>100% ULN)	250 (38)	139 (41)	111 (35)	50 (33)
Unknown	12 (2)	4 (1)	8 (3)	7 (5)
Baseline tumour size, median (range), mm	102 (10–895)	120 (10–895)	90 (11–752)	87 (11–752)
M category, n (%)				
M0	8 (1)	2 (1)	6 (2)	3 (2)
M1a	50 (8)	30 (9)	20 (6)	12 (8)
M1b	89 (14)	38 (11)	51 (16)	28 (18)
M1b	508 (78)	272 (80)	236 (75)	109 (72)

Adapted from Ribas A, *et al. JAMA* 2016.[1]

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Return to study design

Due to rounding, some sections may not add up to 100%. *Indicates patients without any prior systemic treatment for advanced melanoma.
LDH, lactate dehydrogenase; **M,** metastasis; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **ULN,** upper limit of normal.

1. Ribas A, *et al. JAMA* 2016;315:1600–1609. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001: patient baseline characteristics (3/3)[1]

	Total (N=655)	Ipilimumab-treated (n=342)	Ipilimumab-naïve (n=313)	Treatment-naïve (n=152)*
Previous systemic therapies, n (%)				
0	161 (25)	0	161 (51)	152 (100)
1	206 (31)	103 (30)	103 (33)	0
2	174 (27)	128 (37)	46 (15)	0
≥3	114 (17)	111 (32)	3 (1)	0
Previous treatments, n (%)†				
Ipilimumab	342 (52)	342 (100)	0	0
Chemotherapy	215 (33)	155 (45)	60 (19)	0
BRAF or *MEK* inhibitor	110 (17)	63 (18)	47 (15)	0
Other immunotherapy‡	173 (26)	105 (31)	68 (22)	0
Other therapy	94 (14)	66 (19)	28 (9)	0

Adapted from Ribas A, *et al. JAMA* 2016.[1]

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Return to study design

Due to rounding, some sections may not add up to 100%. *Indicates patients without any prior systemic treatment for advanced melanoma.
†Excludes neoadjuvant therapies. Patients may have received more than one type of previous therapy. ‡Excludes ipilimumab.
Q2W, every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks.

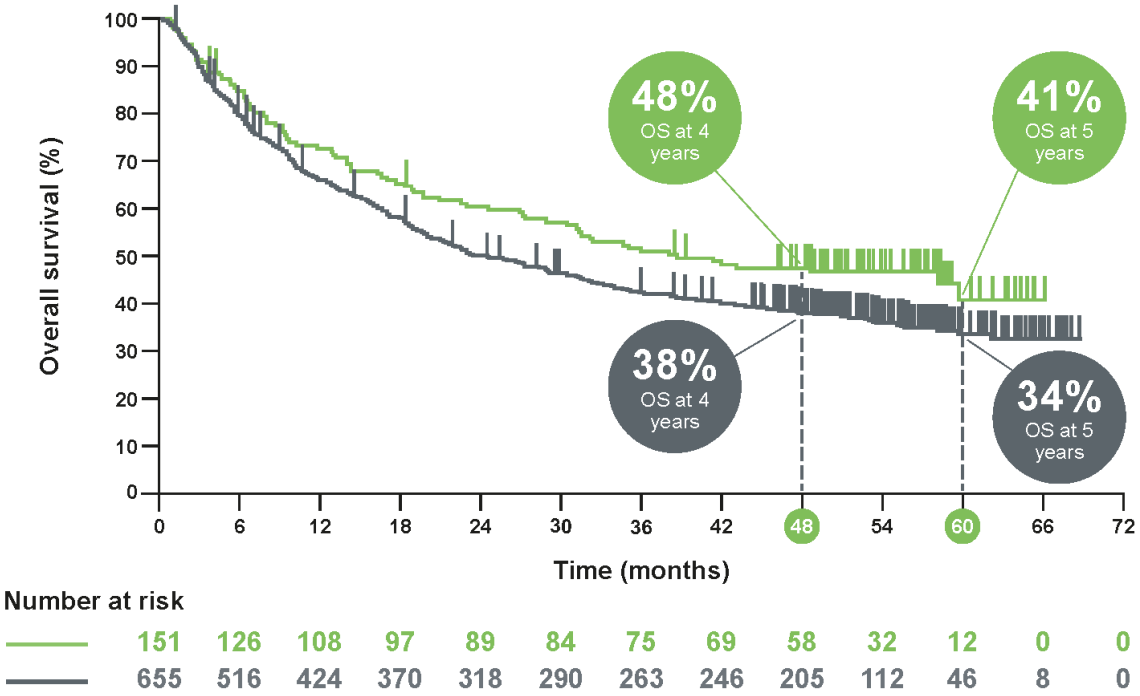
1. Ribas A, *et al. JAMA* 2016;315:1600–1609. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001: OS after 5 years in all patients and in treatment-naïve patients with KEYTRUDA[1]

Median duration of follow-up was 55 months.[1]

Kaplan-Meier estimate of OS in KEYNOTE-001*[1]



Adapted from Hamid O, *et al. Ann Oncol* 2019.[1]

	Patients, n	Events	Median (95% CI)
Treatment-naïve	151	81	38.6 (27.2–NR)
All patients	655	412	23.8 (20.2–30.4)

View PFS data at 5 years

Return to data selection page

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

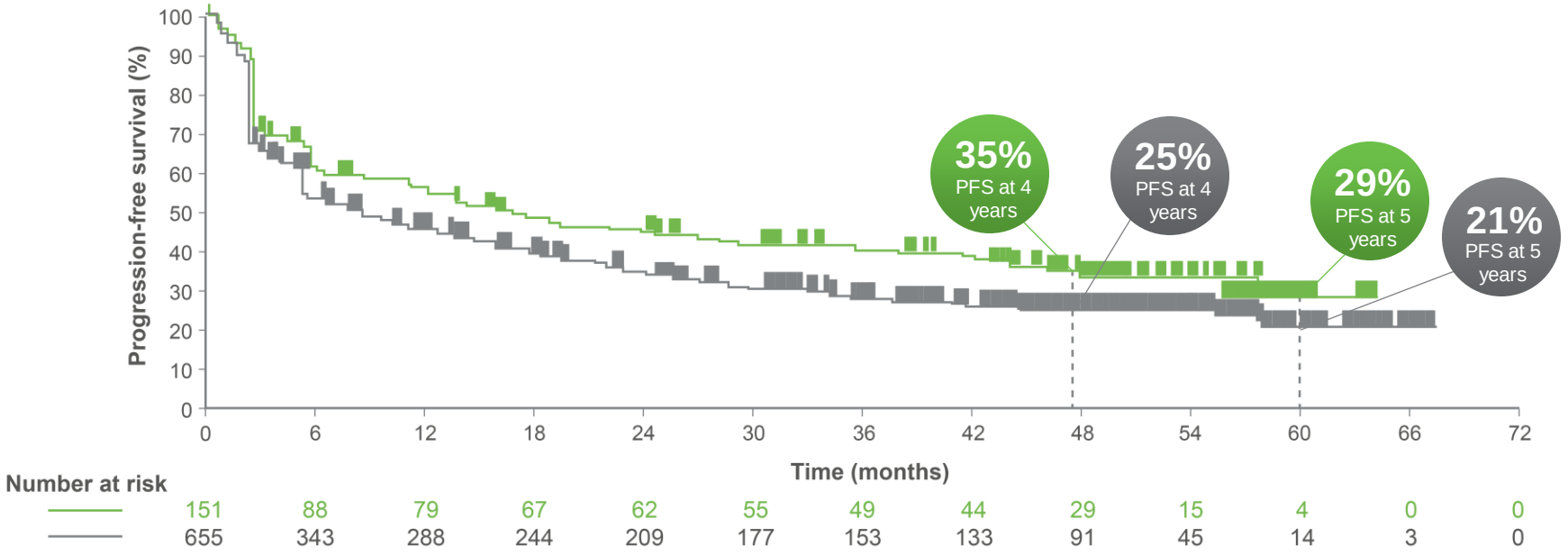
Data cut-off: 1 September 2017. *Derived by the product limit (Kaplan-Meier) method of censored data. OS and PFS were secondary endpoints.[1]
CI, confidence interval; **NR,** not reached; **OS,** overall survival; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks.
1. Hamid O, *et al. Ann Oncol* 2019;30:582–588. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001: PFS after 5 years in all patients and in treatment-naïve patients with KEYTRUDA[1]

Median duration of follow-up was 55 months.[1]

Kaplan-Meier estimate of PFS per irRC by investigator in KEYNOTE-001*[1]



	Patients, n	Events	Median (95% CI)
Treatment-naïve	151	94	16.9 (9.3–35.5)
All patients	655	479	8.3 (5.8–11.1)

View OS data at 5 years

Return to data selection page

Adapted from Hamid O, *et al. Ann Oncol* 2019.[1]

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Data cut-off: 1 September 2017. *Derived by the product limit (Kaplan-Meier) method of censored data. OS and PFS were secondary endpoints.[1]
CI, confidence interval; **irRC,** immune-related response criteria; **NR,** not reached; **PFS,** progression-free survival; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks. **1**. Hamid O, *et al. Ann Oncol* 2019;30:582–588. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001: overall response to KEYTRUDA in all patients and in treatment-naïve patients[1]

Median duration of follow-up was 55 months.[1]

Best overall response per irRC by investigator in KEYNOTE-001*[1]

	All patients (N=655) % (95% CI)	Treatment-naïve (n=151) % (95% CI)
Overall response	41 (37–45)	52 (43–60)
Complete response	16 (13–19)	25 (19–33)
Partial response	25 (22–28)	27 (20–34)
Stable disease	24 (21–27)	20 (14–27)
Progressive disease	25 (22–29)	21 (15–29)
No assessment	10 (8–13)	7 (4–13)

View duration of response data
Return to data selection page

Adapted from Hamid O, *et al. Ann Oncol* 2019.[1]

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

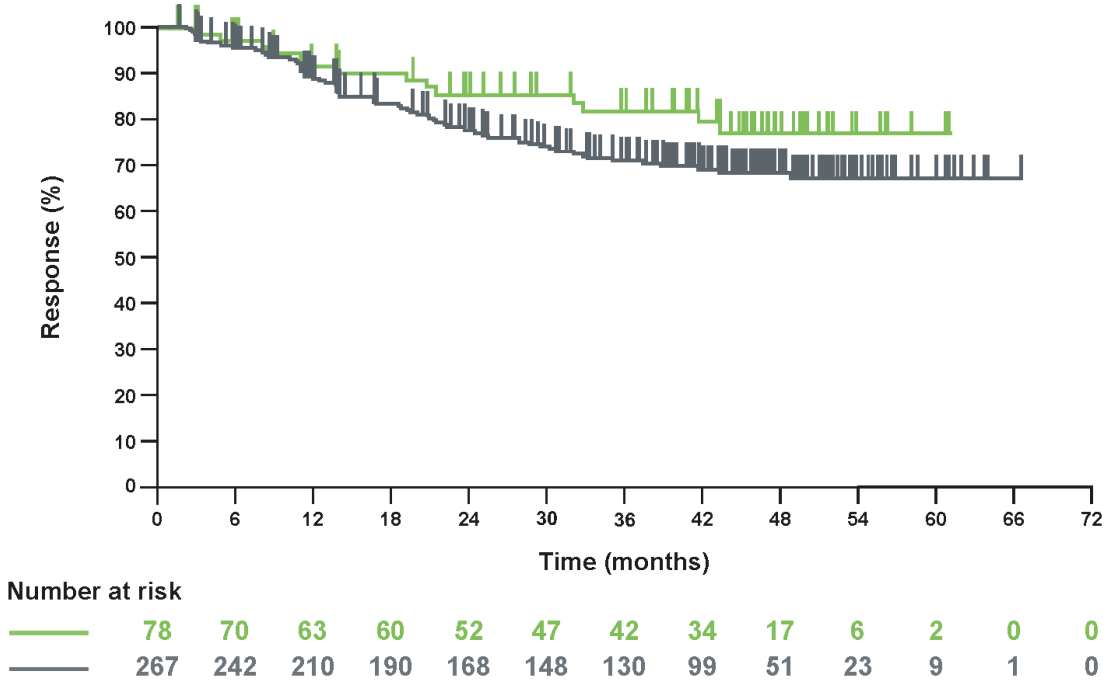
Data cut-off: 1 September 2017. *Analysis based on patients with a best overall response as confirmed complete or partial response.
CI, confidence interval; **irRC,** immune-related response criteria; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks. **1**. Hamid O, *et al. Ann Oncol* 2019;30:582–588. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-001: objective response duration in all patients and in treatment-naïve patients with KEYTRUDA[1]

Median duration of follow-up was 55 months.[1]

Kaplan-Meier estimate of PFS per irRC by investigator in KEYNOTE-001[1]



	Median TTR (range), mo	Median DOR (range), mo	Ongoing response*
Treatment-naïve	2.8 (2.5–32.0)	NR (1.3–60.8)†	82%
All patients	2.8 (0.5–49.6)	NR (1.3–66.3)†	73%

Return to data selection page

Adapted from Hamid O, *et al. Ann Oncol* 2019.[1]

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[3] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[3]

Data cut-off: 1 September 2017. Analysis based on patients with a best overall response as confirmed complete or partial response. *Indicates non-progressive disease at the last assessment (censored) for the patient with the minimum and maximum response duration within the treatment group. †Derived by the Kaplan-Meier method of censored data.[1]
DOR, duration of response; **irRC,** immune-related response criteria; **mo,** months; **NR,** not reached; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **TTR,** time to response.

1. Hamid O, et al. *Ann Oncol* 2019;30:582–588. Supplementary appendix. **2.** Hamid O, *et al. Ann Oncol* 2019;30:582–588. **3**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

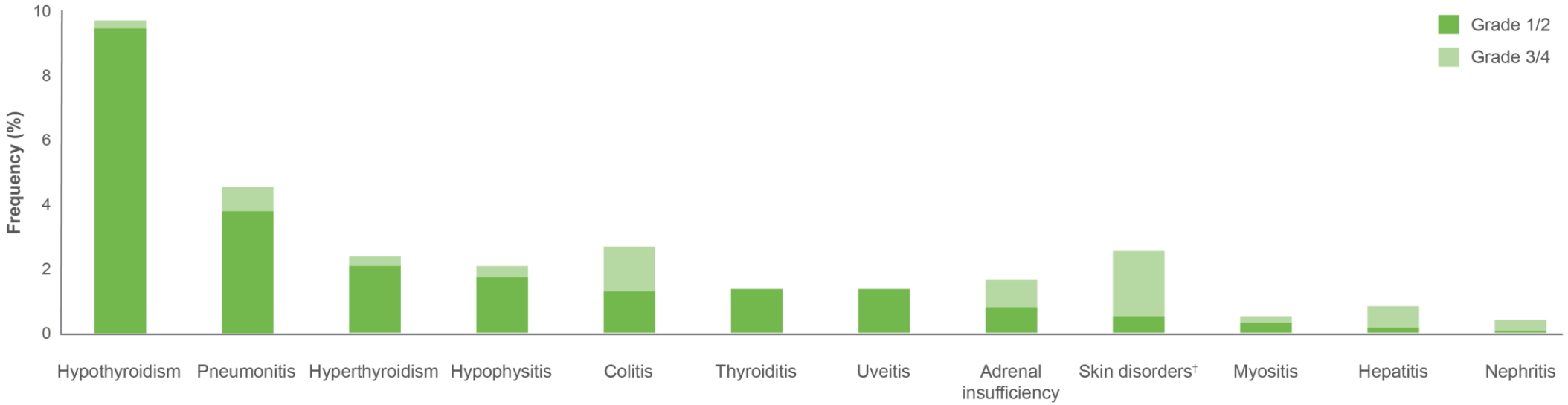
KEYTRUDA® (pembrolizumab)

KEYNOTE-001: immune-mediated adverse events (IMAEs) with KEYTRUDA[1]

Median duration of follow-up was 55 months.[1]

NOTE: KEYNOTE-001 is a Phase I trial; for additional immune-mediated adverse event information, please refer to Phase III data from KEYNOTE-006.

IMAEs in KEYNOTE-001 that occurred in >2 patients*[1]



Adapted from Hamid O, *et al. Ann Oncol* 2019.[1]

Return to data selection page

NOTE: In KEYNOTE-001, KEYTRUDA was dosed at 2 mg/kg Q3W or 10 mg/kg Q2W or Q3W, which are unlicensed doses in adults. To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-001 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Data cut-off: 1 September 2017. *Based on a list determined by the sponsor and regardless of attribution by the investigator.[1] †Includes bullous dermatitis, exfoliative dermatitis, erythema multiforme, exfoliative rash, pemphigoid, pruritus, rash, erythematous rash, generalised rash, maculopapular rash and pruritic rash.[1] **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks.

1. Hamid O, *et al. Ann Oncol* 2019;30:582–588. Supplementary appendix. **2.** KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-002:

Appendix

Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA® (pembrolizumab)

KEYNOTE-002: patient baseline characteristics (1/2)[1]

	KEYTRUDA 2 mg/kg* (n=180)	KEYTRUDA 10 mg/kg* (n=181)	Chemotherapy control (n=179)
Age, median (range), years	62 (15–87)	60 (27–89)	63 (27–87)
Male, n (%)	104 (58)	109 (60)	114 (64)
Race, n (%)			
White	176 (98)	179 (99)	172 (96)
Other	4 (2)	2 (1)	6 (3)
Missing	0	0	1 (<1)
ECOG PS, n (%)			
0	98 (54)	98 (54)	99 (55)
1	80 (44)	83 (46)	80 (45)
Missing	2 (1)	0	0
BRAF V600 mutation status, n (%)			
Mutant	44 (24)	40 (22)	41 (23)
Wild-type	136 (76)	141 (78)	138 (77)

Adapted from Ribas A, *et al. Lancet Oncol* 2015.[1]

***These are unlicensed doses in adults.** To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-002 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Return to study design

Due to rounding, some sections may not add up to 100%.
ECOG PS, Eastern Cooperative Oncology Group performance status; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks. **1.** Ribas A, *et al. Lancet Oncol* 2015;16:908–918. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-002: patient baseline characteristics (2/2)[1]

	KEYTRUDA 2 mg/kg* (n=180)	KEYTRUDA 10 mg/kg* (n=181)	Chemotherapy control (n=179)
LDH, n (%)			
Normal	99 (55)	105 (58)	107 (60)
Raised	77 (43)	73 (40)	68 (38)
Unknown	4 (2)	3 (2)	4 (2)
M category, n (%)			
M0	1 (<1)	1 (<1)	2 (1)
M1a	9 (5)	13 (7)	15 (8)
M1b	22 (12)	17 (9)	15 (8)
M1c	148 (82)	150 (83)	147 (82)
Number of lines of previous systemic therapies, n (%)			
0†	1 (<1)	0	0
1	40 (22)	56 (31)	47 (26)
2	79 (44)	66 (36)	78 (44)
≥3	60 (33)	59 (33)	54 (30)

Adapted from Ribas A, *et al. Lancet Oncol* 2015.[1]

***These are unlicensed doses in adults.** To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-002 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Return to study design

Due to rounding, some sections may not add up to 100%. †Patients with no previous systemic therapies received neoadjuvant or adjuvant therapy only.
LDH, lactate dehydrogenase; **M,** metastasis; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks. **1.** Ribas A, *et al. Lancet Oncol* 2015;16:908–918. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-002: TRAEs occurring in ≥5% of patients in any treatment group[1]

Median time on treatment was 112.5 days (range: 1.0–988.0) and 145.0 days (range: 1.0–967.0) for patients receiving KEYTRUDA 2 mg/kg and 10 mg/kg,* respectively*

Summary	KEYTRUDA 2 mg/kg* (n=178)		KEYTRUDA 10 mg/kg* (n=179)		Chemotherapy (n=171)	
Events, n (%)	**Grade 1–2**	**Grade 3–4†**	**Grade 1–2**	**Grade 3–4†**	**Grade 1–2**	**Grade 3–4†**
Fatigue	42 (23.5)	2 (1.1)	55 (30.7)	2 (1.1)	53 (30.9)	8 (4.6)
Pruritus	39 (21.9)	0	45 (25.1)	0	6 (3.5)	0
Nausea	11 (6.2)	0	17 (9.5)	1 (<1)	55 (32.2)	4 (2.3)
Decreased appetite	11 (6.2)	0	15 (8.3)	0	26 (15.2)	0
Anaemia	5 (2.8)	1 (<1)	7 (3.9)	0	26 (15.2)	9 (5.3)
Diarrhoea	18 (10.1)	0	18 (10.0)	4 (2.2)	11 (6.5)	3 (1.8)
Rash	23 (12.9)	0	23 (12.8)	0	8 (4.7)	0
Alopecia	6 (3.4)	0	1 (<1)	0	36 (21.1)	0
Vomiting	3 (1.7)	1 (<1)	10 (5.6)	1 (<1)	22 (12.8)	4 (2.3)
Arthralgia	14 (7.9)	1 (<1)	13 (7.2)	1 (<1)	8 (4.6)	1 (<1)
Constipation	5 (2.8)	0	10 (5.6)	0	14 (8.2)	0
Myalgia	8 (4.5)	2 (1.1)	6 (3.4)	0	9 (5.2)	1 (<1)
Asthenia	6 (3.3)	1 (<1)	8 (4.4)	1 (<1)	9 (5.2)	1 (<1)
Hypothyroidism	14 (7.9)	0	13 (7.2)	0	0	0
Vitiligo	13 (7.3)	0	14 (7.8)	0	2 (1.2)	0
Dry skin	12 (6.7)	0	11 (6.1)	0	3 (1.8)	0
Thrombocytopenia	2 (1.1)	0	1 (<1)	1 (<1)	12 (7.0)	4 (2.3)
Neutropenia	1 (<1)	0	0	0	9 (5.3)	6 (3.5)
Peripheral neuropathy	2 (1.1)	0	1 (<1)	0	12 (6.0)	2 (1.1)
Maculopapular rash	6 (3.3)	1 (<1)	12 (6.7)	1 (<1)	0	0
Leukopenia	0	0	1 (<1)	0	8 (4.7)	7 (4.0)
Paraesthesia	1 (<1)	0	2 (1.2)	0	10 (5.8)	0
Platelet count decreased	0	0	1 (<1)	0	7 (4.1)	5 (3.0)

Adapted from Hamid O, *et al. Eur J Cancer* 2017.[1]

***These are unlicensed doses in adults.** To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-002 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Return to safety summary

Data cut-off: 16 November 2015. Due to rounding, some sections may not add up to 100%. Safety was assessed in all patients who received ≥1 dose of study treatment. †There were no Grade 5 TRAEs. **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks; **TRAE,** treatment-related adverse event.. **1.** Hamid O, *et al. Eur J Cancer* 2017;86:37–45. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-002: IMAEs at the final analysis[1]

Median time on treatment was 112.5 days (range: 1.0–988.0) and 145.0 days (range: 1.0–967.0) for patients receiving KEYTRUDA 2 mg/kg and 10 mg/kg,* respectively*

Events, n (%)	KEYTRUDA 2 mg/kg* (n=178)		KEYTRUDA 10 mg/kg* (n=179)		Chemotherapy control (n=171)	
All events	32 (18)		38 (21)		3 (2)	
	Grade 1–2	**Grade 3–5**	**Grade 1–2**	**Grade 3–5**	**Grade 1–2**	**Grade 3–5**
Hypothyroidism	16 (9)	0	15 (8)	0	1 (<1)	0
Hyperthyroidism	7 (4)	0	2 (1)	0	0	0
Hepatitis†	1 (<1)	0	0	2 (1)	0	0
Colitis	1 (<1)	0	2 (1)	3 (2)	0	1 (<1)
Pneumonitis	3 (2)	1 (<1)	2 (1)	3 (2)	0	0
Pancreatitis	1 (<1)	0	0	1 (<1)	0	0
Uveitis/Iritis	0	0	2 (1.1)	1 (<1)	0	0
Hypopituitarism	0	0	0	2 (1)	0	0
Hypophysitis	0	1 (<1)	1 (<1)	0	0	0

Adapted from Hamid O, *et al. Eur J Cancer* 2017.[1]

***These are unlicensed doses in adults.** To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-002 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Return to safety summary

Data cut-off: 16 November 2015. Due to rounding, some sections may not add up to 100%. †Includes autoimmune hepatitis.
IMAE, immune-mediated adverse event; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks; **Q6W,** every 6 weeks. **1.** Hamid O, *et al. Eur J Cancer* 2017;86:37–45. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-006:

Appendix

Images are illustrative of the range of patients diagnosed with melanoma.

KEYTRUDA®
(pembrolizumab)

KEYNOTE-006: patient baseline characteristics (1/2)[1]

	KEYTRUDA 10 mg/kg Q2W* (n=279)	KEYTRUDA 10 mg/kg Q3W* (n=277)	Ipilimumab 3 mg/kg Q3W (n=278)
Age, median (range), years	61 (18–89)	63 (22–89)	62 (18–88)
Male, n (%)	161 (57.7)	174 (62.8)	162 (58.3)
ECOG PS, n (%)			
0	196 (70.3)	189 (68.2)	188 (67.6)
1	83 (29.7)	88 (31.8)	90 (32.4)
Elevated LDH level, n (%)	81 (29.0)	98 (35.4)	91 (32.7)
M stage, n (%)			
M0	9 (3.2)	9 (3.2)	14 (5.0)
M1	6 (2.2)	4 (1.4)	5 (1.8)
M1a	21 (7.5)	34 (12.3)	30 (10.8)
M1b	64 (22.9)	41 (14.8)	52 (18.7)
M1c	179 (64.2)	189 (68.2)	177 (63.7)

Adapted from Robert C, *et al. N Engl J Med* 2015.[1]

***These are unlicensed doses in adults.** To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Return to study design

ECOG PS, European Cooperative Oncology Group performance status; **LDH,** lactose dehydrogenase; **M,** metastasis; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks. **1.** Robert C, *et al. N Engl J Med* 2015;372:2521–2532. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

KEYNOTE-006: patient baseline characteristics (2/2)[1]

	KEYTRUDA 10 mg/kg Q2W* (n=279)	KEYTRUDA 10 mg/kg Q3W* (n=277)	Ipilimumab 3 mg/kg Q3W (n=278)
PD-L1 expression positive, n (%)	225 (80.6)	221 (79.8)	225 (80.9)
BRAF V600 mutation, n (%)	98 (35.1)	97 (35.0)	107 (38.5)
Brain metastasis, n (%)	23 (8.2)	27 (9.7)	28 (10.1)
No. of previous therapies, n (%)†			
0	183 (65.6)	185 (66.8)	181 (65.1)
1	96 (34.4)	91 (32.9)	97 (34.9)
Type of previous therapy, n (%)‡			
Chemotherapy	36 (12.9)	41 (14.8)	29 (10.4)
Immunotherapy	8 (2.9)	7 (2.5)	12 (4.3)
BRAF +/- *MEK* inhibitor	50 (17.9)	45 (16.2)	56 (20.1)

Adapted from Robert C, *et al. N Engl J Med* 2015.[1]

***These are unlicensed doses in adults.** To note, 2 mg/kg Q3W (up to a maximum of 200 mg) is licensed in paediatric patients aged 12 years and older with melanoma. The licensed dose of KEYTRUDA in advanced melanoma in adults is either 200 mg Q3W or 400 mg Q6W administered intravenously over 30 minutes.[2] Data from KEYNOTE-006 was included as part of the regulatory submission for KEYTRUDA and appears in the Summary of Product Characteristics.[2]

Return to study design

†One patient (0.4%) in the group receiving pembrolizumab every 3 weeks had received two previous systemic therapies. ‡Only therapy administered for advanced or metastatic disease is listed.
PD-L1, programmed cell death ligand 1; **Q2W,** every 2 weeks; **Q3W,** every 3 weeks. **1.** Robert C, *et al. N Engl J Med* 2015;372:2521–2532. **2**. KEYTRUDA Summary of Product Characteristics. United Kingdom. Available at: https://www.medicines.org.uk/emc/product/2498 Accessed: February 2025.

KEYTRUDA® (pembrolizumab)

Baseline characteristics for patients who transitioned from KEYNOTE-006 to KEYNOTE-587[1]

	KEYTRUDA (n=556)	Ipilimumab (n=278)
Age, years, median (range)	63.0 (18–86)	65.0 (18–88)
Male, n (%)	108 (67.9)	33 (63.5)
Elevated LDH level, n (%)	38 (23.9)	9 (17.3)
BRAF mutation status, n (%)		
BRAF wild-type	97 (61.0)	30 (57.7)
BRAF mutant	62 (39.0)	21 (40.4)
Tumour size, n (%)		
<10 cm	110 (69.2)	37 (71.2)
≥10 cm	22 (13.8)	7 (13.5)
Brain metastasis present, n (%)	20 (12.6)	6 (11.5)
Line of systemic therapy, n (%)		
First	116 (73.0)	35 (67.3)
Second	42 (26.4)	17 (32.7)
Third	1 (0.6)	0 (0.0)

Adapted from Long GV, *et al. Ann Oncol* 2024 (Supplementary appendix).[1]

Return to study design

All values are n (%) unless otherwise specified.
LDH, lactate dehydrogenase.
1. Long GV, *et al. Ann Oncol* 2024;S0923-7534(24)03910-3 (Supplementary appendix).

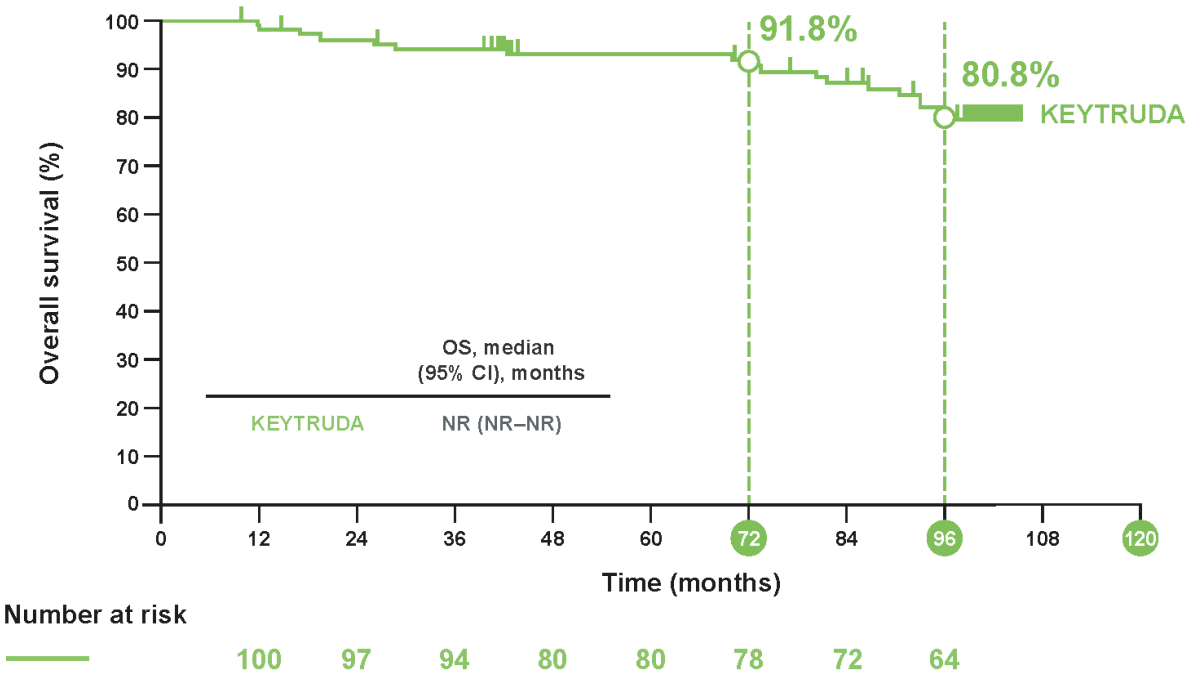
KEYTRUDA® (pembrolizumab)

Exploratory analysis suggests OS was favourable in patients who received >94 weeks of KEYTRUDA[1]

Exploratory long-term analysis; significance was not tested, therefore no statistical conclusions can be drawn from this analysis

10 years

Kaplan-Meier estimates of OS in patients who completed >94 weeks of KEYTRUDA



Adapted from Long GV, *et al. Ann Oncol* 2024.[1]

- For those who completed ≥94 weeks of KEYTRUDA (n=103), median OS was **not reached**
- Estimated 8-year OS rate from Week 94 was **80.8%**

Return to OS data

Data cut-off: 1 May 2024. Median follow-up: 122.9 months.
*From product-limit (Kaplan-Meier) method for censored data.
CI, confidence interval; **HR,** hazard ratio; **LDH,** lactate dehydrogenase; **OS,** overall survival.
1. Long GV, *et al. Ann Oncol* 2024; S0923-7534(24)03910-3.

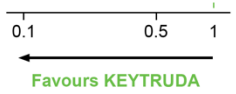
KEYTRUDA® (pembrolizumab)

Exploratory analysis suggests OS favoured KEYTRUDA vs ipilimumab regardless of *BRAF* mutation status or poor prognosis features[1]

Exploratory long-term analysis; significance was not tested, therefore no statistical conclusions can be drawn from this analysis

10 years **OS subgroup analyses**

Subgroup	Events/ patients	Hazard ratio (95% CI)*
Overall	533/834	0.71 (0.60–0.85)
***BRAF* subgroup**		
BRAF-wild type	339/525	0.74 (0.59–0.93)
BRAF-mutant; no prior BRAFi/MEKi	92/163	0.56 (0.37–0.86)
BRAF-mutant; prior BRAFi/MEKi	98/139	0.73 (0.48–1.10)
LDH level		
Normal	328/548	0.78 (0.62–0.98)
Elevated	194/270	0.60 (0.44–0.80)
Tumour size		
<10 cm	321/536	0.72 (0.58–0.91)
≥10 cm	140/186	0.64 (0.45–0.91)
Brain metastases		
Yes	50/80	0.56 (0.32–0.98)
No	477/748	0.73 (0.60–0.88)



Adapted from Long GV, *et al. Ann Oncol* 2024.[1]

- In patients with previously-treated and stable brain metastases, KEYTRUDA **extended median survival by 42.6 months** vs ipilimumab (53.4 vs 10.8) and was associated with a 10-year OS rate of 40.0% vs 27.6%
- HR: 0.56; 95% CI: 0.32–0.98

Return to OS data

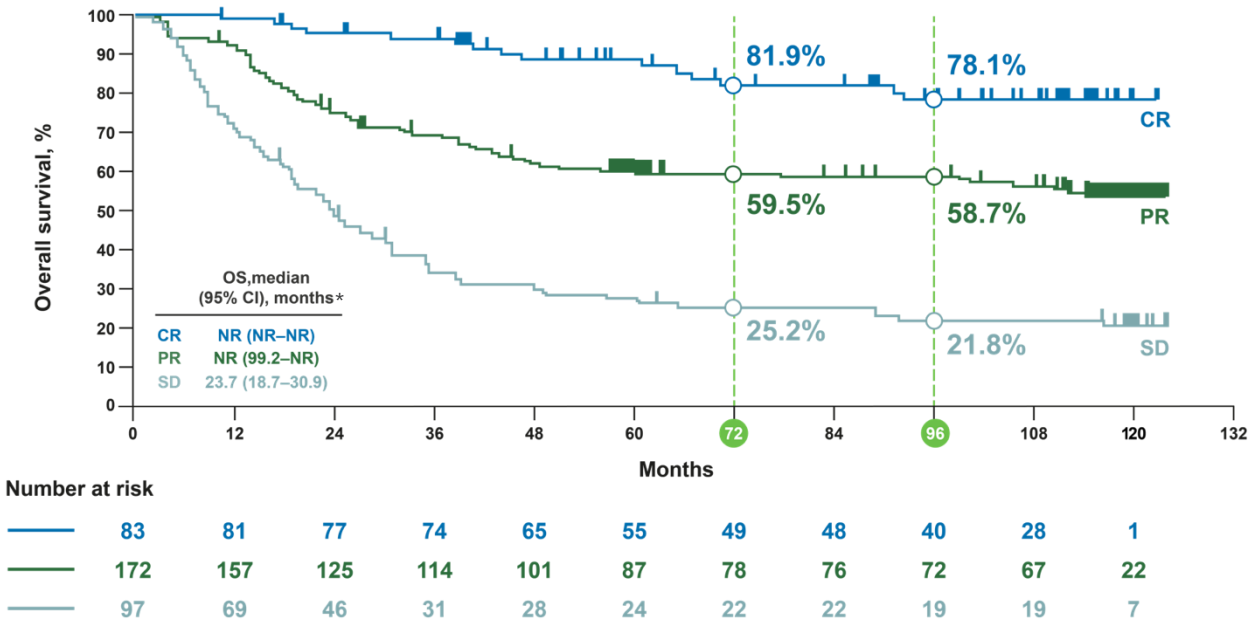
Data cut-off: 1 May 2024. Median follow-up: 122.9 months.
*Based on Cox regression model with the Efron method of handling ties with treatment as a covariate.
CI, confidence interval; **HR,** hazard ratio; **LDH,** lactate dehydrogenase; **OS,** overall survival.
1. Long GV, *et al. Ann Oncol* 2024; S0923-7534(24)03910-3.

KEYTRUDA® (pembrolizumab)

Exploratory analysis suggests OS was elevated in patients with a complete or partial response to KEYTRUDA vs those with stable disease[1]

Exploratory long-term analysis; significance was not tested, therefore no statistical conclusions can be drawn from this analysis

10 years **Kaplan-Meier estimates of OS by best overall response**



Adapted from Long GV, *et al. Ann Oncol* 2024.[1]

- For patients with a complete or partial response to KEYTRUDA, median OS was **not reached** and was associated with 8-year OS rates of 78.1% and 58.7%, respectively
- For those with stable disease, the median OS and 8-year OS rates were **23.7 months** and **21.8%**, respectively

Return to OS data

Data cut-off: 1 May 2024.

*From product-limit (Kaplan-Meier) method for censored data. **CI,** confidence interval; **CR,** complete response; **HR,** hazard ratio; **LDH,** lactate dehydrogenase; **NR,** not reached; **OS,** overall survival; **PR,** partial response; **SD,** stable disease. **1.** Long GV, *et al. Ann Oncol* 2024; S0923-7534(24)03910-3.

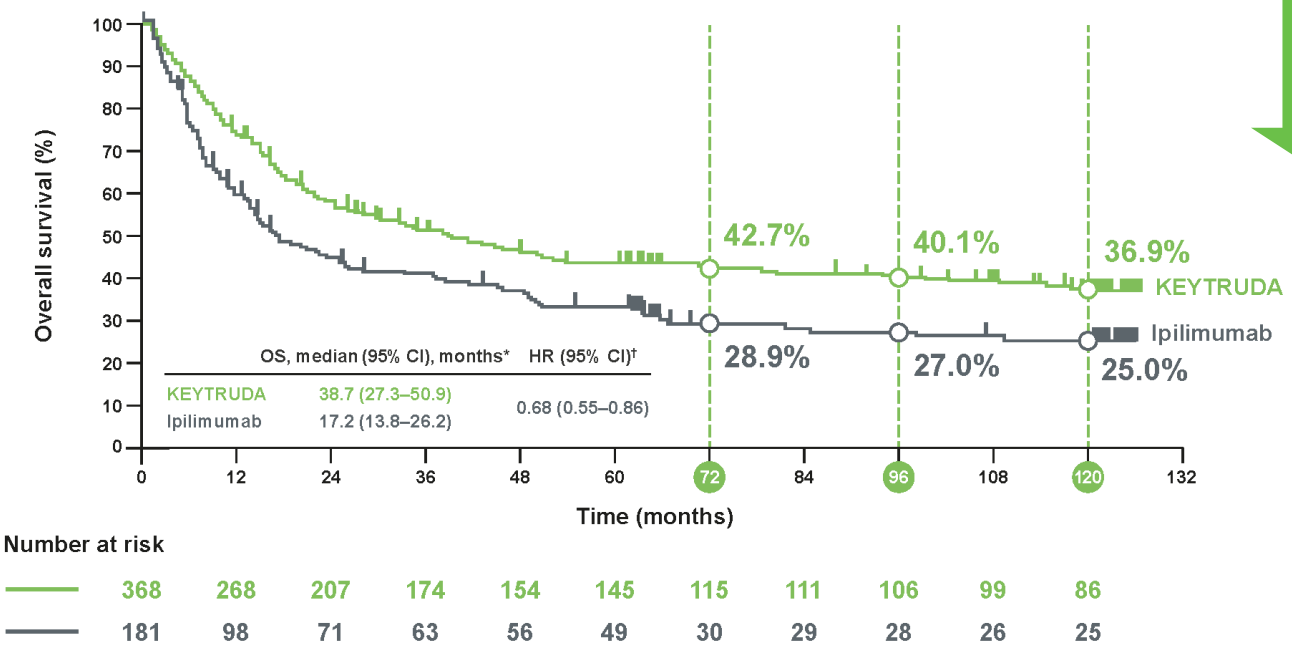
KEYTRUDA® (pembrolizumab)

Exploratory analysis suggests OS was further improved vs ipilimumab if KEYTRUDA was received as 1L therapy[1]

Exploratory long-term analysis; significance was not tested, therefore no statistical conclusions can be drawn from this analysis

10 years

Kaplan-Meier estimates of OS in patients who received KEYTRUDA or ipilimumab as 1L treatment



Adapted from Long GV, *et al. Ann Oncol* 2024.[1]

32%
relative risk reduction

- When received as 1L treatment, KEYTRUDA demonstrated a **32% relative reduction** in risk of death versus ipilimumab
  - KEYTRUDA or ipilimumab was received as 1L treatment in 66.2% (n=368/556) and 65.1% (n=181/278) of patients, respectively
  - In this population, KEYTRUDA was associated with a median OS of 38.7 months vs 17.2 months for ipilimumab
  - HR: 0.68; 95% CI: 0.55–0.86

Return to OS data

Data cut-off: 1 May 2024. *From product-limit (Kaplan-Meier) method for censored data. †Based on Cox regression model with the Efron method of handling ties with treatment as a covariate. **1L,** first-line; **CI,** confidence interval; **HR,** hazard ratio; **LDH,** lactate dehydrogenase; **OS,** overall survival.

1. Long GV, *et al. Ann Oncol* 2024; S0923-7534(24)03910-3.

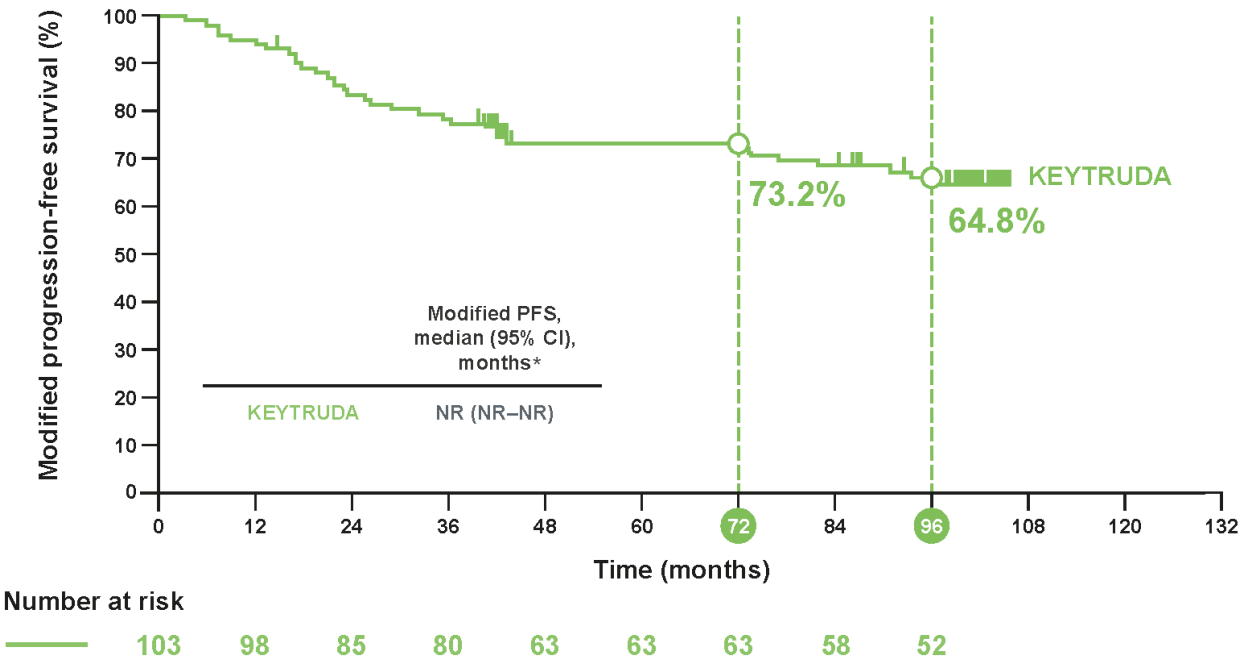
KEYTRUDA® (pembrolizumab)

Exploratory analysis suggests PFS was particularly favourable in patients who completed >94 weeks of KEYTRUDA[1]

Exploratory long-term analysis; significance was not tested, therefore no statistical conclusions can be drawn from this analysis

10 years

Kaplan-Meier estimates of modified PFS in patients who completed >94 weeks of KEYTRUDA



Adapted from Long GV, *et al. Ann Oncol* 2024.[1]

- For those who completed 94 weeks of KEYTRUDA (n=103), median PFS was **not reached**
- Estimated 8-year PFS rate from Week 94 was **64.8%**

Return to PFS data

Data cut-off: 1 May 2024. Median follow-up: 122.9 months.
*From product-limit (Kaplan-Meier) method for censored data.
CI, confidence interval; **NR,** not reached; **PFS,** progression-free survival.
1. Long GV, *et al. Ann Oncol* 2024; S0923-7534(24)03910-3.

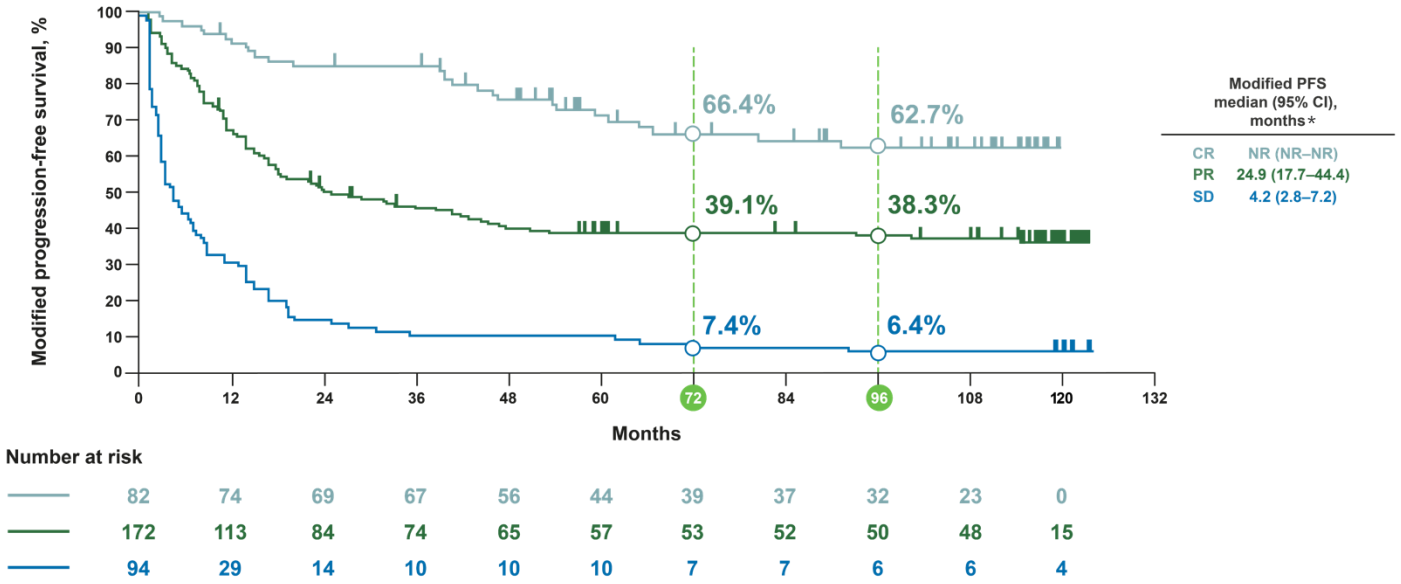
KEYTRUDA® (pembrolizumab)

Exploratory analysis suggests PFS was extended in patients with a complete or partial response to KEYTRUDA vs those with stable disease[1]

Exploratory long-term analysis; significance was not tested, therefore no statistical conclusions can be drawn from this analysis

10 years

Kaplan-Meier estimates of modified PFS by best overall response



Adapted from Long GV, *et al. Ann Oncol* 2024.[1]

- For patients with a **complete response** to KEYTRUDA, median PFS was not reached and was associated with an 8-year PFS rate of 62.7%†
- For those with a **partial response**, median PFS and 8-year PFS rates were 24.9 months and 38.3%, respectively†
- For those with **stable disease**, median PFS and 8-year PFS rates were 4.2 months and 6.4%, respectively†

Return to PFS data

Data cut-off: 1 May 2024.

*From product-limit (Kaplan-Meier) method for censored data. †One patient with CR and three patients with SD were later confirmed as having a best overall response of PD at second efficacy assessment and were therefore not included in modified PFS analysis by best overall response.

CI, confidence interval; **CR,** complete response; **NR,** not reached; **PD,** progressive disease; **PFS,** progression-free survival; **SD,** stable disease.

1. Long GV, *et al. Ann Oncol* 2024; S0923-7534(24)03910-3.

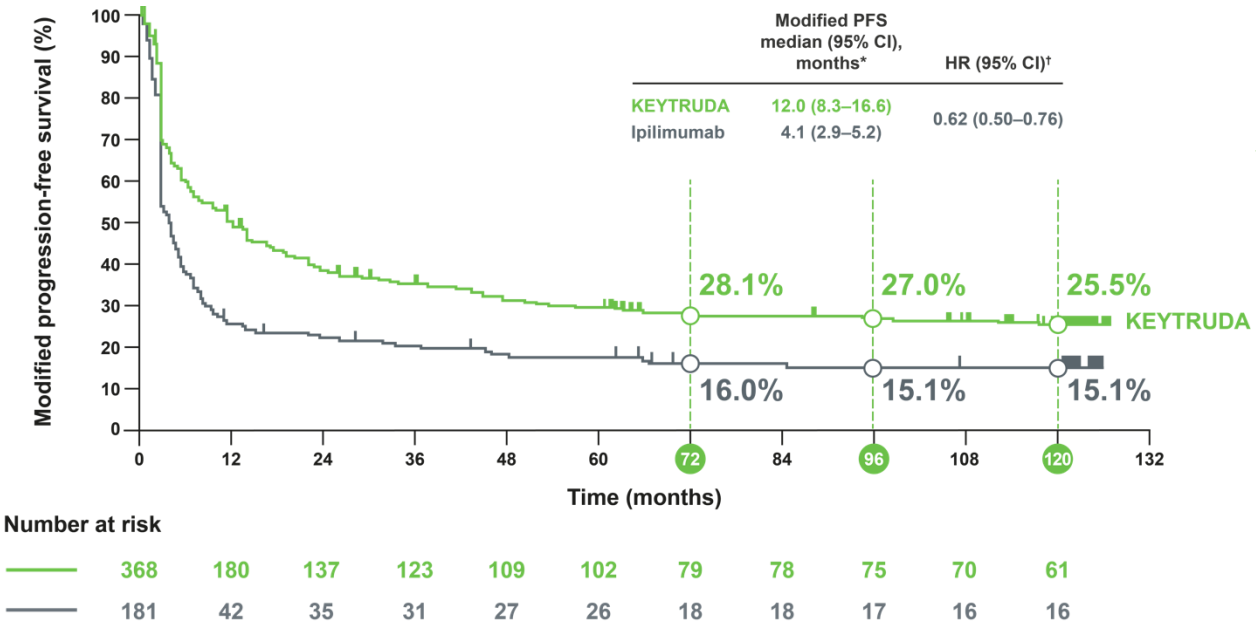
KEYTRUDA® (pembrolizumab)

Exploratory analysis suggests PFS was further improved vs ipilimumab if KEYTRUDA was received as 1L therapy[1]

Exploratory long-term analysis; significance was not tested, therefore no statistical conclusions can be drawn from this analysis

10 years

Kaplan-Meier estimates of modified PFS in patients who received KEYTRUDA or ipilimumab as 1L treatment



Adapted from Long GV, *et al. Ann Oncol* 2024.[1]

38%
relative risk reduction

- When received as 1L treatment, KEYTRUDA demonstrated a **38% relative reduction** in risk of disease progression or death versus ipilimumab
  - HR: 0.62; 95% CI: 0.50–0.76
  - KEYTRUDA or ipilimumab was received as 1L treatment in 66.2% (n=368/556) and 65.1% (n=181/278) of patients, respectively
  - In this population, KEYTRUDA was associated with a median modified PFS of 12.0 months vs 4.1 months for ipilimumab

Return to PFS data

Data cut-off: 1 May 2024.
*From product-limit (Kaplan-Meier) method for censored data. †Based on Cox regression model with the Efron method of handling ties with treatment as a covariate.
1L, first-line; **CI,** confidence interval; **CR,** complete response; **HR,** hazard ratio; **NR,** not reached; **PD,** progressive disease; **PFS,** progression-free survival; **SD,** stable disease.
1. Long GV, *et al. Ann Oncol* 2024; S0923-7534(24)03910-3.

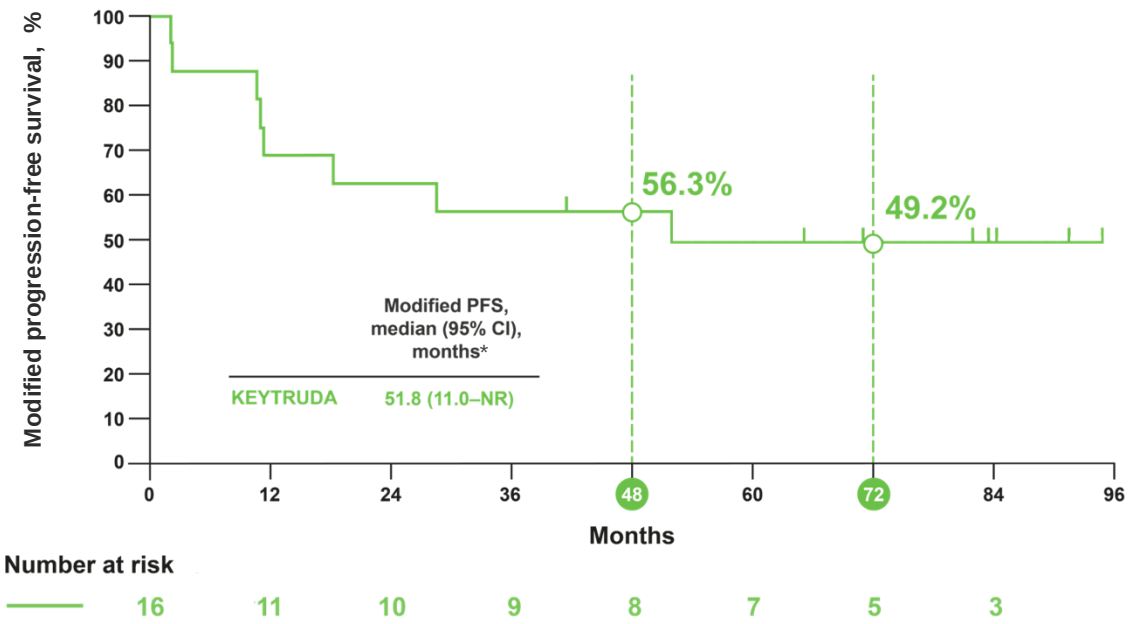
KEYTRUDA® (pembrolizumab)

PFS from start of second-course KEYTRUDA[1]

Exploratory long-term analysis; significance was not tested, therefore no statistical conclusions can be drawn from this analysis

10 years

Kaplan-Meier estimates of modified PFS in patients who received a second-course of KEYTRUDA



Adapted from Long GV, *et al. Ann Oncol* 2024.[1]

- Among patients who received a second course of KEYTRUDA in either KEYNOTE-006 or KEYNOTE-587 (n=16):
  - Four patients had a complete response
  - Five patients had a partial response
  - Five patients sustained stable disease
  - Two patients had progressive disease
- The median modified PFS from the start of the second-course of KEYTRUDA was **51.8 months** and was associated with a 6-year modified PFS rate of **49.2%**

Return to PFS data

Data cut-off: 1 May 2024.
*From product-limit (Kaplan-Meier) method for censored data.
CI, confidence interval; **NR,** not reached; **PFS,** progression-free survival.
1. Long GV, *et al. Ann Oncol* 2024; S0923-7534(24)03910-3.

KEYTRUDA® (pembrolizumab)